

## II. INTRODUCTION AND OVERVIEW

### WHAT IS A MASTER PLAN?

A Master Plan is comprehensive planning document that establishes long-term policy recommendations for a community’s physical development, and outlines implementation strategies that address land use issues, transportation, community facilities and services, the local economy, and the environment. Chapter 41, Section 81D of the Massachusetts General Laws states:

*“A planning board established in any city or town under section eighty-one shall make a master plan of such city or town or such part or parts thereof as said board may deem advisable and from time to time may extend or perfect such plan. Such plan shall be a statement, through text, maps, illustrations or other forms of communication that is designed to provide a basis for decision making regarding the long-term physical development of the municipality. The comprehensive plan shall be internally consistent in its policies, forecasts and standards.”*

In general, communities use the Master Planning process to understand and manage future growth and development in remaining undeveloped areas. While limited areas of Chelmsford may be subject to such development pressure in the future, much of the town is built out. Therefore, Chelmsford’s 2010 Master Plan explores a broader range of issues focused on managing and guiding redevelopment over the next decade.

The Master Plan is one of the main policy tools utilized by the Board of Selectmen, Planning Board, the Zoning Board of Appeals, the Conservation Commission, and the Community Development Department, and other local decision-makers. It is important to note that the Master Plan does not replace other important policy documents prepared by the Town, such as the *Affordable Housing Production Plan* or the *Open Space and Recreation Plan*, but should be used to complement these planning documents.

The extensive public participation process utilized to help formulate the recommendations set forth in this Master Plan ensured that the document reflects the needs and desires of the community. However, in recognizing that communities change over time, the Master Plan should be viewed as a flexible and ever-evolving document. Therefore, the recommendations set forth should be periodically re-evaluated in the interim period before a new Master Plan is created to ensure that they continue to align with the needs of the community.

## **PREVIOUS MASTER PLANS IN CHELMSFORD**

The Town of Chelmsford has prepared Master Plan documents several times over the past fifty years. The first master plan was developed 1963, and subsequent plans were completed in 1975, 1986 and 1996. In earlier versions of the Master Plan, much of the focus was on promoting development and economic growth to accommodate the burgeoning population and workforce in Town and the overall region. Between 1960 and 1990, for example, Chelmsford's total population increased by 114%, from 15,130 people to 32,383 people, while the total number of housing units increased by 160.3%, from 4,540 to 11,816 units. Similarly, between 1971 and 1991, the amount of developed land in Chelmsford grew by 112% (totaling 7,880.92 acres in the latter year), while the total undeveloped land decreased by -37.5% to 6,946.73 acres. These trends are indicative of a community that was rapidly growing, and developing land in accordance with its population increase.

By 1996, however, attention shifted toward striking a balance between continued economic and housing growth, and preserving the quality of life for residents of the town. For many, retaining quality of life meant preserving the Town's natural, social, and cultural resources in the face of encroaching development. Today, many believe that Chelmsford is approaching build-out capacity. During the public process undertaken for this document, some stakeholders expressed an interest in promoting economic growth and development without further utilizing undeveloped land. This objective is supported by the Master Plan Committee and is evident throughout the body of this document which takes a balanced approach to future growth.

## **THE 2010 MASTER PLAN DEVELOPMENT PROCESS**

In 2007, the Planning Board began discussions regarding the process for updating the 1996 Master Plan, and at the Spring 2008 Town Meeting \$70,000 was approved for Comprehensive and Strategic Planning. In Fall of 2008, the Town contacted their regional planning agency, Northern Middlesex Council of Governments (NMCOG), for technical assistance in updating the Master Plan.

In December 2008, the Planning Board appointed a Master Plan Committee, comprised of nine voting members, and the town's Director of Community Development. The voting members of the Master Plan Committee are listed Table 1.1 on the following page, and the Committee's advisors are listed in Table 1.2. The Committee includes representation from the Board of Selectmen, Planning Board, Zoning Board of Appeals, Conservation Commission, Town Meeting, Community Preservation Committee, the business community and town residents at large.

