

III. LAND USE AND ZONING

INTRODUCTION

The Land Use and Zoning chapter of the Master Plan examines past development trends and current land use patterns within the community. Land use refers to the physical arrangement of a community's residential, commercial, industrial and institutional development, along with its transportation network, infrastructure and vacant land. Examining spatial development patterns, rates of change, and trends can provide insight into how the town evolved under varying social, economic and environmental conditions. Understanding land use change within a community is a key aspect of the overall Master Plan, and forms the basis for discussion regarding the future direction of the town.

Many individuals confuse land use with zoning. In the 1900s, local governments began to utilize zoning as a means for regulating the amount and location of development. Zoning is simply one tool that local officials may utilize to balance private property rights with the public interest in providing for orderly growth and change. In order to understand how zoning may aid in the accomplishment of community goals, this section of the Master Plan begins with a land use analysis which considers five aspects of Chelmsford's land use pattern:

- What are the features of Chelmsford's land use pattern?
- How did this pattern come about?
- What aspects of the town's land use pattern are essential to the character of the town?
- Is the existing land use pattern consistent with community goals?
- What opportunities exist to guide future development in a fashion consistent with the goals of the Master Plan or other established community goals?

Goal Statement: *Manage and direct growth, including redevelopment and new development, 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.*

- *Give preference to reuse and redevelopment of existing structures and underdeveloped parcels over new development via incentivized redevelopment zoning (EB), while ensuring that such projects are consistent with neighborhood character and respect the historic resources of the town.*
- *Maintain development and permitting policies that encourage a diverse economic base, provide new housing opportunities for Chelmsford residents of all income levels, and target development to appropriate locations.*
- *Reduce and eliminate land use conflicts to the greatest extent possible.*
- *Protect the character of the town's residential neighborhoods.*
- *Enhance the visual appearance of the community through the creation of design guidelines for appropriate areas.*
- *Encourage the preservation of green space in every redevelopment and development project, while striving to reduce the amount of impervious surface.*

Historical Background

A community's physical progression can be traced through its land use history. The Town of Chelmsford has a well-documented history, typified by the growth and development patterns traditionally found throughout New England. One time Native American trails became links between colonial farmsteads. Local taverns and inns served stagecoach routes that connected population centers. The heart of the community focused on the Common, where goods and services were provided for travelers and those residing in the predominantly agrarian community. Chelmsford Center has retained much of its New England village-style character, with small shops located in older, detached buildings, and historic homes which are still utilized as single-family residences.

In the era following World War II, the Town of Chelmsford not only saw a significant increase in population but also the emergence of a society dependent on the automobile. The development of the local highway network, particularly Interstate 495 and U.S. Route 3, brought new economic opportunities to the community, transforming Chelmsford from a rural town to mature suburb. As can be seen in Table 2.1 below, Chelmsford's population grew from 9,408 to 15,130 between 1950 and 1960, a growth rate of 60.8%. During the 1960s, the town population more than doubled from 15,130 to 31,432, making Chelmsford the fastest growing community in the Commonwealth during that time period. Since 1970, population growth has slowed considerably, as evidenced by the fact that the population only increased by approximately 9.2% from 1970 to 2007.

The land use pattern in Chelmsford reflects the substantial changes precipitated by postwar development. The town is a composite of development traditions, many of which pre-date zoning. While local regulations have shaped recent development, it has occurred against the backdrop of older, established neighborhoods. The input received during the Master Plan visioning sessions and at the public input forums has clearly documented strong community support for preserving and respecting the historic fabric of these neighborhoods.

