

Housing Production Plan

2024-2028

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EXECUTIVE SUMMARY

Background and Purpose

The Housing Production Plan: What it is and why it matters

A Housing Production Plan is a proactive strategy for meeting a community's housing needs, in particular, for planning and developing affordable housing for low and moderate income households that meets the 10 percent goal established under Massachusetts General Law Chapter 40B.

Chapter 40B is the Massachusetts law that enables local Zoning Boards of Appeal to approve affordable housing developments under flexible rules if at least 20-25 percent of the units are rented/sold with long-term affordability restrictions to households earning no more than 80 percent of the area median income, adjusted for family size. (The current income limit for a single person household in Harvard is \$66,300; for a four person household, \$94,650). In communities where less than 10 percent of the year-round housing qualifies as subsidized, developers can ask the State Housing Appeals Committee to overturn local denials of a comprehensive permit or the imposition of conditions they believe make a project infeasible, absent a finding that the project presents serious health or safety hazards.

Housing Production Planning was first introduced by the Department of Housing and Community Development, now the Executive Office of Housing and Livable Communities (EOHLC), in 2002 to provide communities that were below the 10 percent threshold, but making adequate progress toward that goal, protection against adversarial 40B proposals that were inconsistent with their plans. EOHLC maintains the state's Subsidized Housing Inventory (SHI, or 40B list), which documents how many qualified units a municipality has. According to the most recent inventory (June 2023, as amended), Harvard has 117 SHI-qualified units, or 5.3 percent of the 2,199 year-round housing units enumerated in the 2020 Census, a shortfall of 103 units.

Housing production planning is a two-step process. A community must first create a strategy that describes how it intends to meet its affordable housing needs (i.e., to get to the 10 percent threshold) and submit that to EOHLC for approval. The plan must be developed with community input and include a comprehensive housing needs assessment, affordable housing goals, specific implementation strategies, and a time frame for achieving the identified goals. Then, if the plan is approved by EOHLC and the community produces housing units equal to at least 0.5 percent of its year-round housing stock (11 units in Harvard's case) in a calendar year in accordance with the plan, EOHLC will certify the plan; if it produces units equal to 1.0 percent (22 units), it will be certified for two years. Once a community has a certified plan, decisions by its Zoning Board of Appeals (ZBA) to deny a comprehensive permit or approve with conditions will be deemed "consistent with local needs" under MGL Chapter 40B, meaning the ZBA's decision will be upheld by the Housing Appeals Committee.

Demographic Profile

Shifting demographics are influencing the amount and type of housing Harvard needs

<u>Historic population trends.</u> Harvard experienced its greatest growth between 1960 and 1990 when its household population increased by more than 150 percent (excluding the military personnel at Fort Devens). Since 2000, growth has slowed and now trails that of many of its neighbors. Excluding the new

residential community at Devens, Harvard's household population grew by less than 5 percent between 2000 and 2020. With Devens, the increase was nearly 11 percent.

<u>An aging population.</u> Harvard is "graying" as residents who moved to town in their 30s to raise families are aging in place. The median age rose from 39.9 to 48.0 between 2000 and 2020, a substantially greater increase than surrounding towns, the county or state. In 2000, fewer than 17 percent of households included someone 65 or over and fewer than 8 percent included someone 75 or older. By 2020, those shares had more than doubled to 38 and 17 percent, respectively.

<u>Harvard remains primarily a family community.</u> Harvard continues to have a higher share of families and households with children under 18 than most towns in the region, or the county or state. One third of all households include children, but that number is down nearly 7 percent since 2010 when 40 percent of households included children. Of nonfamily households, most are seniors who live alone.

<u>Projected slow growth.</u> The population is projected to grow by less than 2 percent between now and 2030, but the age structure will continue to shift, with significant growth among the 65 and over population and those in the 35-54 year cohort. A similar trend is projected for the towns surrounding Harvard.

A smaller but more diverse youth population. The decline in Harvard's youth population since 2000 was substantially greater than that experienced regionwide. A sharp decline in the preschool population between 2000 and 2010, however, was reversed between 2010 and 2020 as the number of young households (those headed by someone 25-34) more than doubled. Despite a modest uptick in 2022-2023, Harvard's school enrollment has been trending downward for years. The school population peaked in 2006 with a total enrollment of 1,307 students; in 2023-24, enrollment was just 1,020.

While the population of Harvard and the surrounding communities is predominantly non-Hispanic White, it has become more diverse since 2000, the youth population more so than the older population. Students of color represent more than 25 percent of the school population compared to just over 12 percent a decade ago.

Many existing residents are in need of, and eligible for, housing assistance. Even though Harvard ranks among the most affluent communities in the state by most economic indicators, an estimated 20 percent of the town's households are considered low income by federal Department of Housing and Urban Development definitions, earning no more than 80 percent of the area median income; 2 percent live below the federal poverty level.

Approximately 6 percent of the population (15% of households) report at least one disabling physical, sensory or mental condition. The likelihood of having a disability increases dramatically with age, and 70 percent of those reporting a disability are seniors. Fewer than half of those with a disability reported that their condition limited their ability to live independently.

Housing Conditions

Harvard's existing housing stock, while valuable and well maintained, lacks diversity, mirroring its zoning.

<u>Single family homes on large lots.</u> Eighty-six percent of the housing units in Harvard are detached single family homes. They are generally larger than those found in adjacent towns and sited on larger lots. Over half have 4 or more bedrooms, even though more than half of the households living in them have just one or two members. Almost half of the homes in town were built between 1960 and 1990. Since 2000, housing production in Harvard has slowed and trails that of neighboring towns and the county.

40B, special permits and Devens "one stop permitting" have diversified Harvard's housing stock. The most notable change in Harvard's housing stock over the last 20 years has been the addition of attached single family homes (aka townhouses, townhomes). The 2000 Census reported just five such structures; by 2021, there were 100. The increased diversity is the result of units permitted outside the normal approval process, i.e., condominium developments approved under Chapter 40B or at Devens or rental developments approved under the Ayer Road Special Permit process.

The 150+ new homes (market rate and income restricted) that have been approved under the comprehensive permit provisions of Chapter 40B or the special mixed used permitting provisions in the Ayer Road commercial district account for 65 percent of all new housing over the past 20 years. The total number of new housing units built between 2003 and 2022, *including* those permitted under 40B and the 42-unit Bowers Brook Apartments, is fewer than 13 per year. Excluding 40Bs and Bowers Brook, fewer than five units per year have been built. The non-comprehensive permit homes have been custom built or targeted to the high end of the home buying market.

Since 2019, housing prices have escalated dramatically. Housing prices in Harvard and surrounding towns were slow to recover from the Great Recession (2007-2009), but by 2020 prices here – like those across the country – began to skyrocket, fueled by low mortgage rates and limited supply. The median price of a single family home sold in Harvard through the first 6 months of 2023 was \$930,000, more than 50 percent higher than it had been five years earlier. By the summer of 2023, mortgage interest rates had risen to their highest level in 20 years. As a result, the monthly principal and interest payment on a median priced home in 2023 is more than double what it was in 2019 (assuming an 80%, 30 year mortgage).

While the housing market has cooled somewhat since mortgage interest rates began to rise in mid-2022, the median price of both single family homes and condominiums reached their highest level ever in 2022 and prices have continued to climb in 2023. Low inventory, higher interest rates and economic uncertainty have all contributed to the slowdown in sales in 2023. This mirrors the national trend.

Market rate units in 40B developments are among the most affordable homes in Harvard. Excluding income restricted ("affordable") units, 30 percent of the homes that sold for under \$600,000 during the past three and a half years have been market rate units in developments permitted under 40B. These homes are also the only option for owners who wish to live, or stay, in Harvard but without the maintenance responsibilities of large lots.

Rental housing is scarce in Harvard and the surrounding towns. Nearly 90 percent of Harvard householders own their homes. Rentals are scarce, and more than 90 percent of the units built specifically as rental housing are age restricted. About 35 percent of the town's renters live in one of these properties. Most others lease from owners of single family, or 2-4 unit, homes, which are often available only temporarily due to an owner's inability to sell or leave of absence from town.

This region overall offers little multifamily rental housing. Almost no new rental housing has been built in Harvard or the surrounding towns in the past 30 years. With the exception of two or three small

developments, most age restricted (one of which is Harvard's Bowers Brook), the only new apartments built since the early 1990s are Paddock Estates in Boxborough and Village Green in Littleton, both permitted under the comprehensive permit provisions of Chapter 40B.

Housing Affordability

Many of the affordability challenges Harvard residents face reflect what is happening in the larger Eastern Massachusetts housing market and at the national level, where the combined effects of high and rising home prices, climbing interest rates and insufficient production have locked many out of homeownership – and locked many current homeowners in homes that no longer suit their needs or income.

<u>Harvard's relatively high median income notwithstanding, many residents are not well off and struggle with high housing costs</u>. More than 400 households (about 20%) are estimated to be low income, earning no more than 80 percent of the median income for similarly sized households in the area (Eastern Worcester County HUD Area). Over half of these households have very low or extremely low incomes, including two percent with incomes below the federal poverty level. Another 7 percent are considered moderate income (earning between 80 and 100 percent of median).

A far higher percentage of renter households than owner households are low income -58% v 16% -- but because there are so few renters, more than 70 percent of Harvard's low income households own their homes. Seniors are disproportionately represented among the low income households: more than 72 percent of low income homeowners, and nearly that many low income renters, are seniors. Over 60 percent of low income renters live in one of the three subsidized developments, and thus are buffered from the highest cost burdens.

<u>High housing cost burdens affect Harvard homeowners across age and income</u>. This includes homeowners with no mortgage debt outstanding. The town's high home prices and lack of rental options deny entry to many younger families who would like to make Harvard their home.

Vacancies are rare and wait lists are long for the town's subsidized developments. When rental opportunities in 1-4 family homes are available, they are typically priced well above what low or moderate income households can afford.

Harvard is credited with having 117 subsidized housing units on the state's Subsidized Housing Inventory (SHI), or 5.3 percent of its year-round housing units, a shortfall of 103 units. The Town's SHI percentage trails that of most surrounding communities. To achieve the "safe harbor" that would provide a one year exemption from state appeals, Harvard needs to add just 11 qualified units (22 units for a two-year exemption).

Development Constraints and Limitations

The primary obstacle to meeting the housing needs of very low income residents is the growing gap between what it costs to create and maintain decent housing and what very low income households can afford to pay, a challenge that is not unique to Harvard.

Factors that impede development of affordable housing in Harvard, specifically, are a combination of regulatory, physical, and infrastructure constraints.

- The lack of water and sewer infrastructure inhibits housing development. The soils in many parts of Harvard are not well suited to on-site septic systems, but the widely dispersed, low density pattern of development makes a townwide water and sewer system infeasible.
- Open space constitutes about 40 percent of the town's landmass and is its most distinguishing feature.
 There are compelling reasons to protect these valuable resources, but they result in fewer parcels being available for development.
- Single family homes on large lots are the only type of housing allowed by right in Harvard, and the Town's zoning regulations offer few avenues to construct the alternative housing types needed by many segments of the community.
- The zoning bylaw, with its large lot zoning, was based on legitimate environmental concerns that reflected the town's limited infrastructure and inhospitable soils, but it does not reflect changes in technology or more effective tools for encouraging open space-sensitive design that could open up more sites for development. Nor does it acknowledge the fact that alternative housing types and greater density are both appropriate and sustainable in a limited number of areas.

Existing Municipal Tools and Resources

Notwithstanding these challenges, Harvard brings some valuable assets and resources to the task of expanding housing opportunity.

- Harvard has valuable financial resources it can contribute to the development or preservation of
 affordable housing. Most funding comes from the Community Preservation Act surcharge, but the
 Town has also negotiated contributions from developers to put toward affordable housing.
- The Town has forged partnerships with entities to provide access to expertise, skills and staffing capacity that it lacks for a variety of tasks related to certifying, tracking and promoting affordable housing initiatives. These include the Assabet Regional Housing Consortium (and its subcontractor MetroWest Collaborative Development), the Montachusett Regional Planning Commission and several experienced developers, both for-profit and nonprofit, who have worked with worked with the Town on "friendly" 40Bs and who have expressed interest in finding new opportunities here.

Affordable Housing Goals

Harvard has established 4 overarching goals to address its most pressing housing needs and overcome barriers that have impeded progress in the past.

The goals are based on the findings of the housing needs assessment and include recommendations from the 2016 Master Plan as well as recommendations put forth by housing practitioners and the public.

 Preserve and increase the diversity of Harvard's housing stock (including rental, homeownership, or other occupancy arrangements) to enable Harvard to remain inclusive of families and individuals across a broad range of age, income and need.

- 2. Establish a regulatory framework that ensures new housing development is consistent with the sound planning and sustainability standards articulated in Harvard's Master Plan and Climate Action Plan.
- 3. Increase the number of SHI eligible housing units by at least 11 units per year, or 55-60 units over the term of this 5 year plan. The Town's longer term goal is to meet and maintain the state's 10 percent subsidized housing goal, providing the town's fair share of affordable housing while retaining control of local development.
- 4. Improve the efficiency and effectiveness of local housing and planning initiatives and regulations.

Strategies to Overcome Barriers and Address Needs

No single strategy can adequately address Harvard's current and future housing needs, or those of the region.

Collectively, however, the following strategies represent a comprehensive approach that can address the town's most pressing housing challenges. They address Harvard's housing needs on several fronts simultaneously and involve the effort of many participants. They include production initiatives, planning and regulatory reform, local capacity building, and preservation strategies. Most of the production initiatives also require zoning reform or regulatory relief.

- 1. See priority pipeline projects through to completion, including investing Municipal Affordable Housing Trust (MAHT) funds as necessary to serve low income households.
- 2. Identify land parcels that may be available and suitable for affordable development.
- 3. Develop and deploy financial incentives to support affordable housing.
- 4. Collaborate with the Devens Enterprise Commission, the Town of Ayer and other stakeholders to explore options for the redevelopment of Devens' Vicksburg Square as mixed income housing.
- 5. Adopt a townwide inclusionary zoning by-law.
- 6. Amend the zoning bylaw by creating a zoning district (or districts) where multifamily housing is allowed by right in compliance with Section 3A of MGL c. 40A. This new (2021) state law mandates that the district be of sufficient size to accommodate 113 units of housing at a density of 15 units per acre. While affordable units are not required in a multifamily housing development that is allowed as of right, some percentage of the required 113 units (at least 10%) are expected to be SHI eligible.
- 7. With other stakeholders, explore the feasibility of raising Devens' current 282-unit housing cap Further investigation of the challenges and opportunities that additional residential development (market rate and affordable) would entail is necessary, and Harvard will play an active role in these deliberations.
- 8. Investigate the feasibility of removing the prohibition on alternative technologies including communal sewage treatment systems so they can be used town wide where prudent and justifiable.
- 9. Increase the financial resources to facilitate development of affordable housing.

- 10. Build town staffing capacity, including designated staffing to own affordable housing administration, to monitor, maintain and pursue affordable housing.
- 11. Partner with regional collaborations (e.g., Assabet Valley Regional Housing Coalition) and technical assistance providers to bring needed capacity and expertise to affordable housing initiatives.
- 12. Lead community outreach and education to build understanding of and support for the Housing Production Plan goals and the benefits of affordable and diversified housing in Harvard.
- 13. Establish a standing committee of representatives from the Select Board, Planning Board, Municipal Affordable Housing Trust, and other key stakeholders to monitor progress and advance goals of the Housing Production Plan.
- 14. Preserve the long term affordability of the properties on its subsidized housing inventory.

1. INTRODUCTION

1A. Purpose

This Housing Production Plan¹ is intended to guide the expansion of affordable housing opportunities in the Town of Harvard. It represents a management tool for ensuring that timely progress is made toward meeting the Town's affordable housing goals, including the goal of having 10 percent of its housing qualified as affordable on the state's Subsidized Housing Inventory. The plan is based on a comprehensive needs assessment and a thorough analysis of existing conditions, demographic trends and local and regional market forces. It identifies the constraints that have limited affordable housing production in Harvard, and the Town's efforts to mitigate them. It also identifies opportunities and lays out the strategies the Town will pursue over the next five years to meet its goals. The plan describes the mix of housing units required to address those needs, a time frame for their production and the regulatory reforms that will be required.

Housing Production Planning: What It is and Why It Matters. The voluntary housing production planning process was designed to give communities greater local control over the provisions of Chapter 40B, the state's Comprehensive Permit Statute. Chapter 40B is a state law that enables local Zoning Boards of Appeal (ZBAs) to approve affordable housing developments under flexible rules if at least 20-25 percent of the units have long-term affordability restrictions. It was enacted in 1969 to increase the supply and improve the distribution of housing for low and moderate income families throughout Massachusetts.²

The law allows developers of subsidized housing to apply for all necessary local approvals in the form of a single "comprehensive permit" from the Zoning Board of Appeals (ZBA) and to request overrides of *local* zoning and other restrictions if necessary to make the housing economically feasible (e.g., density limits, dimensional requirements, setbacks). *State* regulations, such as the Wetlands Protection Act, Title 5, and all building codes, remain fully in effect under the comprehensive permit. Since the Conservation Commission and Board of Health act as the primary regulatory authorities for the state Wetlands Protection Act and Title 5, applicants still must receive permits from them.

In communities where less than 10 percent of the year-round housing is subsidized, developers can ask the State Housing Appeals Committee (HAC) to overturn local denials of a comprehensive permit or the imposition of conditions they believe make a project infeasible, absent a finding that the project presented serious health or safety hazards.³

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¹ The requirements for HPPs are found at 760 CMR 56.03. The Executive Office of Housing and Livable Communities administers the HPP program.

² Officially called "An Act Providing for the Construction of Low and Moderate Income Housing in Cities and Towns in Which Local Restrictions Hamper Such Construction," the Comprehensive Permit statute was enacted as Sections 20-23 of MGL Chapter 40B, the state's Regional Planning Law, found at http://www.mass.gov/dhcd/components/SCP/ch40Bsr.htm. The implementing regulations are found in Section 760 Chapters 30 and 31 of the Code of Massachusetts Regulations (CMR).

³ There are two other standards that may be applied to determine whether a community has met its fair share of the local and regional need for low and moderate income housing: 1.) low and moderate income housing exists on sites comprising one and one-half percent or more of the total land area zoned for residential, commercial or industrial use, or 2.) the application before the board would result in the commencement of construction of such housing on sites comprising more than three-tenths of one percent of such land area, or ten acres, whichever is larger, in any one

The Executive Office of Housing and Livable Communities (EOHLC), formerly the Department of Housing and Community Development (DHCD), maintains the state's Subsidized Housing Inventory (SHI, or 40B list), which documents how many qualified units a municipality has. According to the most recent inventory (June 2023, as amended), Harvard has 117 SHI-qualified units, or 5.3 percent of the 2,199 year-round housing units enumerated in the 2020 Census, a shortfall of 103 units. (See **Section 4.**)

Many communities, including Harvard, have gained quality low- and mixed-income housing under this law. Indeed, 44 percent of Harvard's new construction over the past twenty years has been permitted under 40B. The right of appeal, however, has always been controversial. Often communities argue that a proposed 40B development is inconsistent with the goals articulated in their master plans, or with sound planning principles generally. In response to these concerns, DHCD issued revised regulations in 2008 that encouraged communities to take a proactive role in guiding the development of affordable housing. Under these new regulations (Housing Production Planning), communities that are below the 10 percent threshold, but are making adequate progress toward it, can receive one- or two-year exemptions ("safe harbor") from HAC appeals by adopting a housing production plan and meeting short-term production goals.

Housing production planning is a two-step process. A community must first create a strategy that describes how it intends to meet its affordable housing needs (i.e., to get to the 10 percent threshold) and submit that to EOHLC for approval. Then, if the plan is approved by EOHLC and the community produces housing units equal to at least 0.5 percent of its year-round housing stock (11 units in Harvard's case) in a calendar year in accordance with that plan, EOHLC will certify the plan; if it produces units equal to 1.0 percent (22 units), it will be certified for two years. Once a community has a certified plan, decisions by its Zoning Board of Appeals (ZBA) to deny a comprehensive permit or approve with conditions will be deemed "consistent with local needs" under MGL Chapter 40B, meaning the ZBA's decision will be upheld by the Housing Appeals Committee.

The plan must cover a period of five years and include the following:

- A comprehensive housing needs assessment, including an analysis of the most current census and
 other economic, demographic and housing market data; a projection of future population and housing
 needs; development constraints and limitations and the community's plans to mitigate such
 constraints to support development; and the capacity of its infrastructure to accommodate the current
 population and anticipated future growth.
- Affordable housing goals, including mix of types of housing, consistent with local and regional needs
 and feasible within the housing market in which they will be situated. This section must include a
 numerical goal for annual housing production that will increase the number of SHI-eligible housing
 units by at least 0.5 percent of its total year-round housing units annually until it reaches 10 percent
 [emphasis added].
- <u>Implementation strategies</u>, including the specific strategies that will be used to achieve the housing production goal and a schedule for doing so. *Strategies should include, to the extent possible, the*

calendar year. Since these standards are rarely applied, the 10 percent threshold is used in this report to refer to all three statutory minima.

identification of municipally owned parcels for which the city will issue requests for proposals for the development of SHI-eligible housing, specific sites for which it will encourage the filing of comprehensive permit applications, and/or specific zoning districts/geographic areas where it would modify current regulations to facilitate the production of such housing [emphasis added].

Municipalities are encouraged to identify their preferred characteristics for the proposed new
development (for example, cluster development, adaptive re-use, mixed-use development,
inclusionary housing, etc.), but they may not impose special restrictions on the development of
affordable housing, such as limiting size of affordable units, limiting diversity in types of housing, or
applying other zoning constraints [emphasis added]. Participation in regional collaborations to address
housing development is encouraged.

Plans should be developed with opportunities for community residents to become informed of the process and the plan, and to provide input. Harvard residents have had such an opportunity. The Municipal Affordable Housing Trust (MAHT) and the Planning Department led the outreach, which took the form of traditional public forums, surveys, interviews with housing practitioners and real estate professionals, and outreach to advocacy groups and others working with low and moderate income families and individuals in need of housing assistance. A summary of the outreach and findings is included in **Appendix 1**.

Harvard takes its obligations under MGL Chapter 40B seriously and views housing production planning as an important component of the comprehensive planning process. Although the Town did not request certification under its previous Housing Production Plans, its progress would have qualified for a two year "safe harbor" with the opening of a 42-unit Low Income Housing Tax Credit project, approved by special permit, in 2012.

1B. Organization

The plan includes the required needs assessment, goals and strategies. It is divided into seven sections in addition to this introduction, an executive summary and a series of appendices. The Needs Assessment comprises Sections 2-7, with Section 7 being a summary of housing needs. Section 8 present's the Town's goals and implementation strategies:

- Demographic Profile (Section 2)
- Housing Conditions (Section 3)
- Housing Affordability (Section 4)
- Development Constraints and Limitations (Section 5)
- Existing Resources and Emerging Opportunities (Section 6)⁴
- Housing Needs Summary (Section 7).
- Affordable Housing Goals and Implementation Strategies (Section 8).

⁴ Section 6 is not required but included to address the unique opportunities and challenges presented by the 2,700 acres of Harvard land that is part of the Devens Regional Enterprise Zone. This land is currently under the control of the Devens Enterprise Commission, and development is dictated by the 1994 Devens Reuse Plan, not the Town of Harvard. Its governance may revert to Harvard in the future. Also included in this section is a discussion of Harvard's plans to comply with Massachusetts' new multifamily zoning requirements under MGL c. 40A § 3A, the MBTA Communities Law.

The appendices provide a summary of outreach and survey results, a development suitability analysis, status of activities from 2017 Housing Production Plan, and Harvard's Subsidized Housing Inventory.

1C. Community Overview

The town of Harvard, located 31 miles northwest of Boston at the intersection of Routes 2 and 495, is a residential community of some 5,500 residents.⁵ (**Map 1.1**). Occupying just under 27 square miles of land, it is a sparsely populated, low-density town with broadly distributed development of homes, farmsteads, orchards, and forested land, but little commercial development. Most of the town, with its scenic vistas and orchards, is included in the Massachusetts Scenic Landscape Inventory. Growth has been modest over the past 30 years, constrained by a challenging topography and restrictive zoning regulations. The town's abundant natural amenities and excellent schools have long made it attractive to families with children.

FORGE VILLAGE Westford (2A) SHIRLEY CENTER 495 Ayer (13) (2A) LITTLETON Devens Shirley COMMON Littleton Leominster 2)=George W Stanton Hwy (2A) (27) (111) (2 Harvard (70) (117)STILL RIVER Acton Boxborough WEST ACTON (110)111 (12)WEST CONCORD Lancaster SOUTH LANCASTER Sterling (117) Bolton (62) Maynard 62 (117) (85) Clinton Map data @2023 Google

Map 1.1: Harvard in its Regional Context

Open space is Harvard's distinguishing feature, particularly its orchards. While the number of active farms declined during the last half of the 20th century, the town still has vital commercial orchards and a number of small, leisure farms. Often characterized as having a rural atmosphere – a quality that is central to the town's image of itself and highly valued by its residents – Harvard has been primarily a bedroom community for many years, its residents employed in management, business, science, or the arts.

Single family dwellings on large lots are the predominant housing form. Most households and businesses are served by on-site, private wells and septic disposal systems. Thus, most new development depends on

⁵ According to the 2020 Census, Harvard's population without Devens was 5,461; with Devens, it was 6,851. All but 343 of the Devens population at that time were inmates at the Federal Medical Center operated by the Federal Bureau of Prisons. The 27 square miles excludes Devens.

finding sufficient well yields on the building lot for the proposed use and soils that can comply with Title 5 standards for septic systems. The limited housing diversity that does exist – mixed income condominiums and subsidized rental units – have been built over the past 25 years, permitted under Chapter 40B, or by special permit within the Ayer Road Village district, or at Devens. Still, the housing stock remains one of large single family homes on large lots, which meet the needs of just a fraction of the people who would like to move to or remain in town. Other housing options are extremely limited and demographic projections suggest that this housing mismatch will grow more acute over the next decade as the population ages, even though little population growth is projected.

DEMOGRAPHIC PROFILE 2.

Housing Needs Assessment

Demographics shape housing demand. Understanding the characteristics of the population, and how they are changing, enables us to anticipate housing needs and plan accordingly. This section describes Harvard's population and household trends. It is organized by topic (population and projections, age distribution, households and families, race/ethnicity, income, poverty, etc.), with most trends discussed at the household level. It incorporates the population living within Harvard's boundaries on the former Fort Devens, with the caveat that the future jurisdiction of Devens will not be determined within the time frame covered by this Housing Production Plan. Please refer to Section 6B: Devens: A Unique Opportunity with Unique Challenges before proceeding.

To understand Harvard in its regional context, data have also been reviewed for the seven surrounding communities: Ayer, Bolton, Boxborough, Lancaster, Littleton, Shirley, and Stow, as well as Worcester County and the state (Map 2.1). Unless otherwise specified (e.g., Greater Boston) the term region refers to Harvard and these seven communities that border it. The population projections for Harvard and the surrounding towns for 2030 were prepared by the UMass Donahue Institute (UMDI), which serves as the Commonwealth's state data center and manages its Population Estimates Program.



Map 2.1: Harvard and Abutting Towns

2A. Population

Historic Trends. Tracking Harvard's historical population trends is complicated by the fact that until 1980 when the Census Bureau established separate census tracts for residential Harvard and Fort Devens, the Army's military personnel and Harvard's year-round residents were reported as a combined population for the town as a whole.⁶ To understand population changes that related to zoning and infrastructure policies that the Town controlled, Charles Eliot, author of Harvard's first master plan (1969) constructed the population history from 1930-1970 that is the basis of **Table 2.1**, using local and state census data, birth-rate trends, housing age statistics and adjusted reports from the Census Bureau. Subsequent population updates are U.S. Census-based for Harvard's residential, or non-Devens, tract only.

Table 2.1: Population Change in Harvard, 1930-2020 (excluding Devens)

Year	Local Population (Harvard without Devens)	# Change Over Decade	% Change Over Decade	Worcester County Population	% Change Over Decade
1930	987			490,737	
1940	1,119	132	13.4%	504,470	2.8%
1950	1,315	196	17.5%	546,401	8.3%
1960	1,840	525	39.9%	583,228	6.7%
1970	2,962	1,122	61.0%	638,114	9.4%
1980	3,744	7 82	26.4%	646,352	1.3%
1990	4,662	918	24.5%	709,705	9.8%
2000	5,230	568	12.2%	750,963	5.8%
2010	5,063	-167	-3.2%	798,385	6.3%
2020	5,461	398	7.9%	859,708	7.7%

Source: Pre-1970, Planning for Harvard: Comprehensive General Plan (1969); subsequent years, U.S. Decennial Census

Although residential Harvard's population growth *rate* outpaced that of Worcester County throughout the 20th century, it was not until the 1960s with the opening of the interstate highway system (I-495) and easy commuting to major employment centers that the town experienced any significant growth. The largest population gain occurred between 1960-1970, though substantial growth continued through the '70s and '80s.

Population Change Since 2000: Harvard and the Region. Harvard's population growth has slowed in the 21st century (**Table 2.2**). Between 2000-2010, it trailed that of neighboring communities and Worcester County. Were it not for the emerging residential community (population in households) at Devens, Harvard would have posted a 3 percent population loss between 2000-2010, not the 1 percent gain shown in Table 2.2. Between 2010-2020, the town again gained population, though still at a slower rate than several of its neighbors, some of which posted double digit gains.

Note: Table 2.2 depicts *both* total population change *and* household population change. The distinction is important because changes in the institutionalized population and/or other group quarters – particularly in a small town – can give a misleading picture of what is happening in those communities. Harvard, Shirley

⁶ Even after the two separate tracts were established, the Fort Devens population was included in Harvard's official Census count and demographic profile. As recently as 1990, the town's population was reported as 12,329 with a median family income of \$47,481. A decade later, after the base closure, the population dropped to under 5,981 and the median family income jumped to \$119,352.

and Lancaster's modest growth in *total population* from 2010-2020 resulted from reductions in the prison population in Harvard and Shirley, and a college closure in Lancaster.

Table 2.2: Growth in Region's Towns, 2000-2020: Total Population v Household Population

	% Change in Population							
	2000-	-2010	2010-	-2020	2000-2020			
	Total Population	Household Population	Total Population	Household Population	Total Population	Household Population		
Ayer	1.9%	4.9%	14.2%	14.0%	16.4%	19.5%		
Bolton	18.1%	18.1%	15.7%	15.6%	36.6%	36.5%		
Boxboro	2.6%	2.6%	10.2%	10.2%	13.1%	13.1%		
Harvard	9.0%	1.0%	5.1%	9.8%	14.5%	10.9%		
Lancaster	9.1%	11.5%	4.8%	8.5%	14.4%	20.9%		
Littleton	9.0%	8.9%	13.6%	13.9%	23.9%	24.0%		
Shirley	13.1%	9.1%	3.1%	6.2%	16.6%	15.8%		
Stow	11.7%	12.2%	8.9%	8.8%	21.6%	22.0%		
8 Town Total	9.0%	8.3%	9.3%	11.0%	19.1%	20.3%		
Worcester County	6.5%	6.3%	8.0%	8.1%	15.0%	14.9%		
Massachusetts	3.1%	3.0%	7.4%	7.5%	10.7%	10.7%		

Source: Decennial Census 2000, 2010, 2020

The Devens Impact. The new residential community at Devens has bolstered Harvard's household population. Harvard's household population grew by less than 5 percent between 2000 and 2020 without Devens. Including the new residential community at Devens, it grew by nearly 11 percent(**Table 2.3**). According to the Census Bureau, the population of Harvard *without* Devens was 5,461 on April 1, 2020; *with* Devens, it was 6,851. The largest component of the Devens population is the 1,000+ men incarcerated at the Federal Medical Center (FMC) operated by the Federal Bureau of Prisons, but there is now a thriving residential community there as well.

The Devens household population totaled 343 residents, living in 133 housing units at the time of the 2020 Census. That number is now estimated to have grown to more than 400 residents in 180 housing units, with another 72 units in the pipeline. Considered Harvard's newest neighborhood – school age children living on Devens are educated in the Harvard schools under contract with MassDevelopment – Devens is nearing the maximum 282 units allowed under the 1994 Reuse Plan. Absent legislative action, that cap can only be changed by votes of concurrent Town Meetings in Harvard, Ayer and Shirley.

