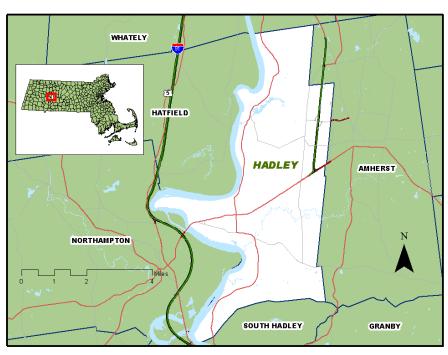
3 COMMUNITY SETTING

A. Regional Context

Hadley, Massachusetts, is an agricultural community with 5,250 residents in 2010 (US Census population estimates). Situated on the eastern bank of the Connecticut River, the town encompasses 24.75 square miles and is bordered by South Hadley, Sunderland and Amherst.

Sandwiched between two larger communities, Amherst, an academic center of approximately 38,000 residents, and Northampton, a bustling retail center of 29,000 people, Hadley struggles to manage commercial development along Route 9 (Pioneer Valley Planning Commission 1991). To date, growth has been concentrated along the east-west artery that passes through the center of Hadley connecting Northampton and Amherst. However, a few projects have breached the boundaries of residential districts.



Map 3-1 Regional Context Map

Prepared by: UMass Open Space and Recreation Plan Project Team.

Some of Hadley's open space is used for passive recreation such as hiking, biking, boating and bird watching. Hadley Cove, for example, is well known to birdwatchers as a good site to observe waterfowl, shorebirds, herons and osprey. The 8.8 mile Norwottuck Rail Trail passes through Hadley connecting Northampton and Amherst. The bike path opened to the public in 1993 and is heavily used by bicyclists, walkers, runners, rollerbladers and baby strollers. Probably the two most frequently visited public recreation areas in Hadley are the Mount Holyoke Range (Skinner and Mount Holyoke State Parks), which provides many trails to explore and high summits from which to enjoy views of the Connecticut River valley, and the Norwottuck Rail Trail. These areas are regional recreation destinations and receive large

numbers of out-of-town visitors each year. Most of the permanently protected land in Hadley is in APR (Agricultural Preservation Restriction) and active agricultural use. Most of the public recreation land is state owned and along the Mount Holyoke Range, with the exception of the rail trail and some undeveloped land on Mount Warner and near the Connecticut River, part of the Connecticut River Greenway State Park. There are only a few town-owned recreation areas in town, mostly playing fields associated with a present or former school.

Part of the town's appeal is the sweeping views afforded by thousands of acres of open farmland. Hadley has some of the most fertile agricultural soils in the country, and farmland protection is a priority for area residents. In addition to maintaining Hadley's rural character, farmland mitigates floodwaters, serves as wildlife habitat and preserves the town's heritage. Farm operations also contribute to the local economy and are an important part of the tourist trade.

Hadley's population has risen steadily over the pastfour decades with the most recent increase of 9.5 % between 2000 and 2010 . This increase in population is significantly greater than the region and state as a whole. During this same period, population growth in Hampshire County was 3.8% and a moderate statewide population increase of 3.1% Hadley residents are relatively older than those in surrounding communities. According to the 2010 census 19.9% of the population was over 65 compared to a county average of 12.6% and a statewide average of 14%.

B. History of the Community

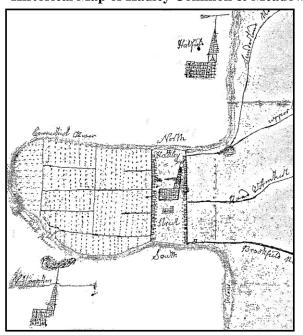


Fig. 3-1 Historical Map of Hadley Common & Meadows

Source: Amherst College Archives

Hadley is one of the earliest settlements in the Connecticut River Valley, colonized in 1659 by religious dissenters from Connecticut. The town was built along West Street, two parallel roads that surround a mile-long common. The first crops and grazing land were established between West Street and the Connecticut River, and the first meetinghouse was built on the northern half

of the Common in 1670. Hadley's original burial ground is situated near the Common on Cemetery Road. The Common is the town's most important historic resource, representing the heart of the original settlement (Farmer 1985).

During the early settlement period three important transportation routes were established. The primary route to Boston was improved along what is now Bay Road and included the construction of a bridge across the Fort River in 1661. In addition, the main route to Springfield, along what is now Hockanum Road, was improved. Finally, a ferry landing was built in 1661 at Aqua Vitae, connecting Hadley and Northampton.

