

INTRODUCTION

The Pepperell Affordable Housing Plan presents the Town's goals and strategies for the production of affordable housing. The requirements for a 40B Planned Production Affordable Housing Plan are detailed in M.G.L. 760 CMR 31.07(1)(i). This regulation stipulates that municipalities may adopt an affordable housing plan that is based upon a comprehensive housing needs assessment and includes strategies for the production of low- and moderate-income housing. To be eligible for housing certification by the Department of Housing & Community Development (DHCD), the plan must demonstrate how Pepperell will achieve the housing production required by the regulation, which is an increase of $\frac{3}{4}$ of 1% of total year round housing units reported in the 2000 U.S. Census.

Communities can use the development rate provision as a tool to encourage Chapter 40B development that meets stated planning objectives, while ensuring that they can reject more undesirable development proposals.

Once the plan is approved by DHCD, Pepperell may request certification of compliance with the plan by submitting proof that the required number of qualifying housing units has been produced during the current calendar year.² Pepperell must create at least 29 subsidized housing units per year until it achieves a total of 391 units, or 10% of its 2000 housing stock. Certification will enable the Board of Appeals to deny comprehensive permit applications for one year from the date of request for certification. If 58 subsidized units, or 1.5% of Pepperell's 2000 housing stock, are constructed in one year, the community may have a reprieve from granting comprehensive permits for two years. In subsequent years, Pepperell will have to demonstrate continued progress toward implementing the housing plan and continue creating at least 29 subsidized housing units per year.

This Affordable Housing Plan will address the following topics: 1) Housing Needs Assessment, 2) Affordable Housing Goals, 3) Affordable Housing Strategy, and 4) Use Restriction Guidelines. This plan has been prepared in accordance with 760 CMR 31.07(1)(i).

Preparing a Planned Production Affordable Housing Plan

The Affordable Housing Committee will review the first section of the report, Pepperell Housing Needs. This will be followed by the additional six tasks as identified below.

- 1. Pepperell Housing Needs:** The Town needs a total of 269 units to meet the State's 10% affordability requirement. To meet the housing needs of Pepperell residents (as shown in Table 25 on p. 23, the Committee ascertained the needed number of rental and ownership affordable units and the type/size of units.
- 2. Vision and Housing Goals:** A draft vision and goal statement is provided. This was edited by the Committee.
- 3. Strategies for Affordable Housing:** Tasks/strategies were identified.
- 4. Rank list of Potential Locations for Affordable Housing:** Possible locations were identified and ranked (See Table 27 on p. 27 and the Growth Management Plan Map).
- 5. Prepare Action Plan:** Strategies were identified to allow Pepperell to attain 29 units of subsidized housing per year beginning in 2006.
- 6. Photographs of Housing Developments we would like to see in Pepperell:** The Committee should identify examples of development which Pepperell would like to emulate.
- 7. Identify Affordable Housing Committee Next Steps:** See the Action Plan.

² The state only recognizes those units that have a recorded deed restriction that limits the occupancy of the unit to individuals or families that meet certain federal affordability criteria.

SECTION I: HOUSING NEEDS ASSESSMENT

HOUSING INVENTORY

According to the U.S. Census, there were 3,917 housing units in Pepperell in 2000, an increase of 412 units since 1990. The distribution of units by types is shown in Figure 1.

- ◆ The town’s housing stock is relatively young; Over 60% of the homes were built after 1970.
- ◆ 79% of the units are owner-occupied, while 21% of the units are renter-occupied (2000 U.S. Census).

Figure 1, Housing Types, 2000

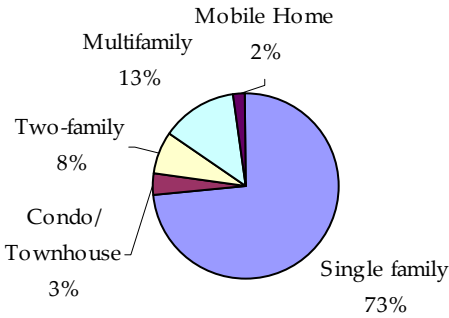
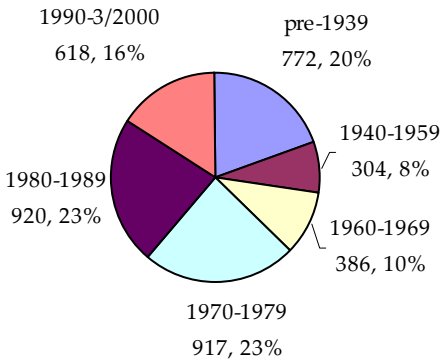


Figure 2, Homes by Year Built



- ◆ When compared to surrounding municipalities, Pepperell has experienced an average rate of construction in recent years. Westford, Tyngsborough, and Groton issued considerably higher numbers of building permits for single family homes. Ayer, Groton, and Tyngsborough constructed a greater number of multifamily units than Pepperell.

- ◆ Although Pepperell recently issued permits for two multifamily developments, the majority of building permits continue to be issued for single family homes. This is a pattern seen in Pepperell and in surrounding communities.
- ◆ Pepperell averaged only three multifamily units built per year; all of these units were part of two developments built in 2003 and 2004.

Table 1, Regional Housing Growth, 1995-2004

Municipality	Single Family Units/Year	Multifamily Units/Year
Ayer	24	9
Dunstable	28	0
Groton	79	9
Lunenburg	48	2
Pepperell	47	3
Shirley	32	<1
Townsend	29	<1
Tyngsborough	63	5
Westford	130	1

Table 2, Pepperell Housing Growth, 1995-2004

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Single Family Units	71	77	64	36	38	63	37	33	30	17
3- & 4-Family Units	-	-	-	-	-	-	-	-	16	15
Total Units	71	77	64	36	38	63	37	33	46	32

Source: SOCDS Building Permits Database

HOUSING COST

Housing Sales

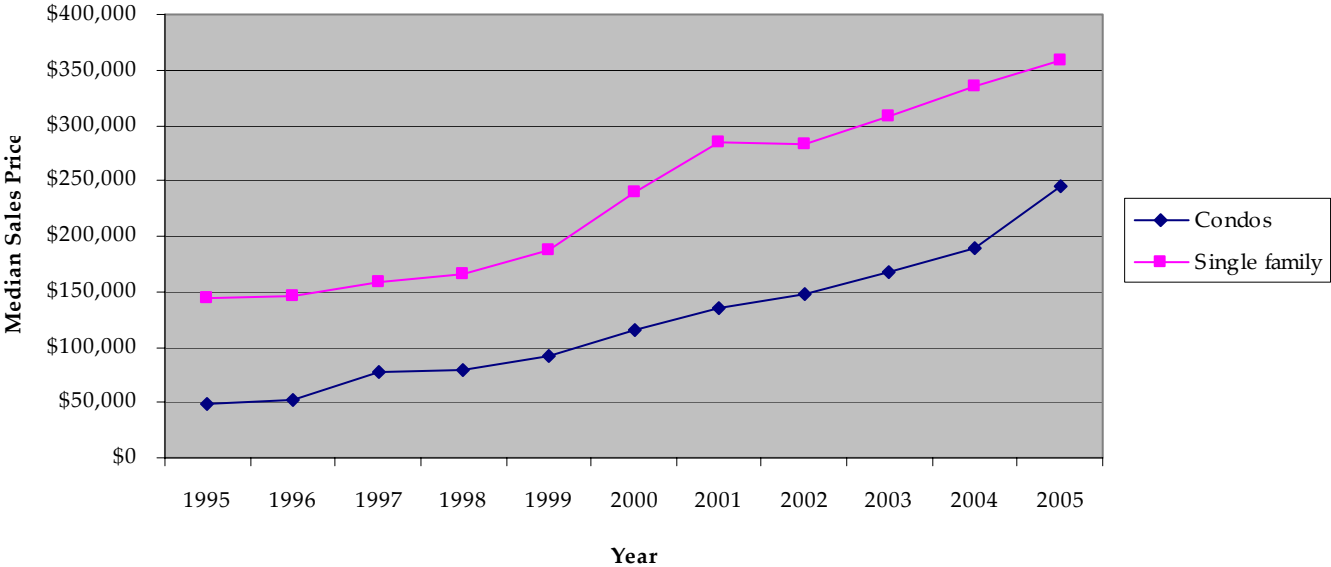
Home prices have soared in recent years, mirroring regional conditions. The average assessed value of all single family homes in Pepperell in FY 2005 was \$308,439, up 97% from \$156,708 in FY 2000. Between 1995 and 2005 the average selling price of a single family home in Pepperell increased by 148% from \$144,900 to \$359,450. From 2004 to 2005 alone, selling prices increased by 7.3%. Data for condominium sales revealed an even more extreme increase, with prices rising by 400% over the past decade (The Warren Group).