Table 2.3: Change in Harvard's Population Since 2000, with and without Devens

	2000	2010	2020	# Change 2000-2010	% Change 2010-2020	# Change 2010-2020	% Change 2010-2020	# Change 2000-2020	% Change 2000-2020
Total HOUSEHOLD Population including Devens	5,174	5,228	5,738	54	1.0%	510	9.8%	564	10.9%
Total HOUSEHOLD Population without Devens	5,170	5,009	5,395	-161	-3.1%	386	7.7%	225	4.4%
Total Population incl. Group Quarters, Harvard									
including Devens	5,981	6,520	6,851	539	9.0%	331	5.1%	870	14.5%

Source: 2000, 2010, 2020 Decennial Census

The nearly 15 percent increase in Harvard's total population during this period is due in part to the 40 percent increase in the prison population at the Federal Medical Center. **Table 2.4** summarizes the 2020 population of Devens, detailing how it has changed since the military left.⁷

Table 2.4: Population and Households at Devens, 2000 – 2020

	2000	2010	2020
Total Population	751	1,457	1,390
Group Quarters, Correctional Facilities	747	1,194	1,043
Other Group Quarters (Non-Institutionalized)		44	4
Population in Occupied Housing Units	4	219	343
Total Households	NA*	80	133
Family Households		57	106
Family Households with Children Under 18		34	65
Non-Family Households		16	27
Primary Householder Over 65		13	22
Population in Households Under 18		61	84

Source: 2020 Decennial Census

Shifting Age Profile: More Seniors, Fewer Children. Even though its overall population has grown only modestly since 2000, Harvard's age profile has shifted. The town is "graying" as older residents are aging in place and the youth population is shrinking. Of course, this is not unique to Harvard; the nation is aging, and suburbs and rural areas are aging at a faster rate than urban areas. These trends are more pronounced in Harvard, however, than in the region, county or state.

Between 2000 and 2020, the town's median age rose from 39.9 years to 48.0 years, a substantially greater increase than that reported for either Worcester County (3.8 years) or Massachusetts (3.1 years). The county's median age in 2020 was 40.2; the state's, 39.9. Harvard has the largest 65+ cohort in the region (20%) and a higher median age than all the neighboring towns, where the median age ranged from 41.1(Lancaster) to 46 (Stow). The age distribution of the region's towns is depicted in **Figure 2.1**.

⁷ Harvard now consists of two census tracts, 7614.01 and 7614.02, comprising a total of six block groups - four in tract 7614.01 and two in 7614.02. Devens is a distinct block group (tract 7614.02, block group 2). These tract designations are different than those used in 2010 and 2000 (and prior decennial censuses) and care should be taken in comparing current conditions with those reported in earlier plans and studies. In 2000, Devens was a separate census tract (7141), distinct from the rest of Harvard (7142). For the 2010 Census, the two tracts were combined into one (7614) with six block groups; (Devens was block group 6). For the 2020 Census, tract 7614 was divided into the two current tracts (7614.01 and 7614.02). The underlying block group boundaries were unchanged, however, from 2010.

⁸ If the Devens population – most of whom are inmates incarcerated at the FMC – is excluded, Harvard's median age in 2020 would have been an even higher 48.6.

100% 6% 5% 7% 7% 6% 90% 10% 10% 10% 10% 12% 11% 12% 13% 80% 70% 60% 26% 28% 25% 28% 25% 50% 26% 28% 26% 40% 12% 18% 15% 15% 30% 20% 11% 11% 16% 20% 23% 21% 19% 20% 20% 19% 17% 16% 10% 5% 0% Stow Ayer Bolton Littleton Shirley Boxborough Harvard Lancaster

Figure 2.1: Household Population Distribution by Age, 2020: Harvard and Surrounding Towns

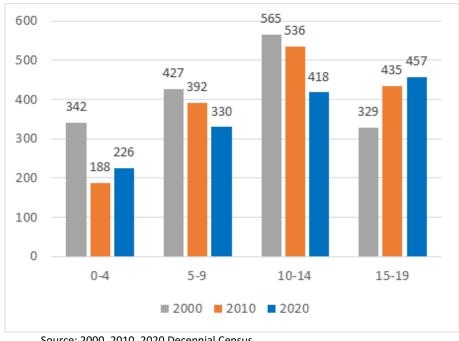
■5 to 19

Harvard's shrinking youth population is shown in **Figure 2.2.** The number of young people (under 19) dropped from 1,663 in 2000 to 1,551 in 2010 to 1,431 in 2020, a substantially greater decline than that experienced regionwide. While the 5-14 numbers continue to drop, the sharp decline in the preschool population between 2000 and 2010 was reversed between 2010-2020. This parallels an increase in young families – those headed by someone under the age of 34 – between 2010 and 2020.

■ 35 to 54 ■ 55 to 64 ■ 65 to 74 ■ 75+

Figure 2.2: Change in Harvard's Youth Population (19 and under), 2000-2020

■ 20 to 34



Source: 2000, 2010, 2020 Decennial Census

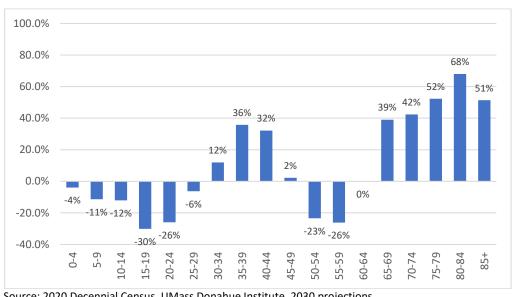
2B. Population Projections

Population projections are based on demographic trends. While they provide a useful tool to help identify changing needs in the marketplace, they are merely a "best guess." Like all forecasts, these projections rely on assumptions about future trends based on past and present trends, which may or may not persist into the future. Any number of economic, political or public health developments can significantly change population dynamics. Unforeseen economic or social influences could bring unexpected numbers of new residents to a region or drive existing residents away. Factors such as infrastructure improvements, public and private investments, and policy changes can affect the growth of a municipality. In December 2022, the UMass Donahue Institute (UMDI) released updated population projections for every municipality in Massachusetts, based on the 2020 Census. These population estimates are based on total population, however, not household population. Therefore, it is more appropriate to look at the age shifts projected for the region to reduce the distorting effect of Harvard's large, all adult, all male prison population.

Modest Growth, Aging Population. Little growth is projected for Harvard or the region – or the state, for that matter – between now and 2030, but there will continue to be some significant shifts in the age structure. Harvard's population is projected to grow by less than 2 percent over its 2020 population by 2030, which covers the period of this Housing Production Plan; a 3 percent growth is projected for the 8 town region.

Figure 2.3 shows the region's projected population change by age group. The most significant growth is expected to be among the oldest residents. The outsized Baby Boom generation, who moved to the area in large numbers in the early 2000s to raise families, will be 66-84 years old in 2030. The only other age group that is expected to see any meaningful growth is the 30-45 year cohort. These are the Millennials - the other giant generation – who will be 34-49 in 2030.

Figure 2.3: Projected Population Change 2020-2030 by 5 Year Age Groups: Harvard and Surrounding **Towns**



Source: 2020 Decennial Census, UMass Donahue Institute, 2030 projections

Key Age Groups for the Housing Industry. Examining the rates at which people of differing ages move, or buy and sell homes, provides insight into what is likely to happen in the housing market as the demographic profile of a region changes. **Figure 2.4** portrays the population changes since 2000 and the 2030 projections by combining the 18 five-year brackets shown in Figure 2.2 into 7 key age groups that are especially important in long range planning: pre-school (under 5), school age (5-19), household formation (20-34), trade-up (35-54), empty nesters (55-64), young seniors (65-79), and older seniors (80+).

This figure drives home the point that aging in place Baby Boomers will swell the senior ranks and Millennials, now entering the trade-up years, will reverse the decline in that age group. While the preschool and school age population are projected to continue its decline, they may trend back up if the 35-54 year cohort continues to grow and/or has more children. The Devens households tend to be younger and have more children than other Harvard households, but any future growth in the school age population during the period covered by this plan will likely be driven by turnover of large single family homes as older homeowners sell to younger families with children.

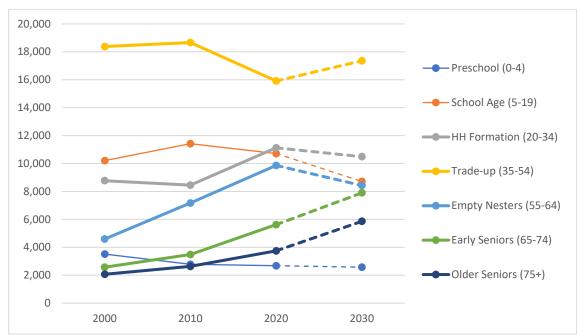


Figure 2.4: Change by Age Group, 2000-2030 (projected), 8 Town Region

The dashed lines are projections.

Source: Decennial Census, 2000, 2010, 2020; UMass Donahue Institute, 2030

2C. Households

More than population, it is the number and type of households within a community that determines housing need and drives housing demand. Household growth, shifts in household size and composition, and the age and income of the householder (also called head of household) all affect the amount and type of housing that will be required. Overall, Harvard's household growth has been modest: 5 percent between 2000 and 2010 and 11 percent between 2010 and 2020 (including Devens). Both trail the region's 10 percent and 13 percent growth for the same periods. Different household types often have different housing needs and preferences, so a community's household distribution is an important predictor of the types of housing it needs, whether or not its population is growing.

Age of Householders. The age of the householder, defined as the person who owns or rents a housing unit, is an important indicator of the type of housing likely to be required. Figure 2.5 shows how householder age has shifted since 2000. The sharp drop in the number of young householders (under 44) between 2000-2010 was reversed between 2010 and 2020 – just as the drop in preschool aged children had been – as more young families have made Harvard their home in the past decade. Their numbers, however, are still dwarfed by the number of older households.

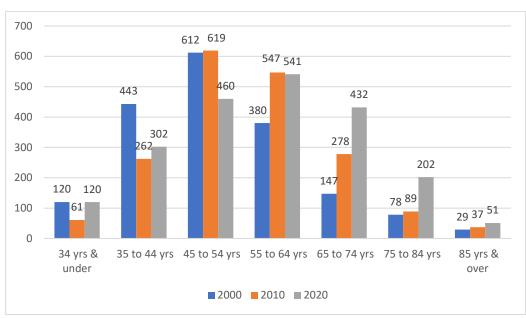


Figure 2.5: Harvard Households by Age of Householder: 2000, 2010, 2020

Source: 2000, 2010 and 2020 Decennial Census

Fifty-eight percent of Harvard's 1,896 owner households and over 60 percent of its 212 renter households are headed by someone 55 years or older. This reflects the aging of the Baby Boom generation (born 1946-1964). In 2000, the leading edge of that generation was 45-54 years old; the trailing edge entered that age group a decade later, in 2010. By 2020, the Baby Boomers had moved into the 65 to 74 cohort.

In 2000, fewer than 17 percent of households included a member aged 65 or over, and fewer than 8 percent included someone aged 75 or older. By 2020, 38 percent included someone 65 or over, while nearly 17 percent had one or more members aged 75 or over. In 2000, 45 percent of households included someone under 18; by 2020, that number had dropped to 35 percent.

Figure 2.6 gives the percentage distribution by age at the time of the 2020 Census.

30.0% 25.7% 25.0% 21.8% 20.5% 20.0% 14.3% 15.0% 9.6% 10.0% 5.7% 5.0% 2.4% 0.0% 34 yrs & 35 to 44 45 to 54 55 to 64 65 to 74 75 to 84 85 yrs & under yrs yrs yrs over yrs yrs

Figure 2.6: Distribution of Harvard Households by Age of Householder in 2020

The trend toward older householders has implications for everything from demands on municipal services and school enrollments to residents' willingness to pay for essential services once they move from the labor force to retirement and fixed incomes. Devens residents tend to be somewhat younger. They are all recent purchasers, not long term residents who have aged in place. Moreover, Devens is designed and priced for a broader range of incomes and household types.

Households, Family Status and Living Arrangements. The aging of its population notwithstanding, Harvard continues to have a higher share of families and households with children under 18 than most towns in the region, or the county or state. According to the 2020 Census, nearly 80 percent of Harvard's 2,108 households (including Devens) are families(1,681). One third of all households include children, but that number is down nearly 7 percent since 2010 when 40 percent of households included children.

The town has a much smaller share of nonfamily households than the region, county or state (20%, or 427 households); of these, 83 percent live alone and most (57%) of those living alone are seniors (65+).(See **Table 2.5**.) Harvard also has a very small number of households that include three or more generations, nonrelatives, or subfamilies.¹⁰

⁹ The Census Bureau defines family as two or more people related by blood, marriage, or adoption, or an unmarried partner household, living together in the same house.

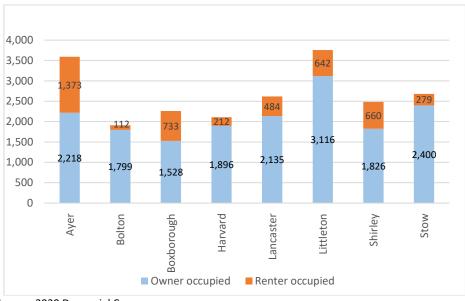
¹⁰ Subfamilies are families that live in the household of someone else. When grown children move back to the parental home with their own children or spouse, they are considered a subfamily.

Table 2.5: Households by Type, 2020: Harvard, Region, County, and State

	Harvard	Region	County	State
Total households	2,108	21,413	331,797	2,749,225
% all households w own children under 18	33%	30%	27%	25%
Family households as % of all households	80%	72%	65%	63%
% of family households w own children under 18	43%	43%	44%	43%
Married couple families as % of all families	88%	83%	72%	72%
Nonfamily households	20%	28%	35%	37%
% of nonfamily householders living alone	83%	81%	79%	77%
% nonfamily householders living alone, aged 65+	57%	45%	41%	43%

Tenure. Nearly 90 percent of Harvard households own their homes, a higher share than any of its neighbors except Bolton (**Figure 2.7**). Rentals are scarce and most (88%) of the professionally managed, or "permanent" rental inventory – is age restricted. With the exception of those living in the three developments built specifically as rentals (Foxglove, Bowers Brook and The Elms), most Harvard renters lease single family homes, which are often available only temporarily due to an owner's inability to sell or leave of absence from town.

Figure 2.7: Households (Housing Units) by Tenure, 8 Town Region



Source: 2020 Decennial Census

Householders in every age group except the very oldest (85+) are more likely to own their homes in Harvard than they are regionwide, but the distribution by age – that is, each age group's share of owner households – is quite similar to that of the region. That is not the case among renter households. Harvard's renter householders are much more likely to be 65 or over, and much less likely to be under 44 than is true for the region. This reflects the fact that a high percentage of Harvard's rental inventory is age restricted, while some of the surrounding towns have more, and newer, apartments in properties offering a variety of amenities sought by younger renters (**Table 2.6**).

Table 2.6: Households by Age of Householder and Tenure, Harvard and Region

Harvard	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	Total
Age group as share of all HHs	0%	5%	14%	22%	26%	20%	10%	2%	100%
% of age group that owns	25%	74%	93%	94%	93%	89%	84%	78%	90%
% of age group that rents	75%	26%	7%	6%	7%	11%	16%	22%	10%
Age group's share of owner HHs	0%	4%	15%	23%	27%	20%	9%	2%	100%
Age group's share of renter HHs	3%	14%	9%	14%	17%	23%	15%	5%	100%
8 Town Region									
Age group as share of all HHs	1%	10%	16%	20%	25%	17%	8%	3%	100%
% of age group that owns	23%	55%	79%	83%	84%	83%	81%	78%	79%
% of age group that rents	77%	45%	21%	17%	16%	17%	19%	22%	21%
Age group's share of owner HHs	0%	7%	16%	21%	27%	18%	8%	3%	100%
Age group's share of renter HHs	5%	21%	16%	16%	19%	14%	7%	3%	100%

Mirroring the region, more than 36 percent of Harvard's owner households have children under 18; just 22 percent of renter households do (Table 2.7).

Table 2.7: Households with Children by Tenure, 8 Town Region

	Harvard	8 Town Total	Worcester County	MA
% Owner Occupied	90%	79%	64%	60%
% Owner HHs w children under 18	36%	35%	31%	30%
% Renter Occupied	10%	21%	36%	40%
% Renter HHs w children under 18	22%	23%	28%	25%

Source: 2020 Decennial Census

Most Harvard households are relative newcomers. An estimated 32 percent moved into their homes in 2015 or later, including 30 percent of homeowners and nearly two-thirds of renters. Only 27 percent moved to their current homes prior to 2000, and just 10 percent have lived in their homes for 30 years or more. All of Harvard's renter households are estimated to have moved into their current homes since 2010 (**Figure 2.8**). Renters typically move more often than owners, but the completion of the 42-unit Bowers Brook apartments in 2012 is certainly reflected in these numbers.

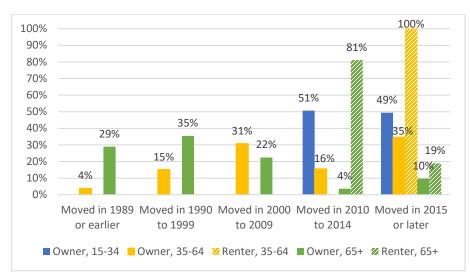


Figure 2.8: Year Household Moved into Their Home by Tenure

Source: 2021 5-Year American Community Survey (Note: The 2020 Census counted 35 renter households living in Harvard, headed by someone aged 15-34. The ACS provides more detailed and timely data than the Decennial Census, but their findings are *estimates only*, subject to higher margins of error, especially when the population is very small (35). The ACS estimated that there were no renter householders in this age group.

Household Size. Household size also affects housing demand, and for decades the average household size in Massachusetts and across the country had been declining. Harvard, where families with children represent a disproportionately large share of households, has bucked that trend. (The town's estimated average family size in 2021 was 3.36 persons per household.) **Table 2.8**, which depicts household size over time, shows that the rise in household size since 2010 was driven by an increase in the size of owner households. The limited rental inventory yields a very small sample size but follow up interviews with the managers of Harvard's two largest rental properties confirm that a large percentage of their units are occupied by single individuals.

Table 2.8: Harvard's Household Size Over Time was

	2000	2010	2020
All Households	2.86	2.76	3.07
Owner-occupied	2.96	2.84	3.13
% 1- and 2-person Owner HHs	45.9%	49.0%	49.1%
Renter-occupied	1.91	1.98	1.74
% 1- and 2-person Renter HHs	75.4%	76.7%	71.7%

Source: 2000, 2010 Decennial Census, 2021 5-Year American Community Survey

Harvard's increasing household size is contrary to that of Worcester County and the state, which both saw household size increase slightly coming out of the recession but trending back down by 2020. Data is not yet available that can tell us if and how the COVID-19 pandemic affected household size.

Notwithstanding Harvard's relatively large average family size, small households – whether made up of seniors, empty nesters or small families – predominate, among both renters and owners. This is a trend seen in many communities. Almost half of Harvard's owner households, and more than three-quarters of its renter households consist of just one or two persons. Many factors can contribute to shrinking

household size, but age is a major consideration; older households typically are smaller than younger households.

2D. Race, Ethnicity and Migration¹¹

Increasing Racial and Ethnic Diversity. Harvard's population, and that of the surrounding communities, is predominantly non-Hispanic White, but the region has become somewhat more diverse since 2000. At the time of the 2020 Census, Harvard's household population was 80.9 percent non-Hispanic White, 3.1 percent Hispanic (Latino), 1.4 percent non-Hispanic Black, 7.3 percent non-Hispanic Asian, 1.5 percent all other races and 5.8 percent two or more races (Figure 2.9). This represented a decline of more than 4 percent since 2000 in the number of residents (household population) identifying as White alone not Hispanic, and a more than quadrupling of the town's admittedly small minority population. This approximates the trend in the 8-town region. Worcester County and the state also saw their non-Hispanic White populations drop by 6 and 9 percent, respectively, and a more than doubling of their much larger populations of color.

Nationwide, the 2020 census documented a dramatic increase in the number of people who identify with two or more racial categories. The growth of that category is evident in Harvard's data as well. In 2020, 94 percent of Harvard's population identified as belonging to a single race, down from 99 percent in 2000 and 2010. Some of the increase in those identifying as multiracial may be due to changes in the questions the Census Bureau used in 2020 to collect race and ethnicity data, as it is a trend seen nationwide.

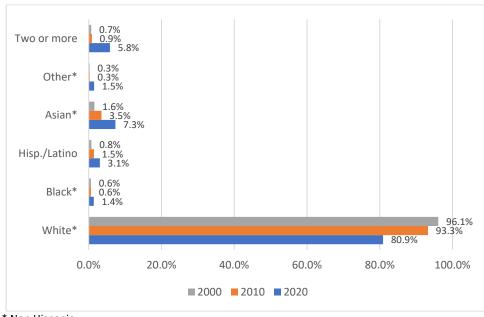


Figure 2.9: Harvard Household Population by Race/Ethnicity: 2000, 2010, 2020

* Non Hispanic

Source: 2000, 2010, 2020 Decennial Census

¹¹ This plan uses the Census Bureau terminology, which classifies as "Hispanic or Latino" respondents who identified as being of Latin American or Spanish origin in the decennial census. Hispanic or Latino persons may be of any race, or combination of races. The Census refers to people who reported their ethnicity or race as anything other than non-Hispanic White alone in the decennial census as minority.

The Devens household population is more racially and ethnically diverse than the balance of Harvard. (**Table 2.9**).

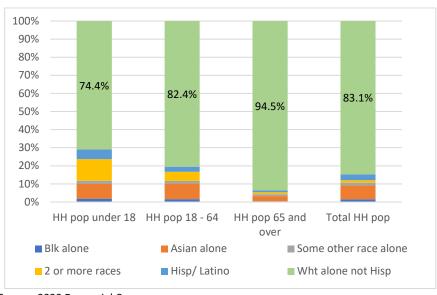
Table 2.9: Race/Ethnicity of Head of Household, Devens v Balance of Harvard

	White not Hispanic	Asian alone	2 or more races	Hisp/Latino	Black alone	Some other race alone
Devens	63%	16%	7%	5%	6%	4%
Balance of Harvard	88%	6%	3%	2%	1%	1%
Harvard Total	86%	7%	3%	2%	1%	1%

^{*}Based on householder identification. Note: The Census Bureau identifies a single person as "householder," or "head of household." It is not uncommon for the householder's spouse, or co-head of household, children or other household members to be of a different race or ethnicity (i.e., to be biracial/cultural or multiracial/cultural. That is why the racial distribution of a population is often different from the racial distribution of the head of householder/householder. 2020 Decennial Census

A Smaller but More Diverse Youth Population. While children of color represent an increasing share of its youth population, Harvard's older population remains overwhelmingly White. Figure 2.10, which depicts the racial/ethnic breakdown of the population by broad categories (roughly corresponding to students, working age adults and retirees), shows that nearly 95 percent of residents aged 65 and over are non-Hispanic White while fewer than 75 percent of those 19 and under are. This trend mirrors that of the region, county and state.

Figure 2.10: Minority* Share of Household Population by Age Group



Source: 2020 Decennial Census

Migration. About 10 percent of the population is foreign born, roughly the same as the average for the 8-town region. A substantially higher percentage of Harvard's foreign born residents have been here longer, however, having arrived prior to 2010. While more than 18 percent of immigrants reported speaking a language other than English at home, just 6 percent said they spoke English less than "very well."

2E. Education

Educational Attainment. The economic potential of a region is indicated in part by the size of the working-age population and its education level, so educational attainment is an important indicator of an area's ability to absorb or support economic growth. Massachusetts overall, and this region in particular, does very well on educational attainment, less well in accommodating younger workers, very likely because of the high cost of living. More than three quarters of Harvard adults (age 25 or older) have at least a bachelor's degree, the highest level of educational attainment in the region and one of the highest in the state. More than one in three has a graduate or professional degree. Other towns in the region – Bolton, Stow, Boxborough – have similar educational profiles, and over 98 percent of residents in these towns have at least a high school diploma.

School Enrollment. Harvard made the decision years ago to operate and manage its own public school system rather than become part of a regional school district. Residents place a strong emphasis on education, and Town Meeting regularly appropriates more than its minimum contribution to support the schools. Because of the school system's consistently high performance, the town has long been an attractive community for families seeking top-rated schools.

Despite a modest uptick in 2022-2023, Harvard's school enrollment has been trending downward for years, the predictable result of the town's slow growth and aging population. In 2000, nearly 6 percent of the population was under 5 years old and over 22 percent was 5-19; by 2020, those cohorts had dropped to just 3 and 13 percent, respectively. (As noted in a previous section, the under 5 cohort has trended up – modestly – after a sharp decline at the beginning of the millennium.)

Harvard's school population peaked in 2006 when total enrollment reached 1,307 students (580 at the Hildreth Elementary School and 758 at the Bromfield School). That population exceeded recommended size limits at that time, which were 488 at the Elementary School and up to 740 at Bromfield. There has been a 25 percent decline in the school age population since then and a new state of the art elementary school was opened in 2021 to support additional capacity.

While most school age children (85%) attend the local public schools, about 9 percent attend other public schools (vocational technical high schools, charter schools, collaboratives, or out-of-district public schools.) The remaining 6 percent attend private or parochial schools or are home schooled. There is a public charter school for grades 7 through 12 and an independent school offering pre-kindergarten through grade 4 at Devens. **Figure 2.11** tracks enrollment in just the local public schools, while **Figure 2.12** shows Harvard's school attending children over time, regardless of where they are educated. Both document the long term decline in students and school enrollment, but both show a modest upturn in the most recent school year.

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¹² Excludes census tract 7614.02, block group 2. Ninety-five percent of the adult population in this block group are inmates incarcerated at FMC.

1,400 1,338 1,200 1,020 1,000 758 800 580 560 600 460 400 200 0 2015-16 2004-5 2005-6 2007-8 2012-13 2014-15 2006-7 2010-11 2013-14 2016-17 2019-20 2009-10 2018-19 2020-21 Hildreth Bromfield District Total

Figure 2.11: Enrollment in the Harvard Public Schools 2004-5 to 2022-23

Source: Massachusetts Department of Elementary and Secondary Education

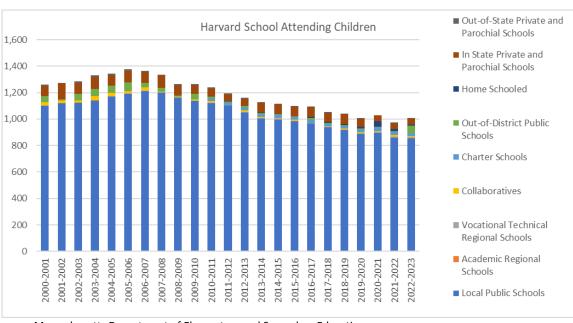


Figure 2.12: Harvard School Attending Children 2000-2001 to 2022-2023

Source: Massachusetts Department of Elementary and Secondary Education

The increasing diversity of Harvard's youth population described in the preceding section is reflected in the school population (**Table 2.10**).

Table 2.10: Racial/Ethnic Profile of Harvard Public Schools: 2020-2021

	African American %	Asian %	Hispanic %	White %	Multi-Race, Non-Hispanic %	All Other
2021-22	2.7%	13.7%	4.0%	74.8%	4.8%	0.0%
2010-11	2.7%	6.9%	1.7%	87.3%	1.3%	0.1%

Source: Massachusetts Department of Elementary and Secondary Education

2F. Economic Conditions

Income. Although a number of communities closer to Boston have surpassed it in both income and housing values in recent years, Harvard remains a community with high household income (and high housing prices). By most economic indicators – income, home values, educational attainment, occupation – it ranks among the most affluent communities in the state. **Table 2.11**, which presents a set of standard wealth indicators for Harvard, Worcester County and the state, illustrates this. This overall economic wellbeing notwithstanding, 20 percent of the town's households are considered low income by federal Department of Housing and Urban Development definitions, earning no more than 80 percent of the area median income, and 2 percent live below the federal poverty level.

Income is not only an important determinant of how much a household can afford to pay for housing, but also whether that household may be eligible for housing assistance. While Harvard's income places it at or near the top among neighboring towns, the entire region is relatively well off compared to the state (**Table 2.12**). Still, an estimated one third of households in the 8 town region are considered low income (earning no more than 80 percent of the area median income, adjusted for family size) and potentially eligible for some form of housing assistance. Affordability is discussed in greater detail in **Section 5**.

Table 2.11: 2021 Key Income Measures: Harvard, Worcester County and Massachusetts

	Harvard	Worcester County	Massachusetts
Household income distribution			
Less than \$25K	5.8%	15.2%	15.2%
\$25K to \$49.9K	5.9%	16.5%	14.6%
\$50K to \$74.9K	9.5%	14.7%	13.5%
\$75K to \$99.9K	5.5%	12.0%	11.7%
\$100K to \$149.9K	19.1%	18.7%	17.8%
\$150K to \$199.9K	13.1%	10.9%	11.1%
\$200K or more	41.0%	11.9%	16.3%
Median household income	\$167,393	\$81,660	\$89,026
Median income w 1 wage earner	\$141,719	\$70,942	\$74,505
Median income w 2 wage earners	\$212,500	\$130,458	\$144,726
Mean household income	\$213,789	\$106,611	\$123,174
Median family income	\$183,906	\$104,022	\$112,543
Mean family income	\$215,869	\$126,981	\$148,067
Nonfamily households		\$59,827	\$52,250
Median income owner households	\$173,993	\$109,938	\$117,790
Median income renter households		\$44,707	\$51,250
% of households w income < 80% AMI	17.9%	43.9%	43.8%
Poverty rate (all people)	3.2%	9.8%	9.9%

Source: 2021 5-Year American Community Survey; source for estimate of low income (<80% AMI) households is most recent HUD CHAS data, based on the 2019 5-Year ACS. When the population being measured is very small (e.g. Harvard's nonfamily or renter households), data are suppressed to protect the privacy of individual respondents.

Table 2.12: 2021 Median Household Income: Harvard and 7 Surrounding Communities

	Households	Families	Married- couple families	Nonfamily households
Ayer	\$101,688	\$136,396	\$148,683	\$55,987
Bolton	\$167,132	\$191,434	\$193,661	\$106,336
Boxborough	\$136,875	\$207,813	\$211,082	\$54,100
Harvard	\$167,393	\$183,906	\$188,952	-
Lancaster	\$109,963	\$119,321	\$139,265	\$68,264
Littleton	\$140,511	\$159,509	\$181,100	\$55,778
Shirley	\$111,875	\$120,565	\$129,435	\$64,799
Stow	\$147,841	\$155,811	\$162,043	\$62,900

Source: 2021 5-Year American Community Survey

Disparities in Income by Household Type, Tenure and Age. Incomes vary widely by household type, as Table 2.8 illustrated. Median income for families is higher than it is for non-family households. The income of homeowners is usually greater than that of renters. While comparative data are not available for 2021 due to the small renter sample size, over the past 10 years, the median income of Harvard's renters was just 34 percent that of homeowners. Household income usually rises as wage earners reach their peak earning years, typically between the ages of 45-64. As householders leave the labor force in retirement – this occurs after age 65 – incomes drop. This, too, is typical.

Income Distribution. Income distribution is more useful than median income for assessing housing needs and determining whether a household is likely to be able to secure housing in the private market or

to qualify for housing assistance. While Harvard is a high income community, it has a fairly diverse range of household incomes (Figure 2.13).

50.0% 45.0% 40.0% 35.0% 30.0% 25.0% 20.0% 15.0% 10.0% 5.0% 0.0% Less \$10K to \$15K to \$25K to \$35K to \$50K to \$75K to \$100K to \$150K to \$200K or than \$14.9K \$24.9K \$34.9K \$49.9K \$74.9K \$99.9K \$149.9K \$199.9K more \$10K All Households ——Families ——Non Family HHs

Figure 2.13: Income Distribution of Harvard Households

Source: 2021 5-Year American Community Survey

An estimated 43 percent of households headed by someone aged 65 or over earn \$100,000 or more per year while 28 percent earn less than \$35,000. More than three quarters of households headed by someone aged 45-64 earn \$100,000 or more, while just 9 percent earn below \$50,000. Somewhat surprising, but consistent with the recent increase in younger households, 96 percent of households headed by someone aged 25-44 earn \$100,000 or more, and none earn below \$75,000 (Figure 2.14).