The community grew slowly in the eighteenth century. Middle Street was divided into house lots in 1713. During the 1720s a number of homes were built outside the core settlement area and by 1770 there were a handful of homes in North Hadley. In the late 1700s homes were built on North and South Maple Streets (Farmer 1985).

New transportation routes were developed in the 1700s linking Hadley with neighboring communities. By the mid-1700s, additional roads and ferry crossings were added. Ferries to Northampton and Hatfield departed from the Hockanum Oxbow and North Hadley. Secondary roads, including East and Maple Streets, were constructed and a route to Amherst was developed along Moody Bridge Road. The Northampton Bridge was constructed in 1803 and the Hatfield bridge in 1809. The bridges replaced the ferries and promoted the development of additional roads to Amherst, including what is now Route 9 and Huntington Road.

During the 19th century the town's civic center shifted from West Street to Middle Street and was marked by the erection of the Hadley Town Hall in 1841 at the corner of Russell and Middle Streets. Irish and French Canadian immigrants began to settle in Hadley in the 1840s. They worked in the broom corn industry. Tobacco was introduced in 1840 and by 1865 was Hadley's major crop. Local farmers also grew potatoes, fruits, and dairy products supplying markets in Amherst and Northampton (Farmer 1985).

Many of the town's important public buildings were built in the early 1900s. The Russell School, designed by Charles Parks of Boston, and the Goodwin Library, designed by Guy Kirkham of Springfield, are two examples from this period. At the same time, residential construction dropped off and there was little expansion into undeveloped sections of town. Instead, smaller homes were built along West, Middle, and East Streets. A number of homes were also built along North and South Maple Streets (Farmer 1985).

The east-west route between Amherst and Hadley continued to be improved. In 1887, the Massachusetts Central Railroad was completed, connecting Amherst and Northampton. And a streetcar line, built in 1899, ran parallel to the railroad along what is now Route 9 (Farmer 1985). The improvement of regional roadways, particularly Route 9 with the construction of the Memorial Bridge in 1936, became the primary transportation route and sparked commercial development within the community. The town center gained regional significance as the intersection of state Routes 9 and 47.

Today Hadley Center remains the civic focus, with a commercial corridor bisecting the community. Homes are concentrated in Hadley Center, North Hadley and along Route 47 through Hockanum (the southern portion of town), but have started to spread along less developed roads, putting pressure on agricultural land. Agriculture is giving way to various occupations outside town, but still plays an important role in the local economy. Hadley remains one of the most important farm communities in the Commonwealth.

Three districts are listed on the National Register of Historic Places: Hadley Center Historic District, North Hadley Historic District, and Hockanum Rural Historic District. This distinction affords these areas protection from federally assisted development projects. Moreover, through automatic inclusion in the State Register of Historic Places, the historic resources in identified areas are offered limited protection from state actions. Inclusion in the State Register of Historic Places also provides eligibility for matching state grants for restoration of properties owned by private nonprofit organizations and the municipality. Sites of interest include the Goodwin Memorial Library and Historical Museum, Porter-Phelps-Huntington House, the Hadley Farm Museum and the Mt. Holyoke Summit House.

Hadley Historic District

The Hadley Center Historic District is an expansive, 2,500-acre historic district encompassing the village center of Hadley, Massachusetts. When it was first listed on the National Register of Historic Places in 1977, the district encompassed the town green and 17 buildings that faced it, at the junction of Russell Street (Massachusetts Route 9) and Middle Street (Massachusetts Route 47). The district was expanded significantly in 1994, adding more than 400 buildings representative of the village's growth from colonial days into the first decades of the 20th century. This expansion encompasses the entirety of a tongue of land extending west from East Street and bounded by a bend in the Connecticut River, which separates Hadley from Northampton. Its oldest property, the Samuel Porter House on West Street, was built in 1713.

North Hadley Historic District

The North Hadley Historic District encompasses the historic rural village of North Hadley, located between Mount Warner and the Connecticut River. It includes properties on River Drive between Stockwell Road and Stockbridge Street, and includes properties on French, Meadow and Mt. Warner Streets. The majority of the properties in the district are residential and agricultural; the notable exceptions are the c. 1834 Congregational Church, the 1795 cemetery, and North Hadley Hall, an 1868 building originally built as a schoolhouse. Construction dates for contributing properties to the district range from the 1780s to 1940, and a significant variety of architectural styles are represented. The district was listed on the National Register of Historic Places in 1993.