TABLE 2.1
POPULATION TRENDS: 1950-2007

Year	Population	% Change
1950	9,408	--
1960	15,130	60.8
1970	31,432	107.7
1980	31,174	-0.08
1990	33,383	3.9
2000	33,858	4.6
2007 (estimated)	34,128	0.8

Source: 2000 U.S. Census

PAST LAND USE TRENDS

The development of any single tract of land seldom changes the overall character of a community. Over time, however, with the development of open land and the corresponding need for support services, changes in overall community character slowly evolved. Table 2.2 below outlines the changes in land use from 1971 to 2008. This data was compiled by the University of Massachusetts Amherst through aerial photo interpretation. The 2008 UMass data is graphically displayed in the land use map on page 20. This information reflects that amount of land covered by a specific use based on physical attributes and is not parcel specific.

As outlined in Table 2.2, the most dramatic land use change occurred from 1971-1985, when 342 acres of commercial and industrial lands were developed. Although population growth in the community began to level out after 1970, an additional 703 acres of land were converted to residential use between 1971 and 1985. This is largely due to a decrease in household size and the formation of new households.

While residential development continued from 1971-1985, the growth in commercial and industrial development brought the most significant change. The Town's location was key to much of the economic growth that occurred during that period. Eastern Massachusetts experienced record commercial growth over the past few decades due to growth in the high technology sector. Chelmsford's advantageous location along Route 3 and I-495 was largely responsible for its economic vitality and its ability to attract new business and industry, and was a catalyst for the increase in industrial development.

During the period from 1985 to 1999, the rate of new development in Chelmsford slowed considerably, as evidenced in the land use change data. Commercial and industrial land uses grew by 28% and 30% respectively. Residential land uses increased by 13% during this same period. As can be seen in Table 2.2, since 1999, there has been almost no change in land use within the Town of Chelmsford. This can be attributed to a slowing economy and the nearly built-out nature of the community. As shown in Table 2.2, by 2008 approximately 64% of the town's land area was developed, with nearly half of the town's land area in residential use.

TABLE 2.2
LAND USE CHANGE IN CHELMSFORD, 1971-2008 (ACRES)

Class of Land Use	Acres in Use					Percent Change				Town % 2008
	1971	1985	1999	2005	2008	1971-1985	1985-1999	1999-2005	2005-2008	
Commercial ¹	242	334	426	411	414	38%	28%	-3.6%	1%	2.8%
Industrial ²	204	454	592	561	560	150%	30%	-5.3%	-0.2%	3.8%

¹ The McConnell Land Use System defines "Commercial" land uses as general urban and shopping centers.

² The McConnell Land Use System defines "Industrial" land uses as light and heavy industrial.

TABLE 2.2
LAND USE CHANGE IN CHELMSFORD, 1971-2008 (ACRES)

Class of Land Use	Acres in Use					Percent Change				Town % 2008
	1971	1985	1999	2005	2008	1971-1985	1985-1999	1999-2005	2005-2008	
Residential ³	5,758	6,461	7,306	7,163	7,371	12%	13%	-2%	2.8%	50.0%
Other ⁴	8,575	7,529	6,454	6,616	6,406	-12%	-14%	2.5%	-3.2%	43.4%
Summary										
Developed ⁵	7,191	8,380	9,435	9,286	9,499	17%	13%	-1.6%	2.2%	64.4%
Undeveloped ⁶	7,587	6,398	5,343	5,464	5,254	-16%	-16%	2.3%	-3.8%	35.6%
Total	14,778	14,778	14,778	14,750*	14,753*	N/A	N/A	N/A	N/A	100%

Note: 2008 Land Use was updated from the 1999 McConnell Land Use files through orthophotography at a scale of 1 to 400.

**Totals from 2005 and 2008 are due to State methodology changes initiated in 2004.*

Historical Master Planning and Zoning Efforts

The Town of Chelmsford has over forty years of experience with long range master planning, with master plan documents completed in 1963, 1975, 1986, and 1996. The first three master plan documents were completed during periods of rapid growth and were primarily focus on responding to the impacts of that growth and planning for future development. However, the 1996 Master Plan began to focus on the quality as well as quantity of future growth. Section II of the 1996 Master Plan, entitled “Future Land Use Options”, presented three potential build out scenarios: Environmental, Economic and Composite. The document ultimately recommended the composite scenario.