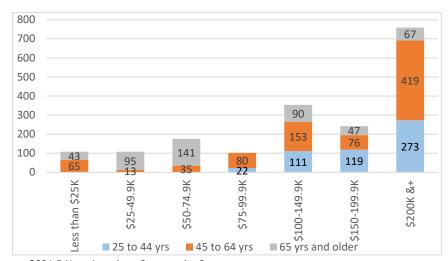


Figure 2.14: Income Distribution by Age of Harvard Householders

Source: 2021 5-Year American Community Survey

Poverty. Poverty rose across Massachusetts, and the country, during the Great Recession (December 2007-June 2009), but it had been dropping steadily since about 2013, before rising again in 2020 with the onset of COVID.¹³ Harvard's poverty rate overall (3.2% in 2017-2021) and the poverty rate among children (2.2%); the working age population, 18-64 years (4.5%); and those 65 and over (0.0%) are substantially below Worcester County or the state. The overall poverty rate in both the county and the state for all of these age groups was over 9 percent.¹⁴

Like income, the incidence of poverty varies widely across jurisdictions and household type. One of the most striking disparities in the poverty rate is between married couple families with children under age 18 and single mothers with children under 18. The 2021 American Community Survey estimated that just 4 percent of Worcester County's married couple households with children live in poverty compared to nearly 26 percent of female headed households with children and no husband present. Due to small sample size, Harvard estimates are suppressed, but it is likely that a disparity exists here as well.

Employment. Roughly two-thirds of Harvard's over-16 population is in the civilian labor force, which is on par with surrounding communities, Worcester County and the state. More than three-quarters of this workforce force is employed in management, business, science, or the arts. Households with children, particularly young children, are less apt to have both parents in the labor force in Harvard than in the county or statewide. This is likely a reflection of the fact that the median income of Harvard's single wage earner households approximates that of two wage earner households statewide (**Table 2.13**).

Table 2.13: Key Employment Metrics: Harvard, Worcester County, Massachusetts

		Worcester	
	Harvard*	County	Massachusetts
% In labor force	65.7%	66.4%	67.2%
% unemployed	5.6%	7.9%	6.6%
HHs w children < 6 and all parents in labor force	39.7%	73.1%	74.2%
HHs w children 6-17 and all parents in labor force	62.9%	77.5%	77.3%
Employed in management, business, science, arts	76.5%	44.6%	49.0%
Worked from home	26.7%	10.5%	11.9%
Mean travel time to work (minutes)	34.6	29.6	29.6

^{*} Excludes census tract 7614.02, Block Group 2. Source: 2021 5-Year American Community Survey

Harvard sits on the outskirts of two metro areas, Boston and Worcester. Residents have access to Boston and Cambridge by car or train, and to other Boston metro employment centers along Interstate Route 495, Route 2, Route 128, and Worcester by auto. Nearly 27 percent of Harvard workers worked from home according to the 2021 5-Year American Community Survey, a far higher percentage than reported for either the county or state — and almost double the number reported five years earlier. As the 2021 ACS captured the pandemic years, this increase is not surprising and may not be sustainable. Even before COVID-19, however, Harvard had a relatively high share of home based workers. The local economy is otherwise very limited.

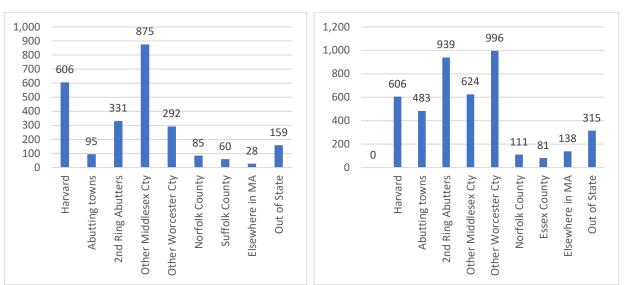
¹³ It is not possible to determine the impact of COVID-19 on poverty rates in Harvard or the surrounding region because the 1-Year American Community Survey, which would provide estimates annually for 2020 and 2021, is not available for areas of fewer than 65,000 people.

¹⁴ The poverty rate cited here are for individuals, not households. Harvard's household poverty rate is 2 percent.

Commuting Patterns. For most people, living in Harvard means traveling to other locations for their livelihood, as well as their goods and services, health care, etc. Residents who have to travel to their place of employment experience longer commutes than those across the county and state. Excluding those who work at home, most workers (92%) commute to their jobs by car, and more than 90 percent drive alone; most of the others commute by train, to which they must drive. About 20 percent of workers have a commute of an hour or more.

Figure 2.15 shows the workplace of Harvard residents as well as the residence of commuters working in Harvard. The substantial number of commuters working in Harvard, depicted on the right side of Figure 2.15, are employed at Devens, for the most part. By the summer of 2023, nearly 9,000 people were employed at Devens' 120 businesses.

Figure 2.15: Place of Work of Harvard Residents (Left) and Residence of Commuters Working in Harvard (Right)



Source: 2015 5-Year American Community Survey. This is the most recent ACS for these particular tables.

There is very little land developed for commercial or industrial purposes outside of Devens, and the largest employers outside of Devens are the Town and the schools. The lack of a commercial base reflects Harvard's land use policies and lack of infrastructure. Although there is a commercial zoning district along Ayer Road north of Route 2, the 2016 Master Plan calculated that just 13 percent the land in the district was developed with commercial uses. That Plan acknowledged that the Town had not made it easy to establish and operate thriving businesses and attributed this, at least in part, to concern that commercial development might change Harvard's appearance in unwanted ways. The only industrial zone was eliminated in 1972.

2G. Disability Status¹⁵

The 2021 American Community Survey estimated that 6 percent of Harvard's non-institutionalized population (approximately 350 residents) had at least one disabling physical, sensory or mental condition. The number of *households* with one or more members having a disabling condition was about 280, or 15 percent of all households.

The likelihood of having a disability increases dramatically with age, and 70 percent of those reporting a disability are seniors (**Figure 2.16**). Fewer than half of those with a disability reported that their condition limited their ability to live independently. Figure 2.16 also shows that the incidence of disability is substantially lower in Harvard across age categories than it is in Worcester County or the state.

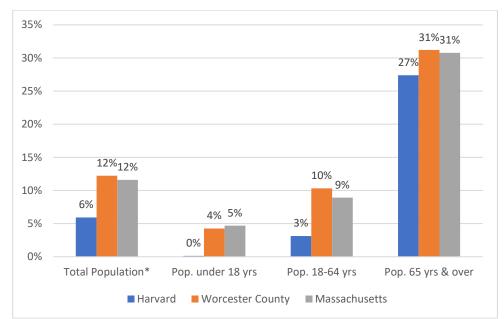


Figure 2.16: Disability Status by Age: Harvard, Worcester County and Massachusetts

Source: 2021 5-Year American Community Survey; includes civilian noninstitutionalized population only

Table 2.14 provides greater detail on the nature and incidence of disabilities experienced by Harvard residents. As the previous figure illustrated, the likelihood of residents reporting a disability increases sharply with age, and more than 60 percent of those aged 75 or over report at least one disabling condition. (Often people experience more than one disability; as a result, there are twice as many disabling conditions identified in Table 2.11 as there are people reporting such.) Conditions most likely to affect one's housing needs include cognitive, ambulatory, self-care, and independent living. One third of residents 75 or over reported a disabling ambulatory condition, and the same number reported difficulty living independently. This age group is projected to increase by more than 48 percent between 2020 and 2030, greatly increasing the demand for both assisted living and in-home health care.

¹⁵ The wide range of disabling conditions and lack of a single definition of what constitutes a disability complicates efforts to quantify their prevalence, but the American Community Survey (ACS) uses the following definition: "a long-lasting physical, mental, or emotional condition. This condition can make it difficult for a person to do activities such

lasting physical, mental, or emotional condition. This condition can make it difficult for a person to do activities such as walking, climbing stairs, dressing, bathing, learning, or remembering. This condition can also impede a person from being able to go outside the home alone or to work at a job or business."

Table 2.14: Detailed Disability Status of Harvard Residents, 2017-2021

	#	%
With a disability		
Under 5 yrs	2	0.4%
5 to 17 yrs	0	0.0%
18 to 34 yrs	2	0.2%
35 to 64 yrs	101	4.1%
65 to 74 yrs	94	14.9%
75 yrs and over	143	61.4%
With a hearing difficulty		
Under 5 yrs	2	0.4%
5 to 17 yrs	0	0.0%
18 to 34 yrs	0	0.0%
35 to 64 yrs	16	0.7%
65 to 74 yrs	35	5.5%
75 yrs and over	84	36.1%
With a vision difficulty		
Under 5 yrs	2	0.4%
5 to 17 yrs	0	0.0%
18 to 34 yrs	2	0.2%
35 to 64 yrs	39	1.6%
65 to 74 yrs	43	6.8%
75 yrs and over	4	1.7%
With a cognitive difficulty		
5 to 17 yrs	0	0.0%
18 to 34 yrs	0	0.0%
35 to 64 yrs	27	1.1%
65 to 74 yrs	16	2.5%
75 yrs and over	35	15.0%
With an ambulatory difficulty		
5 to 17 yrs	0	0.0%
18 to 34 yrs	0	0.0%
35 to 64 yrs	19	0.8%
65 to 74 yrs	34	5.4%
75 yrs and over	77	33.0%
With a self-care difficulty		
5 to 17 yrs	0	0.0%
18 to 34 yrs	0	0.0%
35 to 64 yrs	22	0.9%
65 to 74 yrs	16	2.5%
75 yrs and over	39	16.7%
With an independent living difficulty		
18 to 34 yrs	0	0.0%
35 to 64 yrs	32	1.3%
65 to 74 yrs	32	5.1%
75 yrs and over	77	33.0%

Source: 2021 5-Year ACS; includes civilian noninstitutionalized population only

In addition to those residents with long lasting disabling conditions, there are others whose health and/or other issues require specialized housing services. The numbers are modest, and their needs may be temporary or episodic. Not all such needs can be met locally, but it is important to recognize that Harvard residents contribute to a regional demand for group homes, transitional housing, shelter beds, etc.

Key Findings: Demographic Profile

- Harvard experienced its greatest growth between 1960 and 1990 when its household population increased by more than 150 percent. Growth has slowed since 2000 and now trails that of many of its neighbors.
- The new residential community at Devens has bolstered Harvard's household population. Including Devens, Harvard's household population increased by nearly 11 percent since 2000, more than double the rate of growth the town would have experienced without it.
- Harvard is "graying" as residents who moved to town in their 30s to raise families are aging in
 place. The median age rose from 39.9 to 48.0 between 2000 and 2020, a substantially greater
 increase than surrounding towns, the county or state. In 2000, fewer than 17 percent of
 households included someone 65 or over and fewer than 8 percent included someone 75 or
 older. By 2020, those shares had more than doubled to 38 and 17 percent, respectively.
- Harvard continues to have a higher share of families and households with children under 18
 than most towns in the region, or the county or state. One third of all households include
 children, but that number is down nearly 7 percent since 2010 when 40 percent of households
 included children. Of nonfamily households, most are seniors who live alone.
- The decline in Harvard's youth population since 2000 was substantially greater than that
 experienced regionwide. In 2000, nearly 6 percent of the population was under 5 years old and
 over 22 percent was 5-19. By 2020, those numbers had dropped to just 3 and 13 percent. A
 sharp decline in the preschool population between 2000 and 2010, however, was reversed
 between 2010 and 2020 as the number of young households (those headed by someone 2534) more than doubled.
- Harvard's average household size has increased since 2000 and 2010, bucking the national trend of declining household size. Even so, small households predominate: almost half of owner – and over 70 percent of renter – households consist of just one or two persons.
- The population is projected to grow by less than 2 percent between now and 2030, but the age structure will continue to shift, with significant growth among the oldest residents (Baby Boomers). The only other age group that is expected to see any meaningful growth is the 30-45 year cohort (Millennials) including the young families that moved to Harvard between 2010 and 2020.
- Most Harvard residents are relative newcomers. An estimated 32 percent of households moved into their homes in 2015 or later. Only 27 percent moved to their current homes prior to 2000, and just 10 percent have lived in their homes for 30 years or more.
- The population of Harvard and the surrounding communities is predominantly non-Hispanic white, but it has become more diverse since 2000, the youth population more so than the older population. Students of color represent more than 25 percent of the school population compared to just over 12 percent a decade ago.

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- Despite a modest uptick in 2022-2023, Harvard's school enrollment has been trending downward for years. The school population peaked in 2006 with a total enrollment of 1,307 students; in 2023-24, enrollment was just 1,020.
- Nearly 9,000 people are now employed at the 120 businesses at Devens, but employment opportunities elsewhere in town are limited; the 2016 Master Plan calculated that just 13 percent the land in the commercial district was developed with commercial uses.
- Even though Harvard ranks among the most affluent communities in the state by most economic indicators, an estimated 20 percent of the town's households are considered low income by federal Department of Housing and Urban Development definitions, earning no more than 80 percent of the area median income; 2 percent live below the federal poverty level.
- Approximately 6 percent of the population (15% of households) report at least one disabling
 physical, sensory or mental condition. The likelihood of having a disability increases
 dramatically with age, and 70 percent of those reporting a disability are seniors. Fewer than
 half of those with a disability reported that their condition limited their ability to live
 independently.

3. HOUSING CONDITIONS

Housing Needs Assessment

This section examines Harvard's housing supply, how it has changed over time and how it compares to other towns in the region. It describes current market conditions (home sales, prices, rents, land costs), how they are influenced by regional and national forces, and how they have changed over the past decade.

3A. Characteristics of Harvard's Housing Stock

Eighty-six percent of the housing units in Harvard are detached single family homes. They are generally larger than those found in adjacent towns and sited on larger lots. There are a handful of older 2-, 3- or 4-unit dwellings and a few properties with multiple structures on a single lot. Greater density and variety can be found in older homes in the Town Center, around Bare Hill Pond, Still River Village, and the Shaker Village area, but such development has not been permitted for many years. With the adoption at the fall 2023 Town Meeting of new Open Space and Conservation—Planned Residential Development (OSC-PRD) provisions, multifamily housing will now be permitted. However, this zoning change is so recent that it has not impacted the housing stock.

The mixed income condominiums and subsidized rental units that have been built over the past 30 years were permitted under Chapter 40B or the Ayer Road Village Special Permit. Devens, with its one stop permitting and an infrastructure (water and sewer) not found anywhere else in Harvard, offers a greater mix of housing types, but unless the cap of 282 units of permanent housing is lifted there will be few additional units created there. ¹⁶

Table 3.1 provides basic information about Harvard's housing stock of 2,251 units compared to neighboring towns, Worcester County and the state.

Table 3.1: Housing Stock Characteristics: Harvard and Surrounding Towns, Worcester County and State

	% Owner Occupied	% Single Family Detached	% with 1-3 rooms	% with 8 or more rooms	% with 0, 1, 2 Bedrooms	% with 4+ Bedrooms	% Units Built Since 2000	% Units Built Before 1940
Ayer	61.8%	52.0%	15.6%	21.7%	49.6%	18.0%	17.7%	22.7%
Bolton	94.1%	92.2%	1.7%	62.4%	12.0%	56.2%	22.8%	12.1%
Boxborough	67.6%	61.3%	13.2%	39.4%	37.2%	37.6%	18.9%	4.4%
Harvard	89.9%	86.0%	5.0%	61.4%	17.0%	52.0%	11.2%	20.5%
Lancaster	81.5%	79.6%	8.1%	24.6%	29.8%	25.6%	21.4%	27.9%
Littleton	82.9%	85.4%	6.0%	41.2%	25.5%	32.2%	20.3%	19.0%
Shirley	73.5%	68.7%	6.0%	52.6%	36.5%	32.0%	17.5%	31.8%
Stow	89.6%	80.6%	15.4%	29.5%	27.8%	40.7%	18.9%	16.5%
Worcester County	65.9%	58.7%	12.6%	22.2%	40.7%	20.7%	12.7%	29.2%
Massachusetts	62.4%	51.8%	16.2%	21.3%	44.2%	21.2%	11.9%	31.5%

Source: 2021 5-Year American Community Survey

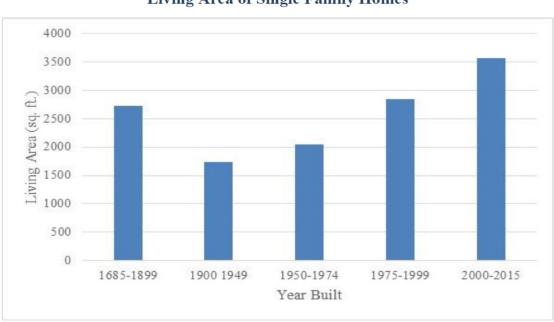
Units in Structure. The most notable change in Harvard's housing stock over the last 20 years has been the addition of attached single family homes (aka townhouses, townhomes). The 2000 Census reported

¹⁶ A total of 241 units (including 60 affordable) will be located in Harvard. There are fewer than 30 unallocated/unpermitted housing units remaining under the cap; however, there are 72 approved but unbuilt units at Emerson Green.

just five such structures; by 2021, there were 100. Most of these are in condominium developments approved under Chapter 40B or at Devens. The completion in 2012 of the 42-unit Bowers Brook Senior Housing, permitted under the Ayer Road Village Special Permit process, tripled the number of rental units in large (20+ unit) professionally managed developments in town; prior to its construction, the only such development was the 24-unit Foxglove Apartments, also on Ayer Road and approved under a comprehensive permit.

Housing Size (Rooms, Bedroom, Living Area). The median number of rooms in Harvard (8.0) is greater than in all neighboring towns except Bolton and is considerably more than the county and state median. Fifty-two percent of Harvard homes have four or more bedrooms, a share exceeded only by Bolton, and far greater than the 21 percent in Worcester County overall. Harvard's home sizes have increased over time. A survey conducted at the time of the most recent master plan found that single family homes built from 2000 – 2015 were over 1,500 square feet larger than those built between 1950 – 1974, an increase of 73 percent (**Figure 3.1**).

Figure 3.1 Living Area of Single Family Homes



Living Area of Single Family Homes

Source: Harvard Assessor's Data

Age of Housing. The distribution of housing units by age is important for several reasons. A housing stock with few units built since 2000 indicates that the housing supply is growing slowly and may not keep pace with demand, leading to rising prices and/or housing shortages. And older housing units are often more expensive to occupy, due to higher heating and maintenance costs. These additional costs have an impact on the affordability of older, outdated units for both owners and renters. Some older units contain lead paint or, for other reasons related to age or obsolescence, pose hazards to their occupants, especially the very young and very old.

Massachusetts has one of the oldest housing stocks in the nation, but housing in this region, at the outer edge of the Boston and Worcester metro areas, is relatively newer. Harvard, like neighboring Bolton,

Boxborough and Stow experienced its greatest period of housing development in the second half of the twentieth century. Almost half of the homes in town were built between 1960 and 1990. Since 2000, however, housing production in Harvard has trailed that of its seven neighbors and the county (**Table 3.2**).

Table 3.2: Year Structure was Built: Harvard and Surrounding Towns, Worcester County and State

	Ayer	Bolton	Boxboro	Harvard	Lancaster	Littleton	Shirley	Stow	Worcester County
2010 or later	10%	8%	11%	7%	6%	9%	3%	11%	4%
2000 to 2009	8%	15%	8%	4%	15%	11%	14%	8%	9%
1990 to 1999	14%	19%	22%	10%	8%	17%	11%	10%	10%
1980 to 1989	13%	11%	7%	10%	8%	7%	14%	11%	12%
1970 to 1979	13%	17%	29%	19%	6%	9%	13%	18%	11%
1960 to 1969	7%	14%	11%	18%	11%	7%	4%	12%	9%
1950 to 1959	7%	4%	5%	9%	8%	17%	8%	10%	11%
1940 to 1949	7%	1%	3%	2%	11%	4%	1%	4%	6%
1939 or earlier	23%	12%	4%	21%	28%	19%	32%	17%	29%

Source: 2021 5-Year American Community Survey

Housing Condition. Homes are generally of high quality. The most recent American Community Survey reports virtually no serious housing problems (lack of plumbing, or complete kitchen facilities, for example). Of course, ongoing maintenance of all types presents a challenge for older and low income homeowners, and over half of all households heat with costly oil, which can be especially burdensome in harsh winters. The adoption of the Stretch Energy Code by Harvard will phase out oil use in favor of all electric, but it will be a slow decades long process and one that National Grid and/or the State will need to help support as the electrical infrastructure in town cannot currently accommodate every house going full electric for heat. The Stretch Code went into effect for new buildings and some major renovations in January 2023. In some cases, the new code is likely to make renovations of the existing aging housing stock more expensive, but it will move us away from home heating oil use.

Lead paint, outlawed for use in housing in 1978, is most problematic in homes built prior to 1950, which would include less than a quarter of Harvard's units, but whenever young children are living in older homes, testing for lead paint and removing or encapsulating it is always recommended. A greater problem for many homeowners is the possibility of septic failure under the State's Title 5 regulations, and the high cost of system repair or replacement to bring failed systems into compliance.

Another area of concern is possible water contamination in wells at Devens and the surrounding neighborhoods due to Per-and Polyfluoroalkyl Substances (PFAS, or "forever chemicals"). The U.S. Army and MassDEP have been monitoring water quality for several years, and while none of the wells tested in Harvard exceeded MassDEP's guidelines for PFAS, the Board of Health in 2023 began requiring water quality testing for property sales and new construction in those parts of town where elevated levels of PFAS have been found.

Vacancy. Vacancy rates are a useful indicator of whether a region is experiencing excess or slack demand, and they are directly linked to housing cost. When vacancy rates are low, or dropping, prices will typically be high, or rising. In a well-functioning housing market, more units would be produced until the vacancy rate returned to normal and home prices and rents moderated. But because of the constraints on new construction in Massachusetts, that hasn't happened. The state has underproduced new housing for

years. As a result, vacancy rates here are among the lowest in the nation while home prices and rents are among the highest.

The ACS does not estimate vacancy rates for small geographies like Harvard or the surrounding towns, but **Figure 3.2** shows the 2021 estimates for Middlesex and Worcester Counties and the state. ¹⁷ Using the widely accepted rule of thumb that a vacancy rate of 6 percent for rental units and 1.5 percent for owner units provides for optimal market functioning, it is clear that the housing market in the region and statewide is extremely tight. Managers at the town's three subsidized developments report that demand is strong for rental units and vacancies are typically of short duration.

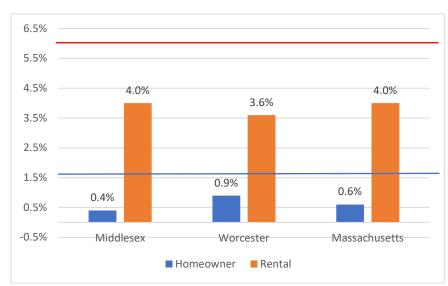


Figure 3.2 Homeowner and Rental Vacancy Rates, 2021: Worcester and Middlesex Counties, MA

Source: 2021 1-Year American Community Survey

Occupancy. Not surprising, given the large homes and relatively small households, overcrowding (described as more than one person per room) is seldom an issue. The 2021 ACS estimates that more than 99 percent of Harvard's housing units are occupied by one or fewer persons per room.

3B. Trends in New Construction

Housing Production. In general, the pace of new housing construction in Harvard is quite slow, and lags that of surrounding communities. Since 2003, fewer than 13 new housing units per year have been added, *including* those permitted under 40B and the 42-unit Bowers Brook Apartments. Excluding those, fewer than 5 units per year have been built. **Table 3.3** compares recent housing production (2013-2022) in Harvard and surrounding communities based on the number of units authorized by building permits reported on the U.S. Census Bureau's Building Permits Survey (BPS). Though voluntary, the BPS is the industry standard for reporting and tracking housing production nationwide.

¹⁷ The 2020 Census identified 9 vacant units as "for rent" and 36 as "for sale only" out of 143 total vacant units; most vacant units in town are held for seasonal, recreational or occasional use.

Table 3.3: Housing Units Authorized by Building Permits: Harvard and Surrounding Towns, 2013-2022

	Units in 1 unit structures	Units in 2 unit structures	Units in 3-4 unit structures	Units in structures of 5+ units	Total	10 Yr Avg
Ayer	275	38	10	13	336	34
Bolton	218	4	0	0	222	22
Boxborough	61	0	0	244	305	31
Harvard	91	14	3	6	104	10
Lancaster	172	0	0	0	172	17
Littleton	431	0	0	144	575	58
Shirley	116	6	0	0	122	12
Stow	118	2	0	30	150	15

Source: U.S. Census Bureau Building Permit Survey (reported and imputed). Edited to correct duplicate Boxborough entry and missing Harvard data from 2013, 2014. Corrections from local building department records.

While the most compelling reason to ramp up production is to meet local and regional housing needs and market demand, a secondary reason is that continued anemic production will disqualify Harvard from consideration for various state funding programs, including Housing Choice. Building permits issued during the last five years is one of the State's criteria for allocating Housing Choice funds. 18

Conversions, Modifications, Teardowns. Over the past two decades a handful of large single family properties have been converted to condominium ownership and, in most of these cases, the resulting units have been more affordably priced than other housing options found in town. Accessory dwelling units (ADUs) represent another modification that offers a means of providing additional rental housing while at the same time providing a source of income for homeowners. On surveys, ADUs appear at or near the top of residents' preferred housing options. Harvard allows ADUs within a single family home or in a detached structure on the property, but until fairly recently few owners had taken advantage of the provision. Since 2016, however, 10 permits have been issued, more than double the number in the prior 15 years. Approval of an ADU is by special permit from the Zoning Board of Appeals, unless the unit is designed and constructed according to the "age-appropriate design criteria," found in Section 125-57E of the Bylaw, in which case it is by right. In 2021, this bylaw was amended to increase the allowable size of an ADU from 1,200 to 1,500 square feet; however, there do not appear to have been any new units permitted since that update.¹⁹

Renovations, additions and the construction of outbuildings have long been common in Harvard, but until recently "teardowns" had been limited. The 2016 Master Plan posited that the reason the

¹⁸ The Housing Choice Grant Program is a competitive grant that rewards municipalities that have produced a significant number of housing units in the last five years and that have adopted or established Best Practices that encourage housing production. There are currently 95 communities that have achieved the designation. They are able to take advantage of new financial resources, including exclusive access to the Housing Choice Community Grants, and preferential treatment for many state grant and capital funding programs, including State Revolving Fund for Water and Sewer infrastructure, MassWorks, Complete Streets, MassDOT capital projects, and PARC and LAND grants.

¹⁹ Since the accessory dwelling unit provision was first added to Harvard's zoning bylaw in 1982, it has been amended four times, leading to a fair amount of confusion as to what is and is not allowed.

demolition/rebuild trend experienced in many built-out towns closer to Boston had not been an issue in Harvard was because the town still had buildable land available. Between 2003 and 2015, just 5 demolition/rebuild permits were issued, but since 2016 there have been 17. Often it is the smaller more affordable homes that are being rebuilt, enlarged and upgraded into high end properties.

Lot Size. Many of the new single family homes have been built on backland or hammerhead lots (4.5 acre minimum lot size) or Approval Not Required (ANR) frontage lots that exceed the 1.5-acre minimum. Analysis of Assessors' data at the time of the last Master Plan found that the 136 single family homes built from 2000 forward occupy an average of 4.2 acres per home, well above the basic lot minimum of 1.5 acres. (The median lot size was 2.69 acres per home.) The combined lot area of these 136 new homes resulted in the conversion of 568 acres of open space to private residential use. The Zoning Bylaw does allow for some alternative residential development options (the mini-subdivisions and Open Space and Conservation—Planned Residential Development (OSC-PRD) provisions), but they were rarely used. The OSC-PRD (cluster) provision, adopted in 2003, had been used just once, for approval of a 4-unit condominium project (no affordable component). Its predecessor, the cluster bylaw, was not used either. As mentioned previously, Town Meeting voted in October 2023 to substantially revise the OSC-PRD, adding significant incentives for affordable housing, open space protection and sustainable, climate resilient development practices.

Chapter 40B Comprehensive Permitting: The New Norm. The most significant trend in new construction has been the use of comprehensive and special permits to grow and diversify the town's housing stock. The 150+ new homes (market rate and income restricted) that have been approved under the comprehensive permit provisions of Chapter 40B or the special mixed used permitting provisions in the Ayer Road commercial district account for 65 percent of all new housing over the past 20 years. The non-comprehensive permit homes have been custom built or targeted to the high end of the home buying market.

Harvard has long struggled to identify locations – and there are some – where more intense development is both appropriate and sustainable. Absent such designated locations, the comprehensive permit has proven to be an effective tool for diversifying the town's housing stock, evidenced by the fact that most 40Bs have been supported as local initiatives, and many of the market rate homes created have been acquired by existing Harvard residents. In addition to providing homes for first time homebuyers who would otherwise be priced out of the Harvard market, empty nesters and seniors have found homes in these developments that met their price, space and maintenance requirements.

Outlook for Future Development. As more and more renters and homebuyers are priced out of the metro Boston housing market, north central Massachusetts has emerged as a more affordable alternative, especially communities on Worcester County's eastern edge, like Harvard and Bolton. While prices here are high, they are still more affordable than many towns closer to Boston. With remote or hybrid work opportunities becoming more commonplace, what had been the downside of this region for those employed in the inner core (Boston, Cambridge, etc.) – a long commute – has been eliminated. This has triggered renewed interest on the part of developers who believe the market may be at or nearing the point where mixed-income rentals or "workforce" housing and modestly sized ("right-sized") single family, townhome or cluster housing are financially viable and marketable. To overcome the Town's reticence to differentiate zoning districts to allow for such options, the Town Planner is now working with stakeholders and consultants to identify suitable locations where multifamily housing will be permitted by right under Section 3A of the Zoning Act (MGL 40A), as required by this new law.

3C. **Home Sales and Prices**

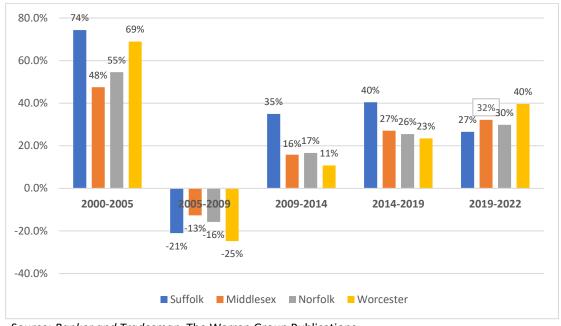
Figure 3.3:

Regional Overview. Housing prices in Eastern Massachusetts rose by double digits annually between 2000 and 2005. During the Great Recession (2007-2009), they dropped sharply, as they did across the country, but the recovery that followed was very uneven. Prices in Boston and its close-in neighbors bottomed out in 2009, then began to rise steadily. Prices didn't bottom out in Worcester County until 2011, and their recovery was more gradual. In 2020, again mirroring the rest of the country, prices here began to skyrocket, fueled by low mortgage rates and limited supply.

The following two figures illustrate these trends. Figure 3.3 documents the dramatic rise in prices across Suffolk, Norfolk, Middlesex, and Worcester counties between 2000 and 2005; the sharp decline between 2005 and 2009; and Worcester County's relatively slow recovery over the next ten years. From 2019 on, however, Worcester County home prices rose at a faster rate than the other three counties. Harvard prices more closely track those of its Middlesex County neighbors than of towns to its west, but a clear pattern is evident: the further one moved from Boston the longer it took for prices to recover.

Figure 3.4 illustrates that median home prices in Harvard and neighboring Bolton and Boxborough were relatively high in 2000 compared to places like Arlington and Somerville, or Boston neighborhoods like Jamaica Plain. However, as those urban locations gained popularity with young homebuyers postrecession, their prices quickly surpassed those in communities further removed from Boston. With many Millennials now in, or entering, their childrearing years, towns like Harvard have emerged as an attractive "next stop." While the jury is still out on what, if any, long term impacts the COVID pandemic will have on residential real estate patterns, it appears that remote or hybrid work -- in some form - is here to stay. And Harvard is well positioned to benefit from that: it now enjoys a price advantage over similar towns closer to Boston, and its high performing schools continue to draw families with children.