Hockanum Rural Historic District

Hockanum Rural Historic District is a rural historic district encompassing a classically famous landscape along the Connecticut River from the border with South Hadley at Hockanum Cemetery in the southwest, following the river and the summit ridge of Mount Holyoke, to the northeast corner of Skinner State Park. It includes the summit area of Mount Holyoke, including the Summit House, Halfway House, and other historic structures within the park, along with the agricultural lands of the valley below, 47 properties, including Georgian and Federal farmhouses, and Hockanum School, a small brick schoolhouse built c. 1840. The agricultural lands in the valley have undergone only relatively modest changes, and farming continues to be a dominant activity in the area. Most of the structures in the valley are related to agricultural activities. The district was added to the National Register of Historic Places in 1993.

C. Population Characteristics

Population Growth, Projection and Density

Population Growth

Hadley's population increased by 28% between 1970 and 2010. Comparing Hadley's population trends to those of the region, we note that in the past four decades, Hadley's population has grown significantly faster than the state's. By 2010, the town's population had increased by 1490 persons since 1970. This increase occurred in a period of comparable (22%) population growth in Hampshire County and a moderate statewide population increase of nearly 13%.

Table 3-1: Population Comparisons between 1970 and 2010				
Year	Hadley	Hampshire Co.	State	
1970	3,760	123,997	5,689,170	
1980	4,125	138,813	5,737,037	
1990	4,231	146,568	6,016,425	
2000	4,793	152,251	6,349,097	
2004	4,860	153,894	6,416,505	
2010	5,250	158,080	6,547,629	
%Change	28.4%	21.6%	13.2%	

Source: U.S. Census Bureau, Census 2007-2011 PVPC Population Estimates 2000-2004

Population Projections

The Massachusetts Institute for Social and Economic Development Research (MISER), located at the University of Massachusetts in Amherst, is an organization that collects and analyzes demographic information for the State. It generates population projections for all Massachusetts cities and towns. The projections are based on fourteen different county models, with birth, survival and migration components figured into each model.

The Pioneer Valley Planning Commission (PVPC) has also generated a series of population projections for cities and towns in the Pioneer Valley. According to *Discerning the Future of the Pioneer Valley, 2000-2030*, the population projection report prepared by the Pioneer Valley Commission, the communities projected to grow the most are primarily rural and outer ring suburban towns like Hadley, Cummington, Middlefield, and Southampton. Hadley is anticipated to be the fastest growing community among all communities in the Pioneer Valley. It is projected to increase from 4,793 people in 2000 to 5,970 in 2030, an increase of 24.6 percent.

Table 3-2: Comparison of Population Projections for Hadley					
Year	MISER	PVPC			
2000	4,793	4,793			
2010	5,034	5,077			
2020	5,340	5,445			
% change	11.41	13.60			

Sources: PVPC & Mass. Institute for Social and Economic Research

Population Density

Hadley ranks as one of the lowest in population density (227 persons per square mile) of the five abutting communities. According to the MISER population projections for 2020, from 2000, Hadley has exceeded the projected increase in density of approximately 216 people per square mile.

Table 3-3 Comparison of Population Density in 2004					
Community	Town Area in Square Miles	Population Density per sq. mile in 2004	Population Density Per sq. mile in 2010		
Hadley	24.72	197	227		
Amherst	27.76	1234	1370		
Northampton	35.6	813	833		
South Hadley	18.39	934	988		
Sunderland	14.8	257	259		
Hatfield	16.82	197	206		
	Source: U.S. Census Bureau, Census 2010				
PVPC Population Estimates 2011					

This increase in population density has important implications for open space and recreation planning. Since there is already a lot of commercial development along Route 9, privately-owned undeveloped land in town will experience the residential development pressure. This highlights the need for protective measures to preserve available open space in Hadley.

Age, Family Structure and Education

Age Distribution

Hadley and all the surrounding communities, with the exception of Amherst, show very similar age distributions. For all communities involved, other than Amherst, (see Table 3-4), the largest segment of the population is the 25-44 year age group. In Hadley, almost three quarters of the population is between 25 and 64 years (71.5%).