Table 3, Median Sales Price, 1995-2005

Year	Median Sales Price of Single Family Homes	% Increase
2005	\$359,450	7.3%
2004	\$335,000	8.4%
2003	\$308,950	9.4%
2002	\$282,500	-0.8%
2001	\$284,900	18.7%
2000	\$240,000	28.0%
1999	\$187,425	13.6%
1998	\$165,000	4.1%
1997	\$158,500	9.2%
1996	\$145,125	0.2%
1995	\$144,900	-

Source: The Warren Group

Figure 3, Median Sales Price of Single Family Homes and Condominiums, 1995-2005



In 2004 there were 216 properties sold in Pepperell, including 156 single family homes and 16 condominium residences (The Warren Group). Local realtors have estimated that the vacancy rate is low; at any given time, there is an average of 23 homes on the market, and homes stay on the

market for an average of 40 days. The 2000 U.S. Census reports the total vacancy rate to be 1.8%, 0.3% of which is for seasonal, recreation or occasional use. The homeowner vacancy rate is 0.3% and the rental vacancy rate is 2.3%.

There were 17 new single family homes permitted in 2004, 30 in 2003, and 33 in 2002; there were 15 multifamily units constructed in 2004 and 16 in 2003. Local realtors report the average selling price of a new single family home on the housing market starts at \$500,000, with a small number priced in the \$400,000 to \$500,000 range. The average price of all single family homes on the market starts at \$300,000. For condominiums, two bedroom townhouses typically sell in the low \$200,000s. A duplex, which is rare in Pepperell, may sell in the mid-\$300,000s. A new condominium development with units priced at \$235,000 has been struggling to sell due to the combination of a 55 and older age restriction and three-level units.

Pepperell ranks in the middle of the range in terms of the average price of single family homes. The average price for a single family home is \$335,000. Pepperell had fewer condominium sales than any other community in the region except for Dunstable.

Table 4, Regional Housing Market, 2004

Community	Single Family Homes		Condos	
	Average Selling Price	# of Sales	Average Selling Price	# of Sales
Ayer	\$272,000	67	\$203,450	40
Dunstable	\$395,000	39	\$0	0
Groton	\$447,500	156	\$260,000	20
Lunenburg	\$269,900	175	\$426,713	22
Pepperell	\$335,000	156	\$189,750	16
Shirley	\$314,950	68	\$222,500	18
Townsend	\$275,000	111	\$77,450	32
Tyngsborough	\$351,000	128	\$179,000	55
Westford	\$459,000	328	\$369,900	134

Source: The Warren Group

Rental Housing

Rental availability in Pepperell is almost nonexistent; realtors report that there are no vacancies. When rental units are available, they are usually quickly filled. The 2000 Census reported the average rent for all apartments was \$697. This figure is typically lower than the going rate, because it includes many households who pay below market rent. Currently, one bedroom apartments typically rent for \$600 per month; two bedroom apartments rent for approximately \$800 per month. These low rents are partly attributed to a decrease in demand for rental units caused by low interest rates which have allowed many renters to purchase homes. Newly constructed apartments rent for approximately \$1,000 to \$1,300 per month. The “fair market rent” that HUD currently allows for housing vouchers is \$856 for one bedroom units and \$1,102 for two bedroom units, including utilities.

Affordable/Subsidized Housing

- ◆ When compared to surrounding communities, Pepperell ranks fifth in terms of percentage of units on the subsidized housing inventory; Ayer, Tyngsborough, Groton, and Westford have higher percentages.

Table 5, Comparison of Subsidized Housing Availability*

	Ch. 40B Units	Total Units Developed	Total Year Round Units (2000 U.S. Census)	% Total Units
Ayer	254	281	3,141	8.1%
Dunstable	0	0	933	0.0%
Groton	182	241	3,339	5.5%
Lunenburg	66	66	3,605	1.8%
Pepperell	122	137	3,905	3.1%
Shirley	60	60	2,140	2.8%
Townsend	84	84	3,162	2.7%
Tyngsborough	276	476	3,784	7.3%
Westford	244	347	6,877	3.5%

*Does not include Section 8 Mobile Vouchers or Massachusetts MRVP vouchers
Source: State Department of Housing and Community Development, as of 1/3/06

- ◆ Pepperell currently has an inventory of 122 subsidized housing units, or 3.1% of its total 2000 year-round housing inventory. To fulfill its requirements under Chapter 40B, Pepperell needs to increase its qualified affordable housing stock to 10%, or 391 units.³ Therefore, an additional 269 units need to be added to the inventory.
- ◆ Mayfield Park, the newest 40B development in Pepperell, was much in demand at its opening and very well-received by the original residents. Clearly there is a demand for affordable housing in Pepperell.

Table 6, Pepperell Chapter 40B Subsidized Housing Inventory

Name	Location	Type	Funding Agency	40B Units	Year End
				5	
	4 Foster Street	Rental	DHCD	51	Perp
	8 Foster Street	Rental	DHCD	12	Perp
	68 Groton Street	Rental	DHCD	5	Perp
	Cottage Street	Rental	DHCD	2	Perp
Mayfield Park	22-24 Tucker Street	Ownership	DHCD	7	2029
Pepperell Meadows	River Road	Rental	RHS	40	2009
Total				122	

Source: Massachusetts Department of Housing and Community Development, as of 1/3/06

³ The state only recognizes those units that have a recorded deed restriction that limits the occupancy of the unit to individuals or families that meet certain federal affordability criteria (in general occupancy costs are limited to 30% of income). Although there may be housing units available on the market which fall within affordable price guidelines, they are not included in the 40B inventory because they lack deed restrictions or other accepted long-term protection mechanisms.

The Pepperell Housing Authority administers low and moderate income housing units. Currently, Pepperell has 70 units, of which 63 are one-bedroom apartments for senior citizens and seven are for families of up to five people.

Pepperell also has three mobile home parks, one of which is limited to those aged 55 and older. All are in high demand, in particular the age-restricted park. This illustrates the demand for affordable housing in Pepperell, especially for the elderly.

Currently there are three Chapter 40B developments at various stages in the permitting process (see Table 7). If these developments are constructed, the number of Chapter 40B units in Pepperell would increase by 20 to 142 units.