The Rise, Fall and Recovery of Single Family Homes Prices, 2000-2022: Suffolk, Middlesex, Norfolk, and Worcester Counties 80.0% 74% 69%



Source: Banker and Tradesman, The Warren Group Publications

\$1,200,000 \$1,155,000 \$1,153,000 \$1,100,000 \$1,100,000 \$1,000,000 \$961.944 \$910,000 \$900,000 \$800,000 \$767,500 \$700,000 \$600,000 \$500,000 \$466,000 \$447,500 -\$420,000 \$400,000 \$300,000 \$200,000 2000 2005 2010 2015 2020 2022 🗕 — Jamaica Plain 👅 🗕 — Arlington 💻 🗕 — Somerville — — Boxboro 🛑 Bolton = Harvard

Figure 3.4: Growth in Median SF Home Prices: Inner Core Communities v Harvard, Surrounding Towns

Source: Banker and Tradesman, The Warren Group Publications

Sales: Price and Volume. Harvard has averaged about 60-65 home sales a year over the past 20+ years, a turnover rate of just under 4 percent per year. Sales volume rose to a 20 year high in 2020, but this included the new units at Devens' Emerson Green. Sales overall have dropped back since then as fewer homes are being listed for sale. Single family sales dropped to their lowest level in a decade in 2022, and even though new condominiums at Craftsman Village and Emerson Green lifted condo sales to an all-time high, sales overall were down. (Figure 3.5). It is unclear whether the jump in single family sales in 2020 and 2021 was related to the COVID pandemic. There is some anecdotal evidence that a desire for open space and schools that continued to function smoothly with hybrid or in-school options motivated some homebuyers, but it is just that — anecdotal.

Figure 3.5: Harvard's Annual Home Sales: 2000-2022

Source: Banker and Tradesman, The Warren Group Publications. Banker and Tradesman includes Devens sales in Harvard's total; the distribution of home sales does not.

■1-Fam ■ Condo

While the number of sales has dropped as interest rates have risen, prices have not. The median price of both single family homes and condominiums sold in Harvard reached their highest level ever in 2022 (**Figure 3.6**), and prices have continued to climb in 2023.

The median price of a single family home sold in Harvard is now more than 50 percent higher than it was five years ago, while mortgage interest rates have climbed to their highest level in 20 years. **Table 3.4**, which shows the estimated monthly cost for principal and interest on the median priced single family home over time, illustrates how dramatically different market conditions are today than they were as recently as 2019. Affordability is discussed further in the following section.

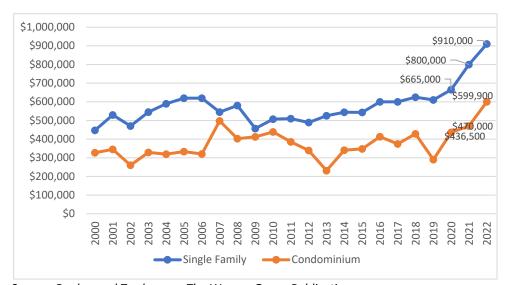


Figure 3.6: Harvard's Median Home Prices: 2000-2022

Source: Banker and Tradesman, The Warren Group Publications

Table 3.4: Monthly Principal and Interest Cost of an 80% Mortgage on a Median Priced Home in Harvard Over Time

	Median SF	20% Down Payment	80% Mortgage	30 Year mortgage interest rate	Monthly mortgage payment
2023*	\$930,000	\$186,000	\$744,000	7.00%	\$4,948
2019	\$610,000	\$122,000	\$488,000	3.50%	\$2,191
2013	\$525,000	\$105,000	\$420,000	4.00%	\$2,005
2009	\$457,000	\$91,400	\$365,600	5.25%	\$2,019
2005	\$620,000	\$124,000	\$496,000	5.50%	\$2,816
2003	\$545,000	\$109,000	\$436,000	5.40%	\$2,450
2000	\$447,500	\$89,500	\$358,000	8.25%	\$2,690

^{*} through July

Source: *Banker and Tradesman*, The Warren Group Publications, median price; the interest on a 30 year fixed rate mortgage is the rate published in the Freddie Mac Primary Mortgage Market Survey for the first week in July of the year shown. Note: the monthly payment shown here is principal and interest *only*. It does *not* include taxes or homeowners insurance.

The distribution of home prices provides additional insight into market conditions. **Table 3.5** shows the distribution by price of homes (single family and condominium) sold in each of the last four years. In 2020, 15 percent of homes sold for less than \$500,000. By 2023, just two percent did. In 2020, 44 percent of homes sold for between \$500,000-700,000; by 2023, that number had dropped to 18 percent. More than half (52%) of the homes sold year to date (2023), were priced above \$800,000; in 2020, just 28 percent were.

Fully 30 percent of the homes that sold for under \$600,000 during the three and a half years depicted in Table 3.5 were market rate units in developments permitted under 40B. Prices have been rising across the board, and the market rate homes in 40B developments are no exception. They are among the only new construction options in town; in 2023, they accounted for more than three quarters of all homes sold for under \$800,000.

Table 3.5: Distribution of Harvard Home Prices: 2000-2023

	% of 2020	% of 2021	% of 20222	% of 2023*
	Sales	Sales	Sales	Sales
\$1 million & up	18%	22%	28%	26%
\$900,000 - 999,999	2%	11%	11%	11%
\$800,000 - 899,999	8%	16%	15%	15%
\$700,000 - 799,999	13%	14%	3%	28%
\$600,000 - 699,999	21%	13%	18%	9%
\$500,000 - 599,999	23%	13%	20%	9%
\$400,000 - 499,999	11%	8%	5%	2%
Under \$400,000	4%	5%	0%	0%

Source: Harvard Assessor's Office.

Includes arm's length transactions of single family and condominiums

Note: The 13 affordable (income restricted) 40B homes that sold during this time frame are not included in this table.

^{* 2023} sales are through July

Harvard Prices Compared to Surrounding Towns. Compared to surrounding towns, Harvard home prices are consistently among the most expensive, and this has been the case for many years. Boxborough and Bolton are the two other towns in the region whose market profiles are most similar to Harvard. (Table 3.6). There is more variability in condo prices (Table 3.7), in large part because nearly all of Harvard's condominium developments were created under Chapter 40B. These developments require that 25 percent of the units be sold to households earning no more than 80 percent of the area median income, at prices affordable to them. While most of the other towns have some 40B condominiums, they also have a range of fully market rate developments, allowed as of right or by special permit.

Table 3.6: Single Family Home Sales Prices: Harvard and Surrounding Communities

Location	2017	2018	2019	2020	2021	2022	Chg 2017-2022
Ayer	\$332,000	\$339,900	\$387,906	\$453,200	\$426,000	\$527,500	58.9%
Bolton	\$541,000	\$572,000	\$597,500	\$529,900	\$705,000	\$767,500	41.9%
Boxboro	\$625,000	\$675,000	\$757,839	\$671,500	\$860,000	\$961,944	53.9%
HARVARD	\$600,000	\$624,500	\$645,438	\$655,000	\$800,000	\$910,000	51.7%
Lancaster	\$328,000	\$367,000	\$399,900	\$413,400	\$501,000	\$430,000	31.1%
Littleton	\$457,500	\$445,000	\$532,495	\$602,500	\$580,000	\$650,000	42.1%
Shirley	\$350,000	\$345,000	\$374,462	\$399,950	\$450,000	\$470,000	34.3%
Stow	\$505,000	\$522,500	\$573,925	\$578,750	\$648,000	\$785,000	55.4%
Worcester County	\$260,000	\$275,000	\$290,000	\$325,000	\$375,000	\$405,000	55.8%

Source: Banker and Tradesman, The Warren Group Publications

Table 3.7: Median Condominium Sales Prices: Harvard and Surrounding Communities

Location	2017	2018	2019	2020	2021	2022	Chg 2017-2022
Ayer	\$213,500	\$218,800	\$345,000	\$250,000	\$405,000	\$333,550	56.2%
Bolton	\$452,655	\$459,000	\$513,000	\$529,900	\$571,450	\$625,000	38.1%
Boxboro	\$115,000	\$126,000	\$140,500	\$149,000	\$170,000	\$223,000	93.9%
HARVARD	\$373,990	\$428,750	\$290,000	\$436,500	\$470,000	\$599,900	60.4%
Lancaster	\$300,000		\$221,000	\$321,500	\$265,000	\$392,250	30.8%
Littleton	\$420,000	\$411,000	\$484,750	\$510,000	\$545,000	\$530,000	26.2%
Shirley	\$148,000	\$180,750	\$182,500	\$177,000	\$266,000	\$310,000	109.5%
Stow	\$437,000	\$513,011	\$401,250	\$490,000	\$495,000	\$550,000	25.9%
Worcester County	\$199,900	\$205,000	\$221,000	\$246,500	\$275,000	\$311,500	55.8%

Source: Banker and Tradesman, The Warren Group Publications

Current Market Outlook. Low inventory, higher interest rates and economic uncertainty have all contributed to the slowdown in sales in 2023. This, too, mirrors the national trend. Prospective buyers and sellers alike are on the sidelines waiting to see what direction the economy moves in and waiting for more product to come on the market, but building permits statewide are down by more than 25 percent from 2022. The rapid increase in mortgage rates from historical lows to 20-year highs has locked out many who would like to buy and locked in many existing owners who refinanced when rates were low and are now reluctant to give up those favorable mortgages. **Table 3.8**, which depicts pending sales, closed sales, median price, days on the market, percent of original asking price received, and the number of new listings in Harvard through May 2023, documents these trends.

Table 3.8: Key Housing Market Metrics: Town of Harvard

	Thru May 2022	Thru May 2023	+/-
Pending Sales	22	20	-9.1%
Closed Sales	13	11	-15.4%
Median Sales Price*	\$950,000	\$1,025,000	7.9%
Cumulative Days on Market Until Sale	44	46	4.5%
Percent of Original List Price Received*	103.1%	97.3%	-5.6%
New Listings	30	28	-6.7%

Source: Massachusetts Association of Realtors

3D. Rental Market

There is very little housing available for rent in Harvard *at any price*. The town's rental market is extremely limited. It includes 75 units in three professionally managed, subsidized multifamily developments, where more than 35 percent of the town's renter households live. Nearly 90 percent of these units are age restricted, and all are income restricted.

The majority of the town's 200+ renters lease their homes from individual owners of single family dwellings that may be available only temporarily due to an owner's inability to sell or leave of absence from town. Often, these homes are rented through word of mouth, and never hit the market. Because there are so few renters in Harvard, and because the American Community Survey – the source of much of the data on rental households – significantly underestimated the renters that do live here, we look at the 8-town region for insights into the rental market. Even in this larger area, rental options are limited compared to towns to the east (Acton, Westford, Concord) and south (Hudson, Marlborough).

Regional Overview. Just over 21 percent of the region's households rent their homes, but the percentage of renters varies widely by town from fewer than 6 percent in Bolton to 38 percent in Ayer. Most renter households live in 1-4 family structures, as is true in Massachusetts and nationwide. Nearly half are single person households; three quarters consist of just one or two residents. Roughly half are headed by someone aged 35-64; 26 percent by someone 15-34 and 23 percent by someone 65 or over. Just 20 percent of the region's renter households include children under the age of 18.

The lack of new rental inventory in the region is striking. Almost no new rental housing has been built in the 8 towns in the past 30 years, possibly longer. With the exception of two or three small, mostly age restricted developments (one of which is Harvard's Bowers Brook), the only unrestricted new apartments built since the early 1990s are Paddock Estates in Boxborough and Village Green in Littleton, both permitted under Chapter 40B.

HUD Fair Market Rents (FMRs). Housing assistance programs are discussed in the following section on affordability, but the HUD fair market rents are cited here because they provide one of the best, and most consistent, indicators of conditions in the rental market. FMRs represent the maximum amount HUD will pay for tenants whose rent the agency subsidizes under its Housing Choice Voucher program (Section 8) and other programs.²¹ HUD FMRs are gross rent estimates, comparable to the gross rent estimates

²⁰ Building permits were reviewed back to 1994 only for this plan.

²¹ HUD calculates its FMRs based on regional surveys of recent movers; they represent the 40th percentile of gross rents for typical, non-substandard rental units occupied by recent movers in a local housing market. They include the

presented in the American Community Survey. The FMRs are based on a broad range of housing options, including one to four family dwellings, and they are set at the 40th percentile (not the median). As a result, they are often lower than advertised rents in professionally managed properties; however, they generally track the ACS median rents.

The sharp increase in the Boston-Cambridge-Quincy FMRs, in particular (**Figure 3.7**), mirrors what was happening in the rental market overall and is not surprising given the Greater Boston rental market's perennially high costs and low vacancies. They point to the need for more rental housing at multiple price points. The Eastern Worcester County 2-BR rent levels that apply to Harvard, Bolton and Lancaster have lagged Boston's for years, and are now just 63 percent of the rent levels in neighboring Middlesex County towns.

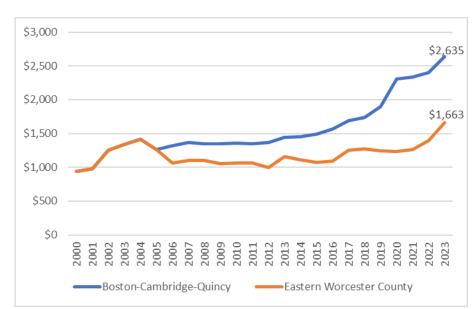


Figure 3.7: Greater Boston and Eastern Worcester County 2-Bedroom FMRs, 2000-2023

Note: Until 2006, Harvard was included in the Greater Boston HUD Fair Market Rent Area. Source: \mbox{HUD}

This rent differential could affect the financial viability of new subsidized and/or mixed income rental development in Harvard, as the rent levels that can be charged here – the HUD FMRs – are considerably lower than what can be charged in neighboring towns like Boxborough, Littleton, Stow, Ayer, and – notably – Devens. ²² Construction costs are as high in Harvard, if not higher, than in these neighboring towns given the lack of infrastructure, yet the allowable rents are substantially lower. Most of the region's towns are included in the Boston-Cambridge-Quincy HUD Fair Market Rent area. Harvard, Bolton and Lancaster are the only three included in the Eastern Worcester County area, where the maximum allowable rent is anywhere from 55 to 76 percent lower, depending on unit size (**Table 3.9**).

shelter rent plus the cost of all tenant-paid utilities, except telephones, cable or satellite television service, and internet service. Public and subsidized units and units less than two years old are excluded from HUD's computation.

²² Because Devens is not a municipality, it is not included in any of HUD's Metro FMR Areas. The regulations that govern the Devens Enterprise Commission, however, state that the Boston-Cambridge-Quincy, MA-NH HUD Metro FMRs are to be used for all residential development at Devens (974 CMR 5.01(4)(c)(1)).

Table 3.9: HUD 2023 Eastern Worcester County 2-Bedroom Fair Market Rent

	Efficie ncy	1 Bedroom	2 Bedrooms	3 Bedrooms	4 Bedrooms
Boston-Cambridge-Quincy	\$2,025	\$2,198	\$2,635	\$3,207	\$3,540
Eastern Worcester County	\$1,112	\$1,263	\$1,663	\$2,254	\$2,681
E. Worc Cty as % of Boston	54.9%	57.5%	63.1%	70.3%	75.7%

Source: HUD

Advertised Rents.²³ A search of a dozen websites for rental listings in houses, apartments, condos, and townhomes in Harvard and its immediate neighbors was conducted in August to augment the limited data from HUD and the ACS.²⁴ An unduplicated count of listings underscored the challenges faced by those seeking rental homes in the area, particularly households with limited income:

- The *only* 2 options in Harvard were a 3-bedroom unit in a condominium for \$3,500/month and a 2-bedroom unit at Devens (also a condo) for \$2,700/month.
- Fewer than 20 listings across all bedroom sizes and in all types of (mostly older, pre-1980) structures: 7 1-bedroom units ranging in price from \$1,350-1,995/month; 7 2-bedroom units ranging in price from \$1,400-3,200; and 4 3-bedroom units ranging in price from \$1,995-3,350/month
- There were limited listings in the region's two newest developments (Paddock Estates in Boxborough and Village Green in Littleton), 2-bedroom units for \$2,715 and \$3,150/month. Prices were slightly higher in communities closer to Boston (Acton, Concord, Westford).
- The three subsidized developments in town, where rents are capped so as to be affordable to low income residents, do maintain waitlists, as do subsidized developments in neighboring towns.

Clearly, available rental units are extremely limited throughout the region, at all price points.

3E. Land Costs

Like rents and home prices, land costs have escalated, and are now in excess of \$400,000 for developable lots with permits in place. In fact, it is the high land costs, more than anything else, that drives up home prices and dictates what gets built. Large lot zoning, Title V requirements and private wells all contribute to high development costs. Just one or two building lots are sold each year. More often, a builder will sell a lot and construct a home for the buyer. As of September 2023, there were 2 parcels listed with Multiple Listing Service. They ranged in size from 3 to 11 acres and were priced from \$525,000 to \$585,000, with a median asking price of \$555,000.

²³ It is unclear what, if any utilities are included in the advertised rents; if they are not, gross rent could easily be an additional \$200+/month. Most utilities are included in the subsidized properties.

²⁴ Trulia, Redfin, Zillow, Craigslist, ColdwellBanker, Berkshire Hathaway, Compass, Rent, Realtor, Rentals, Apartments, Zumper

Key Findings: Housing Conditions

- Eighty-six percent of the housing units in Harvard are detached single family homes. They are generally larger than those found in adjacent towns and sited on larger lots. Over half have 4 or more bedrooms, even though more than half of the households living in them have just one or two members.
- Nearly 90 percent of Harvard householders own their homes. Rentals are scarce, and most (88%) of the units built specifically as rental housing are age restricted. About 35 percent of the town's renters live in one of these properties. Most others lease from owners of single family, or 2-4 unit, homes.
- The most notable change in Harvard's housing stock over the last 20 years has been the addition of attached single family homes (aka townhouses, townhomes). The 2000 Census reported just five such structures; by 2021, there were 100. Most of these are in condominium developments approved under Chapter 40B or at Devens.
- Almost half of the homes in town were built between 1960 and 1990. Since 2000, housing production in Harvard has slowed and trails that of neighboring towns and the county. The total number of new housing units built in the last 20 years (2003-2022), including those permitted under 40B and the 42-unit Bowers Brook Apartments is less than 13 per year. Excluding 40Bs and Bowers Brook, fewer than 5 units per year have been built. The non-comprehensive permit homes have been custom built or targeted to the high end of the home buying market.
- Since 2000, comprehensive and special permits have been used to grow and diversify the
 town's housing stock. The 150+ new homes (market rate and income restricted) that have been
 approved under the comprehensive permit provisions of Chapter 40B or the special mixed used
 permitting provisions in the Ayer Road commercial district account for 65 percent of all new
 housing over the past 20 years.
- Housing prices in Harvard and surrounding towns were slow to recover from the Great Recession (2007-2009), but by 2020 prices here like those across the country began to skyrocket, fueled by low mortgage rates and limited supply.
- The median price of a single family home sold through the first 6 months of 2023 was \$930,000, more than 50 percent higher than it had been five years earlier. Mortgage interest rates are now at, or near, their highest level in 20 years. As a result, the monthly principal and interest payment on a median priced home in 2023 is more than double what it was in 2019 (assuming an 80%, 30 year mortgage).
- Harvard home prices are consistently among the most expensive in this region, and this has been the case for many years. Boxborough and Bolton are the two other towns in the local region whose market profiles are most similar to Harvard.
- The housing market has cooled somewhat since mortgage interest rates began to rise in mid-2022, but the median price of both single family homes and condominiums reached their highest level ever in 2022 and prices have continued to climb in 2023.

- Low inventory, higher interest rates and economic uncertainty have all contributed to the slowdown in sales in 2023. This mirrors the national trend.
- Excluding income restricted ("affordable") units, 30 percent of the homes that sold for under \$600,000 during the past three and a half years have been market rate units in developments permitted under 40B.
- This region in general offers little multifamily rental housing. Almost no new rental housing has been built in the 8 towns in the past 30 years. With the exception of two or three small developments, most age restricted (one of which is Harvard's Bowers Brook), the only new apartments built since the early 1990s are Paddock Estates in Boxborough and Village Green in Littleton, both permitted under the Chapter 40B.

4. AFFORDABILITY

Housing Needs Assessment

While housing prices – rents and the cost to purchase – are determined by supply and demand, affordability is a function of housing cost and household income. This section assesses the affordability of Harvard's housing stock for existing and potential residents, particularly those with low incomes (defined as households earning 80 percent or less of the area median income, adjusted for family size). How significant a problem housing affordability is can be gauged in several ways. Here we assessed:

- the number of households that may be eligible for housing assistance based on their estimated household income;
- the share of households that are cost burdened or severely cost burdened by household type, tenure and income;
- the income required to rent or buy a home in Harvard today; and
- the percent of year-round housing units listed on the Massachusetts Subsidized Housing Inventory. (This metric is a given: Harvard's affordable housing goal is 220 units. The Town currently has 117 units, a shortfall of 103 units, so incremental progress of 11 additional units per year is needed until the 10 percent threshold is reached and maintained.)²⁵

4A. Affordable Housing: What it is and Who is it for?

Defining Affordable Housing. The U.S. Department of Housing and Urban Development (HUD) considers rental housing to be affordable if rent plus utilities paid by the tenant do not exceed 30 percent of gross household income. Tenants whose housing costs are between 30 and 50 percent of income are deemed to be cost burdened (or moderately cost burdened); those with housing costs that exceed 50 percent are considered severely cost burdened. In the case of homeowners, the standard is the same, but housing costs include mortgage payment, real estate taxes and homeowners insurance.

By this definition housing may be affordable without income restrictions or subsidies, and households across the income spectrum may face affordability challenges. *However, as used in this plan, the term "affordable housing" means housing that is eligible for inclusion on the State's Subsidized Housing Inventory* (SHI, or Inventory). To count as affordable under Chapter 40B, and to be credited toward a municipality's 10 percent goal, the housing must meet certain requirements:²⁶

• The housing must be part of a "subsidized" development built or operated by a public agency, nonprofit or limited dividend organization.²⁷

²⁵ The 10 percent "affordable" threshold is a moving target. While the new affordable units get added to the inventory as they are created, and the inventory itself is updated every two years, the year-round housing base from which the 10 percent is calculated is only updated every ten years, based on the decennial census. At that time units created over the prior decade get added into the year round housing unit base.

²⁶ https://www.mass.gov/files/documents/2017/10/10/guidecomprehensivepermit.pdf

²⁷ What constitutes an eligible "subsidy program" has changed over time, as have the production tools, but it is now broadly defined to include local initiatives that involve only minimal technical support provided by EOHLC (the Local Initiative Program, or LIP) and developments financed by conventional lenders under the Federal Home Loan Bank of Boston's New England Fund, in addition to traditional government subsidy programs. There are two types of LIP units: Local Initiative Projects, which are developed through the comprehensive permit process, and Local Action Units,

- At least 25 percent of the units in the development must be income restricted to families or individuals with incomes no greater than 80 percent of area median and have rents or sale prices restricted to affordable levels. (Alternatively, a development may qualify if at least 20 percent of the units are restricted to households earning no more than 50 percent of the median.) The restrictions on rents or sales prices must run for at least 30 years.
- The development must be subject to a regulatory agreement and monitored by a public agency or non-profit organization.
- The owner(s) must meet affirmative marketing requirements.

The inventory includes rental as well as ownership housing, group homes for populations with special needs, and existing homes that are repaired or upgraded using state or federal resources, as long as the occupant is income eligible. In rental projects, all units count, including the market rate ones; in homeownership projects, only the affordable units count. Tenant-based rental assistance and first-time homebuyer mortgages are not counted on the inventory, nor is transitional housing.

Who is Eligible for Housing Assistance. Historically, federal and state housing assistance programs restricted eligibility to renter households earning no more than 80 percent of the area median income, adjusted for family size; today most rental programs target much lower income households. Now there are also opportunities for low income households to purchase a deed restricted home; in such cases there are asset limitations in addition to the income limitations. Each year HUD publishes the income limits for program eligibility, using the following categories to define need:

- Extremely low income, or ELI (</=30% of AMI),
- Very low (VLI) (>30% but not >50% AMI), and
- Low income (LI) (>50% but not >80% of AMI).²⁹

HUD defines "area median income" at the metropolitan area, or county level, and it recognizes nineteen separate areas in Massachusetts. As a result, the qualifying income for HUD programs varies from one part of the state to another. For example, a 3-person household in Eastern Worcester County (Harvard) is considered low income if it earns no more than \$85,200; in the Boston-Cambridge-Quincy area, which includes Harvard's Middlesex County neighbors, a 3-person family income earning up to \$106,650 is considered low income.

which are developed through a city or town's zoning or permit issuance process (for example, through special permits, inclusionary zoning, conveyance of public land, utilization of Community Preservation Act funds).

²⁸ For example, the HUD Housing Choice Voucher Program (HCV, or Section 8) now requires that 75 percent of new admissions go to households earning <30% AMI; Low Income Housing Tax Credits and tax-exempt bonds programs require that at least 20 percent of the units be affordable at 50% AMI or at least 40 percent at 60% AMI. Some resources may be used for higher income households (the Community Preservation Act, for example, can be used to benefit households earning up to the area median income; the Massachusetts Affordable Housing Trust Fund provides resources that can be used to benefit households earning up to 110% of AMI). Such units do not qualify for inclusion on the SHI, however.

²⁹ Income definitions (e.g., low, moderate, very low, middle) have also shifted over time and are not consistent across programs and agencies. As used in this plan the terms "low income" and "LMI (low and moderate income)" have the same meaning: income at or below 80 percent of AMI, adjusted for family size.

Table 4.1 shows the current income limits for the Eastern Worcester County HUD Metro FMR Area, which includes Berlin, Blackstone, Hopedale, Mendon, Milford, Millville, Southborough, and Sutton, in addition to Harvard, Bolton and Lancaster.

Table 4.1: FY2023 Income Limits for the Eastern Worcester County HUD Metro FMR Area

Income Limit Category	1 Person	2 Person	3 Person	4 Person	5 Person	6 Person	7 Person	8 Person
2022 Median Family Income: \$147,600								
80% Low Income Limits	\$66,300	\$75,750	\$85,200	\$94,650	\$102,250	\$109,800	\$117,400	\$124,950
60% (Tax Credit) Income Limits	\$58,260	\$66,600	\$74,940	\$83,220	\$89,880	\$96,540	\$103,200	\$109,860
50% (Very Low) Income Limits	\$48,550	\$55,500	\$62,450	\$69,350	\$74,900	\$80,450	\$86,000	\$91,550
30% (Extremely Low) Income Limits	\$29,150	\$33,300	\$37,450	\$41,600	\$44,950	\$48,300	\$51,600	\$54,950
Poverty Guidelines	\$14,580	\$19,720	\$24,860	\$30,000	\$35,140	\$40,280	\$45,420	\$50,560
CPA Moderate Income Senior (60+)	\$103,320	\$118,080	\$132,840	\$147,600	\$159,408	\$171,216	\$183,024	\$194,832
CPA Low Income Non-Senior	\$82,656	\$94,464	\$106,272	\$118,080	\$127,526	\$136,973	\$146,419	\$155,866

Source: Department of Housing and Urban Development, MA Community Preservation Coalition, effective 5/15/23

Most housing assistance programs also set a cap on allowable rents to ensure that program participants are not cost burdened. These are the fair market rents (FMRs) shown on Table 3.9.

4B. Estimating Harvard's Affordable Housing Needs

Even though its economic profile places Harvard in the top 6 percent of communities statewide, many residents are not well off and struggle with high housing costs. Almost 20 percent (400+ households) are considered low income by HUD standards. More than half of these have very low, or extremely low incomes, including two percent of households whose incomes are below the federal poverty level. Another 7 percent are considered moderate income (earning between 80 and 100 percent of median). Regionwide, one third of households are deemed low income (Table 4.2).

Table 4.2: Estimated Income Distribution of Harvard Households by Tenure, 2020

Income Distribution Overview	Ow	ner	Rei	Renter		Total	
Extremely low income (<= 30% AMI)	83	4%	25	12%	108	5%	
Very low income (>30% to <=50% AMI)	129	7%	50	24%	179	8%	
Low income (>50% to <=80% AMI)	94	5%	48	23%	142	7%	
Moderate income >80% to <=100% AMI	138	7%	15	7%	153	7%	
Household Income >100% HAMFI	1,452	77%	74	35%	1,526	72%	
Total	1,896	100%	212	100%	2,108	100%	
Total all low income (<=80% AMI)	306	16%	123	58%	429	20%	

Source: # of Households, 2020 Decennial Census; estimated breakdown by income, 2019 CHAS data

A much higher percentage of renter households than owner households are low income (58% v 16%), but because there are so few renters in Harvard, more than 70 percent of the town's low income households own their homes. Seniors are disproportionately represented among the low income households. Overall, 38 percent of homeowners and 48 percent of renters are aged 62 or over (the HUD threshold for these

calculations), but more than 72 percent of *low income* homeowners, and nearly that many low income renters, are seniors (**Figure 4.1**).³⁰

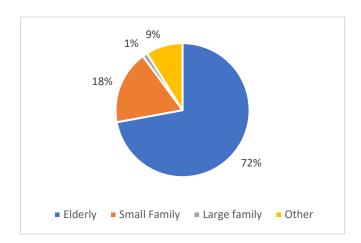


Figure 4.1: Low income Households (<=80% AMI) by Household Type

Note: This figure categorizes household type by HUD definitions: Elderly (age 62 or over); Small family (2- 4 members under 62); Large family (5 or more members; Other - All other non-elderly, non-family households. Source: 2019 CHAS data

Housing Cost Burdens

A Growing National Concern. Housing affordability is a growing national concern, and one increasingly affecting middle income families as well as those with lower incomes. Prospective homebuyers and renters across the country have seen prices surge and supply plummet since the COVID-19 pandemic. According to a Pew Research Center survey conducted in October 2021, nearly half of Americans (49%) said the availability of affordable housing in their local community was a major problem, up 10 percentage points from early 2018. That concern was echoed by many Harvard residents who provided input into the preparation of this plan.

Nationwide most renters, and many owners, now pay more than the 30 percent benchmark for their housing. In 2021, over half of all renter households in the country, and 28 percent of owners with a mortgage, had housing costs that exceeded 30 percent of their household income (considered a moderate cost burden). More than one in four renters had housing costs that exceeded 50 percent of their income (a severe cost burden).

Table 4.3 shows that the cost burdens experienced by Massachusetts and Worcester County renters, and homeowners with a mortgage, are comparable to national norms. Harvard's mortgaged homeowners are somewhat less likely to be cost burdened. (Comparable data on Harvard renters was not available due to the data limitations previously described.) Among homeowners with no mortgage debt outstanding, Massachusetts residents across the board, including Harvard, all faced substantially higher cost burdens than their peers nationally. This suggests that Massachusetts' disproportionately high housing costs are

³⁰ Not all of these low income homeowners would qualify for housing assistance if they sold their current homes. There are asset limitations on most affordable ownership programs, and while there is no asset limitation for participation in most rental programs, the income from a household's assets (including the proceeds from the sale of a home) is considered in determining program eligibility.

mitigated somewhat by its higher incomes. However, those with no mortgage debt outstanding – typically seniors or those unable to work – are hit harder by high property taxes, insurance and fuel costs here than in the state or nation.

Table 4.3: Cost Burdens: Harvard, Worcester County, State and Nation

Owner Households v	vith a Mortgag	ge	
	Moderate Cost	Severe Cost	All Cost
	Burden Only	Burden	Burden
Harvard	12%	6%	18%
Worcester County	15%	10%	25%
Massachusetts	17%	13%	30%
United States	16%	11%	28%
Owner Households v	vith No Mortg	age	
	Moderate Cost	Severe Cost	All Cost
	Burden Only	Burden	Burden
Harvard	13%	9%	22%
Worcester County	9%	9%	18%
Massachusetts	10%	9%	19%
United States	7%	7%	14%
Renter Households			
	Moderate Cost	Severe Cost	All Cost
	Burden Only	Burden	Burden
Harvard			
Worcester County	26%	24%	50%
Massachusetts	25%	26%	52%
United States	25%	26%	51%

Source: 2021 5-Year American Community Survey

Tables 4.4 and **4.5** show that high cost burdens affect Harvard homeowners across age and income. Here, too, tables are presented for homeowners only due to the small number of renters and other data limitations.

Table 4.4: Homeowner Cost Burden by Age

	# of Households (est.)	Cost Burdened (30%+)*
Owner Households		
Householder 15 to 24 years	0	NA
Householder 25 to 34 years	162	13.6%
Householder 35 to 64 years	1,155	13.2%
Householder 65 years and over	446	26.0%

^{*}ACS does not provide estimates of severe cost burdens (50%+) by age

Source: 2021 5-Year ACS

Table 4.5: Homeowner Cost Burden by Income

Cost Burden as % of	Less than	\$10,000 to	\$20,000 to	\$35,000 to	\$50,000 to	\$75,000 to	\$100,000 to	\$150,000
Income	\$10,000	\$19,999	\$34,999	\$49,999	\$74,999	\$99,999	\$149,999	or more
Under 30%		0.0%	0.0%	0.0%	50.6%	78.4%	86.2%	94.5%
30-49.9%		37.5%	0.0%	60.0%	23.4%	21.6%	13.8%	5.5%
50% or more		62.5%	41.9%	40.0%	25.9%	0.0%	0.0%	0.0%
Total Homeowners	0	72	43	40	158	102	347	1,001

Source: 2021 5-Year ACS

Local Real Estate Taxes. A significant contributing factor to Harvard's high housing costs is the local property tax, the principal mechanism for funding municipal services. Among the 200+ responses to the question "What do you dislike about living in Harvard?" on the Planning Department's 2020 survey, the #1 response was "high taxes." It was cited by more than half of all respondents and 40 percent more often than any other response.