**TABLE 1.1  
MASTER PLAN COMMITTEE MEMBERS, 2010**

Member Name	Represents
Judy Tavano	Zoning Board of Appeals
Philip Eliopoulos	Board of Selectmen
Jackie Hoonjan	Chelmsford Business Association
James Lane	Planning Board
David McLachlan	Conservation Commission
Sheila Pichette	Town Meeting Representative
Linda Prescott	Community Preservation Committee
Peter Robson	Town Resident
George Zaharoolis	Planning Board

**TABLE 1.2  
MASTER PLAN ADVISORS**

Advisor	Affiliation
Evan Belansky	Community Development Director
Vivian Merrill	Recording Secretary
Jay Donovan	Northern Middlesex Council of Governments
Beverly Woods	Northern Middlesex Council of Governments

In January 2009, the Master Plan Committee began meeting bimonthly. As with previous editions of Chelmsford's Master Plan, this document was prepared with extensive input and feedback from many stakeholders living and working in the community. The Master Plan Committee spearheaded a rigorous public outreach campaign, and facilitated a participatory process that is summarized below. As shown in Table 1.3 below, six public input sessions were held, drawing the participation of well over 250 residents and business representatives from across the Town.

**TABLE 1.3  
PUBLIC INPUT SESSIONS: MARCH 2009 – OCTOBER 2010**

Event	Date	Number of Participants
Initial Visioning Session	March 24, 2009	57
Business Visioning Session	May 6, 2009	25
Public Forum on Land Use/ Zoning, Economic Development, and Housing	June 3, 2009	60
Public Forum on Transportation	September 17, 2009	25
Natural, Cultural, and Historic Resources	October 7, 2009	41
Public Input Session on the Draft Master Plan document	September 16, 2010	54

*Source: NMCOC*

In addition to the six public input sessions, the Master Plan Committee invited stakeholders to provide input during at their bimonthly meetings. The Committee conducted interviews with thirty (30) local stakeholder groups. In order to help focus the conversation, a list of discussion questions were provided to interviewees prior to the meeting. Stakeholders were also encouraged to submit written comments, participate in the various public input sessions, submit

comments electronically through the Town’s website, or speak during open session at any meeting of the Master Plan Committee. A list of the organizations interviewed as part of this public input process is provided below:

- ◆ Community Development Department
- ◆ Permanent Building Committee
- ◆ Fire Department
- ◆ Police Department
- ◆ School Committee
- ◆ School Superintendant
- ◆ Economic Development Commission
- ◆ Lowell Regional Transit Authority (LRTA)
- ◆ Conservation Commission
- ◆ Historic Commission
- ◆ Community Preservation Committee (CPC)
- ◆ Bicycle and Pedestrian Advisory Committee (BPAC)
- ◆ Planning Board
- ◆ Board of Selectmen
- ◆ Department of Public Works (DPW)
- ◆ Emergency Management Director
- ◆ Chelmsford Housing Authority
- ◆ Chelmsford Senior Center
- ◆ Chelmsford Public Library
- ◆ Chelmsford Open Space Land Stewards
- ◆ Chelmsford Center Water District
- ◆ Building Department
- ◆ Capital Planning Committee
- ◆ Zoning Board of Appeals
- ◆ Sewer Commission
- ◆ Assessors Department
- ◆ Board of Health
- ◆ Chelmsford Finance Committee
- ◆ Chelmsford Business Association
- ◆ Town Manager
- ◆ Slow Growth Initiative
- ◆ Affordable Housing Committee

The Master Plan Committee maintained a Master Plan blog, and offered a standardized public comment form on their website that interested parties could fill out and submit for review. All of the documents produced during the planning process were made available for public review and comment, via the NMCOG website.

## **ORGANIZATION AND OVERVIEW OF THE 2010 CHELMSFORD MASTER PLAN**

This section provides a summary of the organizational layout of the updated Master Plan document and includes the Vision Statement and goals adopted by the Master Plan Committee.

### **A. Contents of the 2010 Master Plan**

This updated Master Plan for the Town of Chelmsford is organized into nine primary components. Section I contains a letter from the Master Plan Committee to the residents of Chelmsford. The introductory section (Section II) provides an overview of the master plan process, includes a discussion of the Vision Statement and Goals, and a brief demographic profile of the community.

Section III focuses on Land Use Planning and Zoning. In addition to a synopsis of past land use development patterns in Chelmsford, it offers a discussion of the Town’s existing Zoning Bylaw and the types of uses permitted under these regulations. The Land Use and Zoning chapter includes a presentation of the issues and opportunities inherent to land use planning and zoning, as well as a set of recommendations for how to best move forward in a way that promotes

economic prosperity without sacrificing the natural, historical, and cultural integrity of the community.