Tal	ble 3-4: Compariso	on of Regional A	Age Distributi	on by Perce	nt
Community	Under 20	20-24	25-44	45-64	65 & over
Hadley	19.8	8.7	20.3	31.4	19.8
Amherst	30.4	35.4	13.3	13.6	7.3
Northampton	20.7	9.8	25.6	30.2	13.7
South Hadley	23.4	11.1	20.9	27.3	17.3
Sunderland	16.6	20.0	26.7	27.1	9.6
Hatfield	18.5	4.2	21.7	37.2	18.4
<u> </u>	<u> </u>			Sour	ce:2010 U.S.Census

An interesting facet of this data is that the percent of persons 65 years of age and over is higher in Hadley than in most of the surrounding communities. Hadley is a town of older people, but has a

population mix that has requires a full range of open space and recreational amenities.

Family Structure

Almost 66% of Hadley's households are family households. Hadley has a higher percentage of family households than both Hampshire County (60.4%) and the State of Massachusetts (64.5%). Conversely, there is almost the same percent of female heads of households (19%) as compared to both Hampshire County (18%) and the state (20%). In addition, there is a tendency toward smaller households. Over 60% of all households are 1 or 2 person households (Table 3-6).

Table 3-5: Hadley Family Households by Family Type				
Type	Hadley	Hampshire Co.	State	
Total Number	2,107	58,702	2,547,075	
Families Husband/Wife	47.3%	44.7%	46.3%	
Male Householder	3.6%	3.7%	4.2%	
Female Householder	9.9%	10.3%	12.5%	
Non-Family	39.3%	41.3%	37%	
			Source:2010 U.S.Cen	

Table 3-6: Households by Number of Persons by Percent				
Number	Hadley	Hampshire Co.	State	
1 Person	24.7%	28.6%	28%	
2 Persons	37.2%	34.3%	31.7%	
3 Persons	17.1%	16.1%	16.4%	
4 Persons	14%	14%	14.5%	
5 Persons	4.5%	4.9%	6.3%	
6 or more	2.6%	2.1%	3.2%	
Total Households	1,895	55,991	2,443,580	
			Source:2000 Census	

Education

The town has two public schools: Hadley Elementary serves Pre-Kindergarten through grade 6 and Hopkins Academy grades 7 through 12. In addition, the private Hartsbrook School serves Pre-Kindergarten through grade 12 and North Star is private school for teens. The school department projections maintain an average grade size at both schools of fifty students. However, there has been a modest upward trend in enrollment and the school department is watching those numbers carefully.

Income Level

Table 3-7 and Table 3-8 compare the town's 2000 and 2010 household income distribution with that of Hampshire County and the state. In 2000, the town had a higher share of households earning \$50,000 or more and a lower share of households earning less than \$25,000 than either the county or the stateBy 2010 over 63% of the town's households had incomes of \$50,000 or more, as compared to 58% of Hampshire County households and 60% of Massachusetts households. Comparatively, 8.8% of the town's households earned less than \$25,000 per year. This is a significant drop from the 2000 figure of 23.4% and well below the 20% for the County and State during the same time period.

Table 3-7: Comparison of Households Income Distribution by Percent in 2000					
Income Range	No. of Hadley Households	Hadley %	Hampshire County %	Massachusetts%	
Less than \$10,000	128	6.80%	7.70%	8.80%	
\$10,000 - \$24,999	315	16.60%	17.70%	15.80%	
\$25,000 - \$49,999	426	22.50%	28.60%	24.90%	
\$50,000 - \$99,999	718	37.90%	33.60%	32.90%	
\$100,000 or more	308	16.30%	12.40%	7.70%	
				Source:2000 Census	

Table 3-8: Comparison of Households Income Distribution by Percent in 2010					
Income Range	Hadley%	Hampshire County%	Massachusetts%		
Less than \$10,000	3.9%	5.9%	6.5%		
\$10,000 - \$24,999	4.9%	14.9%	13.5%		
\$25,000 - \$49,999	16.8%	21.3%	18.9%		
\$50,000 - \$74,999	17.2%	17.5%	16.5%		
\$75,000 or more	45.4%	40.4%	44.5%		

Source: 2007-2011 US Census American Community Survey

Employment

The 2007-2011 data from the US Census American Community Survey revealed that there are 2953 people in Hadley's labor force including the unemployeda 13.5% increase from 2000.. Of those employed, only 22.5% work in the community while the majority (77%) commute out of town. According to the Pioneer Valley Planning Commission, the percentage of those unemployed has increased from 2.1% to 7.3% between 2000 and 2010.