On average, Harvard homeowners do pay among the highest property taxes in the region (and in the state). This reflects not only the town's relatively high property values but also its overdependence on residential property to support essential town services (**Table 4.6**). More than 96 percent of Harvard's tax levy comes from residential property, nearly all of which are single family homes. Commercial, industrial and personal property contribute less than 4 percent.

Table 4.6 Key Tax Metrics: Harvard and Surrounding Towns

	FY 2023 Single Family Value	FY 2023 Single Family Tax Bill	Residential/Open Space % of Total Value	Commercial/Industr ial Property % of Total Value	Single Family Tax Bill as % of Value
Ayer	\$447,050	\$5,552	70.59	29.41	1.24
Bolton	\$712,173	\$12,463	94.67	5.33	1.75
Boxborough	\$764,691	\$11,868	81.92	18.08	1.55
Harvard	\$773,419	\$12,833	95.67	4.33	1.66
Lancaster	\$456,209	\$7,842	86.83	13.17	1.72
Littleton	\$594,069	\$9,654	78.75	21.25	1.63
Shirley	\$405,142	\$5,745	89.15	10.85	1.42
Stow	\$640,760	\$11,617	93.67	6.33	1.81

Source: Massachusetts Department of Revenue, Division of Local Services

4D. Affordability Gap

Income Required to Buy or Rent a Home in Harvard in 2023. The median priced single family home sold in Harvard through the first half of 2023 cost \$930,000. Assuming a homebuyer could come up with a 20 percent down payment (\$186,000), the monthly cost for principal, interest, property taxes and homeowners insurance would require an income of nearly \$227,000 under standard underwriting practices. This is substantially more than the median income of the town's current residents (just over

\$187,000), which is more than twice the statewide median (**Table 4.7**). Any lower down payment would raise the monthly carrying cost, requiring an even higher income.³¹

Table 4.7: Income Required to Purchase Harvard's Median Priced Single Family Home over Time

	Income Required	Harvard's est. Median HH Income
2023*	\$258,800	\$187,436
2019	\$124,240	\$156,667
2013	\$111,700	\$137,500
2009	\$108,180	\$142,411
2005	\$149,840	\$126,353

^{*2023} sales through July

Source: Median price single family homes, The Warren Group; interest rates, underwriting standards, FreddieMac; taxes and homeowners insurance are based on comparable sales/values.

Table 4.8 provides further evidence of just how far out of reach a home purchase in 2023 would be for existing residents. Only the School Superintendent and the Police Chief earn more than the town's median household income of \$187,436. Teachers, municipal workers and public safety personnel seeking to buy a home in Harvard today would find it especially challenging. The average teacher salary is \$96,945, and the average police salary is \$72,961. Highway department employees earn on average \$58,304 and library workers \$58,734. (These are all base salaries; they do not include stipends, overtime, detail payments, etc.). The EMT and fire departments are staffed by volunteers, most of whom (65%) live in town. They respond based on their availability and are compensated per call, and for time spent in training and meetings.

3

³¹ While there is no single hard and fast rule for how much of their gross income borrowers can spend on principal, interest, taxes and insurance (PITI, or front-end ratio), 30 percent is used here for illustration purposes. There can be considerable variation depending on lender, loan type and size, credit score, etc. Most lenders focus on the back-end debt-to-income (DTI) ratio, which includes – in addition to the required payment for PITI – the borrower's minimum monthly payments on credit cards, student loans, auto loans, personal loans, etc.). FreddieMac will allow up to 45 percent on the back-end ratio, but even if a homebuyer has no other monthly debt obligations at the time of purchase, it would be highly unlikely that a lender would allow much more than 33 percent for PITI.

Table 4.8: Price Distribution of Homes Sold, January – July 2023: Income Required And Income Distribution of Harvard Households:

Price Range	% of Sales	Estimated Inco	ome Required
\$1 million & up	26%	\$266,000	+
\$900,000 - 999,999	11%	\$240,000	\$266,000
\$800,000 - 899,999	15%	\$213,000	\$240,000
\$700,000 - 799,999	28%	\$186,000	\$213,000
\$600,000 - 699,999	9%	\$160,000	\$186,000
\$500,000 - 599,999	9%	\$133,000	\$160,000
\$400,000 - 499,999	2%	\$106,000	\$133,000

Income Distribution						
42%						
13%						
20%						
6%						
10%						
3%						
3%						
2%						
1%						

Includes single family homes and condominiums; income restricted 40B homes are excluded Source: Distribution of homes sold through July, Harvard Assessors; interest rate, underwriting standards, FreddieMac; taxes and homeowners insurance, estimated at 1.8% of purchase price are based on comparable sales/values; income distribution, 2021 5-Year American Community Survey

Renters face an even greater challenge. Units are scarce, and turnover is low. Historically, the income of Harvard renters has averaged about 35 percent of homeowner income, suggesting that a typical Harvard renter earning around \$60,000 could afford to spend about \$1,500 per month on rent. Without a rent subsidy (voucher), or a unit in one of the three subsidized developments, there would be few, if any, options for this family or individual, even though they may be income eligible for assistance.

4E. Harvard's Affordable Housing

The Subsidized Housing Inventory (SHI). With little rental housing available at any price in Harvard, long waitlists for public and subsidized units in surrounding communities, and a diminishing supply of affordable rental housing in the region's private market, the subsidized rental housing on the SHI represents an increasingly important affordable housing resource. Equally important are the affordable ownership units, which provide an opportunity for young families to move to Harvard, and – though they don't count on the inventory – opportunities for non-low income residents to purchase smaller, maintenance-free homes in the market rate units. As described in the preceding section, the market rate units in mixed income 40B developments have been among the most affordably priced homes in Harvard.

The Executive Office of Housing and Livable Communities (EOHLC) maintains the state's official tally of units that qualify as affordable housing on its Subsidized Housing Inventory (SHI). These are the units that count toward a municipality's 10 percent goal under Chapter 40B. Currently, Harvard has 117 subsidized units, more than four times the number it had when it submitted its first Housing Production Plan in 2004. This represents 5.3 percent of the 2,199 year-round housing units recorded on the 2020 Census, a shortfall of 103 units (Figure 4.2). To achieve the "safe harbor" that would provide a one year exemption from state appeals, Harvard needs to add just 11 qualified units (22 units for a two-year exemption).

³² The June 29, 2023 SHI currently posted on the EOHLC website shows Harvard as having 108 qualified units, or 4.91% of its year round housing. It has not been updated to reflect the addition of 10 units that had been inadvertently omitted (4 at Trail Ridge, 2 at Pine Hill Village and 4 at Craftsman Village) or the loss of one unit at Harvard Green. These updates, which have now been reported to, and acknowledged by, EOHLC bring Harvard's SHI count to 117, or 5.32%, a shortfall from the 10% goal of 103 units. The SHI carries a footnote that data is reported by individual communities and is subject to change as new information is obtained and use restrictions expire.

5.7% 6.0% 140 5.4% 5.5% 5.3% 5.2% 120 5.0% 100 4.0% 80 2.8% 2.8 2.5% 3.0% 60 114 117 113 1.9% 108 1.5% 2.0% 1.5% 1.1% 40 1.0% 20 33 0.0% 0 1997 2000 2002 2004 2006 2008 2010 2012 2014 2017 2020 2023 # SHI Units ——SHI %

Figure 4.2: Harvard's Subsidized Housing Inventory Over Time

Source: 2023 SHI, as amended, EOHLC; prior years from DHCD-posted Inventories

Table 4.9 lists the properties that are currently counted on Harvard's SHI (June 2023, as amended). See **Appendix 4**.

Table 4.9: Housing Counted on the 6/29/23 Subsidized Housing Inventory, as Amended

Development Name	Address	Туре	Total Development Units	SHI Units	Share of SHI Units that are Income Restricted	Program	Comp Permit	Restrictions	Affordability Expiration Date	Subsidizing Agency
The Elms^	105 Stow Rd	Rental	9	9	100%	LIP, HOME	No		2047	EOHLC
Harvard						Rural Housing		Age 62+ or		
Elderly/Foxglove	253; 453 Ayer Road	Rental	24	24	100%	515, LIHTC	Yes	disabled	2042	RHS
Harvard Green*	Lancaster County Road	Ownership	32	7	100%	LIP	Yes		perp	EOHLC
Estates at Harvard	Walnut St & Elm Rd									
Hills^*	(Devens)	Ownership	71	13	100%	LIP	Yes		perp	EOHLC
						FHLB New		24 units (6		
Trail Ridge at Harvard	Littleton County Road	Ownership	52	13	100%	England Fund	Yes	affd) 55+	perp	FHLBB
Harvard Common						FHLB New				
Condominiums	15 Littleton Rd	Ownership	12	3	100%	England Fund	Yes		perp	EOHLC
Bowers Brook^^	196 Ayer Road	Rental	42	42	100%	LIHTC	No	55+ or disabled	2041	EOHLC
DOWEIS BIOOK	130 Ayer Noau	Nemai	42	42	10076	LITTE	INU	uisabieu	2041	LOTILC
Craftsman Village**	361 Ayer Road	Ownership	20	4	100%	LIP	Yes		perp	MassHousing
						FHLB New				
Pine Hill Village**	off 260 Stow Road	Ownership	24	2	100%	England Fund	Yes		perp	FHLBB
Harvard Total			286	117						

Source: EOHLC and local records

Notes:

The SHI does not report total development units for individual projects or the number of units that are restricted to occupancy by low income households (<80% AMI). That information was provided by the towns, the developers, or other sources.

[^] The Elms was built as replacement housing on the site of an earlier Local Initiative Project that could not be rehabbed. It received federal HOME funds, among other resources.

^{^*} The Estates at Harvard Hills, a Local Initiative (LIP) project that straddles the Harvard/Ayer town line, was permitted by the

- Devens Enterprise Commission (DEC), the one-stop permitting entity for development at Devens. The total development is 102 units; 32 units including 12 income restricted ones, are credited to Ayer's SHI count.
- * Harvard Green originally had 8 affordable units; one affordable unit was lost when the mortgagee sold the unit at auction to an ineligible buyer. EOHLC took the lender to court and recovered \$140,000 for the Town to compensate for the lost unit.
- ^^ Bowers Brook was permitted as part of a mixed use development under the Ayer Road Village Special Permit Zoning.
- ** Craftsman Village will have 5 affordable units when complete; Pine Hill Village will have 6, adding 5 more units to the SHI, and bringing the total to 122 units, or a shortfall of 98 units.

Table 4.10 shows that Harvard's SHI percentage is below most of the towns in the region. It is worth noting, however, that all the units for which the Town receives credit are income restricted to households earning no more than 80 percent of the area median income. That is not the case in most of the region's communities. The distinction between what housing counts on the Inventory and what housing is reserved for low income individuals and families is important. Affordable units for low income households is the most critical need because that is where the shortfall is most severe. However, the number of units that count is also important. This region has such a shortage of rental housing, developments that include both market rate and income restricted units fill a critical need. In fact, it was to facilitate the production of mixed income rental housing that communities were allowed to count all the units in rental properties on the SHI.

Table 4.10: Harvard's Subsidized Housing Inventory v Surrounding Towns

	2020 Census Year Round	2023 Total Development			Income Restricted SHI	% income restricted
Community	Housing Units	Units**	2023 SHI Units	SHI %	Units (est.)	units only
Ayer	3,783	381	226	6.0%	196	5.2%
Bolton	1,967	409	298	15.2%	130	6.6%
Boxborough	2,343	323	266	11.4%	84	3.6%
Harvard	2,199	286	117	5.3%	117	5.3%
Lancaster	2,736	224	138	5.0%	119	4.3%
Littleton	3,861	666	452	11.7%	286	7.4%
Shirley	2,592	106	106	4.1%	106	4.1%
Stow	2,743	393	179	6.5%	137	5.0%

Source: EOHLC 6/29/23 Subsidized Housing Inventory; estimate of income restricted units from town records, other publicly available documents

Growing the Subsidized Housing Inventory. Massachusetts is home to a sophisticated network of capable non-profit and for-profit developers who make effective use of the available tools and resources for affordable housing production. Competition for resources is intense and communities without an experienced development partner have difficulty growing their affordable housing inventory. Harvard has been fortunate to have had experienced developers partner with the Town to provide quality subsidized housing, but with no land zoned for clustered or multifamily housing, the only two zoning tools Harvard has had to grow its inventory are the Ayer Road Village Special Permit and the 40B Comprehensive Permit. It is hoped that the recently amended Open Space Conservation-Planned Residential Development bylaw will provide an additional tool.

Preserving the Existing Inventory. Both the rental and ownership homes on the Subsidized Housing Inventory need to be carefully monitored to ensure that they continue to serve the target population, especially when there is a change in ownership. Harvard recently lost an ownership unit to the inventory when it was sold to an ineligible purchaser at auction after the owner defaulted on the mortgage. The Massachusetts Attorney General brought legal action against the lender on behalf of EOHLC, and in the

resulting settlement the Town was compensated in the amount of \$140,000 for the loss of the affordable unit. The funds have been placed in the Municipal Affordable Housing Trust (MAHT) to support future affordable housing initiatives, but any such loss represents a step backward to the Town's goal of 10 percent.

The risk on rental properties is somewhat different. Typically, housing developed with state or federal subsidies or tax credits involve use restrictions, which require that the property be maintained as affordable housing serving income eligible tenants for a specific period. Preserving these units beyond that time is complicated, often involving public and private investment and technical expertise beyond what the Town can offer. The quasi-public Community Economic Development and Assistance Corporation (CEDAC) maintains a comprehensive and up-to-date database of subsidized housing in Massachusetts, including the status of their subsidies. None of Harvard's three subsidized rental developments is at risk of losing units during the term of this plan, but the Town needs to be vigilant to ensure that these valuable community assets are not lost. (Bowers Brook and Foxglove's affordability restrictions run through 2042, The Elms through 2047.)

Key Findings: Housing Affordability

- About 20 percent of Harvard households (400+) are estimated to be low income, earning no
 more than 80 percent of the median income for similarly sized households in the area (Eastern
 Worcester County HUD Area). Over half of these households have very low or extremely low
 incomes, including two percent with incomes below the federal poverty level. Another 7
 percent are considered moderate income (earning between 80 and 100 percent of median).
 Regionwide, one third of households are deemed low income.
- A far higher percentage of renter households than owner households are low income 58% v 16% -- but because there are so few renters, more than 70 percent of Harvard's low income households are homeowners. Over 60 percent of low income renters live in one of the three subsidized developments, buffering them from high cost burdens.
- High housing cost burdens affect Harvard homeowners across age and income, including those with no mortgage debt outstanding.
- Many of the challenges Harvard now faces reflect what is happening in the larger Eastern
 Massachusetts marketplace and at the national level, where the combined effects of high and
 rising home prices, climbing interest rates and insufficient production have locked many out of
 homeownership and locked many current homeowners in homes that no longer suit their
 needs or income.
- Households priced out of homeownership put increased demand on the region's rental market.
 Vacancies are rare and wait lists are long for the town's subsidized developments. When rental opportunities in 1-4 family homes are available, they are usually priced well above what low or moderate income households can afford.
- The most recent Subsidized Housing Inventory (June 2023, as amended) credited Harvard with 117 subsidized housing units, or 5.3 percent of the 2,199 year-round housing units counted on the 2020 Census, a shortfall of 103 units.
- Harvard's SHI percentage falls near the bottom of the region's communities. All the units for
 which the Town receives credit are income restricted to low income households, however. That
 is not the case in many of the region's communities; when just the income restricted units are
 counted the difference between Harvard and its neighbors is less pronounced.
- To achieve the "safe harbor" that would provide a one year exemption from state appeals, Harvard needs to add just 11 qualified units (22 units for a two-year exemption).

5. DEVELOPMENT CONSTRAINTS AND LIMITATIONS

Housing Needs Assessment

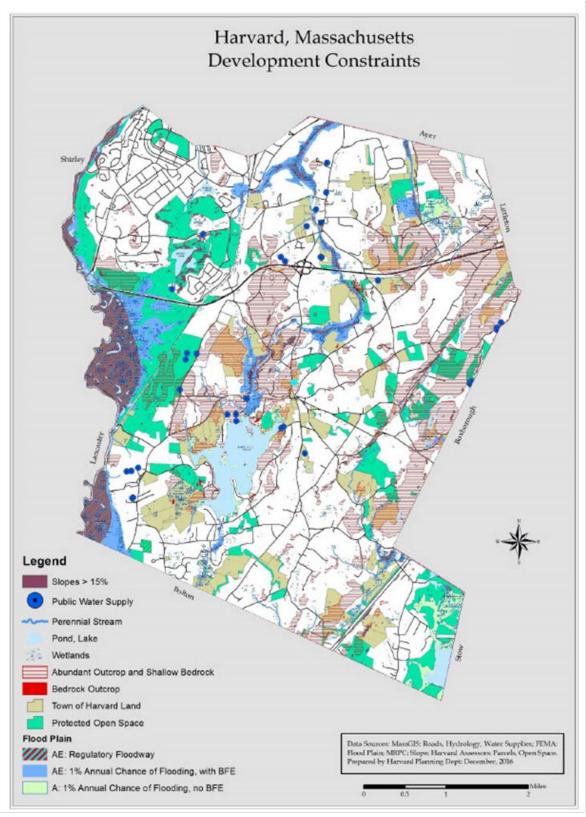
Note: This section draws heavily the Town of Harvard's 2016 Master Plan

Harvard's abundant natural resources and physical limitations for development, combined with conscious decisions the Town has made to protect its fragile ecology, has enabled it to retain its distinctive rural character. These same attributes, however, make development in Harvard challenging. This section describes the environmental conditions, regulatory constraints, and infrastructure and municipal capacity that limit development in much of the town. It includes a number of maps showing these development constraints, protected open space where development is prohibited, lands potentially suitable for development, existing development, and the Town's zoning map and current land uses.

5A. Natural and Physical Constraints

Map 5.1 displays on a single map the various natural and physical constraints that limit development in Harvard. It depicts water resources, wetlands, slope, soil conditions, flood plains, and protected open space. More detailed maps can be found in the Town's 2016 Master Plan, accessible at https://www.harvard-ma.gov/master-plan/pages/2016-master-plan.

Map 5.1: Development Constrains



Water Resources. Surface waters in Harvard include rivers, streams, ponds, and wetlands. Harvard is located within three watersheds: the Nashua River watershed, which encompasses about two-thirds of the Town, and the Merrimack and Concord River watersheds. The town's entire western boundary is defined by the Nashua River, and a significant portion of the river watershed is protected by the Oxbow National Wildlife Refuge, a large conservation area owned by the U.S. Fisheries and Wildlife Service. Wetlands are prevalent throughout the town, and in addition to restrictions imposed by the Wetlands Protection Act, Harvard has enacted additional protections. These include a no-disturb zone within a 50-foot buffer zone of a wetland, and a no-structure zone within a 75-foot buffer of a wetland.

Bare Hill Pond is the largest and most prominent water body in Harvard. Arguably Harvard's most significant natural resource, it has had a history typical for Massachusetts ponds that became prime real estate first for summer camps and later for year-round residences. More recent development has occurred mainly along the eastern and southern shores of the Pond. Development in the last 20 years has largely involved reconstruction of existing homes and conversion of summer cottages to year-round use. Conversion of seasonal residences on non-conforming lots requires a special permit from the Board of Appeals which reviews plans to prevent potential contamination of ground and surface waters. The Board of Health must approve upgrades to non-complying septic systems.

Flood Plains. There is a strong correlation between environmentally sensitive areas and areas prone to flooding. Floodplains support wildlife habitat, aquifer recharge, flood storage, and water purification, and they are critical to the health of streams, ponds, and bordering vegetated wetlands. The flood zones delineated by the National Flood Insurance Program (NFIP), which are the basis for floodplain management and mitigation, are depicted on Map 5.1. Extensive flood plains occur along the Nashua River on the town's western border, but most of this flood plain is in federal ownership, part of the Oxbow National Wildlife Refuge. A second large flood plain occurs in the southeastern part of Harvard (the Delaney Wildlife Management Area), but it is also immune from development, having been purchased by the State for flood control in the upper Assabet River watershed.

Areas of Ecological Significance. Harvard has 5,726 acres of land in areas with known ecological significance. They include Areas of Critical Environmental Concern (ACEC), Core and Critical Habitat, and Priority Habitats of Rare Species. Most of these areas overlap, and over half (3,300 acres) are along the Nashua River and within the Oxbow National Wildlife Refuge, which extends into Devens. A second significant environmentally sensitive area includes 1,488 acres on the eastern side of town, extending from Black Pond to Horse Meadow Pond.

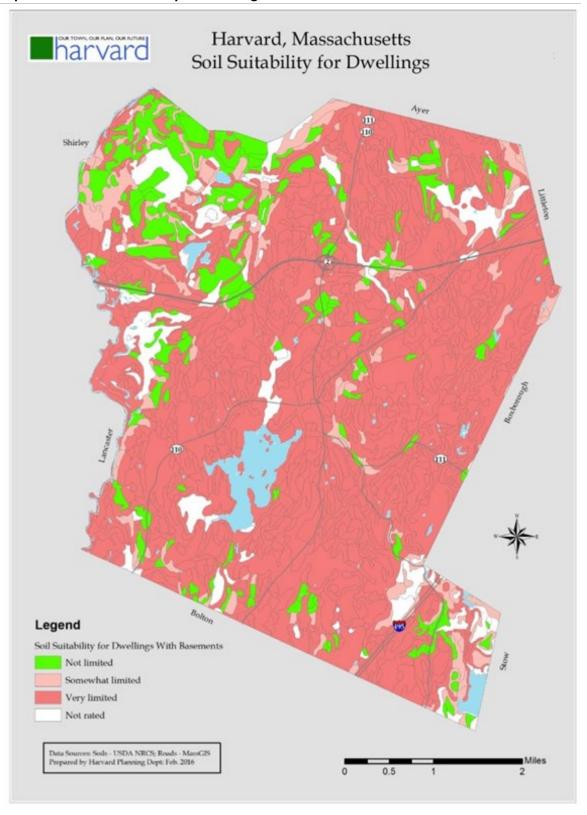
Areas identified as Core Habitat are necessary to promote the long-term survival of Species of Special Concern (those listed under the Massachusetts Endangered Species Act and additional species identified in the State Wildlife Action Plan), exemplary natural communities, and intact ecosystems. Critical Natural Landscapes are intact landscapes that support ecological processes and a wide range of species and habitats over the long term. Priority Habitats of Rare Species are areas within which state-listed rare species have been observed within the last twenty-five years. Mapped Priority Habitats determine whether a proposed project must be reviewed by MassWildlife's Natural Heritage and Endangered Species Program for compliance with the Massachusetts Endangered Species Act.

Soils. Soils, combined with Harvard's dependence on wells for water and septic for waste disposal, represent the most widespread barrier to development. The fact is, Harvard's soils are poorly suited for development, but the low density pattern of development makes a townwide water and sewer system infeasible. Ledge outcrops occur in many locations, and bedrock is usually not far from the surface,

creating challenging conditions for housing development. The Natural Resources Conservation Service (NRCS) publishes soil ratings for many land uses, including septic systems and dwellings. The rating terms indicate the extent to which soils have limitations for a particular use, e.g., "not limited," "somewhat limited," and "very limited." Although the constraints of "somewhat limited" soils can usually be overcome with appropriate design, "very limited" soil conditions are generally prohibitive without major soil reclamation, special design, or expensive installation procedures. Nearly all of Harvard is comprised of soils rated "very limited" for construction of single family homes, and most of the areas rated "not limited" or "somewhat limited" have already been developed. A notable exception is the Devens section of Harvard. There, extensive deposits of coarse stratified drift provide a better environment for construction and intensive land use. ³³ (Map 5.2)

³³ "Unsuitable" does not prevent development, but it does mean that septic systems in Harvard are costly to design and build.

Map 5.2: Soil Suitability for Dwellings

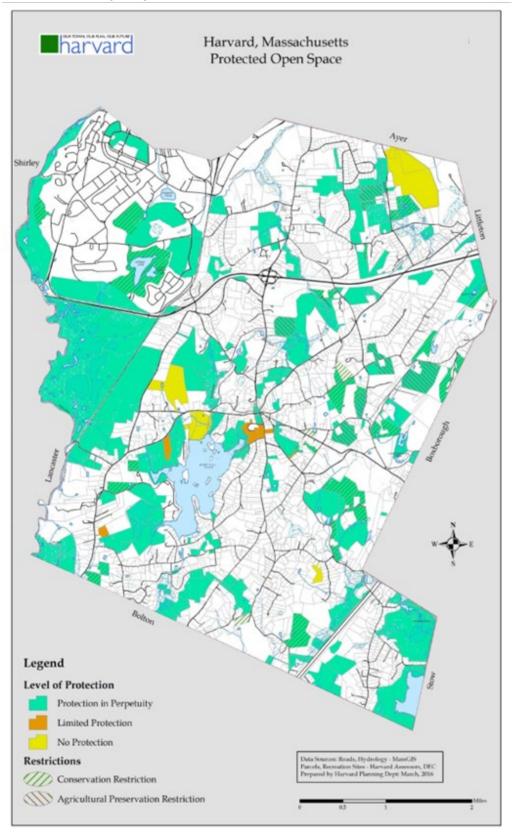


Protected Open Space. Harvard has a long history of open space protection. Acquisitions, gifts, tax title takings, land swaps and other means of securing conservation land have been pursued in Harvard since at least 1962. Half a century of land preservation efforts has resulted in some 4,000 acres – nearly 30 percent of Harvard's total land area – in some form of permanent protection from development. In the past 20 years, Harvard has added over 1,000 acres of land in permanent protection.

Citing the open space inventory maintained by the Town, the 2016 Master Plan noted that Harvard and various Land Trusts owned and managed approximately 1,900 acres, 26 state and federal agencies control about 1,350 acres, and land with an agricultural preservation restriction (APR) or conservation restriction (CR) total over 500 acres. The inventory of protected land includes some fairly large properties, such as the Great Elms (69 acres), Prospect Hill (61 acres), and the Bare Hill Wildlife Sanctuary on Bolton Road and the Clapp Land on Still River Road (44 acres each). Harvard's protected open spaces are shown on **Map 5.3**.

Some of Harvard's most striking open space features, however, are completely unprotected. They could be developed at any time. While development pressure remains low, such properties are at little risk for change, but the 2016 Master Plan cautioned that if the Town did not take steps to enable development to occur in more appropriate locations, these priority lands could be at risk. In addition to the temporarily protected Chapter lands, there are large institutional holdings such as the 40 acres owned by the Sisters of Saint Benedict Center in Still River Village, 67 acres owned by the Saint Benedict Priory in Still River Village. Harvard University's 37-acre Oak Hill Observatory, and 52 acres of camp properties around Bare Hill Pond.

Map 5.3: Protected Open Space



Assessing Sites for Development Suitability. A detailed Development Suitability Analysis, undertaken at the time of the 2016 Master Plan, is included as Appendix 2. The Analysis documents the physical characteristics of Harvard that make development difficult. It takes into account environmentally sensitive areas that are not suitable for building, such as wetlands, floodplains, and BioMap core habitats, as well as areas where development may harm important resources, such as water supply protection areas and prime farmland soils. Removing such lands from consideration leaves 1,471 acres that are not currently developed, are not protected from development, did not have environmental constraints, and were potentially developable based on size and access. Of this total, about 1,000 acres are enrolled in a Chapter 61 tax abatement program for forestry management, agricultural production, or recreation. By agreeing to manage their properties for these purposes, landowners enjoy reduced property taxes. Protection is temporary, however, and owners may remove their property at any time, pay back taxes as required by law, and sell the land for development. These unconstrained lands may be suitable for higher residential density to help meet local housing needs.

5B. Regulatory Constraints

Zoning is intended to regulate the use of property for the health, safety and general welfare of the public. In effect, zoning and land use policies and the way they are implemented determine the location, size, and type of housing in a community, influencing access to fair housing choice, housing affordability and residential development patterns generally.³⁴ Harvard's zoning regulations make it difficult to promote moderately priced market rate housing. In general, they encourage single family homes on large lots throughout most of the Town – the only type of housing allowed by right – and offer few avenues to construct alternative housing types needed by many segments of the community.

Zoning Overview. Town Meeting adopted Harvard's first zoning bylaw in 1951 with one district defined for the entire town as was the common practice at the time in rural areas. Separate use districts followed in 1965, including Agricultural/Residential (AR), Business (B), Commercial (C), and Industrial (I). Harvard established a Watershed Protection (W) District in 1968 and eliminated its only industrial zone in 1972. Today, the zoning bylaw references eight districts: Agricultural-Residential (AR), Business (B), Commercial (C), Multiple Residence (MR), Watershed Protection & Floodplain (W), Watershed Protection & Flood Hazard (WFH), Nashua River Watershed Greenspace Buffer District (WG), and Wireless Communication Tower Overlay District (WCTOD), but nearly all of Harvard's developable land is in the AR district (Table 5.1.) Map 5.4 depicts the Town's zoning map and Map 5.5 shows the current land use by parcel.

³⁴ Massachusetts municipalities are granted the authority to regulate the use of land, building and structures under MGL Ch. 40A. Under MGL Ch. 41 (Section 81D) local planning boards are required to prepare master plans. There is, however, no requirement that local zoning ordinances and bylaws be consistent with the adopted master plan.

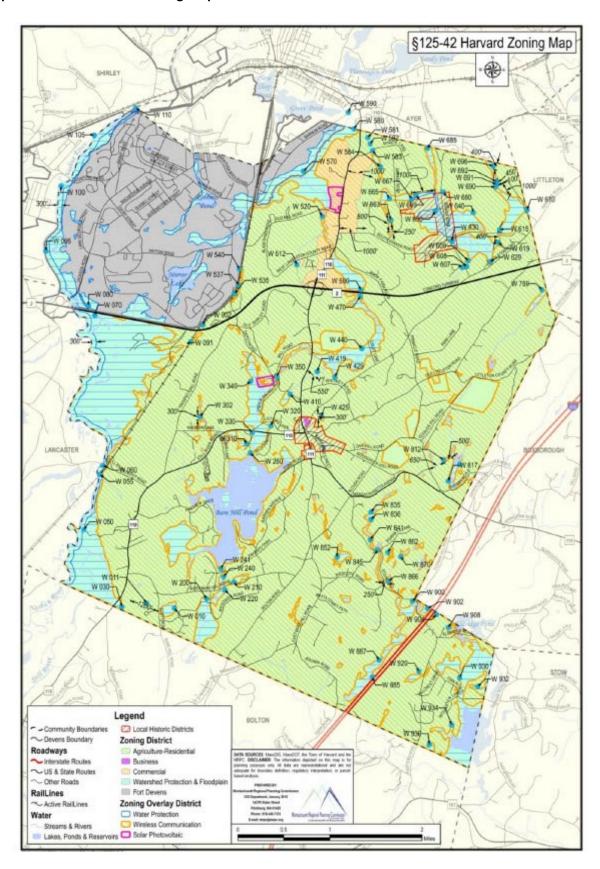
Table 5.1: Harvard's Zoning Districts by Area

District	Acres	Percent
Agricultural Residential	11,753	77.9%
Business	3	0.02%
Commercial	346	2.3%
Multiple Residence	0	0.0%
Watershed Protection and Floodplain	2,985	19.8%
Acres subject to Harvard Zoning	15,088	100.0%
Acres of Devens in Harvard	2,275	

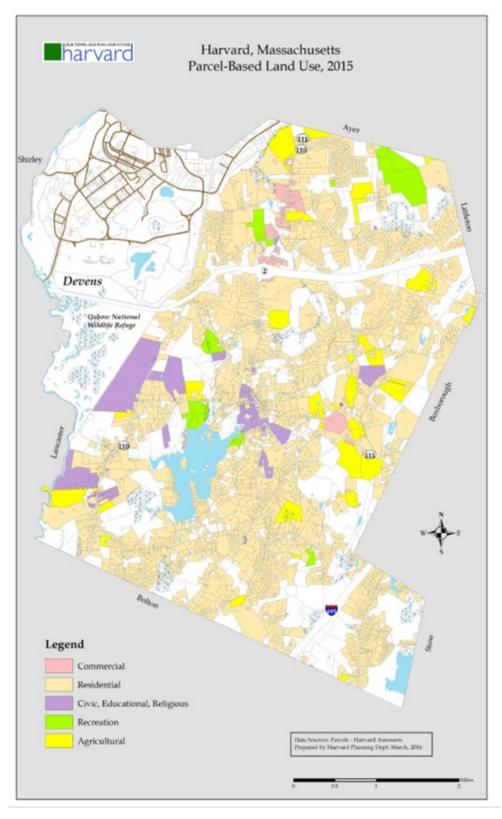
Source: 2017 HPP, from MRPC, Harvard Zoning Coverage, 2015

The AR district provides for single family homes, agricultural uses and a limited number of institutional uses as-of-right. Conversion of older homes to two-family or multifamily buildings, conversion of seasonal to year-round residences, and accessory dwelling units are classified as special permit uses. The zone's basic lot area requirement is 1.5 acres, but under a hierarchy of dimensional rules, the minimum lot size may increase to 4.5 acres depending on the type of lot or project. The second named residential district, MR, has no associated boundaries on the zoning map, and thus does not exist.