Table 7, Proposed Chapter 40B Projects

40B Project: Name/Location	Approval Date	Types of Units	Total # Units	# Affordable Units*	# 40B Units
131 Lowell Road		Single family	4	1	1
Bayberry Phase I		Duplexes	44	11	11
42 Lowell Road		Apartments	8	8	8
Total			56	20	20

* In a rental development, 100% of the units are counted as affordable even though only 25% are rented as affordable.
Source: Town of Pepperell

REGULATORY AND PHYSICAL ENVIRONMENT

LAND USE PATTERNS

- ◆ The Town of Pepperell is a rural residential community. Approximately 23% of the land area is developed for single family homes, mostly on 20,000-80,000 square foot lots. Only 1% of the Town is developed for industrial and commercial uses.
- ◆ While Table 8 identifies 75% of the town land area as undeveloped, some of the area is not developable because of environmental constraints or restrictions. 2,072 acres (14%) of land are classified as open space; 1,716 (12%) of these acres are permanently protected while 342 have limited protection. 1,525 acres (10%) of agricultural land classified under Chapter 61, Chapter 61A or Chapter 61B are not permanently protected. Some open space parcels owned by private individuals or organizations may also be vulnerable to future development if they do not have permanent development restrictions, even if the owner currently intends to preserve them as open space.

Table 8, Existing Land Use

Land Use Category	Area (Acres)	% of Town Area	% of Dev. Area
Single Family Residential	3,354	22.6%	89.2%
Multifamily Residential	31	0.2%	0.8%
Commercial	67	0.5%	1.8%
Industrial	91	0.6%	2.4%
Public/Recreation	143	0.9%	3.8%
Transportation/Utilities	75	0.5%	2.0%
Total Developed	3,761	25.3%	100.0%
Agriculture	2,070	14.0%	
Vacant	8,606	58.0%	
Water	400	2.7%	
Total Undeveloped	11,076	74.7%	
Total Town Area	14,837	100.0%	

Source: MassGIS, from Aerial photography, 1999

Table 9, Change in Land Use, 1971–1999

Land Use	1971	1985	1999
Single Family Residential	1,155	2,094	3,354
Multifamily Residential	8	31	31
Commercial	50	62	67
Industrial	24	55	91
Public/Recreation	156	253	143
Transportation/Utilities	57	73	75
Total Developed Land	1,450	2,568	3,761
Agriculture	2,673	2,488	2,070
Vacant (Includes Forest & Wetlands)	10,337	9,405	8,606
Water	378	378	400
Total Undeveloped Land	13,388	12,271	11,076

Source: MassGIS, from Aerial photography, 1971, 1985, 1999

- ◆ Between 1971 and 1999, the amount of developed land in Pepperell has increased by 160%. Most of this growth is comprised of single family development. At the same time, the amount of land devoted to agricultural uses has decreased by 29%.

- ◆ Once a factory and farming town, Pepperell has become a mostly “bedroom community” with little commercial or industrial development. Only one factory remains open; the Bemis Bag and Pepperell Paper Mill closed their operations in 1997 and 2002, respectively.

ZONING

- ◆ The Town of Pepperell has five residential districts as well as a commercial and an industrial district. The residential districts cover 96.7% of the Town’s 14,829 acres. Nearly half of the Town (7,055 acres) is zoned as Rural Residence (RR). The Commercial (C) District, which comprises 0.5% of the Town’s land area, permits dwelling units above the first floor and boarding houses by right; multifamily dwellings are permitted by special permit. Residential uses are not permitted in the industrial district.

- ◆ Single family homes are permitted by right in all of the residential districts. Two family dwellings are permitted by right in the Urban Residence (UR) District and by special permit in the Suburban Residence (SR) District. Minimum lot sizes range from 80,000 square feet in the RR, Town Residence (TR) and Recreational Residence (RCR) districts to 40,000 square feet in the SR and UR districts.

Table 10, Pepperell Zoning Districts

Residential	
Rural Residence	RR
Town Residence	TR
Recreational Residence	RCR
Suburban Residence	SR
Urban Residence	UR
Nonresidential	
Commercial	C
Industrial	I
Overlay Districts	
Water Resource Protection	WRPOD
Wireless Communications	WCOD

- ◆ Multifamily units may be created by special permit in the UR and C districts with a minimum lot size of 10,000 square feet per dwelling unit. A maximum of four units is allowed per multifamily dwelling; in a multifamily development larger than eight units, only 20% of the units may contain three or more bedrooms.

- ◆ Accessory apartments are permitted by special permit.
- ◆ Within the WRPOD, single family and multifamily residences connected to the town sewer are permitted in the Well Protection Zone and the Aquifer-Watershed Protection Zone but not in the Water Source Protection Zone. Single family and multifamily residences serviced by septic systems must be on lots with a minimum size of 80,000 square feet.
- ◆ The zoning bylaw allows for an Open Space Residential Development (OSRD) in which residential dwellings may be constructed at greater densities provided the residences are grouped in clusters. The OSRD must be located on at least ten acres with a minimum lot size of 20,000 square feet when served by town sewer and 30,000 square feet when not served by town sewer. The bylaw has not been used often, partly due to the ten acre minimum.

See Appendix 3 for a more detailed summary of the Town's Zoning Bylaw.

BUILDOUT ANALYSIS

In 1999, EOEA oversaw the preparation of a buildout analysis for the Town of Pepperell. This exercise provides an estimate of what might result if all of the remaining land in town were developed under existing zoning regulations. The potential for redevelopment of underutilized properties or development that does not conform to zoning is not accounted for. The buildout analysis estimated that a total of 3,386 dwelling units could be created, assuming all single family. Given an average household size of 2.84, the population could grow by an additional 9,616 residents for a total population of at least 20,758 persons.

What is a Buildout Analysis?
A buildout analysis provides an estimate of what might result if all remaining land in town were developed under existing zoning regulations. The potential for redevelopment of underutilized properties or development that does not conform to zoning is not accounted for.

Is the Buildout Analysis Accurate?
The methodology for completing a buildout analysis is necessarily abstract.
- Land that could not support new development is often identified as developable.
- However, especially as communities approach their full development capacity, they often experience increases in density which are not accounted for in the buildout analysis, through infill development, Comprehensive Permits, and zoning changes.

Table 11, Summary of Buildout Capacity

Zoning District	New Dwelling Units	Water Use (GPD)	New Students	New Population	New Road Miles
Rural Residence	1,663	371,756	931.5	4,957	37.8
Town Residence	916	204,761	513.0	2,730	15.6
Recreational Residence	469	104,894	262.8	1,399	8.0
Suburban Residence	323	72,146	180.8	962	5.5
Urban Residence	15	3,341	8.4	45	0.3
Total	3,386	756,898	1,896.5	10,093	67.2

Source: EOEa Buildout Analysis, 1999

The buildout analysis also finds the potential for an additional 67.2 road miles and water use of 756,898 gallons per day within the residential districts.

This analysis does not give any indication of the rate of development or the time frame for reaching full buildout. It is likely that residential zoning districts will be built out in a much shorter time frame than commercial and industrial districts, especially given the strong housing market and the lack of economic development in recent years.