Section IV relies heavily on demographic and industry data to assess the current state of Economic Development in Chelmsford. The chapter launches with a brief economic statistical profile of the community, followed by a discussion of existing economic and business conditions in Town—paying special mind to the current economic crisis of the past two years. From there, community assets and liabilities are presented, followed by an infrastructure analysis, and an examination of commercial and industrial activity. Another important element of this chapter is the discussion about striking a balance between economic development and quality of life - a central theme throughout this plan. Based on this discussion, a list of economic development opportunities, including potential economic redevelopment sites, is presented. The chapter concludes with an issues and opportunities discussion, coupled with a list of economic development recommendations.

Section V looks at Transportation Planning in Chelmsford. It includes a description of the existing transportation network within the community, including commuting patterns within the town, traffic volumes, crash statistics and the current state of the Town’s overall transportation infrastructure for all transportation modes (auto, transit, commuter rail, bicycle and pedestrian). A detailed operational and safety analysis is provided for fifteen key intersections and improvement recommendations are outlined to address deficiencies identified at each location. As with other sections of the Master Plan, issues and opportunities related to transportation are presented and discussed, and a comprehensive list of recommendations is provided.

Section VI assesses Housing issues in Chelmsford. It begins with an overview of the various neighborhoods in Town, and then moves into an analysis of the existing conditions of the housing stock and housing market. Topics covered within this analysis include housing development and sales trends; housing needs, as determined by demographic data available for the community; affordable housing efforts in Chelmsford; issues, opportunities, and recommendations for sustainable housing production in the community. One of the most important components of this chapter is the list of sites identified as potential housing sites developed through extensive conversations among the Master Plan Committee, Town staff, and other local stakeholders.

Section VII examines policy and planning issues related to Open Space and Recreation. Topics covered in this chapter include existing conditions, local capacity, open space and recreation planning efforts, and identified community needs. The chapter also includes an analysis of issues and opportunities, as well as a set of recommendations.

Section VIII focuses on the Natural, Historical and Cultural Resources of Chelmsford. It includes a discussion of existing environmental, historical and cultural assets, and an analysis of the issues and opportunities inherent to natural, historical and cultural protection and preservation in Chelmsford. Finally, a set of recommendations about how best to conserve these important resources is presented.

The ninth section of the plan examines Municipal Facilities and Services. An inventory of existing town-owned facilities is provided and the physical characteristics and condition of each facility is assessed and described. Similarly, an inventory of town services is presented and opportunities for improving the efficiency and quality of service delivery are discussed. Similar to other sections, issues and opportunities regarding future facility and service needs is provided, along with a set of recommendations.

The final section of the Master Plan includes the Implementation Plan, which consists of a matrix containing each recommendation outlined in the Master Plan. The table identifies the town department, board, commission or committee with primary implementation responsibility for each specific recommendation. In addition, a timeframe for implementation is established.

## **B. The Master Plan Vision Statement**

Over the course of the master plan development process, the Master Plan Committee has worked to craft and refine the town's Vision for the Future, which is presented below. The Master Plan has been created with an eye toward guiding the community in a fashion that will ultimately achieve this vision:

*“The Town is a vibrant, safe and pleasant place to live and work. Pride in the community is evident throughout Town. The educational system in town is known for its high standard of excellence, adding to the attractiveness of the Town. There are diverse and affordable housing opportunities for people of all income levels, lifestyles and age groups. Our Center Village contains a mix of business and residential uses and is an important cultural and economic asset to the community. The ongoing use of revitalized mill structures and the North Town Hall in Vinal Square is testimony to the Town's preservation and celebration of its historic resources. Town government is responsive to the needs of the community and has a high level of civic engagement. There is strong and open communication between town officials, citizens and the business community.*

*The Town's infrastructure and information architecture is adequate to meet the Town's current needs and to serve as the foundation of sustainable future growth. We enjoy the town-wide system of parks, open spaces and recreation areas that enhance our quality of life. The transportation system is safe and efficient, incorporating the needs of all residents through roadway improvements, enhanced transit service and facilities designed to accommodate the needs of pedestrians and bicyclists. Sewer and water service is available throughout town and the capacity of the system is sufficient to handle current and future demand.*

*The Town welcomes responsible redevelopment and new development that promotes sustainable development practices, broadens the community’s tax base, provides employment opportunities and protects natural and historic resources. We encourage and support businesses through open communication with town government and a streamlined permitting process. The business community continues to show its commitment to the Town through its participation in and support of community activities and organizations.”*

### **C. Principal Goals of the Master Plan**

The following seven (7) goals are the principal goals that have been used to guide the Master Plan development process. A set of sub-goals have also been established and are enumerated on the first page of each section of the plan.