The previous master plans resulted in comprehensive revisions to the Town’s zoning bylaw and map and were reflective of the community’s desires at that time. These changes directly influenced the historical land use patterns and trends, and established a framework for future development activity.

³ The McConnell Land Use System defines “Residential” land uses as of the following: multi-family, smaller than ¼ acre residential lots, ¼ - ½ acre residential lots and larger than ½ acre residential lots.

⁴ The McConnell Land Use System defines “Other” land uses as of the following: Cropland, Pasture, Forest, Wetland, Mining, Open Land, Participation, Spectator and Water Based Recreation, Salt Wetland, Urban Open, Transportation, Waste Disposal, Water and Woody Perennial.

⁵ The McConnell Land Use System defines “Developed” land uses as of the following: Participation, Spectator, and Water Based Recreation, Multi-Family Residential, High, Medium and Low Density Residential, Commercial, Industrial, Urban Open, Transportation and Waste Disposal uses.

⁶ The McConnell Land Use System defines “Undeveloped” land uses as of the following: Cropland, Pasture, Forest, Wetland, Mining, Open Land, Water and Woody Perennial uses.

LAND USE CHARACTERISTICS OF EXISTING PARCELS

Land use coverage information provided through the University of Massachusetts/McConnell data differs significantly from parcel-based land use statistics. Since land use coverage information maps account for a community's entire geography, they include features such as open water and roadways. In contrast, tax assessor parcels maps represent land in recorded plans used to determine the appraised value of property. Given the different characteristics of these two data sources, it is not possible to directly compare one with the other, but both sources provide important insight into the development patterns within town and show similar trends. Table 2.3 below provides parcel-based land use statistics from the tax assessor's database for FY 2008.

**TABLE 2.3
CURRENT USES OF LAND IN CHELMSFORD (2008)**

Class of Use	Acres	% Total Acreage
Residential		
Single-family dwellings	7,193	62.26
Two-family dwellings	126	1.09
Three-family dwellings	39	0.34
Condominiums	401	3.47
Mobile homes	39	0.34
Four to eight unit apartments	10	0.08
Apartments with more than eight units	54	0.47
Rooming and boarding houses	2	0.02
Total	7,864	68.07
Commercial		
Hotels, Motels and Nursing Homes	28	0.35
Storage Warehouses and Distribution Facilities	74	0.64
Retail Trade (restaurants, shopping centers/malls, depart. stores, etc.)	140	1.21
Auto-Related Uses	30	0.26
Banks, General and Medical Offices	161	1.39
Indoor and Outdoor Recreational Facilities	32	0.28
Misc.	8	0.07
Total	473	4.09
Industrial		
Manufacturing, R&D	489	4.23
Public Utilities	57	0.49
Total	546	4.72
Exempt Land		
Municipal	1,870	16.19
Colleges, Churches, 121A corp., Housing Auth. and Charitable Org.	228	1.97
State Land	307	0.27
Total	2,405	20.82
Chapter 61, 61A, 61B Land	265	2.30
Grand Total	11,553	100%

Source: Chelmsford Assessor's Database for FY 2008

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MAP 1: LAND USE MAP

Residential Land Uses

As shown in Table 2.3 above, 68 % of the town's land is used for residential purposes, of which 92% is utilized for single-family residences. An overwhelming majority of the homes in Chelmsford are detached single-family residences built in tract subdivisions. An additional 6% of the community's acreage is occupied by other residential uses including condominiums, multi-family housing, and rooming/boarding houses. Residential uses are distributed consistently throughout town, with single-family homes being most prevalent in West Chelmsford, the Westlands, Ward Corner, South Chelmsford, and North Chelmsford. Homes clustered around the town's lakes and ponds reflect the character of a one-time vacation area with small-size lots and modest cottage-style houses, most of which have been converted to year-round residences.