Table 12, Summary of Buildout

Buildout Impact	
Additional Residents	10,472
Additional Students (K-12)	1,968
Additional Residential Units	3,514
Additional Developable Land Area (acres)	7,999
Additional Commercial/Industrial Buildable Floor Space (sq. ft.)	12,981,377
Additional Water Demand (gallons/day)	1,759,026
Residential	785,400
Commercial and Industrial	973,626
Additional Solid Waste (tons/year)	6,315
Recyclable	2,650
Non-recyclable	3,665
Additional Roadway (miles)	70

Source: EOEa

FACTORS THAT CONSTRAIN AND PROMOTE GROWTH

Infrastructure

- ◆ The nearest commuter rail stations to Boston are located in Ayer and Littleton (See Regional Map). However, a lack of parking at the stations limits the feasibility of Pepperell residents utilizing the commuter rail.
- ◆ Major roads which run through Pepperell include Routes 111, 113, and 119. Additionally, Pepperell is served by the Lowell Regional Transit Authority (LRTA) which provides “Road Runner” service to the elderly and disabled.
- ◆ Approximately 80% of Pepperell is serviced by Town water. The remaining residents have private wells.
- ◆ Pepperell’s water system dates to 1907 (Pepperell Comprehensive Plan, p. 7-4). Water supply is provided by three wells, one on Bemis Road and two on Jersey Street (see Water and Sewer Infrastructure Map). The three wells have a combined storage capacity of approximately three million gallons per day. Current demand (2004) is 733,000 gallons per day; the maximum average permitted per day based on the year’s average is 1.25 gallons per day. Additionally, there is an emergency water connection with Townsend.
- ◆ The 1998 Pepperell Comprehensive Plan recommended that the Town undertake a plan to determine if additional wells are needed to satisfy Pepperell’s water demands. Subsequently, the Town determined that there is a need for a fourth well and is currently looking for an appropriate site.
- ◆ Approximately 35% of Pepperell households are served by public sewer. Pepperell households not on the sewer system are serviced by individual septic disposal systems.
- ◆ The Town has an agreement with Groton in which Groton discharges sewers serving its downtown area to the Pepperell system in return for payment. Pepperell recently upgraded its wastewater treatment plant to a design capacity of 1.1 million gallons per day. 25% of this capacity is reserve for Groton, leaving 825,000 gallons per day for Pepperell. The plant discharges treated wastewater into the Nashua River. Current daily flow demand averages 475,000 to 500,000 gallons per day.

Zoning

- ◆ Multifamily dwellings are permitted by special permit in only two zoning districts, Urban Residence and Commercial, both of which cover only 1.8% of the town’s land area. Multifamily residences are not permitted by right in any district.
- ◆ Current lot area requirements in the Urban Residence district limit the amount of multifamily housing that can be developed.
- ◆ There is no inclusionary housing requirement.

Economic Development/Tax Base

- ◆ Pepperell’s proximity to New Hampshire, which is tax-free, and in particular Nashua, which has a great deal of commercial establishments, has contributed to the decline of commercial development in town.
- ◆ Pepperell’s Town Center, where the majority of businesses are located, runs along Route 113. However, many people passing through Pepperell do so along Route 119; as a result, they never drive through Pepperell’s major commercial area.
- ◆ It is well understood in Pepperell that homeowners' property taxes do not cover educational costs. Other housing types, on the other hand, can generate a positive cash flow to the town.

As shown on Table 13, family housing is often a net loss to the Town as opposed, for example, to one and two bedroom garden condominiums.

Table 13, Cost of Services: Fiscal Impacts of Development

Type of Development	Revenue/General Govt.	Revenue/Education
Positive Revenue Benefits		
Research Office Parks	+	+
Office Parks	+	+
Industrial Development	+	+
High-Rise Garden Apartments (Studio/1BR)	+	+
Age-restricted Housing	+	+
Garden Condominiums (One/Two BR)	+	+
Open Space	+	+
Neutral Revenue Benefits		
Retail Facilities	-	+
Townhouses (2/3 Bedrooms)	-	+
Expensive Single family Homes (3-4 BR)	-	+
Negative Revenue Benefits		
Townhouses (3-4 BR)	-	-
Inexpensive Single family (3-4 BR)	-	-
Garden Apartments (3+ BR)	-	-
Mobile Homes (Unrestricted Occupancy)	-	-

Source: The Growth Impact Handbook, DHCD, p.10

AREAS FOR DEVELOPMENT

Despite the lack of viable public transit options and weak access to major highways, the rural setting, the large amount of land available for development, and a relatively affordable housing market make Pepperell an attractive location. The Land Use Suitability map identifies those areas of town which are best suited for various types of land uses. For purposes of analysis, the town can be divided into areas with development potential and areas with barriers to development. Areas with development limitations (barriers) include those natural resource areas with regulatory protection, i.e., wetlands, flood zones, Zone IIs, and potential high and medium yield aquifers. Resource areas with limited or no regulatory protection include BioMap habitat areas, priority habitats, and potential and certified vernal pools. Taken together with protected open space and surface water bodies, one can block out areas where development is unsuitable. The remainder of town can then be divided into distinct areas for potential development.

A preliminary Vision Plan map has been prepared based on this assessment of protection and development areas. For purposes of growth management planning, four areas have been identified. The characteristics of and the opportunities within these areas need to be further described by the Town.

- 1. Downtown Area**
 - ◆ Located along Main Street between River Road and Groton Street and along Lowell Road
- 2. Inner Core Growth Management Area**
 - ◆ Located west of the Downtown
- 3. Outer Core Growth Management Area**
 - ◆ Scattered throughout town; mainly located west of the Downtown and south of the Inner Core
- 4. Rural Area**
 - ◆ Located throughout Pepperell

NEEDS ANALYSIS

HOUSING DEMAND

Population Growth

Pepperell’s population has nearly doubled over the past thirty years, with a total gain of 5,255 persons (89.3%) between 1970 and 2000. The Metropolitan Area Planning Council (MAPC) predicts that the population growth will increase slightly in the coming decades, approaching over 12,600 residents by the year 2020. The Massachusetts Institute for Social and Economic Research (MISER) offers a slightly higher projection of 13,000 by 2020.

Figure 4, Population Estimates and Projections in Pepperell

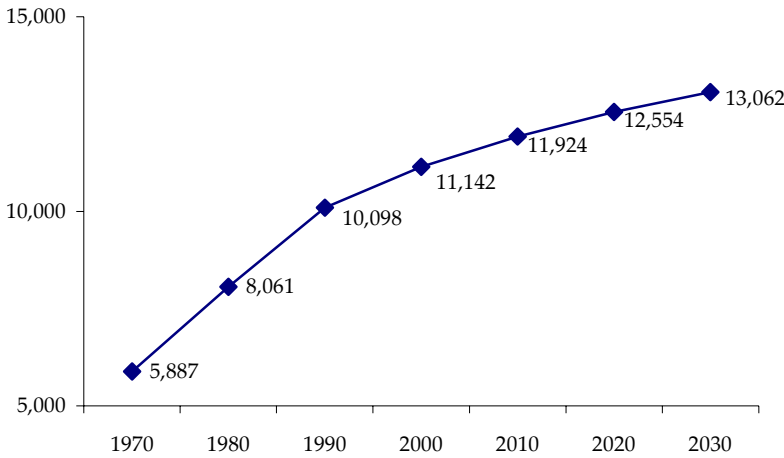


Table 14, Population Growth in Pepperell and Region

Population growth is not unique to Pepperell; it is a phenomenon shared by communities in the area. In the past decade, the surrounding communities all experienced growth as well (see Table 14). Of these towns, Pepperell is neither the fastest nor slowest growing community, ranking above Ayer, Lunenburg, Shirley, and Townsend but below Dunstable, Groton, Tyngsborough, and Westford in terms of percent change in population from 1980 to 2000.