- 1. Land Use and Zoning:** Manage and direct growth, including redevelopment and new development projects, in a manner consistent with the community’s character and ensure that the Town’s zoning and land use policies and practices are consistent with the approved Master Plan.
- 2. Economic Development:** Establish an active economic development program to retain and attract “growth” businesses, which enhance the Town’s tax base and create well-paying jobs in a manner that balances job creation with the quality of life.
- 3. Transportation:** Improve and enhance the community’s established transportation network by promoting alternative transportation modes, expanding public transit options, and implementing traffic improvements and techniques that are directed at alleviating congestion and improving safety.
- 4. Housing:** Promote the development and maintenance of diverse and affordable housing opportunities for Chelmsford residents consistent with the community’s character for all income levels, lifestyles and age groups.
- 5. Open Space and Recreation:** Manage, preserve and protect the open space and recreation resources and invest in the expansion of these areas in order to enhance the quality of life.
- 6. Natural, Historical and Cultural Resources:** Maintain, protect and preserve the natural, cultural and historic resources that provide the Town its unique identity and enhance the quality of life of its residents.
- 7. Facilities and Services:** Provide high quality, cost effective and accessible services to meet the changing needs of the Town’s residents and businesses.

## DEMOGRAPHIC PROFILE

As part of the introduction to the 2010 Chelmsford Master Plan, the demographic profile of the community provides some standard and comparative data related to population, households and income. This demographic profile provides a linkage between the 1996 Chelmsford Master Plan and the 2010 Master Plan. More specific data related to the subject areas, such as economic development, housing or transportation, are included in their respective chapters.

### A. Population Characteristics

Within the population section, there is information on Chelmsford population figures for 1990 and 2000, as well as population estimates for 2005 through 2009. The racial composition and foreign-born status of the population in 1990, 2000 and 2008 are also discussed. Population projections for Chelmsford and the Greater Lowell region are provided for 2010 through 2030, while population projections for the various age cohorts in Chelmsford are also provided.

The population for the Town of Chelmsford increased from 32,383 in 1990 to 33,858 in 2000, which represented a growth rate of 4.6%. This growth rate was among the lowest in the Greater Lowell region, which grew by 6.7% during this same period of time. Only the City of Lowell at 1.7% and the Town of Billerica at 3.6% had lower population growth rates between 1990 and 2000. The U.S. Census released new population estimates for the Greater Lowell region as of July 1, 2009. Based upon these population estimates, the Greater Lowell region experienced a growth rate of 2.4% between the U.S. Census figures (281,225) in April 2000 and the estimated figures (287,875) for July 1, 2009. Compared to the rest of the region, Chelmsford had the smallest positive growth rate during this period, increasing by only 0.7%. As shown in Table 1.4 below, the population growth in Chelmsford, Billerica (2.3%), Dracut (3%), Dunstable (19.3%), Pepperell (3.3%), Tewksbury (6.1%), Tyngsborough (8.1%) and Westford (9%) offset the slight population decrease in the City of Lowell (0.7%). The Town of Chelmsford actually experienced a decrease in its population estimates from 2008 to 2009.

**TABLE 1.4**  
**GREATER LOWELL POPULATION AND POPULATION ESTIMATES: 1990 - 2009**

Community	4/1/1990	4/1/2000	7/1/2005 (estimated)	7/1/2006 (estimated)	7/1/2007 (estimated)	7/1/2008 (estimated)	7/1/2009 (estimated)
Billerica	37,609	38,981	40,069	41,391	41,616	41,844	39,865
<b>Chelmsford</b>	<b>32,383</b>	<b>33,858</b>	<b>33,852</b>	<b>33,707</b>	<b>34,302</b>	<b>34,409</b>	<b>34,111</b>
Dracut	25,594	28,562	28,971	29,385	29,273	29,501	29,415
Dunstable	2,236	2,829	3,163	3,222	3,265	3,323	3,375
Lowell	103,439	105,167	103,383	103,229	103,196	103,615	104,400
Pepperell	10,098	11,142	11,439	11,412	11,324	11,382	11,508
Tewksbury	27,266	28,851	29,120	29,418	29,366	29,543	30,597
Tyngsborough	8,642	11,081	11,369	11,542	11,773	12,019	11,980
Westford	16,396	20,754	21,520	21,507	21,626	22,066	22,624
<b>NMCOG Region</b>	<b>263,659</b>	<b>281,225</b>	<b>282,886</b>	<b>284,813</b>	<b>285,741</b>	<b>287,702</b>	<b>287,875</b>

Source: U.S. Census for 1990 and 2000 and U. S. Census Population Estimates for 2005-2009 as of July 1, 2009.