Multifamily residences and condominiums are interspersed throughout town, with concentrations in North Chelmsford along Middlesex Street, Tyngsborough Road and on Littleton Road near the Westford town line. Condominiums represent approximately 5% of the residential land uses and 3.47% of the overall land use acreage. Two- and three-family homes make up a very small percentage (1.43%) of the land use in the town overall and only 2% of the residential land.

Commercial Land Uses

Commercial land uses make up approximately 4% of the total land use area in town, according to the assessor's database. Chelmsford has a diverse commercial base comprised of retail, hotels, restaurants, financial establishments, and service type businesses. A diversity of land use types and varying patterns of commercial land use can be found throughout Chelmsford.

Shopping center and suburban retail plaza development is prevalent along Route 110 between the Center and Route 3, and within the Drum Hill area. Office/R&D development occupies much of land along Route 129 in the area of the Route 3 interchange. Smaller scale village-style businesses are found in Chelmsford Center and the Vinal Square area of North Chelmsford, while pockets of neighborhood-style retail establishments are interspersed throughout the community. Commercial development is generally concentrated in the following geographic areas:



Drum Hill commercial retail district

Chelmsford Center

The historic commercial and civic center of Chelmsford provides a variety of retail, professional office and service businesses. The Town Hall and Town Library are located in close proximity to newer, automobile-oriented commercial retail establishments including a grocery store, a discount retail department store, and strip-small style development along Summer Street and Route 110. The heart of the town center contains a mix of specialty retail, restaurants and service type businesses.



Retail uses in Chelmsford Center

Drum Hill and Technology Drive

Drum Hill is one of the town's major retail corridors. Located adjacent to Route 3, and bordering the City of Lowell, commercial land use patterns within the Drum Hill area consist of broad mix including professional offices, shopping centers, banks, restaurants, medical/surgical services, and a hotel. The commercial district is anchored by a supermarket and large discount department store. The remaining retail activity consists primarily of medium-sized stores, serving local rather than regional needs.

Vinal Square/North Chelmsford

A small cluster of businesses is located in North Chelmsford around the historic village of Vinal Square. This area, located at the intersection of Route 40, Middlesex Street and Route 3A, is home to a variety of neighborhood retail and service businesses. Renovated historic mill complexes are located south of Vinal Square, along Middlesex Street and Route 3A, and provide office, industrial and additional retail space. Scattered pockets of neighborhood retail development can be found along Route 3A north of Vinal Square to the Tyngsborough town line.

South Chelmsford Village

South Chelmsford Village is a small historic village located along Route 27 and Maple Road and contains limited retail space, a local farm stand, and a few large industrial buildings.

Route 110/Littleton Road

Route 110 (Littleton Road) is the town's main east/west corridor and traverses the center of Town. The corridor accommodates a variety of retail and commercial businesses. The most densely developed portion of the roadway extends from Chelmsford Center, past the Interstate

495 interchange to the Lowell border near Route 3. This section of the corridor features large retail complexes, such as East Gate Plaza and the Chelmsford Mall, as well as smaller-scale retail and service establishments, small professional office properties and two hotels.

Industrial Land Uses

In 2008, approximately 546 acres or 4.72% of the town's tax parcels contained an industrial use. Industrial uses include utilities, manufacturing, research and development facilities, warehousing and wholesale establishments. Many of these establishments are located along Route 129, in the Drum Hill area, in the mill complexes in North Chelmsford, and along Route 3A north of Vinal Square. More extensive information regarding industrial development within Chelmsford can be found in the Economic Development section of this document.

Institutional Land Uses

The Town of Chelmsford has a traditional group of institutional land uses consisting of government, charitable, religious and educational properties, which occupy 20.82% of the town's tax parcel acreage. The town owns 1,836 acres of land or 15.39% of the acreage included in the town's tax parcels. Charitable, non-profit, educational and religious entities own 228 acres, or approximately 1.97% of the town's tax parcel acreage. The Commonwealth of Massachusetts owns 307 acres, representing 2.66% of the overall land acreage, while Middlesex County owns 34 acres.