Municipality	Population 2000	1980 - 2000	
		Population Change	% Change
Ayer	7,287	+294	4.2%
Dunstable	2,829	+1,158	69.3%
Groton	9,547	+3,393	55.1%
Lunenburg	9,401	+996	11.9%
Pepperell	11,142	+3,081	38.2%
Shirley	6,373	+1,249	24.4%
Townsend	9,198	+1,997	27.7%
Tyngsborough	11,081	+5,398	95.0%
Westford	20,754	+7,320	54.5%

Source: U.S. Census

- ◆ The increase in the number of households in Pepperell mirrors the increase in total population (see Table 14).
- ◆ The rate of increase in households is greater than that of the population; thus, the number of persons per household has fallen in the past thirty years. This trend is expected to level off in the coming decades (see Table 15).

Table 15, Population and Household Growth, 1970–2030

	Population	% Change	Households	% Change	Total Additional Households	Persons per Household
1970	5,887		1,738			3.39
1980	8,061	36.9%	2,653	52.6%	915	3.04
1990	10,098	25.3%	3,505	32.1%	852	2.88
2000	11,142	10.3%	3,917	11.8%	412	2.84
2010	11,924	7.0%	4,227	7.9%	310	2.82
2020	12,554	5.2%	4,527	7.0%	297	2.77
2030	13,062	4.0%	4,778	5.5%	251	2.73

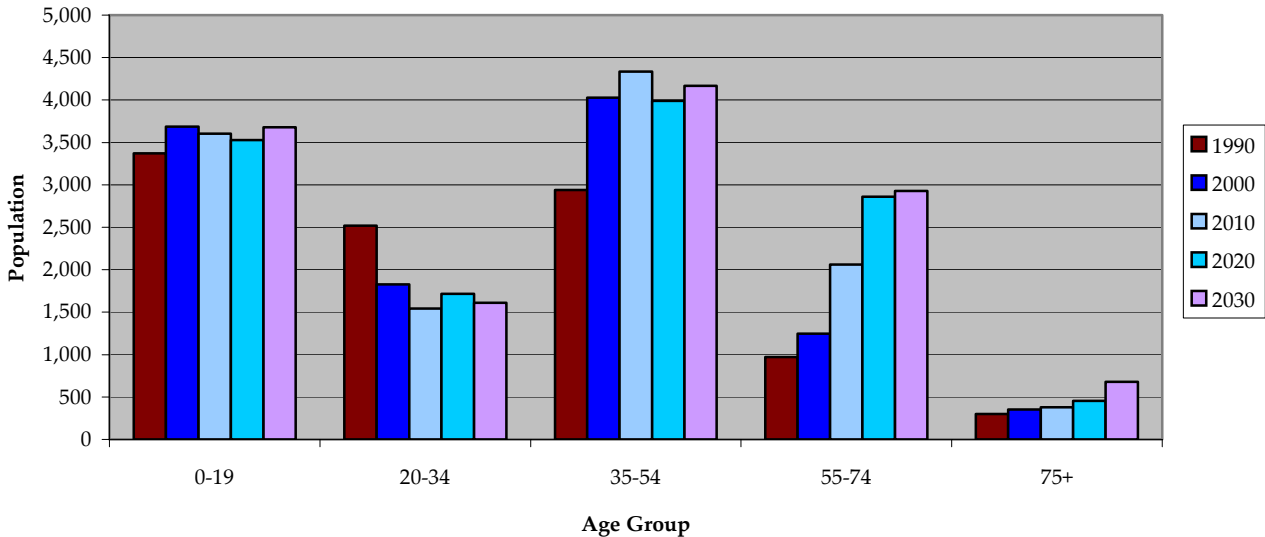
Source: U.S. Census, MAPC

Age

Between 1990 and 2000 significant changes in Pepperell’s population occurred.

- ◆ Young adults (aged 20-34) decreased significantly, by 27%
- ◆ Middle aged residents (35-54) increased by 37%
- ◆ Seniors (55-74) and the elderly (75+) increased by 28% and 18%, respectively

Figure 5, Population By Age Group, 1990-2030



By 2030, Pepperell’s population is projected to grow by 17%; considerable demographic changes are expected to occur.

- ◆ Pepperell’s young adult population is rapidly declining. 12% of Pepperell’s population will be between 20 and 34 in 2030, compared to 25% in 1990.
- ◆ Pepperell’s seniors will account for 22% of the total population by 2030 compared to 11% in 2000. This is an increase of 135%.
- ◆ The elderly population is predicted to almost double by 2030.

School Enrollment

- ◆ Although the data presented above shows a 9.4% increase in the number of residents aged 0-19 between 1990 and 2000, the school enrollment data presented below indicates that there has been a substantial increase in the number of school children in Pepperell over this period. Preprimary and kindergarten enrollment has increased by 223% and elementary and high school enrollment has increased by 105%. This discrepancy could be explained by a substantial influx of young families into town.
- ◆ The number of pupils enrolled in college has also increased significantly, by 130%.

Table 16, School Enrollment in Pepperell, 1990 and 2000

Grade Level	1990 Enrollment			2000 Enrollment			% change 1990-2000
	Public	Private	Total	Public	Private	Total	
Preprimary				425	290	715	
Kindergarten				242	16	258	
Preprimary/Kindergarten	149	152	301	667	306	973	223%
Grades 1-4				1,086	92	1,178	
Grades 5-8				1,158	273	1,431	
Grades 9-12				1,028	230	1,258	
Elementary/High School	1,789	98	1,887	3,272	595	3,867	105%
College Undergraduate				302	453	755	
Graduate/Professional School				173	519	692	
Post-High School Total	404	224	628	475	972	1,447	130%
Total	1,038	474	2,816	4,414	1,873	6,287	123%

Source: 1990, 2000 U.S. Census

Disabled Individuals

- ◆ There are 2,481 non-institutionalized individuals aged five and over (24% of total population over age five) that report to have a disability (2000 U.S. Census).⁴
- ◆ 91% of elderly residents (over age 65) report to have a disability.
- ◆ Of the reported disabilities, 9.8% are sensory in nature, 21.2% are physical, 18.0% are mental, 6.0% require assistance for self-care, 18.3% are unable to go outside of the home, and 26.9% impede employment.

Employment and Labor Force

- ◆ Businesses in Pepperell employed a total of 1,452 people in 2003. The jobs to labor force ratio shows that there is one job for every five Pepperell residents.
- ◆ The unemployment rate in Pepperell in 2004

Table 17, Jobs to Labor Force Ratio, 2003

Pepperell jobs	1,452
Pepperell resident labor force	<u>6,667</u>
Jobs/Labor Force Ratio	0.22

⁴ The Census defines a disability as “A long-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”.

was 4.7%, down from 6.4% in 2003. This compares with the statewide average of 5.1% in 2004, down from 5.8% in 2003.

- ◆ Pepperell jobs provided an average annual wage of \$32,604 in 2003. In all industry sectors, the average annual wage fell below the FY2004 moderate income level of \$57,500 (80% of median income) for the Lowell Primary Metropolitan Statistical Area (PMSA). Only three industries, Transportation & Warehousing, Information, and Professional & Technical Services, provided an average annual wage that exceeded the low income standard of \$40,000 (50% of median income). Many employees live in households with more than one income, thus they may fall in a higher income bracket, and/or residents may not be employees in the town.