The percentage of Hadley's residents employed by "white collar" occupations surpasses that of the County, Commonwealth, and national averages. In 2010, 45.2% of Hadley's labor force was employed in managerial, professional, and related occupations. These occupation types are usually among the better paying positions, which contributes to a median household income in Hadley that exceeds county, Commonwealth, and national averages. In 2010 the median household income for Hadley residents was \$73,974, compared to \$60,331 for Hampshire County, and \$65,981 for the state. This provides the town with a solid economic base, as its residents generally have secure financial situations, which contributes to the overall stability of the local economy.

Hadley's population generally has a higher level of education than either Hampshire County residents or Massachusetts residents as a whole. This trend is not surprising given Hadley's proximity to numerous institutions of higher education. Between 1990 and 2000, the share of Hadley residents age 25 or older who completed either some college or an advanced degree increased from 56.7% to 64.6%. In 2010, the percentage increased again to 68.4%..

Housing

Hadley's housing stock is composed primarily of single family homes, with this segment making up 78.9 % of Hadley's housing. Hadley has a significantly larger percentage of single family units compared to the county and the state as well as a lower percentage of multi-family dwelling

units that the County or State. Between 2000 and 2010, the number of residential housing stock with 5 units or more has doubled from 4.1% to 8.4%.

Table 3-9: Comparison of Housing Stock in 2010				
Type of Structure	Hadley	Hampshire Co.	State	
Single Family	78.9%	64.5%	57.3%	
2 - 4 Family	12.4%	17.5%	21.5%	
5 or more	8.4%	16.5%	20.4%	
Mobil Home/Trailer	0.0%	1.5%	0.9%	
Total Units	2230	62,434	2,799,357	
			Source: 2010U.S. Census	

Housing stock in Hadley has increased significantly in the last decade from 1953 units to 2230 units (14.2%). Comparatively, the County has only increased by 6.8% and the State by 7.1% during the same time period. Hadley has also seen a slight shift from owner-occupied dwellings to rental units. The number of rentals has increased by 5.4% in Hadley while the number of rentals has remained relatively stable in Hampshire County and the State.

Table 3-10: Housing Shift from Owner Occupied to Rental					
	2000	2000	2010	2010	Change
	Owner- Occupied	Rental	Owner- Occupied	Rental	
Hadley	74.7%	25.3%	69.3%	30.7%	-5.4%
Hampshire Cty	65%	25%	66.4%	33.6%	+1.4%
Massachusetts	61.7%	38.3%	62.3%	37.7%	+0.6%

Source: 2007-2011 U.S. Census American Community Survey

Building Permits

The annual number of building permits issued for new housing construction in Hadley decreased between 1995 and 2005. The data shows a decline from 1998 to 2000, then a steady increase to 2003, and a subsequent decrease to 2005. Between 1995 and 2005, 198 building permits for new homes were issued. The majority of building permits for housing issued during this period were for additions and/or alterations (582 permits), with the largest number coming in 2005 (99). The greatest number of new home permits issued for a given year occurred in 1997 (30 permits). Since that time, the number of permits issued each year has decreased to a low of 9 permits in 2004 and 2005. Data available for 2012 shows a continuation of this pattern with only 5 new home permits issued (4 single-family detached; 1 3-4 family); and 177 permits for residential renovations.

[Гable 3-13: Housing Pern	nits Issued in Hadley 1	995- 2005, 2012
	New Homes	Renovations and Additions	Total
1995	25	46	71
1996	30	44	74
1997	30	57	87
1998	18	48	66
1999	17	56	73
2000	9	37	46
2001	15	40	55
2002	18	51	69
2003	18	57	75
2004	9	47	56
2005	9	99	108
2012	5	177	183

D. Growth and Development Patterns

Patterns and Trends

Hadley began as an agricultural community centered around the town common, but is increasingly characterized by commercial development along Route 9. Residential development is concentrated in Hadley Center, where lots were divided into long narrow strips from the parent tracts of the first settlers. Houses are also clustered in the center of North Hadley and along Route 47 in Hockanum. More recently, there has been residential development along secondary roads in areas traditionally reserved for agriculture. Subdivisions sprouted up in the 1980s along Bay Road, Rocky Hill Road, Huntington Road, Mt. Warner Road, Stockbridge Street and Shattuck Road. Recently development pressure is strong in areas north and south of Route 9, including Rocky Hill Road, North and South Maple Streets, and Mill Valley, Moody Bridge and Lawrence Plain Roads. Commercial development remains strong on Route 9. Most of the recent commercial and residential development is on farmland, including several proposals for large national retail stores.