OPEN SPACE LAND AND PROTECTION STATUS

Approximately 999.16 acres of the Town's 2,620.42 acres of classified open space are considered permanently protected, comprising 6.7 percent of the Town's total land area. The majority of these open space properties are owned by the Town and the Water Supply Districts. Detailed information regarding ownership and level of protection for those properties with permanent protection or limited protection is provided in Table 2.4 below.

TABLE 2.4
OPEN SPACE LANDS

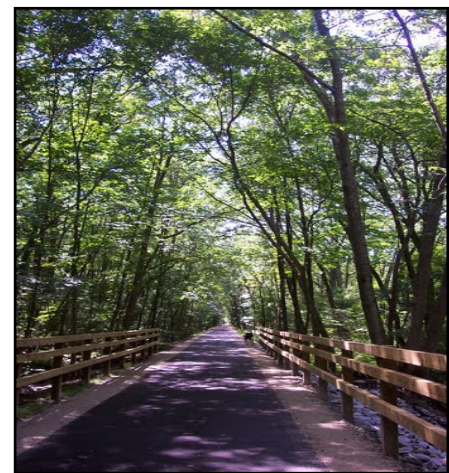
Ownership/Classification	Number of Parcels	Total Acreage
Permanently Protected Lands		
Commonwealth of Massachusetts	4	64.97
Town of Chelmsford	100	778.11
Chelmsford Land Conservation Trust	13	74.28
Conservation Restrictions (Public and Private)	10	71.03
Water Supply Districts	2	2.77
Total	129	991.16
Unprotected/Limited Protection Public Lands		
Commonwealth of Massachusetts	3	8.78
Town of Chelmsford (including cemeteries)	199	717.18
City of Lowell (cemeteries)	2	14.63
Water Supply Districts	73	388.47

**TABLE 2.4
OPEN SPACE LANDS**

Ownership/Classification	Number of Parcels	Total Acreage
Total	277	1,129.06
Unprotected/Limited Protection Private Lands		
Chapter 61	12	112.23
Chapter 61A	24	256.97
Chapter 61B	3	28.93
Cemeteries	6	102.07
Total	29	359.55
Total	45	500.20

Source: Chelmsford Assessor's Database for FY 2008, and NMCOG

The two largest parcels owned by the Commonwealth of Massachusetts are located on Billerica Road (28 acres) and Proctor Road (21 acres). The Massachusetts Department of Transportation also owns the Bruce Freeman Rail Trail, which runs through the Town. The three largest Town-owned open space properties are the Cranberry Bog Reservation on Acton Road (180 acres), Russell Mill/Town Forest on Mill Street (132 acres) and the George B. B. Wright Reservation (90 acres), which is in the area of Parker Road, Green Valley Road and Old Stage Road. Most of the town-owned parcels are relatively small - of the 97 permanently protected parcels, only seventeen (17) contain more than ten acres.



Bruce Freeman Rail Trail

Water supply lands are owned by the three (3) Water Supply Districts within Town as shown in Table 2.5 below. Collectively, the town's three water districts own 75 parcels of land comprising 391.24 acres.

**TABLE 2.5
SUMMARY OF PROPERTY OWNED BY WATER SUPPLY DISTRICTS**

Water Supply District	Number of Parcels Owned	Total Acreage Owned
East Chelmsford Water District	5	34.10
North Chelmsford Water District	12	87.94
Chelmsford Water District	58	269.20
Total	75	391.24

Ten (10) properties, totaling 71.03 acres, are permanently protected through conservation restrictions, and all are located in the Residential B (RB) zoning district. The Chelmsford Land Trust, a private, non-profit organization dedicated to the preservation of open space, owns thirteen (13) parcels totaling 74.28 acres. At twenty-four (24) acres, the Warren Wildlife Sanctuary located on Boston Road, is the largest Chelmsford Land Trust parcel.