In terms of racial composition, the town’s population in 1990 was comprised principally of white residents (96.3%). According to the 1990 U.S. Census, the town’s minority populations consisted of black (.5%), American Indian (.1%), Asian (3.1%), other race (0.02%) and Hispanic/Latino (1%). Even though Chelmsford is still a predominantly white community, the number of nonwhite residents living in Town—especially those of Asian descent and those who identify as some “Other” race or multiracial-- has increased substantially in recent years. Table 1.5 below, compares the racial composition of Chelmsford residents in 2000 and 2008.

**TABLE 1.5**  
**RACIAL COMPOSITION OF CHELMSFORD: 2000 AND 2008**

	2000		2008		Percent Change
	Number	Percent	Number	Percent	2000-2008
Total Population (One Race Alone)	32,383	100	32,402	100.00	0.05
White	31,520	97.34	29,395	90.72	-6.74
Black or African American	194	0.60	176	0.54	-9.28
American Indian and Alaska Native	0	0.00	0	0.00	0
Asian	1,550	4.79	2,287	7.06	47.55
Native Hawaiian and Other Pacific Islander	0	0.00	0	0.00	0
Some other race	26	0.08	189	0.58	626.92
Two or more races	311	0.96	355	1.10	14.15
Hispanic or Latino (of any race)	488	1.51	357	1.10	-26.84

*Source: U.S. Census Bureau 2000; 2006-2008 American Community Survey*

According to figures provided in the 2000 U.S. Census and 2006-2008 *American Community Survey*, the total population identified as “white alone” decreased by -6.74% between 2000 and 2008. In 2000, white residents comprised 97.34% of the Town’s total population, but eight years later that rate had decreased to 90.72%. The Black/African American and Hispanic/Latino communities declined as well—decreasing by 9.28% and 126.84%, respectively, during this time period.

In contrast, populations identified as “Asian alone”, “Some other race”, and “Two or more races” notably increased between 2000 and 2008. During this eight year time period, residents of Asian descent grew by 47.55%, comprising 4.79% of the town’s population in 2000 and 7.06% in 2008. While residents identified as “some other race” were still a very small percentage of the town’s population in 2008 (189 residents total, or 0.58% of the Town’s total population), this segment of the population actually grew by 626.92% (26 residents, or 0.08% of the Town’s population) in 2000. Similarly, multiracial residents comprised 0.96% of the Town’s population in 2000, but had increased by 14.15% by 2008, accounting for 1.1% of the local population.

Additionally, the number of foreign-born residents has increased considerably over the past twenty years. In 1990, there were 1,940 foreign-born residents living in Chelmsford. Ten years later that number had grown by nearly a quarter (24.6%) to 2,418 residents. As of 2008, there

were 3,186 foreign born residents living in town. This represents an increase of 31.8% from 2000, and foreign-born residents comprised 9.8% of the Town’s total population in 2008.

In 2007, the Massachusetts Highway Department (MassHighway), which has been renamed as the Massachusetts Department of Transportation (MassDOT), developed population projections for the region through 2030. These population projections were based upon a statewide model that assigned a specific share to each Metropolitan Planning Organization (MPO) region and then to its individual communities. NMCOG provided comments on the draft projections and the final projections were adjusted accordingly. Based upon the population projections established by MassDOT, Chelmsford was expected to increase its population by 3.1% between 2000 and 2010, and by 22.3% between 2000 and 2030. Compared to the rest of the region, as illustrated in Table 1.6 below, Chelmsford’s projected population growth between 2000 and 2030 was the third lowest in the region at 10.8%. Due to the more mature level of development in Chelmsford and the lower population base figures for the other communities, the projected population growth for Chelmsford lags behind the rest of the region. If you compare the population estimate by the U.S. Census for Chelmsford in 2009 (34,111) with the MassDOT projected population for Chelmsford in 2010 (34,920), it appears that the population projections may be higher than the actual population growth.