Map 5.4: Harvard's Zoning Map



Map 5.5: Parcel-Based Land Use



Allowed Uses. Detached single family homes on ANR (approval not required) lots that meet the Town's strict dimensional, intensity and site requirements are the only use allowed by right. They are allowed in all three districts (AR, B and C), but restricted in the C District to parcels that existed in 1972. Other residential uses that may be allowed by special permit include:

- Accessory Dwelling Units (ADUs): First adopted in 1982, the ADU provision has been amended four times, most recently in 2021. Its purpose, however, has remained unchanged: to provide the owner of a single-family residence the opportunity to establish an accessory dwelling in a section of the residence or in an accessory building with no change in the principal use of the premises. Approval of an ADU is by special permit from the Zoning Board of Appeals, unless the unit is designed and constructed according to the "age-appropriate design criteria," (i.e., universal design) defined in the Bylaw's Senior Residential Development section (125-57E), in which case it is by right. There is no restriction on who can live in the unit. The 2021 amendment increased the allowable size from 1,200 to 1,500 square feet. Rarely used in the first 25 years of its existence, activity has picked up in recent years. It is unclear whether the increased usage reflects changes in the bylaw or changes in residents' demographic, economic or personal considerations, or some combination of the two.
- Backland Lots and Mini-Subdivisions: Backland and hammerhead lots, now the predominant lot type in Harvard, are allowed by special permit for single family homes and require a minimum lot size of 4.5 acres and 50 feet of frontage. Common driveways (serving up to 4 lots), which eliminate the need for new subdivision roads and allow access ways to be built to less rigorous standards, also require a special permit. Mini-subdivisions of up to 3 homes, each on lots of at least 3 acres with 180' of frontage require a special permit from the Planning Board, but if the roads remain private, they too may be built to less strict standards. The bylaw was added in 1981, but no evidence has been found that it was ever used.
- 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. Since 2004, multifamily buildings have been allowed as part of an Ayer Road Village Special Permit (ARV-SP), a provision that requires a special permit and applies only to property in the Commercial District that has 300 feet of frontage on Ayer Road.³⁵

As its name implies, the intent of this provision is to encourage a mix of residential and commercial uses in the C-District to create village-like settings. It offers density incentives and relaxation of dimensional standards to encourage applications and is one of the few instances where multifamily developments are allowed. In 2016, Town Meeting authorized assisted living facilities as permissible uses within an ARV-SP development. It was under this zoning that the 42 unit Bowers Brook development was permitted with an adjacent medical building. According to the 2016 Master Plan, there are about six parcels with the required frontage and a couple of others where the frontage could be met, if combined.

• <u>Intensity of Use and Dimensional Requirements</u>. 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 across the board to the AR, B, C, and W

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³⁵ According to the 2016 Master Plan, there are only about six undeveloped parcels with the required 300 feet of frontage, and two others where, if parcels were combined, the frontage could be met.

districts. In addition to minimum lot area and maximum floor area ratio (FAR) requirements, the Town regulates lot coverage, shape, and dimensions, e.g., frontage, minimum lot width, along with front, side and rear setbacks, building height, and driveway access. While these restrictions yield a low density development pattern in a way that preserves rural character, they set the stage for high land values. The maximum building height for all buildings (except churches) is less than 35 feet and three stories.

- Open Space and Conservation—Planned Residential Development (OSC-PRD). At its 2023 Fall Town Meeting, Harvard voted to substantially amend its 20-year old OSC-PRD bylaw to incentivize, among other things, affordable housing. The bylaw that was updated had been in place for more than 20 years and had produced just one (4 unit) development, which did not include an affordable component. Like its predecessor, the new bylaw is intended to minimize residential land consumption, protect open space and diversify the town's housing stock. It provides, by special permit, a series of incentives for increased density, up to 10 units per acre overall from a base density of 2 units, in exchange for various concessions, one of which is the inclusion of affordable (SHI-eligible) housing. It eliminates a number of requirements that had proved to be disincentives to its use and provides additional density incentives for incorporating senior housing and using climate resilient practices above and beyond the town's requirements aligned with the state's Stretch Code.
- <u>Hildreth Housing Overlay District</u>. In 2016 the Town adopted this overlay district to allow a senior housing development on Town-owned land adjacent to the Hildreth House, then the Town's senior center. A feasibility study determined that the site was not suitable for the proposed development and plans were abandoned. The senior center has since relocated to the commercial district. The site may be re-evaluated at a later date for unrestricted housing.

Over time, Harvard has modified its zoning bylaw in an attempt to align its land use regulations with its planning goals – including the expansion of affordable housing options and the diversification of the housing stock through zoning – but with few exceptions, these changes (e.g. cluster by law, minisubdivision, ADUs) have not achieved the desire results. In fact, the only successful effort to expand affordable housing options through zoning (rather than the comprehensive permit) has been the Ayer Road Village Special Permit.

5C. Infrastructure and Municipal Capacity

Limited Public Water Supply. Harvard has just a small municipal water and sewer system that serves the Town Center (Map 5.6). The only high yield aquifer is found at Devens. As described in previous sections, most households and businesses are served by on-site, private wells and septic disposal systems, and the low density development pattern of the town would make it cost prohibitive to develop new water and sewer systems elsewhere. Thus, most new development depends on finding sufficient well yields on the building lot for the proposed use and soils that can comply with Title 5 standards for septic systems.³⁶

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³⁶ The lack of public water and sewers is limited in many Massachusetts communities. The State's Analysis of Impediments to Fair Housing (2019) noted that the number of Massachusetts towns that are wholly or substantially dependent on septic was nearly unprecedented among urbanized states. The U.S. Census Bureau stopped reporting on access to public sewers in 1990, but at that time nearly half of Massachusetts municipalities had three-quarters of their homes on septic.

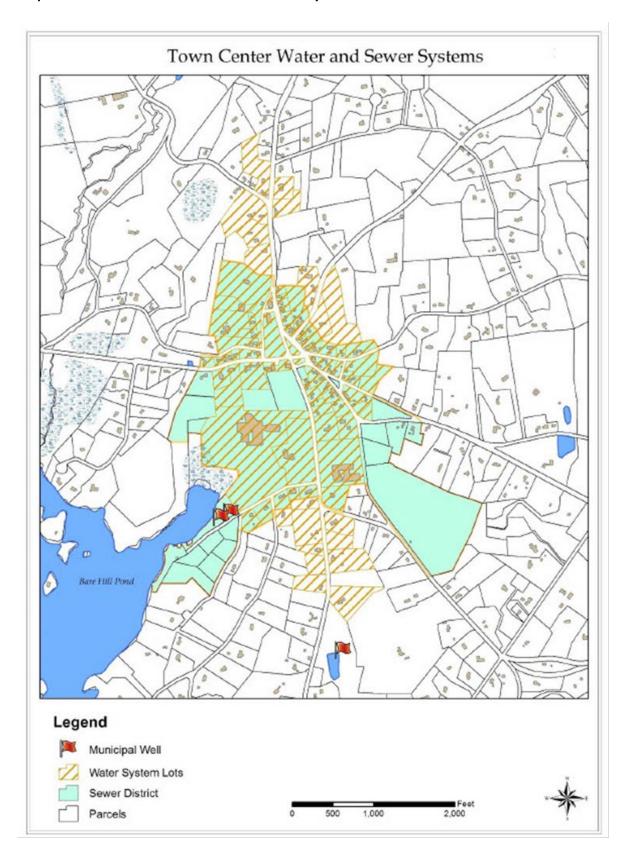
The existing town water supply system serves about 100 clients in the town center, including the schools and other municipal buildings. The source of the supply is two wells on Pond Road, but over the past three years, those wells have had various problems with elevated PFAS (per- and polyfluoroalkyl substances) levels and coliform bacteria contamination. In May (2023), voters approved the borrowing of \$4.85 million to install a connection to the Devens water system, making that the source of town water.³⁷ In addition to ensuring a plentiful supply of water, which will provide increased fire protection for the town, all the drinking water in Devens is currently treated for PFAS. Once the Devens connection is completed, the existing wells will remain open as a backup.

Until now the Harvard water system has been regulated by an appointed Water and Sewer Commission and operated by the Department of Public Works assisted by subcontractors for testing and maintenance, but once the connection to Devens is complete, Devens personnel, who are more experienced at running and managing a treatment facility and better positioned to adjust to evolving regulations, will take over. Houses along the proposed water line on Depot Road will be able to connect to the new system, but there are no plans currently to extend service to the commercial district, nor are there plans to include sewer hookups.

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³⁷ Under the terms of the Devens Reuse Plan, Harvard has the right to connect to Devens water, provided there is enough capacity. Devens' current permitted water withdrawal is about 4.8 million gallons per day, and its average usage is 1.8 million gallons per day, with a peak usage in summer of 2.1 million gallons per day. Harvard's current water requirement is 22,000 gallons per day, with an average use of about 15,000 gallons per day. (Harvard Press, 2/10/2023)

Map 5.6: Town Center Water and Sewer Systems



Limited Sewer. The Water and Sewer Commission also oversees a small sewer district that Harvard established with approval from the state Legislature (Chapter 37, Acts of 2010). The sewer district falls in the same general area as the water district and includes portions of Ayer Road, Mass. Avenue, Elm Street, Pond Road, Still River Road, and Fairbank Street. Its service area is limited to 12 nonresidential properties, 17 multifamily properties containing 43 dwelling units, 38 single family homes, and 8 public buildings.

The primary purpose of the sewer district was to provide existing uses in the Town Center with reliable treatment and to remove failing septic systems that posed a threat to the municipal wells. Chapter 37 specifically restricts connections of a new use, a use that has been reconstructed resulting in a greater flow, or a facility that has undergone a change in use to the wastewater system, and it prohibits an increase in the design flow of an existing facility unless it could have met Title 5 standards for a new septic system [emphasis added]. The Commission may make exceptions if a connection is necessary for the public health and safety or creates a demonstrable benefit to the Town. It is unlikely, however, that the system would allow a significant increase in residential density or promote new commercial growth.

The sewer system has an unused portion of its total capacity of approximately 3,000 gallons per day (gpd). The Commission had allocated 3,000 gpd to development of a senior housing project adjacent to the Town's Senior Center since it would provide a benefit to the Town by addressing an important housing need. The capacity was deemed sufficient to permit up to 20 units of housing, and the 2016 Town Meeting voted to establish a housing overlay district of about 7 acres in that location to allow the project to proceed. The plan was subsequently abandoned when the site proved infeasible, and the Senior Center moved to a new location.

Limited Organizational Infrastructure. Harvard's limited municipal infrastructure extends beyond water and sewer. The Town has a long history of citizen-led functions. Its emergency services – fire and EMT – are volunteer, and it was not until 2013 that Town Meeting agreed to fund a part-time contractual town planner position. One of the Town's master plans and all of its housing production plans, including this one, were prepared in house. The Town has twice had a Housing Partnership that took the lead in such things as conducting a town-wide housing survey, a needs assessment, and site analyses of several town-owned parcels of land to gauge their suitability for affordable housing. The Partnership developed guidelines for proposed 40B developments, negotiated the town's two Local Initiative Projects, and advocated for adoption of the Community Preservation Act and establishment of the Municipal Affordable Housing Trust (MAHT). Once the MAHT was established in 2006, that board assumed the lead on affordable housing matters and the Housing Partnership was disbanded.

Still, it has been difficult for the Town to develop and sustain an aggressive affordable housing agenda. MAHT's recent decision to enlist the services of a regional housing consortium to provide staffing capacity and expertise the Town lacked should assist in this regard, but the lack of an explicit housing policy and implementation infrastructure not only hampers Harvard's ability to grow and maintain its subsidized inventory, it undermines the town's ability to attract the kind of market rate development it desires.

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³⁸The first was prepared under the Planned Production Regulation under MGL Chapter 40B, 760 CMR 31.07 (1)(i).

Key Findings: Development Constraints and Limitations

- The combination of regulatory, physical, and infrastructure constraints have made housing diversity and affordability difficult goals for the town to achieve. The lack of water and sewer infrastructure inhibits housing development. The soils in many parts of Harvard are not well suited to on-site septic systems, but the widely dispersed, low density pattern of development makes a townwide water and sewer system infeasible.
- Soils, combined with Harvard's dependence on wells and septic represent the most widespread barrier to development. The Natural Resources Conservation Service rates nearly all of Harvard's soils as "very limited" for construction of single family homes. A notable exception is Devens, where extensive deposits of coarse stratified drift provide a better environment for construction and intensive land use.
- Harvard has limited municipal water and sewer in the town center. In May (2023) voters
 approved the borrowing of \$4.85 million to install a connection to the Devens water system,
 making that the source of town water. Houses along the proposed water line will be able to
 connect to the new system, but there are no plans currently to extend service to the
 commercial district, nor are there plans to include sewer hookups.
- The existing small sewer district, serving roughly the same area, was established with approval from the state Legislature in 2010. Its primary purpose was to provide existing uses in the Town Center with reliable treatment and to remove failing septic systems that posed a threat to the municipal wells. It specifically restricts connections of a new use.
- Wetlands are prevalent throughout the town, and in addition to restrictions imposed by the
 Wetlands Protection Act, Harvard has enacted additional protections. These include a nodisturb zone within a 50-foot buffer zone of a wetland, and a no-structure zone within a 75-foot
 buffer of a wetland.
- More than one quarter of Harvard's total area (over 4,200 acres) is in some form of permanent protection from development, the result of the Town's long history of conservation and open space protection.
- There are about 1,500 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. Of this total, about 1,000 acres are enrolled in one of the Chapter 61 tax abatement programs for forestry management, agricultural production, or recreation. Some of this land may be suitable for development. The development prohibitions on Chapter lands are temporary, and owners may remove their property at any time, pay back taxes as required by law, and sell the land.
- Surveys indicate that many residents are concerned about affordability and the lack of housing variety, but Harvard's regulatory framework promotes large homes on large lots and creates barriers to other housing types. Detached single family homes on ANR (approval not required) lots that meet the Town's strict dimensional, intensity and site requirements are the only residential use allowed by right.

- Harvard has modified its zoning bylaw over time in an attempt to align its land use regulations with its planning goals including the expansion of affordable housing options and the diversification of the housing stock but with few exceptions, these changes (e.g., cluster by law, mini-subdivision, ADUs) have not achieved the desire results.
- The one exception is the Ayer Road Village Special Permit, the intent of which is to encourage a
 mix of residential and commercial uses in the C-District to create village-like settings. It was
 under this zoning that the 42 unit Bowers Brook development was permitted with an adjacent
 medical building.

6. EXISTING RESOURCES, EMERGING OPPORTUNITIES

Housing Needs Assessment

This section describes actions the Town has already taken, and the resources it has available, to support its affordable housing agenda. It also describes the status of two emerging opportunities for diversifying Harvard's housing stock overall and boosting its affordable housing: Devens and newly created multifamily zone(s) – yet to be identified – that will comply with the Commonwealth's new multifamily zoning requirements. Finally, it describes the intersection of the State (and Town) affordable housing and climate goals.

6A. Existing Resources

Community Preservation Act (CPA). Harvard was one of the first communities in the state to adopt the provisions of the Community Preservation Act in 2001, when Town Meeting approved a 1.1 percent surcharge. Established by the Legislature in 2000, the CPA allows municipalities to create a local Community Preservation Fund through the imposition of a surcharge of up to 3 percent of the tax levy against real property for open space protection, historic preservation, affordable housing, and outdoor recreation. The legislation also created a statewide Community Preservation Trust Fund, administered by the Department of Revenue, which provides distributions each year to communities that have adopted the CPA. The CPA requires that a minimum of 10 percent of the funds collected each year (including the state match) be used, or reserved for future spending, for each of the three community preservation purposes: open space; historic preservation; and community housing. Since the establishment of the Municipal Affordable Housing Trust Fund in 2006, most of the CPA funding for housing has been transferred into the Trust Fund. In 2023, Annual Town Meeting voted to increase the CPA surcharge to the maximum 3 percent, with exemptions for low income and the first \$100,000 of assessed value on commercial and residential property.

To date, more than \$5.6 million dollars have been generated from the local surcharge and state distribution resources under the Community Preservation Act. Over 20 percent of the funds raised have been allocated to affordable housing, most to the Municipal Affordable Housing Trust Fund.

Harvard Municipal Affordable Housing Trust. Established in 2006, under enabling legislation passed by the state legislature the preceding year, Harvard's Municipal Affordable Housing Trust (MAHT) was created to facilitate the creation or preservation affordable housing for low and moderate income households.³⁹ Its principal source of funding has been the Community Preservation Act, but if and when other financing sources become available, they are placed in the fund. For example, the developer of Trail Ridge condominiums volunteered to contribute \$5,000 per market rate unit (total \$195,000) to assist the Town in its affordable housing initiatives. Just recently (September 2023), the Trust became the recipient

³⁹ https://malegislature.gov/Laws/GeneralLaws/PartI/TitleVII/Chapter44/Section55C. The state enabling legislation allowed communities to create housing trusts through their local legislative body, and established guidelines on what these local housing trusts can do, specifics as to who can serve on a local housing trust board and what powers a community can grant the board. The demand for housing trust funds grew as more towns adopted the Community Preservation Act because they provide a more flexible vehicle for disbursing funds since individual projects do not have to be approved by Annual Town Meeting. Harvard had long used a similar approach to fund the acquisition of land for conservation.

of a \$140,000 settlement brought by the Attorney General on behalf of EOHLC and the Town for the loss of an affordable unit sold by the lender at auction to an ineligible purchaser.

Since it was established, the Municipal Affordable Housing Trust Fund has contributed to the support of a number of affordable housing initiatives, some of which have come to fruition, or will in the near future. Others proved infeasible and were abandoned, and. Examples of projects/uses funded by the Trust are:

- A \$200,000 loan to assist in the development of Bowers Brook, a Low Income Housing Tax Credit development in the Ayer Road Commercial District;
- Acquisition of 28 acres of land on Littleton Road, for the purpose of developing mixed-income housing.
 The MAHT issued a Request for Proposals (RFP) in 2014 to develop this site, but the project was subsequently abandoned, and the site was sold.
- In 2020, with technical assistance from MetroWest Housing Collaborative, the Trust created a program
 to assist income-eligible renters and homeowners who had been financially impacted by the COVID-19
 emergency. Special Town Meeting approved \$20,000 from the Community Preservation Fund for the
 program. Despite extensive promotion and outreach, there was no demand, and the funds were
 eventually returned to the MAHT.
- In 2015, the Trust committed to provide a \$140,000 subsidy to the developers of Emerson Green Village in Devens to support the development of 40 rental units. The developer's original proposal did not include any affordable units that would be eligible for inclusion on the Subsidized Housing Inventory. The proactive intervention by the Trust in providing this financial commitment ensured that 10 units (25%) would be income restricted to residents earning no more than 80% of the area median income. As a result, all 40 units would be credited to Harvard's subsidized count. The project stalled, however, so the deal was not consummated.

As this Housing Production Plan was being prepared for submission, MassDevelopment approved an additional 6 units for this project. The MAHT now expects to subsidize 12 so that 26 percent of the 46 units will be reserved for households earning 80 percent of AMI or less, but details have not been finalized.

The Trust was also instrumental in enlisting the services of a Regional Housing consortium to provide the staffing capacity and expertise the Town of Harvard lacked for a variety of tasks related to affordable housing initiatives.

Regional Housing Services Office. In 2019, Harvard joined the Assabet Regional Housing Consortium (ARHC), a multi-jurisdictional Regional Housing Services Office, to gain access to expertise, skills and staffing capacity for a variety of tasks related to certifying, tracking and promoting affordable housing initiatives. Modelled on the successful Regional Housing Services Office that serves Acton, Bedford, Burlington, Concord, Lexington, Sudbury, Wayland and Weston, ARHC is a collaboration among member communities Berlin, Bolton, Boxborough, Harvard, Hudson, Lancaster, Littleton, Stow, and the Devens Enterprise Commission/MassDevelopment. It contracts with Metro West Collaborative Development to provide member towns assistance with municipal functions of affordable housing, including proactive monitoring, resident assistance, program administration, project development, technical assistance, and regional activities. This approach affords member communities access to housing services at a lower cost than they could obtain on their own.

The fee structure is based on a combination of hours for local services, plus regional activities and monitoring. Since Harvard joined the Consortium (with funding from the Municipal Affordable Housing Trust of approximately \$3,000/year), Metro West has assisted Harvard in developing an Emergency Rental Assistance program in response to the COVID-19 emergency and providing technical assistance in reviewing its Housing Production Plan.

Regional Affordable Housing Development Partners. Because of its small size, Harvard is ineligible to receive housing or community development funds from the state or federal government, but it has from time to time participated in home repair programs managed by its regional planning agency, Montachusett Regional Planning Commission and would welcome the opportunity to do so again should resources become available. There are also several experienced for-profit developers who have worked with worked with the Town on "friendly" 40Bs who have expressed interest in finding new opportunities here. Likewise, there are regional nonprofit developers who either have worked with the Town, or in similar communities, and would be interested in doing so. (Examples include the Chelmsford Housing Authority subsidiary, CHOICE, which developed the 9-unit Elms project; NewVue Communities in Fitchburg, which works in the MRPC region; East Boston-based Neighborhood of Affordable Housing (NOAH), which recently worked with the town of Carlisle on an affordable development and is currently working with Ayer; and MetroWest Collaborative, which had submitted a proposal in response to a request for proposals on a site the MAHT had acquired that did not move forward.)

6B. Devens: A Unique Opportunity with Unique Challenges

No discussion of Harvard's future would be complete without consideration of the challenges and opportunities associated with the Town's resumption of jurisdiction over its Devens lands. The uncertainty over when, if and how governance of Devens (formerly Fort Devens, the largest military base in New England) will revert to Harvard, and what that will mean for the community, creates enormous planning challenges. Some 60 percent of the land area at Devens is part of Harvard's historical land, and it represents about 15 percent of the Town's total area.⁴⁰

The decision on Devens future will not be made during the term of this Housing Production Plan, but a great deal of consideration has already been given to what the various disposition outcomes might mean for the host towns, the Devens residential community, and the Commonwealth.

A recommendation about Devens disposition must be made to the governor and legislature by July 1, 2033. At issue is whether the lands will revert back to the host communities, become a new town, or operate under some type of hybrid arrangement. In the meantime, the Town of Harvard continues to seek ways to increase its subsidized housing inventory and expand and diversify its housing stock throughout the town, including at Devens, with the active participation of residents who live there. Devens residents

⁴⁰ Established in 1917 at what was then the major hub of New England's rail network, Fort Devens grew rapidly as a training center for military personnel. The population of the base fluctuated considerably over the years, spiking during World Wars I and II and the Korean and Vietnam conflicts, and it played a major role in the region's economy for most of the twentieth century. As recently as 1990, Fort Devens had a resident population of more than 9,000, a peak daytime population of 15,000, and supported military and civilian employment for an estimated 7-8,000 workers. Harvard's responsibilities to, and interaction with, the military population, however, was minimal. Once the military enclave was established, all existing roads into Fort Devens from residential Harvard were closed, creating a continuous seven-mile barrier across the town's western edge, penetrated only by Route 2. Children residing on the base were educated in the Ayer schools, and even those stationed there referred to the base as being in Ayer.

are represented on the Town's Municipal Affordable Housing Trust and participated in the development of this plan.

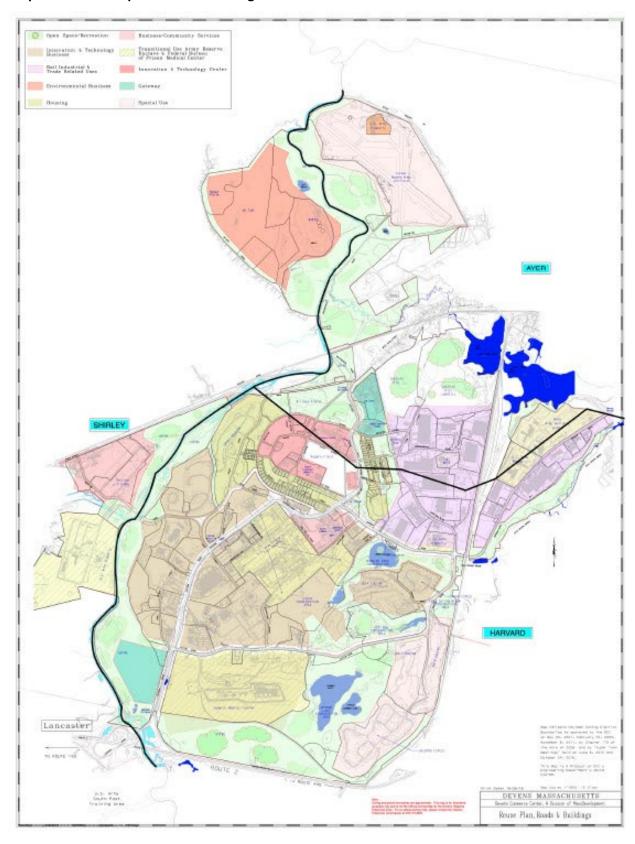
The Creation of the Devens Regional Enterprise Zone. Following the announcement in 1991 that Fort Devens would close, the Commonwealth negotiated to buy the property, 2,700 acres of which are in Harvard, from the federal government. Through state legislation filed in 1993 (Chapter 498 of the Acts of 1993), and votes on a Reuse Plan and Zoning Bylaw the following year by the host communities of Harvard, Ayer and Shirley, MassDevelopment⁴¹ became the public agency responsible for the management and redevelopment of lands within what was designated as the Devens Regional Enterprise Zone (DREZ, or Devens) in 1996 (Map 6.1). The Army retained portions of Devens for continued federal and state uses, as well as responsibility for remediation of sites contaminated by its activities, but a new, unified permitting agency – the Devens Enterprise Commission (DEC) – became the regulatory body.

The Devens Regional Enterprise Zone (DREZ) is a unique instrumentality of the state. It became the legal mechanism for acquiring 4,400 acres of the former military base and redeveloping it as a regional employment center, a process that was expected to take 20-40 years. Under Chapter 498, MassDevelopment was designated as the sole entity with power to acquire, maintain, develop, and dispose of property at Devens. Chapter 498 also created the Devens Enterprise Commission (DEC) as the entity that reviews and permits development proposals and administers and enforces redevelopment in accordance with the Devens Reuse Plan and Bylaws. The DEC is composed of representatives from each of the three surrounding town and the broader Devens region and it operates as a unified permitting agency, with joint powers of a special permit granting authority, planning board, conservation commission, board of health, zoning board of appeal, and historic district commission. Chapter 498 also gave MassDevelopment up to \$200 million in funding to pay for infrastructure improvements that would be needed to attract and support industrial growth at Devens.

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⁴¹ In 1994 when Chapter 498 took effect, MassDevelopment was known as the Massachusetts Government Land Bank.

Map 6.1: Map of Devens Showing Historical Town Boundaries



The Devens Reuse Plan. The Devens Reuse Plan is similar to an urban renewal plan in that it relies on the powers of government to restore, reorganize, and reposition property for private development. The overarching goal of the plan was to redevelop in a sustainable manner and replace all 7,000 to 8,000 jobs that were lost as a result of the base closure. It envisioned a large industrial and office park threaded with conservation and recreational open space, with small pockets of housing, adaptive reuse of historic military buildings, and business-related retail services. The Reuse Plan limited residential development in Devens to 282 units. Twenty-five percent of the planned 282 units of housing (241 in Harvard), were to be reserved for low or moderate income households and special needs populations. The 282 housing units were to have been created primarily through rehabilitation of the existing military housing, but after a developer was selected in 2000, it was discovered that 180 of the units targeted for rehabilitation were contaminated with pesticides. These units were subsequently demolished, with the Army remediating the contaminated soils.

Current Status. While much of the housing that served the military was demolished when the base closed because of its generally poor condition and/or environmental contamination, 102 units of former officers' housing were renovated and sold for homeownership in 2002. These homes straddle the Harvard-Ayer town line, with 71 (13 affordable) in Harvard. Their redevelopment as mixed income housing was supported as a joint Local Initiative Project (LIP) by the two towns. A decade later, eight moderately priced zero net energy single family homes were constructed, and two years later 12 energy-efficient townhouses were added. Emerson Green, Devens newest development (in the area formerly known as the Grant Road housing neighborhood), was commenced in 2015 and is still under development. When complete, it will include 130 units with a mix of for-sale single family homes, duplexes, triplexes, and a quadplex, in addition to an apartment building complex with 46 rental units. Fifty-eight of those for-sale units have been built to date. When this project is complete, there can only be 18 additional residential units constructed in Devens unless the 282-unit cap is lifted.⁴²

Devens remains primarily a non-residential area, as it was planned to be. The DREZ now hosts more than 120 business, non-profit, and governmental organizations that provide a combined total of nearly 9,000 jobs. It has over 1,800 acres of protected open space, and a number of social services, including veterans' services, food pantry, behavioral health clinic, shelter for homeless women with children, job training for at-risk youth, and adult and child daycare. With sustainable redevelopment as a guiding principle in the Devens Reuse Plan, development in Devens has had a reduced environmental footprint. In November 2022 the state Legislature passed an economic development bill that more than doubled the allowable amount of commercial development, consistent with a Massachusetts Environmental Policy Act 2008 Notice of project Change filing and subsequent Section 61 Findings. ⁴³In the earliest days of the redevelopment effort, many of the businesses that moved into Devens brought warehouse and manufacturing jobs to the region. Over time, however, Devens began to attract more higher-end manufacturing, R&D, and biotechnology businesses, including life science and clean energy, and the development process accelerated.

By almost any measure, Devens has been a successful economic, social, and environmental development initiative. One of the key reasons for its success is that Chapter 498 gives significant power to

⁴² There is a 13-unit transitional housing facility for single women with children in the underlying Town of Harvard, 36 units of transitional housing for homeless veterans, and a 58 unit senior housing facility in the underlying Town of Shirley that do not fall under the housing cap.

⁴³ The increased commercial development cap did not add any additional land available for development in Devens. All development is occurring within the areas identified for development in the Reuse Plan.

MassDevelopment and the DEC. Establishments that choose Devens are guaranteed fast-track or "unified" permitting from the DEC. Unlike Harvard's separately elected and appointed citizen boards, the DEC is a combined "one-stop" Planning Board, Conservation Commission, Board of Health, special permit granting authority, zoning board of appeal, and Historical Commission, staffed by planning, development and legal professionals. In addition, Devens was able to attract new growth through favorable zoning, robust water, sewer, and energy infrastructure, and competitive utility rates.

Harvard's Newest Neighborhood. Some 180 families now call Devens home. Under Chapter 498, MassDevelopment is responsible for providing the services that Harvard's local government provides to the rest of town. It does so through a combination of contracts for services with one of the three towns (or other towns in the region), arrangements with other state agencies, e.g., the State Police, and hiring its own personnel, such as the Devens Fire Department. MassDevelopment also oversees water, sewer, electric and gas utilities for Devens. Children residing at Devens are educated in the Harvard Public Schools, under a contract with MassDevelopment.

Resuming jurisdiction of Devens would represent a significant change in Harvard's zoning structure by increasing the percentage of land available for commercial uses. A combined Harvard and Devens Zoning Map would have approximately 70 percent residential (even with no additional housing), 18 percent open space, and 11 percent non-residential.⁴⁴ This would create a more balanced residential-commercial-industrial zoning mix and might provide some relief for homeowners as residential property today makes up 95 percent of Harvard's total assessed valuation.