Approximately 717.18 acres of land owned by the Town is unprotected or has limited protection from potential development. These lands include town parks, school athletic fields and playgrounds, landfills and cemeteries. The City of Lowell also owns two (2) parcels totaling 14.63 acres.

Chelmsford currently has approximately 398.13 acres of private land in forestry, agricultural or recreational uses, enrolled in the Chapter 61, 61A and 61B tax abatement programs. The Chapter 61 lands are all located within the Residential B (RB) zoning district and comprise 112.23 acres of land. Chapter 61A and 61B lands comprise 285.90 acres and are located within residential zoning districts, with the exception of two (2) parcels which are located within the Roadside Commercial zoning district.

The three (3) Water Supply Districts comprise seventy-five (75) parcels, totaling 391.24 acres. There are six (6) privately-owned cemetery parcels totaling 102.07 acres. The Water Supply District and cemetery parcels are classified as having limited or unprotected status.

BUILD-OUT ANALYSIS AND FUTURE LAND USE OPTIONS

A build-out analysis is a land use planning tool used to help a community understand the impacts of developing available land to the capacity allowed under current zoning. It is understood and acknowledged that while build-out studies are useful, they cannot predict when in time full build-out will occur. More importantly, it is understood and cautioned that the Town may never reach full build out of vacant and under-developed land as this depends on many factors, such as the economic climate and market conditions, which are generally outside a community's control. A build-out analysis can help a community identify changes that are needed in its Master Plan, Zoning Bylaw and development regulations.

In its simplest form, a build-out analysis looks at land area that is currently developed, developable land area, and vacant land area that is subject to absolute development constraints, such as open water, wetlands, or parcels of dedicated or permanently protected open space. The undevelopable land is subtracted from the total land area to determine area still available for development.

Within the last two years, two build out analyses have been completed. This first, an analysis of vacant developable lands under existing zoning regulations, was undertaken by NMCOG and completed in 2008. This residential and commercial/industrial build out primarily focused on larger sized parcels that had significant contiguous developable uplands. The methodology can be found in Appendix B of the 2008 Chelmsford Build Out Analysis Update prepared by NMCOG.

A second build out analysis was conducted in 2010 by the Town's Community Development Department to analyze development capacity of under-developed properties that have existing

structures that are not fully developed. This build-out concluded that the redevelopment of existing, underutilized land will have a significant impact on the Town.

Vacant Developable Lands

The results of the 2008 Build-out Analysis concluded that Chelmsford is nearly built out (See Map 2, Developable Lands), with only 680.58 acres of vacant developable land remaining, as shown in Table 2.6 below.

TABLE 2.6
UNDEVELOPED/DEVELOPABLE PARCELS BY ZONING CLASSIFICATION

Zoning Classification	Number of Parcels	Total Acreage
Limited Industrial (IA)	13	96.54
Special Industrial (IS)	3	83.07
Residential A (RA)	10	79.75
Residential B (RB)	46	397.74
Adult Entertainment (CX)	3	23.48
Total	75	680.58

Source: 2008 Chelmsford Build-out Analysis Update prepared by the Northern Middlesex Council of Government

Table 2.7 below summarizes the results of the build-out analysis and quantifies some of the infrastructure impacts of achieving full build-out.

TABLE 2.7
2008 BUILD-OUT ANALYSIS SUMMARY TABLE

Indicator	Impact
Developable Land (sq. ft.)	29,646,183
Developable Land (acres)	680.58
Total Residential Lots	56
Adult CX Buildable Floor Area (sq. ft.)	439,801
Industrial IS Buildable Floor Area (sq. ft.)	1,104,463
Industrial IA Buildable Floor Area (sq. ft.)	1,676,370
Commercial/Industrial Water Use (gallons/day)	241,575
Residential Water Use (gallons/day)	11,025
Municipal Solid Waste (tons)	88.64
Non-recycled Solid Waste (tons)	53.66
New Residents	147
New Students	29
New Residential Subdivision Roads (miles)	0.95