**TABLE 1.6  
GREATER LOWELL POPULATION PROJECTIONS: 2000-2030**

Community	2000	2010	2015	2020	2025	2030	Percent Change, 2000-2030
Billerica	38,981	40,020	40,470	41,090	41,650	42,150	8.1
<b>Chelmsford</b>	<b>33,858</b>	<b>34,920</b>	<b>35,460</b>	<b>36,110</b>	<b>36,900</b>	<b>37,500</b>	<b>10.8</b>
Dracut	28,562	33,408	34,700	36,900	38,100	40,300	41.1
Dunstable	2,829	3,780	4,300	4,850	5,490	6,120	116.3
Lowell	105,167	108,210	109,790	111,200	112,010	113,270	7.7
Pepperell	11,142	14,150	17,120	18,660	20,300	22,450	101.5
Tewksbury	28,851	30,915	31,700	32,300	32,500	33,270	15.3
Tyngsborough	11,142	13,430	14,610	15,400	16,200	17,400	56.2
Westford	20,754	24,807	26,350	28,490	29,350	31,340	51.0
Greater Lowell	281,225	304,000	314,500	325,000	332,500	343,800	22.3

Source: 2000 U.S. Census and 2007 MassDOT projections in consultation with NMCOG

In terms of the breakout of Chelmsford’s projected population by age, the Metropolitan Area Planning Council (MAPC) developed age cohort projections in 2006 for eastern Massachusetts communities based upon the 1990 and 2000 U.S. Census data. Similar to the MassDOT projections developed in 2007, these age cohort projections were developed across a wider region and then the community figures were developed. These age cohort projections are important in developing future policies for the community to address school enrollment, workforce numbers, housing needs and a variety of other subject areas.

These estimates are important because they speak to changes in the number of youth, the working-age population, and senior citizens living in a community over time. Changes in the age composition of a community have significant implications for the various planning initiatives within a community and there are different needs to be addressed within each age cohort.

Table 1.7 below shows Chelmsford's population broken down by age cohort, based upon the 1990 and 2000 U.S. Census. The age cohort projections for 2010, 2020 and 2030 were developed by MAPC and initially based upon the 1990 U.S. Census. Therefore, there will be some slight variations in the age cohort projection numbers from the population projections developed by MassDOT. However, the age cohort trends will remain consistent.

**TABLE 1.7**  
**POPULATION BY AGE COHORT: 1990-2030**

Age Range	1990	2000	2010	2020	2030	Percent Change, 2000-2030
Under 10 Years	4,240	4,650	3,939	3,708	3,813	-18.0
10-14	2,107	2,398	2,131	1,960	1,947	-18.8
15-19	2,140	1,989	2,184	1,973	1,843	-7.3
20-24	2,311	1,193	1,707	1,592	1,453	21.8
25-34	5,518	4,161	3,385	3,729	3,482	-16.3
35-49	7,727	8,923	7,828	6,502	6,768	-24.2
50-64	5,224	6,126	9,086	10,061	8,965	46.3
65-74	1,906	2,372	2,736	4,117	5,057	113.2
75+	1,210	2,046	1,759	2,003	2,988	46.0

*Source: 1990 and 2000 U.S. Census Projections for 2010, 2020 and 2030 developed by the Metropolitan Area Planning Council, 2006*

According to the projections by MAPC, Chelmsford is expected to experience the largest overall growth in its older populations – 50 to 64 years, 65 to 74 years, and 75+ - and its early working age or college population (20-24 years). Between 2000 and 2030, the 50-75+ population is expected to grow by nearly 6,500 residents or 61.3%. Within this overall population, the 65-74 age group is projected to grow by 113.2% between 2000 and 2030, the 50-64 age group is expected to increase by 46.3%, and the 75+ age cohort will increase by 46%. The early working age or college population (20-24) is expected to grow by 21.8% between 2000 and 2030, which represents the only age group below 50 years of age expected to increase. Overall, then, the community is expected to grow older and will need to address the growing needs of older residents.

The largest decline in any age cohort is in the 35-49 age group, which is expected to decrease by 24.2% between 2000 and 2030. This age group traditionally has the established families in the community. The 10-14 age group is projected to decrease by 18.8% during this time period, while children under 10 years of age are expected to decline by 18%. The early family group, or those in the 25-34 age range, is projected to decrease by 16.3% between 2000 and 2030. The

decline in these age groups will have an impact upon the school system and housing stock within the community.

## B. Household Characteristics

As with the population projections completed by MassDOT, household projections were developed to show the growth of households in the Greater Lowell region. Households are defined by the U.S. Census as being equivalent to “occupied housing units”. According to the projections developed by MassDOT, as reflected in Table 1.8 below, the number of households in Chelmsford is expected to increase by 8.6% between 2000 and 2020 and an additional 3% between 2020 and 2030. Compared to the other eight communities in the Greater Lowell region, Chelmsford has the second lowest projected growth rate for both decades—only slightly higher than the City of Lowell for both timeframes. This growth in the number of households is consistent with the projected population changes in the town and across the region. The total number of households in the NMCOG region is projected to increase by 28,858 (30%) between 2000 and 2030, with the most significant growth occurring in Dunstable (31.1%) and Pepperell (22.4%), which currently have the fewest households in the region.