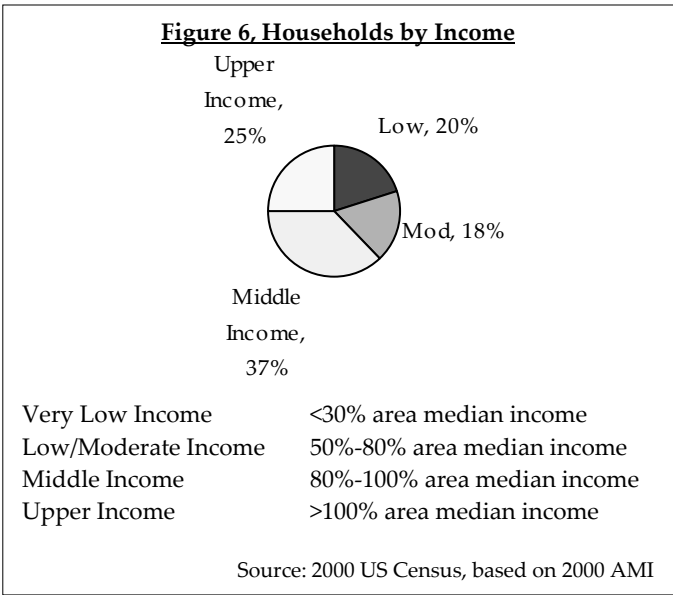
NEEDS ANALYSIS

HOUSING AFFORDABILITY AND AVAILABILITY

Chapter 40B defines Affordable Housing as housing that is affordable to households earning up to 80% of the area’s median income (AMI). Although there may be market-priced units that fall within this price range, in order to be counted on the subsidized housing inventory, homes must have a covenant or deed restriction to preserve their affordability. The 40B requirement does not reflect actual affordable housing needs in Pepperell; there are many households earning less than 50% of AMI, as well as some in the middle income range, earning 80% to 100% of AMI, who cannot find housing they can afford without some form of assistance. The following gap analysis aims to identify the types of housing and levels of affordability that will meet the needs of the residents of Pepperell.

Income Standards

Pepperell is part of the Lowell Primary Metropolitan Statistical Area (PMSA), for which the FY2006 median income is \$80,400 for a household of four. Subsidized affordable housing typically targets low and moderate income households earning up to 80% of the median family income. Various housing subsidy programs have their own requirements for affordability and income eligibility for specific housing developments differs, but for the most part housing that meets 40B requirements serves households in this income group. For FY2006, households of four earning up to \$58,000 are considered low/moderate income according to HUD. With this income a household can afford a home costing up to \$202,000 or a monthly rent of \$1,450.



A family of four falling within the low-income group earns up to \$40,200 per year, for which a rent of around \$1,000 per month would be considered affordable. Housing for middle-income households (which will not qualify as affordable under Chapter 40B) might consist of homes valued at up to \$300,000, affordable to families of four making 100% of AMI.

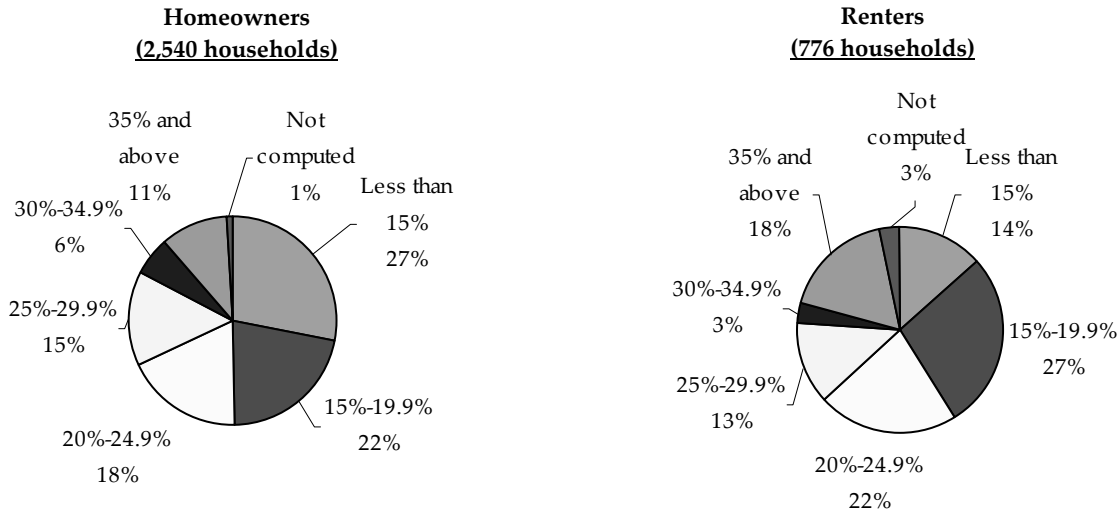
Table 18, HUD Income Guidelines for 2006 **Median Income for Lowell PMSA = \$80,400**

	1 person	2 persons	3 persons	4 persons	5 persons
Low Income (50% AMI)	28,150	32,150	36,200	40,200	43,400
Moderate Income (80% AMI)	40,600	46,400	52,200	58,000	62,650
Middle Income (100% AMI ⁵)	50,750	58,000	65,250	72,500	78,300

⁵ Middle income range (100% AMI) calculated by LKA; HUD does not provide guidelines for incomes above 80% AMI.

Housing affordability is measured by comparing monthly housing costs to the income of households. By affordable housing standards, households should spend no more than 30% of their income on housing-related expenses. Figure 7 illustrates the proportion of Pepperell homeowners and renters who are burdened by high housing costs.

Figure 7, Percent of income spent on housing cost for Pepperell Residents



Source: Income data is from 2000 U.S. Census.

For a housing unit to be affordable, a household should spend no more than 30% of its household income on housing costs. In Pepperell, over 17% of all households spend more than 30% of income on housing costs, making them technically unaffordable. Over 16% of households in owner-occupied housing units spend more than 30% of their incomes on housing, while 33% of households in renter-occupied housing units spend more than 30% of their household incomes on housing (U.S. Census).

Table 19, Housing Costs as Percent of Household Incomes in Pepperell

% of income spent on housing costs	Homeowners		Renters		Total	
	# of units	% of total units	# of units	% of total units	# of units	% of total units
Less than 15%	714	28.1	105	13.5	819	24.7
15.0-19.9%	548	21.6	215	27.7	763	23.0
20.0-24.9%	468	18.4	167	21.5	635	19.1
25.0-29.9%	373	14.7	101	13.0	474	14.3
30.0-34.9%	146	5.7	26	3.4	172	5.2
35.0 and above	272	10.7	139	17.9	411	12.4
Total Households with High Cost Burden	418	16.4	165	32.8%	583	17.6
Not computed	19	0.7	23	3.0	42	1.3
Median monthly costs	\$1,371		\$697			

Source: 2000 U.S. Census

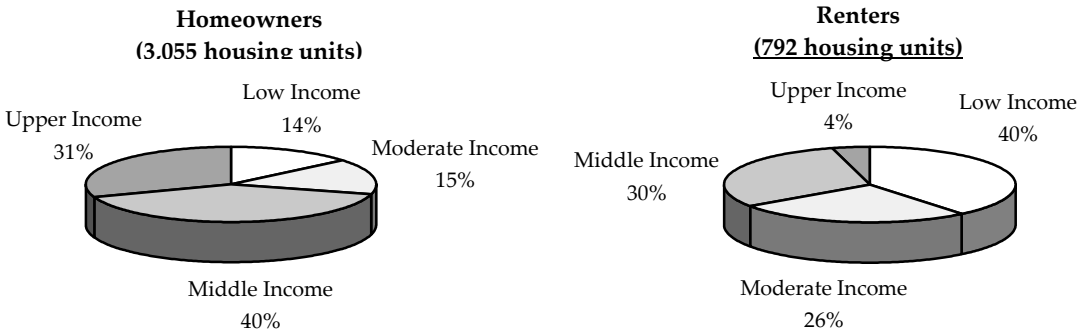
Another indicator of change in housing affordability is to compare the increase in average housing costs to the increase in median income. Between 1990 and 2000, the average price of single family homes rose by 26% (\$152,000 in 1990 to \$240,000 in 2000, Banker & Tradesman). Over this same period, the median household income in Pepperell increased by 46.5% (\$44,492 in 1990 to \$65,163 in 2000, U.S. Census). This indicates that homeowners enjoyed increased levels of affordability over that period. However, since 2000, prices of single family homes have risen to \$370,000 (average price for January-May 2005), a 54% increase. Comparatively, incomes in the Lowell PMSA have increased by only 24% since 2000.