It would also assist in diversifying Harvard's overall housing stock and in meeting the town's affordable housing goals. While there is very limited opportunity to create additional units under the current housing cap, that cap could be raised. And given Massachusetts' current housing crisis, there is mounting interest at the state level and regionally to do so. If this were to happen, it could present a unique opportunity to create an exciting new residential community that includes a significant number of affordable units. Devens could potentially provide opportunities for additional developments similar to Emerson Green: energy efficient, sustainably constructed and intentionally compact to create a cohesive traditional neighborhood. Additional opportunities would exist for multifamily homes, both affordable and market rate, rental and ownership, at the historic Vicksburg Square and other sites. The challenges, however, are daunting.

6C. Massachusetts' New Multifamily Zoning Requirements

Recognizing that Massachusetts' system of land use planning was a major contributor to the state's chronic housing challenges (affordability, insufficient supply), the legislature passed the first major overhaul of the State Zoning Act (Chapter 40A) in more than 40 years in 2021. An Act Enabling Partnerships for Growth (Chapter 358 of the Acts of 2020) was signed into law by Governor Charlie Baker on January 14, 2021. Dubbed the Housing Choice Initiative, the Act included a series of amendments and revisions to Chapter 40A that its proponents hope will facilitate local zoning approvals for production of more housing, including more mixed-use projects that include housing. In addition, it authorized \$115 million for transit and climate-resilient affordable housing development and neighborhood stabilization activities and included a number of other important provisions.

⁴⁴ Harvard Master Plan, 2016.

That vara iviasier Than, 2010

⁴⁵ The statute can be found at https://malegislature.gov/Laws/SessionLaws/Acts/2020/Chapter358

Among the most significant changes, the new law reduces the voting requirement from a two-thirds supermajority vote to a simple majority for specific zoning provisions that facilitate housing production. 46 But the change that represents the most immediate challenge – and opportunity – for Harvard is the requirement that cities and towns designated as MBTA communities have in place a zoning ordinance or bylaw that supports by-right zoning for multifamily housing. Since Harvard abuts three towns with MBTA commuter rail service – Shirley, Ayer and Littleton – it must comply with this new zoning requirement, which is codified as Section 3A of MGL Chapter 40A. In total, 177 MBTA communities are subject to these new requirements.

Requirements of the New Law. An MBTA community shall have a zoning ordinance or by-law that provides at least one district of reasonable size in which multifamily housing is permitted as of right; provided, however, that such multifamily housing shall be without age restrictions and shall be suitable for families with children [emphasis added]. For the purposes of this section, the district must have a minimum gross density of 15 units per acre, subject to any further limitations imposed by section 40 of chapter 131 [Wetlands Protection Act] and title 5 of the state environmental code established pursuant to section 13 of chapter 21A.

Specific requirements (minimum multifamily unit capacity, minimum land area) vary depending on the characteristics of the community. Harvard is one of about three dozen communities considered "Adjacent Small Towns." The required number of units for these towns is 5 percent of the town's total housing units, 48 which means Harvard's multifamily district must accommodate 113 units. The deadline for Adjacent Small Towns to submit their compliance applications to EOHLC is December 31, 2025.

Compliance will be achieved when the municipality adopts a multifamily zoning district and associated bylaw that meets all the requirements of the compliance guidelines and is certified by EOHLC. Towns that fail to make zoning changes by the state's deadline will be ineligible to receive funds from the Housing Choice Initiative, the Local Capital Projects Fund, the MassWorks Infrastructure Development Program, and thirteen other state programs. ⁴⁹ Of greater consequence, the Massachusetts Attorney General has issued an advisory underscoring the fact that compliance is not optional: (*C*)overed communities cannot

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⁴⁶ Among the zoning bylaws or amendments that can now be enacted with a simple majority vote are those that allow as of right multifamily housing or mixed-use development in an eligible location, accessory dwelling units or open-space residential development and those that establish smart growth or starter home zoning districts. The full list is included in the regulations.

⁴⁷ "Adjacent small town" means an MBTA community that (i) has within its boundaries less than 100 acres of developable station area, and (ii) either has a population density of less than 500 persons per square mile, or a population of not more than 7,000 year-round residents as determined in the most recently published United States Decennial Census of Population and Housing.

⁴⁸ Harvard had 2,251 *total* units according to the 2020 Census. It had 2,199 *year-round* units, which is the standard used to calculate a town's 10 percent goal on the Subsidized Housing Inventory.

⁴⁹ These include: Community Planning Grants, Massachusetts Downtown Initiative, Urban Agenda, Rural and Small Town Development Fund, Brownfields Redevelopment Fund, Site Readiness Program, Underutilized Properties Program, Collaborative Workspace Program, Real Estate Services Technical Assistance, Commonwealth Places Programs, Land Use Planning Grants, Local Acquisitions for Natural Diversity, Municipal Vulnerability Preparedness (MVP) Planning and Project Grants

opt out of or avoid their obligations by choosing to forego state funding. Failure to comply may result in civil enforcement action or liability under federal and state fair housing laws. [Emphasis added.]⁵⁰

The law does not mandate that units are built. Market and financial considerations will determine that. What it does require is that municipalities designate at least one district in which multifamily housing is *allowed* by right. [Emphasis added.] There is also nothing in the new law that requires – or authorizes – an MBTA community to require affordable units in a multifamily housing project that is allowed as of right. However, EOHLC will consider an affordability requirement to be consistent with as of right zoning as long as the zoning requires not more than 10 percent of the units in a project to be affordable, and the cap on the income of families or individuals who are eligible to occupy those affordable units is not less than 80 percent of area median income.⁵¹

Status: Harvard's Action Plan for Compliance. The Town Planner and Planning Board have been conducting community outreach to determine residents' preference for the location of the multifamily district. Work is also underway on the bylaw language that will accompany the map. The parcels under review were identified with assistance from the Montachusett Regional Planning Commission (MRPC) under a District Local Technical Assistance (DLTA) grant. The Town is hopeful that it will be able to evaluate additional parcels with DLTA funding from MRPC in 2024.

6D. Affordable Housing and the Town and State Climate Goals

In October 2021, at a Special Town Meeting, Harvard residents approved a climate change resolution that affirms the Town's support for the greenhouse gas (GHG) reduction goals established by the Commonwealth and for any subsequently adopted modifications of those goals. The resolution further affirms Harvard's willingness to change its practices, policies, and procedures in support of achieving the goals established by the state in order to mitigate the impacts of climate change.

Both the Executive Office of Housing and Livable Communities (EOHLC) and the Executive Office of Energy and Environmental Affairs (EEA) encourage housing development that is consistent with smart growth, sustainable design and green building practices, and the Harvard Climate Action Plan – the roadmap for meeting the Town's 2021 commitment to reducing GHG emissions – aligns with those goals. Specifically, it supports the Commonwealth's "Clean Energy and Climate Plan for 2030," the "2050 Decarbonization Roadmap" and the 2020 legislative session "Act Creating a Next Generation Roadmap for Massachusetts Climate Policy."

All new development, including affordable housing, will be encouraged to promote protection of natural resources and climate change adaptation and resilience. The MAHT and Climate Action Committee will continue to research ways to incentivize "green" building design that results in optimally sited, smaller, energy and water-efficient homes powered by renewable energy. Even in a car dependent community like Harvard, a smart growth approach to housing – with compact development and green design and

⁵¹ Section 4b, Compliance Guidelines for Multi-family Zoning Districts. In allowing this level of affordability, EOHLC has attempted to strike a balance between economic feasibility and the need for more affordable housing. The agency acknowledges the fact that inclusionary zoning – the requiring of affordable units in multi-family projects approved by special permit, or as a condition for building at greater densities than the zoning otherwise would allow – is already a common practice in Massachusetts.

⁵⁰ https://www.mass.gov/news/ag-campbell-issues-advisory-on-requirements-of-mbta-communities-zoning-law

construction – can help the town protect the environment and create more affordable neighborhoods. By maximizing energy efficiency and conservation in design, using healthier materials and finishes, and including renewable energy components, affordable housing developments can become models for sustainable development.

Key Findings: Existing Resources, Emerging Opportunities

- Harvard has valuable financial resources it can contribute to the development or preservation of
 affordable housing. Most funding comes from the Community Preservation Act surcharge, but
 the Town has also negotiated contributions from developers to put toward affordable housing.
- The Municipal Affordable Housing Trust administers these funds, and it has entered into a regional housing services consortium to provide administrative and technical support for affordable housing tracking and monitoring that the Town could not provide in-house.
- Harvard has been aided in creating its subsidized housing inventory by experienced development partners, both for profit and nonprofit. There is continued interest by some of these partners in working with Harvard on the challenging task of identifying a new multifamily district that complies with MGL Chapter 40A, Section 3A and meets local housing needs and environmental requirements.
- The uncertainty over when, if and how governance of Devens will revert to Harvard and what that will mean for the community, creates enormous planning challenges. Some 60 percent of the land area at Devens is part of Harvard's historical lands, and it represents about 15 percent of Harvard's total area. The decision on Devens future governance will not be made during the term of this Housing Production Plan, but its residents have been involved the plan's development, which includes affordable housing opportunities on Harvard land in the Devens Enterprise Zone.
- Affordable housing at Devens is credited to the towns on whose land it sits (Harvard, Ayer or Shirley), but the Devens Reuse Plan governs what can be built there, and development is overseen by the Devens Enterprise Commission. The allowable number of housing units is currently capped at 282, of which 241 are, or will be, in Harvard. Some 180 families now call Devens home. Children residing there are educated in Harvard Public Schools under a contract with MassDevelopment.
- The resumption of jurisdiction of Harvard's Devens lands could present significant benefits to the Town but also significant challenges.
- In 2021, the legislature passed the first major overhaul of the State Zoning Act (Chapter 40A) in more than 40 years. The new law includes a series of amendments and revisions to Chapter 40A intended to facilitate local zoning approvals for production of more housing, including more mixed-use projects that include housing.
- The change that represents the most immediate challenge and opportunity for Harvard is the requirement that cities and towns designated as MBTA communities have in place a zoning ordinance or bylaw that supports by-right zoning for multifamily housing. Since Harvard abuts three towns with MBTA commuter rail service Shirley, Ayer and Littleton it must comply with this new zoning requirement which requires at least one district of "reasonable size" in which multifamily housing at a gross density of 15 units per acre is permitted as of right. Such housing must be suitable for families and may not include age restrictions.

7. HOUSING NEEDS ASSESSMENT SUMMARY

Sections 2-6 constitute Harvard's Comprehensive Needs Assessment. This section summarizes the key findings that have informed Harvard's housing goals and implementation strategies for the coming five years.

Summary of Housing Needs. Notwithstanding Harvard's relative affluence and overall economic wellbeing:

- About 20 percent of households (400+) are estimated to be low income, earning no more than 80 percent of the median income for similarly sized households in the area (Eastern Worcester County HUD Area).
- About 110 of these households (5%) are considered extremely low income (<=30% AMI) and 150 (7%) are considered very low income (>30% but <=50%).
- About 2 percent live below the federal poverty level.
- Another 7 percent are considered moderate income (earning between 80 and 100 percent of median).
- Seniors are disproportionately represented among the low income households (72%).
- Over seventy percent of Harvard's low income households are homeowners and 75 percent of them are cost burdened. A relatively high percentage of the town's low income renters live in subsidized housing, thus fewer of them (38%) experience cost burdens.
- The regional needs are far greater: one third of households in the 8-town region are low income, and more than half of those are extremely low or very low income. One in four has a housing affordability problem. The region's rental housing shortage is especially acute for the lowest income renters.
- While affordability is the greatest challenge for most low and moderate income residents, some –
 particularly (but not limited to) seniors need home adaptations, assistance with daily living, or other
 special services to live independently.
- Harvard's population and that of the region is expected to grow by less than 3 percent during the
 period covered by this plan, but as its demographic profile continues to shift, different housing types
 will be required.
- The lack of affordable housing options has impacted some groups more than others: low income homeowners; seniors and others on fixed incomes; and young adults and families locked out of homeownership, but with limited opportunities to rent a home in Harvard or surrounding towns.

Harvard needs alternative types of housing to address the unmet needs of its existing low income residents, most of whom are senior homeowners. It also shares a regional responsibility to expand housing choice for those for whom the town currently offers few opportunities: young families seeking to purchase their first home and renters across age, income and household type. The Town depends on volunteers to provide essential services — both the fire and EMT departments are staffed by volunteers, as are many other aspects of town governance — and increasingly the citizens that fill those roles cannot afford to live in town. There is a significant gap between the wage scale of town and school employees and the cost to buy a home in Harvard.

Housing Mismatch. In addition to an affordability gap, there is also a mismatch between the housing requirements of town residents and the type of housing available. Smaller homes, rentals, barrier-free or low-maintenance housing options are scarce and where they do exist, they have been built under special permits, comprehensive permits or at Devens, with its more flexible zoning and well-developed infrastructure. Over half the town's housing units have four or more bedrooms, even though nearly half its

households consist of only one or two people. The population is aging, and many of those wishing to downsize would like to stay in town if appropriate alternatives were available. The high home prices and lack of rental units prevent young families who work in the area from making Harvard their home.

The greatest demand is for smaller, moderately priced ownership units and rentals in a range of size and price points. The demand for both comes primarily from the same two groups: 1.) young people — individuals and small families, mostly — including those who work in the area, but can't afford to buy, and 2.) older homeowners wishing to downsize, but with no alternatives available locally, either for rent or purchase. Often the former are looking to buy their first home and the latter are seeking lower maintenance properties, single level living and, in a smaller number of cases, supportive services.

Special Needs. A small number of Harvard residents have more specialized needs. An estimated 280 households have one or more members with a disabling condition, 70 percent of which are headed by seniors. Fewer than half of those with a disability reported that their condition limited their ability to live independently. Conditions most likely to affect one's housing needs include cognitive, ambulatory, selfcare, and independent living. One third of residents 75 or over reported a disabling ambulatory condition, and the same number reported difficulty living independently. This age group is projected to increase by more than 48 percent between 2020 and 2030, greatly increasing the demand for both assisted living and in-home health care.

There are also residents, or former residents, whose health and/or other issues require specialized housing services. Their numbers are small, and their needs may be temporary or episodic; not all such needs can be met locally. However, the Town recognizes that Harvard residents contribute to a regional demand for group homes, transitional housing, shelter beds, etc.⁵²

Impediments to Addressing Harvard's Housing Needs. The primary obstacle to meeting the housing needs of very low income residents is the growing gap between what it costs to create and maintain decent housing and what very low income households can afford to pay. This is a challenge shared by communities across the state, most with greater needs and fewer resources than Harvard.

The factors that impede the development of affordable housing in Harvard, specifically, are a combination of regulatory, physical, and infrastructure constraints. The same constraints have also limited the diversity of market rate housing and commercial development:

- The lack of water and sewer infrastructure inhibits housing development. The soils in many parts of
 Harvard are not well suited to on-site septic systems, but the widely dispersed, low density pattern of
 development makes a townwide water and sewer system infeasible.
- Open space constitutes about 40 percent of the town's landmass and is its most distinguishing feature.
 Most of the town, with its scenic vistas and orchards, is included in the Massachusetts Scenic
 Landscape Inventory. There are compelling reasons to protect these valuable resources, the benefits of
 which extend far beyond Harvard's borders, but they result in fewer parcels being available for
 development.

⁵² While they don't count on the Subsidized Housing Inventory, there is a 13 unit family shelter and transitional housing for 36 homeless veterans at Devens. Harvard is also providing transitional housing for two large families, granted humanitarian parole status in the U.S. following the Taliban takeover in Afghanistan. With financial assistance under American Rescue Plan Act (ARPA), Town renovated and leased a vacant house, previously used for school administrative offices, to Ascentria Care Alliance for this purpose.

- Single family homes on large lots are the only type of housing allowed by right in Harvard, and the Town's zoning regulations offer few avenues to construct the alternative housing types needed by many segments of the community.
- The zoning bylaw, with its large lot zoning was based on legitimate environmental concerns that reflected the town's limited infrastructure and inhospitable soils, but it does not reflect changes in technology or more effective tools for encouraging open space-sensitive design that could open up more sites for development. Nor does it acknowledge the fact that alternative housing types and greater density are both appropriate and sustainable in a limited number of areas.

8. AN AFFORDABLE HOUSING AGENDA FOR HARVARD

Goals and Implementation Strategies

This section identifies Harvard's top affordable housing goals and the strategies and supporting actions that will enable the Town to achieve those goals in accordance with 70 CMR 56.03 (4)(c & d). They are based on the needs and opportunities identified in the previous sections and include recommendations from the 2016 Master Plan as well as recommendations put forth by housing practitioners and the public. The experiences of comparable communities in the region and elsewhere in the Commonwealth have also been considered.

By implementing these strategies and actions, Harvard can make timely progress toward meeting the 10 percent affordable housing goal set by the state. It can also become more effective in generating support among existing residents and civic leaders for expanding affordable housing options and attracting capable partners willing and able to undertake such development.

As the Town prepared this updated plan, it reviewed the status of recommendations made in the 2016 Master Plan and the 2017 Housing Production Plan. Some of the initiatives and recommendations put forth in those plans have been achieved, others have fallen short or remain works in progress. As appropriate, some recommendations from those earlier plans have been carried over into this one. A summary of outcomes from the 2017 Housing Production Plan is included in **Appendix 3**.

Lessons Learned. When Harvard undertook its first Housing Production Plan in 2004 (then called a Planned Production Plan) the Housing Partnership surveyed communities with needs and resources similar to Harvard, which had been especially successful in advancing their affordable housing agendas, about what they thought were the critical success factors. Some common themes emerged that we found helpful. We revisited them recently as we prepared this plan; they have stood the test of time well, and we have taken them to heart:

- Choose tools that make sense
- Leverage resources
- Enact inclusionary zoning or some other form of affordable housing incentive zoning
- Use the special permit process to exact concessions for affordable housing, as is done for conservation and open space
- Look first to town-owned property
- Forge a strong working relationship with a designated housing entity (or entities) that can acquire and produce affordable housing
- Local political support is critical

8A. Affordable Housing Goals

For the five-year period beginning with the acceptance of this plan, the Town of Harvard has adopted the following goals:

1. Preserve and increase the diversity of Harvard's housing stock (including rental, homeownership, or other occupancy arrangements) to enable Harvard to remain inclusive of families and individuals across a broad range of age, income and need.

- 2. Establish a regulatory framework that ensures new housing development is consistent with the sound planning and sustainability standards articulated in Harvard's Master Plan and Climate Action Plan.
- 3. Increase the number of SHI eligible housing units by at least 11 units per year (55-60 units over the term of this 5-year plan). The 55-60 units anticipates an increase in Harvard's base year-round housing count as the result of new production. The Town's longer-term goal is to meet and maintain the state's 10 percent subsidized housing goal, providing the town's fair share of affordable housing while retaining control of local development.
- 4. Improve the efficiency and effectiveness of local housing and planning initiatives and regulations.

Guiding Principles. The Town will be guided by the following principles, also drawn from the Master Plan and other planning documents (e.g., prior Housing Production Plans, the Town's Climate Action Plan) and citizen input as it implements its affordable housing strategy:

- Provide a variety of types of affordable housing, appropriate to the needs of the residents of Harvard
 and the region. The mix should include both rental and ownership; detached single family homes and
 compact development options; housing for families and individuals of all ages and units tailored
 specifically to the needs of senior citizens and those with special needs.
- Seek opportunities to combine affordable housing with open space protection through limited development on parcels acquired for conservation.
- Target town-owned sites and other properties that can be obtained at discounted prices.
- Seek opportunities to expand the supply of affordable housing within the existing built environment through increased density in existing residential properties and adaptive reuse of non-residential structures.
- Ensure that new affordable housing is sustainable, well designed and harmonious with its surroundings.
- Ensure that new development promotes protection of Harvard's natural resources and climate change adaptation and resilience.

8B. Implementation Strategies

Achieving these goals will require appropriate tools and regulations (or regulatory relief), financial resources, development capacity, and political will. No single strategy will address Harvard's current and future housing needs, or those of the region. Collectively, however, the following strategies represent a comprehensive approach that can address the town's most pressing housing challenges. They address Harvard's housing needs on several fronts simultaneously and involve the effort of many participants.

The strategies are organized into the following categories: production initiatives; planning and regulatory reform; local capacity building; and preservation strategies. Most production initiatives require zoning reform or regulatory relief. An estimated timetable for implementation follows the narrative. Because of the vagaries of public funding and the public approval process, it is likely that some of the specific

developments will move into production according to the schedule outlined while others will lag or may never come to fruition. Still other opportunities may emerge; the plan anticipates some substitution of projects, and as long as new proposals are consistent with the goals and principles laid out here, such substitutions should not be problematic.

Housing Production Initiatives.

Harvard is pursuing several development opportunities that will move it close to its 10 percent goal or, at the very least, provide it with "safe harbor" during the five years covered by this plan. Production initiatives include the pursuit of pipeline projects, the evaluation of potential development sites and the advocacy, in collaboration with regional partners, of expanded housing opportunities at Devens:

- Pursue emergent housing production opportunities and see current projects through to completion
 - The Village at Robin Lane (off Old Mill Road), a 24 unit ownership development (6 affordable units) that is expected to receive a comprehensive permit from the ZBA in the first quarter of 2024.
 - Emerson Green Village (Devens), Phase 1 and 2 MassDevelopment and the Devens Enterprise Commission are preparing for the final phase of the Emerson Green neighborhood (aka Grant Road) at Devens. This is the project that Harvard's Municipal Affordable Housing Trust had committed to support with a substantial financial investment, if and when it moved forward. As originally proposed, the development was to have included 40 rental units of which 10 would be designated as moderate income.

Harvard's MAHT proposed – and has since reiterated its willingness to buy down moderate-income units in Emerson Green Village at Devens when that project moves forward to create SHI-eligible units. Originally proposed in 2015, the project stalled, but it is now expected to go forward as a larger development (46 units) in 2024-2025. The Trust will be meeting with the developer and the Devens Enterprise Commission (DEC) in early 2024 to consummate Harvard's substantial investment in this development to ensure that 25 percent of the units will be income restricted to low income households. Despite numerous delays, the Town and the DEC are hopeful this project can commence construction in 2024.

• Housing in the Town's new Multifamily District (not yet designated) Under Section 3A of MGL c. 40A, Harvard must designate one or more multifamily zoning district(s) in which multifamily housing is permitted as of right. The district must be of sufficient size to accommodate 113 units of housing at a density of 15 units per acre. The housing may not include age restrictions and must be suitable for families with children. While affordable units are not required in a multifamily housing development that is allowed as of right, some percentage of the required 113 units are expected to be SHI eligible. EOHLC has indicated it will consider a 10 percent affordability requirement to be consistent with as of right zoning, and there may be other opportunities for the Town to use its own financial resources to boost that number.

For planning purposes, we have assumed that at least 10 affordable rental units would be produced in this district, sometime after December 31, 2025, when the Town's 3A compliance plan must be submitted to EOHLC. The Planning Department is working to identify an appropriate location for the new district, and there is developer interest in pursuing multifamily rental opportunities in Harvard.

• Completion of Current 40B Developments (Pine Hill Village and Craftsman Village)
In addition to the proposed developments listed above and the redevelopment of Vicksburg
Square (see strategy 2), the completion of two 40B comprehensive permits will add an additional 6
affordable units to the town's SHI. The long-stalled 24 unit ownership development (Pine Hill
Village, 6 affordable) will add 4 additional units to the inventory. Following the bankruptcy of the
original sponsor, this project was taken over by another developer and is now nearing completion.
An affordable housing lottery was recently held, and the 4 remaining affordable homes are
expected to be occupied later this year. Craftsman Village, a 20 unit (5 affordable) ownership
development is now substantially complete, and the final affordable unit will be added to the SHI.

Other

While currently not under review, we expect that additional 40B and Local Initiative Projects (LIPs) may be proposed throughout town during the period covered by the plan. Some production is also anticipated under the recently amended Open Space Conservation-Planned Residential Development (OSC-PRD) bylaw. The OSC-PRD affordable units would be qualified as LIP Local Action Units (LAUs) and would meet the same requirements for inclusion on the SHI as other units. If/when an inclusionary bylaw is adopted, affordable units created under that mechanism would also qualify as LAUs.

- 2. Collaborate with the Devens Enterprise Commission, the Town of Ayer and other stakeholders to explore options for the redevelopment of Devens' Vicksburg Square as mixed income housing

 If rezoned as residential, this historic property a former Army barracks could be a prime location for mixed income housing. It straddles the Ayer-Harvard boundary, and the two communities are working cooperatively to facilitate its redevelopment. It was a similar cooperative regional initiative that produced the Estates at Harvard Hills, the first residential development on Devens (25% affordable) following the base closure. As with all development at Devens, the Devens Enterprise Commission (DEC), not the local Zoning Boards of Appeal (ZBAs), would provide comprehensive one-stop permitting.
- **3.** With other stakeholders, explore the feasibility of raising Devens' current 282-unit housing cap Further investigation of the challenges and opportunities that additional residential development (market rate and affordable) would entail is necessary, and Harvard intends to play an active role in these deliberations.
- 4. Identify land parcels that may be suitable for affordable development

Led by the Town Planner and the Municipal Affordable Housing Trust, Harvard continues to evaluate sites for their potential as affordable or mixed income housing using 40B or other zoning techniques that produce similar affordability outcomes (e.g., Devens one stop permitting, affordable overlay districts, the new 3A multifamily zoning district). 53 These include town (or other publicly) owned property, tax title

⁵³ For properties not at Devens or on limited sites in the commercial district, 40B has been – and is likely to continue to be – the most frequently used permitting tool. Six of Harvard's nine existing affordable housing developments received comprehensive permits, most locally supported, or "friendly" 40Bs. The ZBA approved a seventh 40B development, but the sponsor did not move forward with the project. Of the remaining non-40B projects, two involved the

redevelopment and reuse of existing properties; the third, part of a mixed use development in the commercial district, was permitted under an Ayer Road Village Special Permit.

properties, and other sites that might be available at discounted prices, as well as parcels in private ownership.

Most of the property owned by the Town is committed to specific purposes (education or conservation, for example) and thus not available for housing, but there are sites that would be suitable for development at a greater density than is currently allowed under conventional zoning. Similarly, properties that are currently used for other purposes, or controlled by other state or federal agencies (MassDevelopment, for example), could be repurposed for housing. Community Preservation Act (CPA) funds are available to conduct planning studies of potential sites, which include – but are not limited to – the following:

- Vicksburg Square (Strategy #2) is the most prominent example of a publicly owned property that could be redeveloped for housing. Recent estimates suggest that up to 400 units could be created in this location, one third of which is in Harvard. As noted above, the Devens Enterprise Commission (DEC), not the local Zoning Boards of Appeal (ZBAs), would provide comprehensive one-stop permitting.
- Two town owned properties that had previously been considered for housing, but deemed infeasible, are being re-evaluated in light of changing needs and conditions: the 13+ acre gravel pit on Stow Road and the Hildreth House property in the town center. Hildreth House, formerly the town's Senior Center, is currently being used as town office space. It sits on 5.7 acres, but an abutting 1.6 acres (currently the Fire Station) may be freed up if the fire station moves to a new location, as has been proposed. This site has the benefit of town sewer and, when the new water line from Devens is installed, town water.
- There are fewer than a dozen properties in tax title status, and most of these are small, wet, landlocked, and/or have other issues (e.g., contamination). However, there are two or three that the MAHT is seeking additional information on that might be suitable for development.
- In addition to these site specific opportunities, two nascent proposals (Habitat for Humanity, Ascentria Care Alliance) do not yet have identified sites.

Planning and Regulatory Reform.

While the top priority of this plan is to expand the supply of affordable housing eligible for inclusion on the State Subsidized Housing Inventory, a broader – but equally important – goal is the diversification of the town's housing stock in general. Zoning regulations can have powerful effects on encouraging private responses to address local housing needs with minimal local expenditure and are key component of Harvard's strategy. The Town recognized this when it amended its Open Space Conservation-Planned Residential Development bylaw last month, substantially bolstering the incentives for affordable housing. The revised bylaw represents an important implementation strategy. Others include:

1. **Adopt an inclusionary zoning by-law** Inclusionary zoning requires that any development over a certain size include a set-aside of some number of affordable units, or a cash payment in lieu of units to support the creation of affordable housing. Harvard had considered inclusionary mandates or incentives in the past but determined that they would not have yielded any benefit given the town's normal (non-40B)

⁵⁴ Article 97 of the Massachusetts Constitution requires that, in order to withdraw conservation land for other purposes, the Conservation Commission must give its unanimous consent, Town Meeting must provide a 2/3 vote, and the State legislature must also provide a 2/3 vote.

development pattern of "one builder, one house, per year." With its amended OSC-PRD bylaw expected to generate developer interest in clustered housing and the allowance of inclusionary requirements in as of right development in the new Multifamily district, inclusionary zoning will be a valuable tool.

The Town will pursue technical assistance in preparing a bylaw for approval at Town Meeting in 2024 or early 2025. Possible sources include the Massachusetts Housing Partnership (MHP), the Montachusett Regional Planning Commission, or independent consultants. Several area towns have implemented inclusionary policies that have yielded affordable units and/or payments in lieu including Acton, Groton, Stow, Lunenburg, and Lancaster and Harvard will seek guidance from them as well.

- 2. Amend the zoning bylaw to comply with Massachusetts' new Multifamily Zoning Requirements (Section 3A of MGL c. 40A) As noted under production initiatives, the Town has already enlisted outside consultants to work with the Town Planner and Planning Board to identify an appropriate site(s), gauging marketability, infrastructure requirements/capacity, and the myriad issues that must be considered in a planning change of this significance. The goal is to have one or two sites or a short list of sites ready for review by late 2024 and a bylaw ready for submission by the Spring 2025 Annual Town Meeting. As sites are evaluated for possible designation as a multifamily residential district under Section 3A, they will also be reviewed to determine whether they might be appropriate as a 40R Smart Growth Overlay district or other overlay district that would facilitate development of clustered, mixed income housing (ownership or rental).
- 3. **Evaluate Innovative/Alternative Septic Systems or Requirements** Work to overcome constraints related to water and sewer by removing the prohibition on alternative technologies including communal sewage treatment systems so they can be used town wide as feasible. Communal sewage treatment systems are now allowed only in Ayer Road Village Special Permit developments and in Open Space developments. The Master Plan established the framework for overcoming some of these barriers. That Plan noted advancements in wastewater technology and Title V flexibility that didn't previously exist now enable Harvard to facilitate a wide range of housing types if the town provides effective zoning incentives. And, notwithstanding the town's generally poor soil conditions, several areas have been identified as potentially suitable for more intense development, and technology and economics continue to make parcels once dismissed as unsuitable, possible housing sites.

Local Capacity Building.

This category includes strategies to expand the financial resources available for affordable housing; build the Town's own inhouse capacity to drive its affordable housing agenda; access technical support and expertise not currently available inhouse; and broaden community support for affordable and diversified housing in Harvard.

1. **Expand the financial resources available for affordable housing** Led by its Municipal Affordable Housing Trust (MAHT), the Town will continue to build its financial resources to deploy for affordable housing. In addition to Community Preservation Act funds, the Trust will continue to explore such means as inclusionary mandates (payments in-lieu), exaction fees, private contributions, and real estate transfer fees. ⁵⁵ The judicious use of public resources to leverage private investment in affordable and mixed

⁵⁵ There are currently several proposals in the Massachusetts legislature that would allow cities and towns to collect an additional real estate transfer fee on the sale of more expensive homes. So-called local option enabling legislation, they would give individual cities and towns the ability to enact transfer fees of between 0.5 percent to 2 percent, to be paid by the seller, for the purpose of creating and supporting local affordable housing. The value of transfer fee would

income developments is a critical component of this plan, and one where Harvard is starting from a position of strength.

The Town will seek state, federal and non-governmental grant opportunities to support its affordable housing agenda. In addition to the technical assistance and development subsidies often required for affordable housing development, resources will be sought that meet broader complementary goals such as expanding equity, climate resiliency and sustainability.