**TABLE 1.8  
HOUSEHOLDS AND HOUSEHOLD PROJECTIONS: 2000-2030**

Community	2000	2020	Percent Change, 2000-2020	2030	Percent Change, 2000-2030
Billerica	12,961	14,838	14.5%	15,540	4.7%
<b>Chelmsford</b>	<b>12,826</b>	<b>13,929</b>	<b>8.6%</b>	<b>14,340</b>	<b>3%</b>
Dracut	10,450	14,265	36.5%	15,640	9.6%
Dunstable	936	1,732	85.0%	2,270	31.1%
Lowell	37,992	41,119	8.2%	41,770	1.6%
Pepperell	3,845	6,807	77.0%	8,330	22.4%
Tewksbury	9,955	11,845	19.0%	12,370	4.4%
Tyngsborough	3,741	5,572	48.9%	6,440	4.4%
Westford	6,836	10,193	49.1%	11,700	14.8%
NMCOG Region	99,542	120,300	20.9%	128,400	6.7%

*Source: 2000 U.S. Census; projections by MassDOT in consultation with NMCOG*

## C. Income Characteristics

Compared to the other towns in the region, Chelmsford had the third highest median household and median family incomes and the second highest per capita income in 2008. Dunstable and Westford have consistently had higher household and family incomes than Chelmsford, with Westford also surpassing the Town in its per capita income.

Between 1990 and 2008, the median household (MHI) and family incomes (MFI) in Chelmsford increased by 63.6% and 85.4%, respectively, while per capita income (PCI) increased by 93.7%. Compared to other communities in the region, per capita incomes increased at a higher rate

between 1990 and 2008 in Dunstable (98.4%), Pepperell (107.8%), Tyngsborough (118.7%), and Westford (109%). Median Household incomes grew at a higher rate in every community except for Dracut (52.8%). These statistics are illustrated in Table 1.9 below.

**TABLE 1.9  
PER CAPITA, MEDIAN HOUSEHOLD, AND MEDIAN FAMILY INCOMES: 1990-2008**

	1990	2000	2008*	Percent Change,1989-2008
<b>Billerica</b>				
Per Capita Income	\$19,395.00	\$24,953.00	\$32,479	67.5
Median Household Income	\$50,210.00	\$67,799.00	\$85,022	69.3
Median Family Income	\$53,302.00	\$72,102.00	\$95,712	79.6
<b>Chelmsford</b>				
<b>Per Capita Income</b>	<b>\$21,814.00</b>	<b>\$30,465.00</b>	<b>\$42,258</b>	<b>93.7</b>
<b>Median Household Income</b>	<b>\$53,971.00</b>	<b>\$70,207.00</b>	<b>\$88,293</b>	<b>63.6</b>
<b>Median Family Income</b>	<b>\$59,368.00</b>	<b>\$82,676.00</b>	<b>\$110,066</b>	<b>85.4</b>
<b>Dracut</b>				
Per Capita Income	\$16,508.00	\$23,750.00	\$31,046	88.1
Median Household Income	\$45,165.00	\$57,676.00	\$69,012	52.8
Median Family Income	\$48,506.00	\$65,633.00	\$80,226	65.4
<b>Dunstable</b>				
Per Capita Income	\$20,059.00	\$30,608.00	\$39,802	98.4
Median Household Income	\$62,515.00	\$86,633.00	\$102,615	64.1
Median Family Income	\$65,720.00	\$92,270.00	\$116,747	77.6
<b>Lowell</b>				
Per Capita Income	\$12,701.00	\$17,557.00	\$23,009	81.2
Median Household Income	\$29,351.00	\$39,192.00	\$50,944	73.6
Median Family Income	\$35,138.00	\$45,901.00	\$56,878	61.9
<b>Pepperell</b>				
Per Capita Income	\$17,374.00	\$25,722.00	\$36,109	107.8
Median Household Income	\$44,492.00	\$65,163.00	\$82,462	85.3
Median Family Income	\$49,259.00	\$45,901.00	\$97,428	97.8
<b>Tewksbury</b>				
Per Capita Income	\$18,224.00	\$27,031.00	\$33,852	85.8
Median Household Income	\$52,572.00	\$68,800.00	\$87,427	66.3
Median Family Income	\$56,786.00	\$76,443.00	\$99,405	75.1
<b>Tyngsborough</b>				
Per Capita Income	\$16,633.00	\$27,249.00	\$36,380	118.7
Median Household Income	\$48,842.00	\$69,818.00	\$87,887	79.9
Median Family Income	\$52,358.00	\$78,680.00	\$105,993	102.4
<b>Westford</b>				
Per Capita Income	\$21,878.00	\$37,979.00	\$45,728	109
Median Household Income	\$60,566.00	\$98,272.00	\$117,538	94.1
Median Family Income	\$63,047.00	\$104,029.00	\$130,030	106