Housing Gap

New two-bedroom apartments can rent for as high as \$1,300 per month while older units may rent for as low as \$800. Using an average market rent of \$1,000, a household must have an annual income of \$40,000. 26% of Pepperell households do not meet this threshold. To afford the average 2005 (January–May) selling price for a single family home of \$370,000, a household must have an annual income of \$110,000. 91% of Pepperell households do not meet this income threshold.

Gap Analysis
A gap analysis looks at what types of housing are available in Amesbury. It compares what the population can afford, based on median household incomes, and what types of housing might be desired, based on household types. The analysis considers both homeowners and renters.

Figure 8, Pepperell Residents by Income Level



Source: Income data is from 2000 U.S. Census.

Homeowners

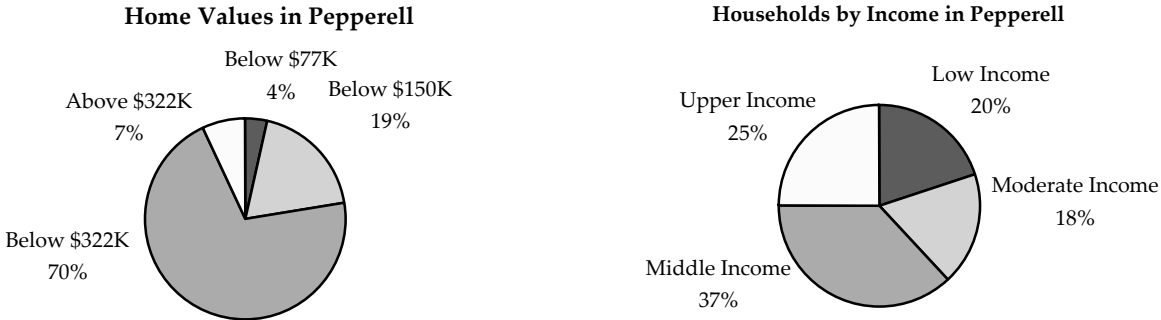
There is a housing gap between the number of houses available and the number of households with incomes large enough to pay for the available housing. The greatest deficit is in homes affordable to low income households, which comprise 20% of all households in Pepperell. At this income, households can afford the price of a house below \$77,000; however, almost none of the housing stock falls in this price range and not enough housing is being built at this price range. This results in many current homeowners facing high cost burdens (see Table 19 above) and would-be first-time homebuyers who cannot find affordable homes. Figure 9 illustrates the income thresholds for affordable living units based on household income levels.

Table 20, Affordable Home Prices, Town of Pepperell

Family of 3	2006 Affordable Home Values	2000 Affordable Home Values
Low Income (50% AMI)	106,000	75,000
Moderate Income (80% AMI)	177,000	115,000
Middle Income (100% AMI)	300,000	233,000
Upper Income (>100% AMI)	>300,000	>233,000

Price calculated for 30 year mortgage at 6.0% rate with 5% down payment and \$300/month for mortgage insurance and property taxes, such that monthly housing costs do not exceed 30% of income.

Figure 9, Homeowners Affordability Index



Source: 2000 US Census
Calculated assuming 5% down, 6.0% APR mortgage for 30 years, 30% of income for housing costs and \$300/month for taxes and insurance

In fact, the number of low income renters who could potentially become first time homebuyers far exceeds the number of homes that are reported to fall within an affordable price range. Together with homeowners, low income households outnumber affordable housing units more than 8:1. Moderate income households are in a better position to find affordable housing, however the stock of housing affordable to both low and moderate income households still falls below what is needed. Meanwhile the number of homes that are affordable to middle and upper income households is more than adequate to serve the needs of households within the moderate income range. *This data most likely understates the lack of affordable ownership housing, as the home values reported to the Census were frequently below the potential selling price if the homes had been placed on the market.*

Table 21, Homeowners Housing Gap¹

Income Group	Maximum Affordable Home ²	Households in Income Range				Owner-Occupied Units in Price Range			
		Owners	Renters	Total	% of Households	Number	% of Owner Units	Cumulative	Cumulative %
Low Income 50% of median	\$77,000	424	311	735	19%	88	4%	88	4%
Moderate Income 80% of median	\$150,000	468	206	674	18%	486	19%	574	23%
Middle Income 150% of median	\$322,000	1,226	241	1,467	38%	1,777	70%	2,351	93%
Upper Income >150% of median	>\$322,000	937	34	971	25%	189	7%	2,540	100%
		3,055	792	3,847	100%	2,540	100%		

¹ Based on 2000 household income and home values, the last year for which town-level data is available. From 2000 to 2005, median sales price for single family homes in Pepperell rose by 54%, while incomes in the Lowell PMSA have risen by only 24%.

² Price calculated for 30 year mortgage at 6.25% rate with 5% down payment and \$200/month for mortgage insurance and property taxes, such that monthly housing costs do not exceed 30% of income.

Housing Gap: Renters

Currently market rate one-bedroom apartments rent for between \$600 and \$700/month and two bedrooms rent for about \$800/month. At these rates, older one- and two-bedroom apartments fall within the low-income affordability range defined for four-person households. However, rents for newly constructed two-bedroom apartments are considerably higher; to afford a \$1,300 monthly rental, a household must have an income of \$52,000. Additionally, over 64% of renter households in Pepperell have only one or two members, hence a lower standard for affordability should be considered, as shown in Table 22.

Table 22, Income and Rental Affordability¹

Family of 2	2006 Income	2006 Affordable Rent	2000 Income	2000 Affordable Rent	Households	Units ²
Very Low Income (30% AMI)	\$19,300	\$485	\$15,600	\$390	170	81
Low Income (50% AMI)	\$32,150	\$800	\$25,950	\$650	106	208
Moderate Income (80% AMI)	\$46,400	\$1,160	\$40,150	\$1,000	180	278
>80% AMI	\$64,300	\$1,600	\$51,900	\$1,300	345	741

¹ Note: Housing subsidy programs use their own eligibility standards.

² Reported in the U.S. Census by gross rent

There is a substantial shortage of rental housing affordable to two-person households with very low incomes, while low- and moderate-income households are apparently adequately served in the Pepperell rental market. According to the U.S. Census, 33% of renters (165 households) spent more than 30% of their income on housing in 2000. In addition, while many renters may currently be paying below-market rents for their apartments, such low rents are often not transferable to new tenants if the apartment turns over, so that the availability of apartments that are available to very low income households is probably less than indicated by Census data.

Housing Needs by Age

When these households are examined in terms of age, it is possible to determine which subsections of the population are carrying more of the burden. 17.6% of homeowners aged 35 to 54 years spend over 30% of their income on housing costs, the highest percentage of all age groups. This percentage decreases slightly for homeowners between the ages of 55 and 74 who face a high cost burden. 13.6% of elderly (75 years and older) homeowners spend over 30% of their incomes on housing.