Source: Hadley Assessor's office

Infrastructure

Transportation Systems

Hadley is a town of commuters: only 23% of residents live and work in town. Most residents travel by car to nearby towns and 90% of them drive alone. As a result, Hadley's roads are congested, potentially unsafe, and side roads are used as shortcuts. Although many roads in Hadley have retained their rural character, the Route 9 corridor has grown in intensity in recent years and is expected to become even more congested. Pedestrian safety and safe roads are key priorities for Hadley residents. The Massachusetts Highway Department has started to expand Route 9 capacity. This project will alter the areas surrounding the historic Town Common and the critical intersections at the town center. Of primary importance to the town is the development of a Mass Highway Interaction Policy to facilitate the communication of Hadley's vision for Route 9 and the Town Center to the state agency. It might also help the town to

establish Street Design Guidelines to be used along Route 9 and in other areas of town where roads are will be built new or modified. These Guidelines will encourage road characteristics that match Hadley's vision of itself as a rural community. Elements to be addressed include shared streets with pedestrians, bicyclists, automobiles and farm equipment; safe intersections that require vehicles to slow down; landscaping and street trees; and, lights and street furniture. (Hadley Master Plan 2005, E-5).

Water Systems

The Hadley DPW Water Division is responsible for the operation and maintenance of the Town's four wells, the Callahan Ultrafiltration Plant, the Mt. Warner pump station, approximately 62 miles of water mains, over 550 fire hydrants and 2,175 service connections and meters. Municipal water is supplied by groundwater sources from four town-operated wells: Mount Warner Wells No. 1 and No. 2, and Callahan Wells No. 3 and No. 4 at Bay Road. The Town of Hadley's primary drinking water supply is groundwater, which is now primarily drawn from the Callahan wells. The aquifer covers an area of about 216 square miles consisting of nonporous sandstone. Roughly 700,000 gallons of drinking water are provided every day.

Sewage Systems

The Town of Hadley sewerage system consists of over 21 miles of gravity and force main piping. There are 9 sewage pumping stations of various types and vintages that assist in directing the wastewater to the Treatment Facility located at 230 Middle Street. This facility has a permitted flow allowance of 540,000 gallons per day and currently serves 941 residential and commercial users, processing on average 420,000 gallons of wastewater per day.

Hadley's Wastewater Treatment Facility is a secondary treatment facility consisting of preliminary treatment (screening and grit removal), mechanical aeration, secondary clarification, and sodium hypochlorite disinfection. The facility also included ancillary systems such as sludge pumping, sludge holding/thickening tanks, standby electrical generation, and plant water pumps. The current facility reflects improvements constructed in 1988.

Long Term Development Patterns

Commercial Development

The Route 9 Business District is the town's primary economic area with large concentrations of commercial and retail uses; however, it also contains the historic town center, houses several municipal structures and serves as the principal gateway to the community. Over time, the existing buildings have been redeveloped as market conditions shift and older uses become obsolete. This trend will continue into the future and the town wants to be prepared for this inevitable redevelopment. At least three new large retail developments are in the process of being permitted and developed along Route 9. Hadley residents would like to manage and control future commercial development and limit such development to the established commercial areas along Route 9.

Residential Development

In the past three decades, Hadley's population has grown at a significantly faster rate than the region, and this trend is projected to continue. Hadley's population increased by 28% between 1970 and 2010. Comparing Hadley's population trends to those of the region, we note that in the past four decades, Hadley's population has grown significantly faster than the state's. Hadley is anticipated to be the fastest growing community among all communities in the Pioneer Valley. It is projected to increase from 4,793 people in 2000 to 5,970 in 2030, an increase of 24.6 percent.

Housing stock in Hadley has increased 14.2%. Comparatively, the County has only increased by 6.8% and the State by 7.1% during the same time period. Hadley has also seen a slight shift from owner-occupied dwellings to rental units. The number of rentals has increased by 5.4% in Hadley while the number of rentals has remained relatively stable in Hampshire County and the State.