- 2. Build town staffing capacity, including designated staffing to own affordable housing administration, to monitor, maintain and pursue affordable housing.
- 3. Partner with regional collaborations and technical assistance providers Even with a designated point person on staff, there will continue to exist issues and initiatives that require skills and expertise beyond what the Town is likely to be able to provide in house. These include bylaw development and reform, project- or program-specific technical assistance, support to maintain the SHI, and community outreach efforts. Harvard will continue to partner with regional collaborations (e.g., Assabet Valley Regional Housing Coalition and its subcontractor, MetroWest Collaborative Development) to bring needed capacity and expertise to its affordable housing initiatives. Other possible sources of assistance include the Massachusetts Housing Partnership and the State's Rural and Small Town Development Fund.
- 4. Establish a standing committee to monitor progress and advance the goals of the Housing Production Plan This committee would be made up of members of the Select Board, Planning Board, Municipal Affordable Housing Trust, and other key community stakeholders. It is recommended this committee meet twice a year to review progress toward HPP with a designated town employee to lead the process.
- 5. Lead community outreach and education on the benefits of maintaining an affordable and diverse housing supply Efforts to ensure that residents understand the goals of the plan and have opportunities to learn about the benefits of affordable and diverse housing will be critical to ensuring that the Housing Production Plan is successfully implemented. The MAHT, in partnership with other town committees and leaders, will engage in ongoing community education and solicit community input as goals are pursued and enacted.
- 6. Affirmatively further fair housing Expand outreach to underserved populations. Forge partnerships with other community and regional organizations serving people of color, immigrant groups, low income families, veterans, and other protected classes to increase awareness of, and access to, affordable housing opportunities in Harvard (e.g., Ascentria Care Alliance, Habitat for Humanity, Clear Path for Veterans, Council on Aging, and faith-based organizations). At the same time, expand fair housing training for town residents, boards and committees, and other local organizations.

Preservation.

The Town is committed to preserving the long term affordability of the properties on its subsidized housing inventory. To this end, it will:

price or only the portion of the sale price above the threshold. The Massachusetts Budget and Policy Center has prepared an interactive dashboard with data for every MA municipality showing how much revenue a community could raise by a real estate transfer fee under these various options. https://massbudget.org/2023/11/27/real-estate-transfer-fee-city-town/

1. **Enhance Town review and oversight to ensure no loss of affordable units** Harvard currently has six mixed income ownership developments on the SHI. On two of these, the Town shares monitoring responsibilities with EOHLC. Deed restrictions are recorded at the Registry of Deeds, and it is the responsibility of the monitoring agent to ensure that all resales (including those resulting from foreclosure) comply with 40B regulations and the terms of the Affordable Housing Restriction. If the Town adopts an Inclusionary Zoning bylaw, affordable units created in that way will also need to be monitored and tracked to ensure compliance with program requirements.

While none of the Town's three subsidized rental developments is at risk of losing affordable units during the term of this plan (their affordability restrictions run through at least 2042), the proposed monitoring committee (see Capacity Building, #4) will receive annual updates on the state of preservation tools, resources, issues, etc. from the Town's regional housing services provider, or other technical assistance resources such as MHP, CEDAC and CHAPA.

2. **Explore opportunities to create additional units in existing properties** With just 10 homes (excluding deed restricted affordable units) having sold for under \$500,000 in the past three years, there are limited opportunities to preserve existing moderately priced homes. However, there may be opportunities to create additional units in large properties upon turnover, and this is something the Town Planner, Planning Board and MAHT will continue to investigate. In the past, such conversions have resulted in the creation of moderately priced homes.

Summary

Harvard is well positioned to implement this Housing Production Plan now. It has been working toward these goals for many years, but a number of recent actions by the Town and the State (the recent revisions to the Open Space bylaw incentivizing affordable housing, the Devens Enterprise Commission announcement that it will be moving forward with the final phase of the Emerson Green development, the increase in CPA surcharge from 1.1 to 3 percent, and the state mandate that Harvard create a zoning district where multifamily housing is allowed by right) make it more likely that its goals can be achieved over the next five years.

The accompanying matrix projects that Harvard can surpass the 0.5 percent/year threshold for "safe harbor," with qualifying affordable units that are in various stages of predevelopment or have been proposed (but not acted on). Production may not occur in a linear fashion, however. Assuming construction of *only* the identified developments, the Town would acquire an additional 60 units on the SHI over the next five years toward its 10 percent goal. These new units would be created through a combination of zoning reforms and incentives, financial support from the Municipal Affordable Housing Trust, comprehensive permit developments by private parties, and Local Initiative Units created as the result of development under the Ayer Road Village Special Permit, the Open Space Conservation-Planned Residential Development bylaw, or newly enacted inclusionary mandates.

Note: Affordable housing planning is a process, and the Housing Production Plan is a working document. Thus, not all strategies have specific actions associated with them. With a more effective housing infrastructure in place, additional actions and possibly new strategies will be identified over the five year term of the plan.

Table 8.1 Summary of Strategies Including Timeline and Responsible Entity

Strategy	Timeline	Responsible Entity:							
Housing Production Initiatives.	Year(s)	РВ	TP	MAHT	ZBA	ВН	СРС	TA	SB
1. Pursue emergent housing production	1-5								
opportunities.									
2. Work with the Town of Ayer to support	1-5								
development of Vicksburg Square in Devens									
3. Work with legislature and	3-5								
MassDevelopment to remove Devens's									
residential housing cap									
4. Identify land parcels that may be suitable	1-3								
for affordable development									
Planning and Regulatory Reform.	TP	РВ	TP	MAHT	ZBA	ВН	CPC	TA	SB
1. Adopt an inclusionary zoning by-law	1-3								
2. Amend the zoning bylaw to comply with									
Massachusetts' new Multifamily Zoning									
Requirements (Section 3A of MGL c. 40A)									
3. Evaluate Innovative/Alternative Septic	3-5								
Systems or Requirements									
Local Capacity Building.	Year(s)	РВ	TP	MAHT	ZBA	ВН	СРС	TA	SB
1. Expand the financial resources available	1-5								
for affordable housing									
2. Build town staffing capacity, including	1-3								
designated staffing to own affordable									
housing administration									
3. Partner with regional collaborations and	1-5								
technical assistance providers									
4. Establish a standing committee to	1-5								
monitor progress and advance the goals of									
the Housing Production Plan									
5. Lead community outreach and education	1-5								
on the benefits of maintaining an affordable									
and diverse housing supply									
6. Affirmatively further fair housing	1-5								
Planning and Regulatory Reform.	TP	PB	TP	MAHT	ZBA	ВН	CPC	TA	SB
1. Enhance Town review and oversight to	1-2								
ensure no loss of affordable	2.5								
2. Explore opportunities to create additional	2-5								
units in existing properties									

Key:

PB: Planning Board BH: Board of Health

CPC: Community Preservation Committee

TP: Town Planner

TA: Town Administrator

MAHT: Municipal Affordable Housing Trust

SB: Select Board

ZBA: Zoning Board of Appeals

SUMMARY FINDINGS TOWNWIDE HOUSING SURVEYS

Appendix 1

The Town of Harvard has conducted many surveys over the years to solicit resident input on housing needs and preferences. These surveys are typically undertaken in conjunction with major planning efforts (e.g., the Master Plans or Housing Production Plan updates, or proposals to amend the Town's Zoning Bylaw). The findings of the two most surveys, summarized here, have helped inform this Housing Production Plan. The first was initiated by the Planning Department in 2021; the second by the Municipal Affordable Housing Trust (MAHT) in 2022.

The Planning Department's survey was conducted in two parts. The first part, intended for all Harvard residents, was designed to gather information on housing needs and preferred types of residential development for households across age, income and household type. The second, developed in collaboration with the Council on Aging, was tailored to residents aged 50 and over (the town's largest demographic group). Over 200 residents responded to the general survey and 130 responded to the survey targeted to those aged 50 and over. Some 220 residents responded to the MAHT survey. Presumably, many of the same residents responded to both.

The findings of both Planning Department surveys and the Municipal Affordable Housing Trust survey are summarized here. Links to the Town's website are provided for those wishing to see the survey instruments and detailed findings.

HARVARD PLANNING DEPARTMENT SURVEY HIGHLIGHTS

PREFERENCE FOR DIVERSIFIED HOUSING BY TYPE (for all ages, without age restrictions)

General Residential Survey respondents show moderate support for the general idea of diversifying our housing stock. (60% support / 23% don't support.) The more specific the question, however, the more that support for stronger specific types becomes apparent.

General Residential Survey Respondents Ranked Diversified Housing by Structural Type:

Tier 1:

- Accessory Units (70%)
- Cottage Clusters in Rural Setting (61%)
- Cottage Clusters near Existing Village Center (59%)
- Mixed-Use Development (57%)
- Single Family / Small Lot (56%)

Tier 2:

Planned Unit Development (45%) 2-Family Homes (44%) Conversion of Large Homes (43%)

Tier 3:

- Townhouses (38%)
- More Large Lot Single Family Homes (38%) Condos (33%)
- Low-Rise Garden Apts. (30%) 3-4 Family Homes (22%)

General Residential Survey Respondents Ranked Diversified Housing by Homebuyer Type:

Active Seniors (83%)

- Workforce (teachers, firefighters, etc.) (68%) Seniors with Special Needs (65%)
- People Who are Physically Disabled (54%)
- Those Needing Affordable (54%) 1st Time Buyers (53%)
- People with Emotional or Mental Disabilities (33%)
- People in Recovery (26%)

PREFERENCE FOR SENIOR HOUSING BY TYPE

Senior Survey respondents ranked senior housing options in 3 tiers:

Tier 1:

• Independent Living Community with Smaller Homes or Cottages (52%)

Tier 2:

- Independent Living Community with Townhouses, Condominiums or Apartments (39%)
- Smaller Homes on Smaller Lots (38%)

Tier 3:

- CCRC (26%)
- All-Age Community (18%)
- Co-Housing (18%)
- Accessory Units (13%)
- Assisted Living (13%)

General Residential Survey respondents ranked senior housing options in 3 tiers:

Tier 1:

Smaller Homes or Cottages in Clusters of ≤15 (65%)

Tier 2:

- Repurposed / Converted in Village (48%) Repurposed / Converted Anywhere (47%) Accessory Units (47%)
- Independent Living Apts. in Commercial or Multi-Family District (47%)

Tier 3:

- Assisted Living Development in Commercial or New Multi-Family District (35%)
- CCRC in Commercial or New Multi-Family District (30%)
- Senior Apts. over Storefronts or in Mixed-use Development in Commercial District (30%)

General Residential Survey respondents ranked top 3 choices for senior housing:

- 1st PLACE: Small Homes or Cottages in Clusters of ≤15
- 2nd PLACE: Repurposed or Converted Existing Residences
- 3rd PLACE TIE: Independent Living Apts. in Commercial or New Multi-Family District
- 3RD PLACE TIE: Accessory Apartments. on Existing Lots

The survey instruments, power point presentation of results and related documents can be found on the Town's website at:

https://www.harvard-ma.gov/sites/g/files/vyhlif676/f/uploads/residential_development_survey_form.pdf https://www.harvard-ma.gov/sites/g/files/vyhlif676/f/uploads/senior_housing_survey_form.pdf Senior survey results presentation

https://www.harvard-ma.gov/sites/g/files/vyhlif676/f/uploads/senior_survey_results_03112021.pdf General survey_results_presentation

https://www.harvard-ma.gov/sites/g/files/vyhlif676/f/uploads/general survey results 03152021.pdf

MUNICIPAL AFFORDABLE HOUSING TRUST SURVEY HIGHLIGHTS

The Municipal Affordable Housing Trust conducted a survey regarding housing/development in Harvard. The survey was available on the town's website from June through September of 2022. There were 219 respondents, 209 of whom were homeowners. Many respondents indicated support for more housing for ages 55+ and affordable housing in general.

67.6% responded affirmatively to the stand-alone question, "Do you feel that Harvard needs more affordable housing?" Responses of "not sure" outnumbered "no" 35-28.

There was less support for increasing the number of rentals (although "more" was still the highest response).

Nearly half (104) the respondents would like to see fewer or no change in the number of large single-family homes.

What would you like to see more or less of in Harvard?

	Large SF Homes, 3+ BR	55+ Housing	Affordable Housing	Assisted Living	Accessory Dwelling Units	Rentals
Fewer	84	9	15	15	17	29
More	20	158	141	111	125	97
No change	81	38	40	56	48	61
No answer	34	14	23	37	29	32
Total	219	219	219	219	219	219

What do you think are the most pressing housing issues or opportunities in Harvard? Any final thoughts or comments?

42.5% (93) respondents did not weigh in on the final survey question, "What do you think are the most pressing housing issues or opportunities in Harvard? Any final thoughts or comments?" For those that did comment, the greatest number of responses concerned:

- all things senior housing (affordable; smaller; designed for aging in place or more options available for those who want to move; assisted living);
- affordability; and
- diversity, primarily in the housing stock which, in turn, would help diversify the population.

SUMMARY OF COMMUNITY ENGAGEMENT PROCESS

The Municipal Housing Affordable Trust led a community engagement process to solicit input from diverse voices across the community, engaging over 250 community members through community meetings and surveys in total. During the process to create the Harvard Housing Production Plan the following process steps were undertaken:

- April 2022 MetroWest was officially contracted as a consultant organization to support the drafting process in partnership with the Municipal Affordable Housing Trust.
- June 9, 2022 Community Meeting #1 took place announcing the process to the public
- June to October 2022 Community Survey distribution and collection period (219 surveys collection)
- December 2022 to February 2023 Community Feedback Conversations took place with key individuals and communities to solicit initial ideas for potential goals to include in the Plan:
 - Climate Action Committee
 - · Council on Aging
 - Town Administrator
 - Chair of Zoning Board of Appeals
 - Chair of Planning Board
 - Devens Enterprise Commission, Land Use Administrator
- May 3, 2023 Municipal Affordable Housing Trust and MetroWest completed Harvard Housing Production draft for final community feedback phase
- May 31, 2023 Solicit feedback on initial draft from the key committees and residents including:
 - Select Board
 - Planning Board
 - Zoning Board of Appeals
 - Board of Health
 - Climate Action Committee
 - Council on Aging
 - Town Administrator and key staff
- November 29, 2023 Solicit feedback on final draft from the key committees and residents
- December 19, 2023 Approved by the Select Board

DEVELOPMENT SUITABILITY ANALYSIS80

Appendix 2

This Development Suitability Analysis, prepared by RKG Associates, appeared as Appendix 1 in the 2016 Harvard Master Plan.

A community's growth potential is limited by both physical constraints, areas where growth requires expensive engineering solutions to overcome obstacles, and by natural resources, where development may have significant consequences in degrading the environment. **Map A-1** shows areas that are not suited to development and those that are better suited to development. Included in the areas not suited are wetlands, interim wellhead protection areas, zone II wellhead protection areas, floodways, one percent annual chance flood prone areas, BioMap2 core habitats, BioMap2 critical natural landscapes, areas of critical environmental concern, prime farmland soils, and farmlands of statewide or unique importance.

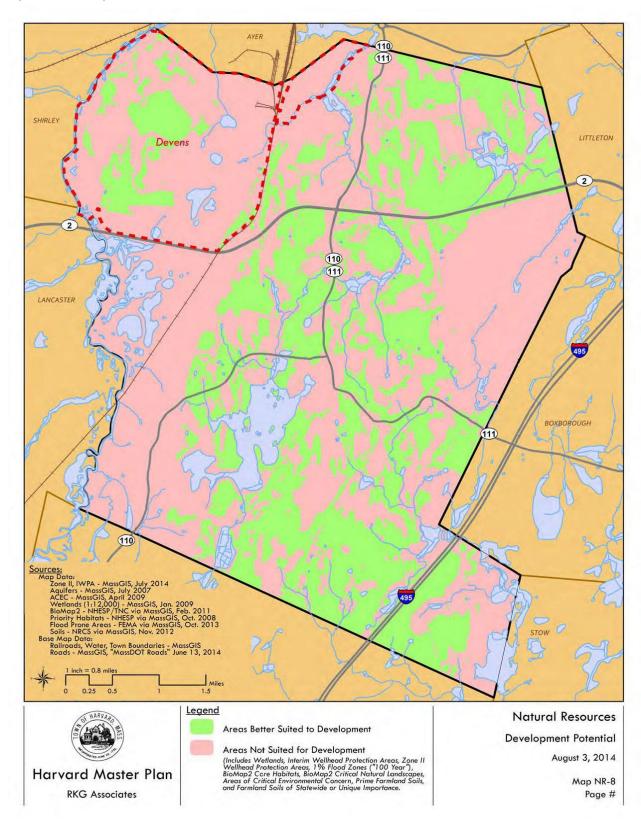
Another way to look at land availability is to examine the parcels in town that are already developed or protected from development. Map A-2 shows this analysis. The map also shows parcels in the Chapter 61 tax relief program as of 2008, which may or may not have buildings on them – houses, barns, etc. These Chapter 61 lands are all subject to development or additional development (through subdivision) and should not be considered protected. It should be noted that in this analysis, any parcel with a single family home on it, regardless of whether the parcel is one acre or a hundred, is shown as developed. Clearly, some of these parcels could be further developed either through the subdivision process to add additional housing units to the current parcel, or through redevelopment with demolition of the existing house and new development. Based on the limited commercial zoning, most of such redevelopment would be residential.

Map A-3 shows the land areas in Harvard that are not yet developed and are not protected from development either. A significant amount of this land lies within areas identified in the 2002 Master Plan⁸¹ as important to preserve for their value as agricultural or historic landscape resources or where protection of groundwater resources or the Bare Hill Pond watershed is important. 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. The majority (sixty eight percent, or 1,008 acres) of these areas are in the Chapter 61 program, which indicates some level of desire by the owner to keep the land in agriculture, recreation, or forestry uses. However, without permanent protection the land remains open to development. Based on the absence of wetland and floodplain areas, some of this land should be where efforts to increase development density should occur, as a means to increase housing diversity in town as well as to reduce pressure on other land areas which are not as suitable for development.

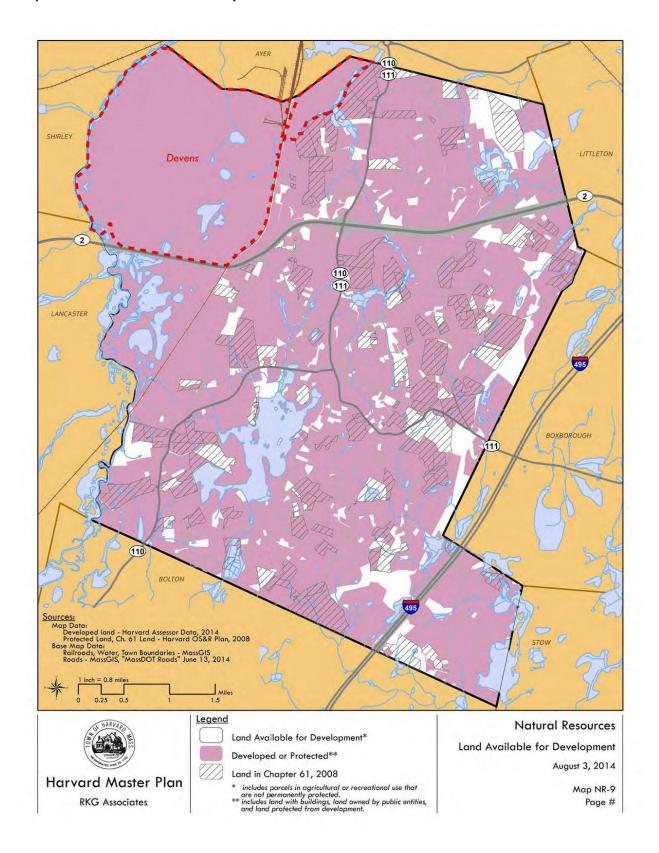
⁸⁰ RKG Associates performed this Development Suitability Analysis, which appeared in the "Open Space and Natural Resources Working Paper", September 2014.

⁸¹ Community Opportunities Group et. al, Harvard Massachusetts Master Plan, (November 2002), Map 4- A.

Map A.1 Development Potential



Map A.2 Land Available for Development



Map A.3 Land Vulnerable to Development

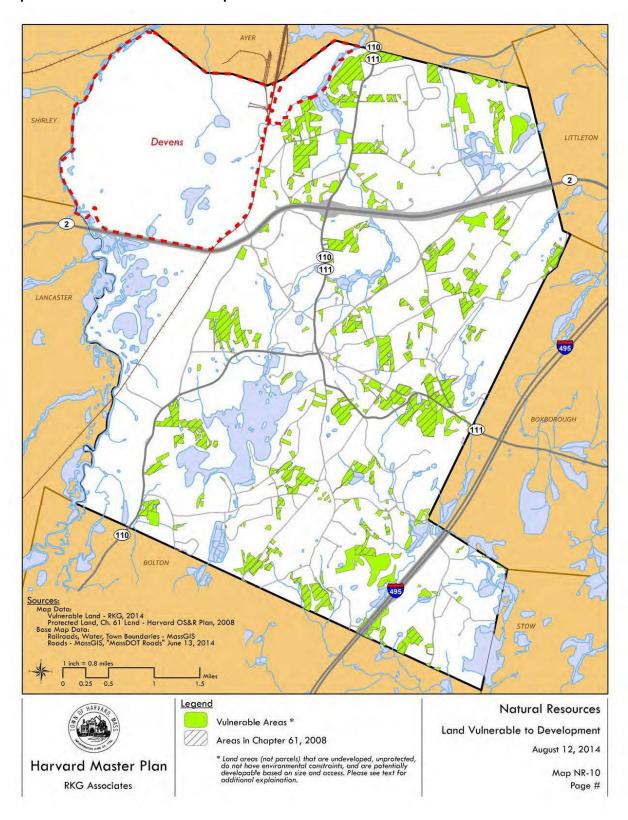


Table A-1 shows the acreage of specific areas previously discussed, and their percentage of the town and of the vulnerable lands.

Table A.1 - Vulnerable Land Statistics

	Total Acreage	Percent of Town*	Percent of Vulnerable Lands
Aquifer Areas	3	0.02%	0.16%
Zone II Wellhead Protection Areas	100	0.62%	5.80%
Interim Wellhead Protection Areas	42	0.26%	2.43%
Environmentally Sensitive Areas**	287	1.78%	19.51%
Farmland Soils	859	5.32%	58.40%

Notes:

Note that the data in this table are not additive, many of these areas overlap each other.

Source: Analysis of GIS data by RKG Associates, August 2014

Given that it is unrealistic for the Town or any conservation organizations to preserve all – or even most of – the "vulnerable areas" shown in Map A-3, and the fact that previous plans have recommended that preservation efforts should continue in areas designated as scenic, Map A-4 shows the areas of Harvard that are vulnerable to development and the areas already protected, along with the 1982 designated scenic landscapes, which cover 41 percent of the town. Harvard is among a small handful of municipalities across the state with such a large percentage of the community so designated.

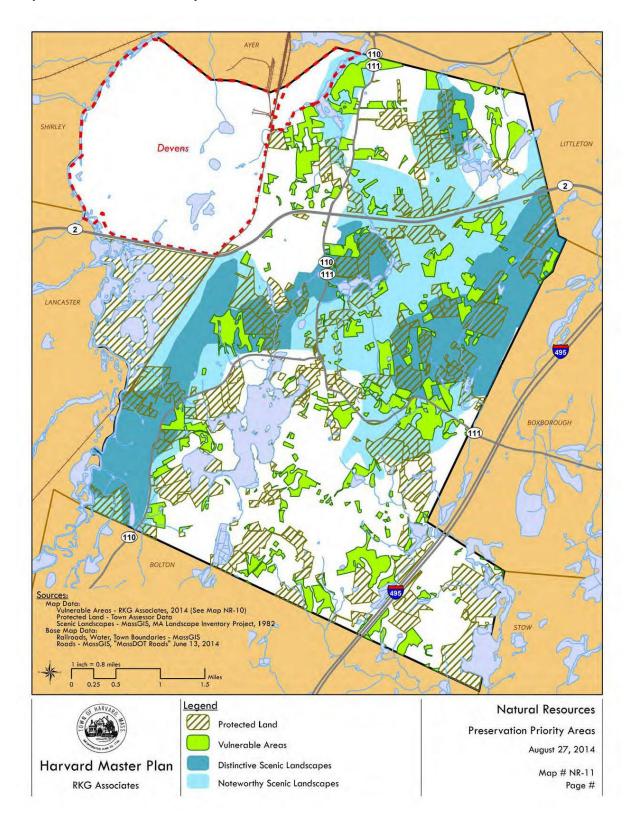
The more recent Heritage Landscape Inventory⁸² project completed in June 2006 did not identify any priority landscapes, for participants felt that all of the seventy-six landscapes listed were equally important. Thus, Map A-4 relies on the older data in recognition that there should be a methodology to set priorities in land protection efforts. The vulnerable lands that are adjacent to protected lands and are within a distinctive scenic landscape would be a reasonable "top priority" for protection, followed by those vulnerable lands adjacent to protected lands within noteworthy scenic landscapes or those that would bridge gaps in otherwise protected corridors. There are ninety-one land areas with a total of 868 acres that fall within one of these scenic landscape designations. Harvard should prioritize areas for protection efforts and identify specific parcels for acquisition of the land or conservation restrictions.

^{* 16,144} acres, does not include water or rights-of-way

^{**} Includes Areas of Critical Environmental Concern (ACEC), BioMap2 Core Habitat, BioMap2 Critical Natural Landscape, and NHESP Priority Habitats of Rare Species.

⁸² Massachusetts Department of Conservation and Recreation and Freedom's Way Heritage Association, Harvard Reconnaissance Report, Freedom's Way Landscape Inventory (June 2006), page 3

Map A.4 Preservation Priority Areas



PROGRESS UNDER 2017 HOUSING PRODUCTION PLAN

Appendix 3

The 2017 Housing Production Plan committed the Town to work on a variety of implementation strategies to expand housing affordability and diversity. That plan placed actions within the framework of the State's five HPP implementation categories, adding other activities that did not fit neatly within the state Guidelines.

Strategy 1. Identify zoning districts or geographic areas in which the municipality proposes to modify current regulations for the purposes of creating affordable housing developments to meet its production goals.

A. Implement Standards and Map for the Multiple Residence District: With the enactment in 2021 of An Act Enabling Partnerships for Growth, the focus of this initiative shifted to establishing a multifamily district that would comply with the new state law. Under the new law Harvard is required to have at least one district of sufficient size to accommodate, by right, 113 units of multifamily housing at a minimum gross density of 15 units per acre. As soon as the law was passed, the Town Planner began working on strategies/sites with various stakeholders and outside consultants to ensure Harvard would be in compliance by December 31, 2025. Work is ongoing and this has carried over as a top priority in the 2024-2028 Housing Production Plan.

B. Revise OSC-PRD Bylaw: The revised OSC-PRD bylaw was adopted by the fall 2023 Town Meeting. The newly amended bylaw provides a substantial density bonus for the inclusion of affordable (SHI eligible) housing.

C. Allow Development of Nonconforming Lots: Some lots were identified, but they were deemed unbuildable by the Assessing Department due to wetlands setbacks and lack of space for compliance with State Law Title V for wastewater.

Strategy 2. Identify specific sites for which the municipality will encourage the filing of comprehensive permit projects.

A. Construct Hildreth Senior Housing Project: Town Meeting voted to approve the Hildreth Housing Overlay District (HHOD) to include approximately 7.3 acres of land in the Town Center for this project at a density of 12 units per acre and the Water and Sewer Commissions allocated 3,000 gpd of wastewater capacity to the development. The project was abandoned, however, when the site proved infeasible.

B. Inventory Town-Owned Land: Preliminary investigation of parcels that may be available through tax title taking; this will be pursued in 2024-2028.

C. Utilize Local Initiative Program (LIP): Two 40B developments (Pine Hill Village and Craftsman Village) were approved and built. While not proposed as LIPs, their approval was not contentious. Currently 40B is the only mechanism by which single family homes on less than 1.5 acres or duplex housing can be permitted in Harvard.

Strategy 3. Identify characteristics of proposed residential or mixed-use developments that would be preferred by the municipality

A. Prepare Mixed-Use Development Guidelines: Mixed use developments are permitted (and encouraged through incentives) as part of an Ayer Road Village Special Permit (ARV-SP). The Planning Department initiated the development of guidelines for integrating residential and commercial uses in a

cohesive development, and this remains a work in progress. One mixed use development with 3 residential units was approved under the ARV-SP, but it has not moved forward.

- **B.** Create Town Center Overlay District: See 2A, above. No action was taken on a larger (town centerwide) overlay district that could possibly have included incentives for affordable housing.
- **C. Revise Accessory Apartment Provisions:** Town Meeting amended the Accessory Apartment Bylaw in 2021 by increasing the allowable size of accessory dwelling units (ADUs) from 1,200 to 1,500 square feet. It also provided for by right permitting provided certain senior accessibility and universal design guidelines were followed. (Otherwise ADUs were by special permit only.)

Also in 2021, Town Meeting voted to delete a bylaw, enacted in 2012 but never used, that was meant to encourage people to create ADUs that would qualify for inclusion on the SHI. The Municipal Affordable Housing Trust had intended to establish a grant program to incentivize homeowner participation, but that idea was abandoned. Further investigation determined that while ADUs could be an effective way to diversify the housing stock, expand affordable options generally and assist low income homeowners, trying to qualify such units for inclusion on the SHI was fraught with challenges and generated little homeowner interest. Focus shifted to inclusionary zoning as a more appropriate tool, and this is a priority strategy in the 2024-2028 plan.

Strategy 4. Identify municipally owned parcels for which the municipality commits to issue requests for proposals to develop affordable housing

- **A. Conduct Screening Analysis of Town-Owned Land:** The Assessing Department did run a list of Town owned property, but they have not been evaluated for feasibility, nor has there been any commitment made by the Town to issue a Request for Proposal to develop affordable housing. This strategy will be carried over into the 2024-2028 plan.
- **B.** Adopt Housing Overlay Districts: As described in 2A, the Planning Board prepared, and Town Meeting adopted, a zoning overlay district to allow a senior housing development on surplus land next to the Hildreth House. The site proved infeasible, however, and the project was abandoned.

Strategy 5. Participate in regional collaborations addressing housing development

- **A. Seek Housing Rehabilitation Funds:** Harvard had hoped there would be an opportunity to participate in a housing rehabilitation program that provided grants for income eligible homeowners to correct code violations, upgrade deficient systems, and make energy improvements. It had participated in a CDBG-funded program administered by the Montachusett Regional Planning Council in the past, but such funding is no longer available.
- **B. Regional Housing Planning:** Harvard continues to work with the Towns of Ayer and Shirley and the Devens Enterprise Zone on housing and planning initiatives at Devens, which affect all three municipalities and the emergent residential community at Devens

Strategy 6. Other Housing Strategies

A. Subsidize Private Housing for Affordability: The mission of the MAHTF is to "provide for the creation and preservation of affordable housing in the Town of Harvard for benefit of low and moderate income households." As the designated entity in Harvard charged with addressing affordable housing needs, the Trust actively seeks out opportunities for fostering the development of affordable housing. A commitment the Trust made to write down the cost of 10 moderate income rental units, making them affordable to low income households, did not move forward during the period of the 2017 plan, but similar commitments are expected to be extended, and units created, during 2024-2028.

- **B. Encourage Smaller Housing Units:** The two 40B developments provided both 2 bedroom units and some 3 bedroom units. While Harvard definitely lacks smaller (2 bedroom) homes, it also has a shortage of affordable family housing for first time and lower income homebuyers; these 40B developments addressed both those needs.
- **C. Continue CPC Funding for Affordable Housing:** To date, more than \$5.6 million dollars have been generated from the local surcharge and state distribution resources under the Community Preservation Act. Over 20 percent of the funds raised have been allocated to affordable housing, most to the Municipal Affordable Housing Trust Fund. In 2023, Annual Town Meeting voted to increase the CPA surcharge to the maximum 3 percent, with exemptions for low income and the first \$100,000 of assessed value on commercial and residential property.
- **E. Innovative/Alternative Septic Systems:** No action; to be carried over into 2024-2028.

HARVARD'S SUBSIDIZED HOUSING INVENTORY

Appendix 4



















Top row (L to R): 42 unit LIHTC rental development (55+ and/or disability), special permit; 20 unit detached single family homeownership (5 affd), 40B; 12 unit townhouse homeownership (5 affd), 40B LIP

Middle row: 52 unit townhouse homeownership (13 affd; 24 units are 55+, 6 affd), 40B; 24 unit detached single family and duplex homeownership (6 affd), 40B; 32 unit townhouse homeownership (7 affd), 40B LIP

Bottom row: 9 unit HOME rental development; 24 unit RHS/LIHTC rental development, 40B LIP; 71 unit homeownership (13 affd), renovation/reuse of former military housing at Devens (additional 31 units in Ayer)