Table 23, Homeowner Housing Costs as Percent of Household Income by Age

% of income spent on housing costs	15-34 years		35-54 years		55-74 years		75 years and older	
	Number	%	Number	%	Number	%	Number	%
Less than 20%	126	33.6	812	50.4	316	63.4	18	27.3
20.0-24.9%	105	28.0	280	17.4	52	10.4	31	47.0
25.0-29.9%	99	26.4	225	14.0	41	8.2	8	12.1
30.0-34.9%	17	4.5	112	7.0	17	3.4	0	0.0
35.0% and above	28	7.5	171	10.6	64	12.8	9	13.6
Total Homeowners with High Cost Burden	45	12.0	283	17.6	81	16.2	9	13.6
Not computed	0	0.0	10	0.6	9	1.8	0	0.0

Source: U.S. Census

For every age group, with the exception of 35 to 54 years, a higher percentage of renters than homeowners face a high cost burden. Over a quarter of elderly renters spend over 30% of their income on housing costs while 43% of renters aged 55 to 74 years spend 30% or more of their income on housing costs. In terms of percent income, rental costs are clearly much higher than housing costs in Pepperell. This illustrates the need for an increase in affordable rental stock in the Town, particularly for the elderly and young people.

Table 24, Renter Housing Costs as Percent of Household Income by Age

% of income spent on housing costs	15-34 years		35-54 years		55-74 years		75 years and older	
	# of units	% of units	# of units	% of units	# of units	% of units	# of units	% of units
Under 20%	142	47.0	143	47.5	35	34.3	0	0.0
20.0-24.9%	76	25.2	66	21.9	8	7.8	17	23.9
25.0-29.9%	23	7.6	43	14.3	8	7.8	27	38.0
30.0-34.9%	8	2.7	9	3.0	9	8.8	0	0.0
35.0% and above	46	15.2	40	13.3	35	34.3	18	25.4
Total Renters with High Cost Burden	54	17.9	49	16.3	44	43.1	18	25.4
Not computed	7	2.3	0	0.0	7	7.0	9	12.7

Source: U.S. Census

Housing Needs

A range of housing options is needed to serve Pepperell's households, both in terms of price and style of unit. Pepperell is fortunate to have a relatively diverse housing stock, with 73% single family homes and the balance consisting of multifamily, two family and townhouse structures. The town's historic development pattern provides for varying housing styles and densities in core villages and rural neighborhoods. Recent development, however, has contributed mostly single family homes on individual lots, which do not serve segments of the town's growing population.

If current trends continue, the town will have considerably less housing diversity in the future, and Pepperell's young adults, childless professionals and first-time homebuyers will find fewer suitable homes that allow them to stay in the community. More multifamily, townhouse, condominium and rental housing is needed to maintain a balanced housing stock. Desirable types of housing for these populations include:

- Smaller, two-three bedroom starter homes
- Two, three, and four family homes
- Garden-style condos
- Townhouses
- Rental units
- Community with a mix of housing types

There is also a need for housing suitable for small households (i.e., single individuals), elderly, and disabled persons. Types of housing that are suitable these populations include:

- Age-restricted alternatives such as garden-style rental units or condos
- Non age-restricted accessible housing
- Housing with services or assisted living facilities
- In-law apartments
- Community with a mix of housing types

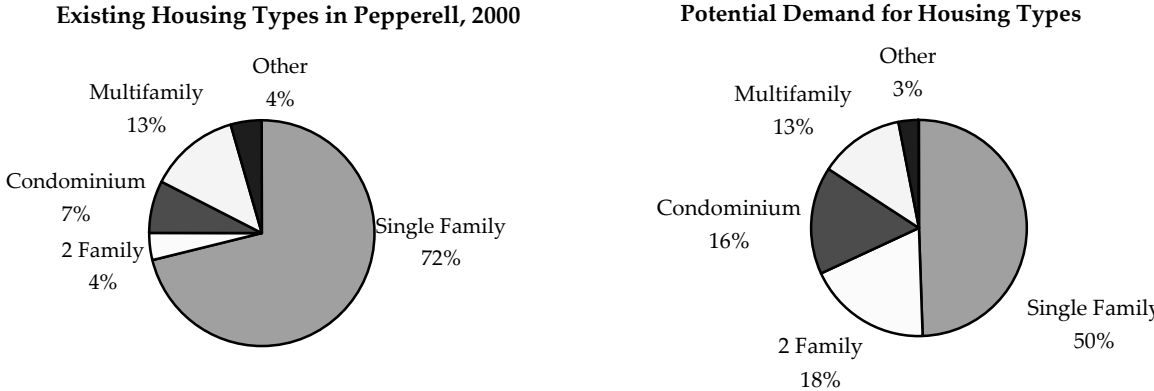
The Gap Analysis demonstrated that there is inadequate housing in the low and moderate price range to serve low- and moderate-income households (as of the 2000 Census)—660 housing units compared with 1,400 households. The town has a significant proportion of low income households who are not adequately served with the existing housing stock. There are 735 households in this income range (including homeowners and renters), and fewer than 90 homes affordable to these households. Rental housing for very low income households is needed, as well as homeownership opportunities for first time homebuyers in the low income range. The town has only 122 units of subsidized housing; moderate-income households may be priced out of the housing market as home prices inflate faster than incomes. An effort is needed to create more deed restricted housing in the moderate income price range to preserve the level of affordability that the town has traditionally offered.

Around 165 renters and 420 homeowners indicated a high cost burden. About two-thirds of households with a high cost burden are between the ages of 35 and 53, including renters and homeowners. A third of renters with a high cost burden are over age 55.

In particular, the needs of the elderly population are unmet. Of the three mobile home parks in Pepperell, the age-restricted development has the highest demand. 43% of renters aged 55-74 have a high cost burden, while over a quarter of renters over 75 years spend over 30% of their monthly incomes on housing. As the elderly population is projected to increase over the next 20 years, their need for housing will continue to rise.

The pie chart below depicts the percentages of existing housing types in Pepperell. An alternative vision which illustrates a mix of housing types more in line with Pepperell’s housing needs has been provided. **This diagram is intended to suggest the direction that the town needs to move in, in order to ensure that housing needs are addressed. This illustration is not intended to represent quantitative goals for the town’s future housing mix.**

Figure 10



Potential Demand for Housing Types in Figure 10 is derived from Table 25 which shows one possible estimate of needed housing types in Pepperell for different types of households.

Table 25, Housing Demand: Alternative Housing Types

Household Types	Total Households	Actual % of Households	Estimated Needed Housing Types ¹				
			Single Family	Two Family	Condo	Multi-family	Other ²
Elderly (Age 85+)	56	1.5%	6 10%	6 10%	6 10%	10 20%	28 50%
Older Adults (Age 65 – 84)	440	11.4%	176 40%	44 10%	44 10%	88 20%	88 20%
Middle-aged Without Children (Age 35 – 64)	893	23.2%	446 50%	179 20%	223 25%	45 5%	0 0%
Young Adults Without Children (Up to age 34)	724	18.8%	109 15%	181 25%	217 30%	217 30%	0 0%
Two-Parent Households	1,440	37.5%	1,080 75%	216 15%	72 5%	72 5%	0 0%
Single Parent Households	292	7.6%	88 30%	88 30%	58 20%	58 20%	0 0%
Total (% of total)	3,845	100.0%	1,905 50%	714 18%	620 16%	490 13%	116 3%

(1) Half of the two-family homes and all of the multifamily homes are assumed to be rentals. Condos and single family homes are assumed to be for ownership.
 (2) Includes mobile homes; may include assisted living or other group living arrangement.