Data Source: 1990 and 2000 U.S. Census; 2006-2008 American Community Survey

\*Note: 2008 estimates for Dunstable, Pepperell, and Tyngsborough were calculated by applying the average percentage increase for the other 6 communities (between 2007 and 2008) in the region to the 2007 figures developed by Claritis, Inc.

Table 1.10 on the following page illustrates the distribution of incomes for Chelmsford households in 2000 and 2008. This data reveals that in less than a decade, the percentage of households and families earning less than \$100,000 per year, except for the \$10,000-\$14,999 and \$15,000-\$24,999 ranges, *decreased*, while the percentage of households and families earning

more than \$100,000 per year *increased* across all brackets. For example, households earning between \$35,000 and \$49,999 in 2000 accounted for approximately 13.2% of all households and by 2008 they accounted for 8.2% of total households. Conversely, households earning \$150,000 or more per year jumped from 8.4% of all households in 2000 to almost 19.8% in 2008.

**TABLE 1.10**  
**INCOME DISTRIBUTION FOR HOUSEHOLDS IN CHELMSFORD: 2000 AND 2008**

Income Bracket	Number of Households 2000	Percent of Total Households	Number of Households 2008	Percent of Total Households	Percent Change, 2000-2008
Less than \$10,000	523	4.1	425	3.2	-18.7
\$10,000- \$14,999	400	3.1	410	3.1	2.5
\$15,000- \$24,999	887	6.9	913	6.9	2.9
\$25,000- \$34,999	847	6.6	803	6.1	-5.2
\$35,000- \$49,999	1,693	13.2	1,080	8.2	-32.2
\$50,000- \$74,999	2,589	20.2	2,110	16	-18.5
\$75,000- \$99,999	2,247	17.5	1,455	11.1	-35.2
\$100,000- \$149,999	2,555	19.9	3,223	24.5	26.1
\$150,000- \$199,999	672	5.2	1,545	11.7	129.9
\$200,000 or more	413	3.2	1,202	9.1	191
Median Household Income	\$70,207	12,826	\$88,293	13,166	25.8

Source: 2000 US Census, 2006-2008 American Community Survey

Table 1.11 below compares the income distribution for Chelmsford families in 2000 and 2008. The income distribution among families followed similar trends as households: families with lower incomes declined, except for the \$10,000-\$14,000 bracket, between 2000 and 2008. For example, those families earning less than \$10,000 per year declined by 72.8%, those earning between \$15,000 and \$24,999 declined by 12.8%, and those earning between \$25,000 and \$34,999 and \$35,000 and \$49,000 declined by 25.8% and 57%, respectively. Conversely, families earning between \$100,000 and \$149,999, \$150,000 and \$199,999, and more than \$200,000 per year increased by 18%, 120%, and 194.7%, respectively. Part of these trends can be attributed to the economic inflation that has occurred over the past two decades, although the 2008 data accounts for the economic downturn that has occurred since December 2007.

**TABLE 1.11**  
**INCOME DISTRIBUTION FOR FAMILIES IN CHELMSFORD: 2000 AND 2008**

Income Bracket	Number of Families 2000	Percent of Total Families	Number of Families 2008	Percent of Total Families	Percent Change, 2000-2008
Less than \$10,000	147	1.6	40	0.4	-72.8
\$10,000- \$14,999	80	0.9	86	1	7.5
\$15,000- \$24,999	304	3.2	265	3	-12.8
\$25,000- \$34,999	391	4.2	290	3.3	-25.8
\$35,000- \$49,999	1,164	2.4	501	5.6	-57
\$50,000- \$74,999	2,005	21.4	1,337	15	-33.3
\$75,000- \$99,999	1,910	20.4	1,114	12.5	-41.7
\$100,000- \$149,999	2,368	25.3	2,795	31.4	18
\$150,000- \$199,999	616	6.6	1,355	15.2	120
\$200,000 or more	376	4	1,108	12.5	194.7
Median Family Income	\$82,676	9,361	\$110,066	8,891	33.1

Source: 2000 US Census, 2006-2008 American Community Survey