Source: 2008 Chelmsford Build-out Analysis Update prepared by the Northern Middlesex Council of Government

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MAP 2: DEVELOPABLE LAND

Potential Residential Build-out

The largest areas of vacant developable residential land are found in the RB zoning classification, with nearly 400 acres of land remaining on 46 parcels. Combined with ten parcels, comprising nearly 80 acres, remaining under the RA zoning classification, future residential development is projected to add 56 additional housing units and 147 new residents, including 29 new students.⁷

Obviously, other factors, such as Chapter 40B (affordable) housing, changing family and household size, redevelopment of current properties, housing turnover and shifting demographics (“empty nesters” selling to younger families), will have an impact upon these projections.



Potential redevelopment site for a new MBTA commuter rail station in Vinal Square. (Source: Pictometry International, 2008)

Commercial and Industrial Build-out

There is no remaining developable land located in the commercial zoning districts. Therefore, any new commercial development will likely occur as a result of a redevelopment or infill project. In some areas, such as Chelmsford Center and Vinal Square, creation of a mixed-use overlay district and adoption of a mixed-use bylaw would allow the Town to take advantage of “smart growth” programs at the state level, while revitalizing these areas as commercial centers. As part of the Build-out Analysis, Map 3 was developed depicting future redevelopment opportunities within the Town.

The remaining acreage in the IA zoning district should be further evaluated to ensure that the land is developed to the highest and best use, as a means of promoting economic development and growing the non-residential tax base. Two of the vacant industrial parcels do not meet the minimum lot size requirements under the Town’s existing zoning bylaw (Map 86, Block 328, Lots 27 and 28). Unless they are combined with other parcels, they cannot be developed without a variance from the Zoning Board of Appeals. Most industrial operations do not use multi-story buildings. The potential commercial/industrial floor area that can be developed does not account for factors such as this, and therefore, it is likely that the floor area ratio would be less than that assumed in the build out calculations.

⁷ Most of this acreage is classified as Chapter 61 lands and the Town has the right-of-first-refusal should the property be put up for sale.

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MAP 3: REDEVELOPMENT PARCELS

Under-developed Lands

As mentioned above, a supplemental build out was conducted in 2010 by the Town's Community Development Department which focused exclusively on commercial and industrial development. This build out identified the additional development capacity for each underdeveloped parcel. The specific methodology for the 2010 Commercial/Industrial Build Out is included in Appendix B of this document.

The results of the 2010 Build-out Analysis concluded that Chelmsford has significant potential for additional square footage on under-developed lands via redevelopment of existing under-utilized parcels with existing structures. As mentioned previously, it is important to note that the Town may never see full build out of under-developed lands.

Table 2.8 and 2.9 summarizes the results of the under-developed lands build out analysis based upon zoning and land use types.

TABLE 2.8
UNDER-DEVELOPED LANDS BY ZONING CLASSIFICATION

Zoning Classification	Number of Parcels	Total Acreage
Commercial Neighborhood (CA)	17	40
Commercial Roadside (CB)	52	90
Shopping Center (CC)	13	47
General Commercial (CD)	69	60
Limited Industrial (IA)	124	586
Total	275	823

Source: 2010 Chelmsford Build-out Analysis prepared by the Community Development Department

TABLE 2.9
UNDER-DEVELOPED LANDS BY LAND USE TYPE

Land Use Type	Number of Parcels	Total Acreage
Commercial	107	246
Auto-related	31	24
Office	49	115
Industrial/Manufacturing	88	440
Total	275	825

Source: 2010 Chelmsford Build-out Analysis prepared by the Community Development Department

Table 2.10 and 2.11 on the following page summarizes the results of the under-developed lands build-out analysis based upon zoning and land use types.

TABLE 2.10
BUILD-OUT ANALYSIS SUMMARY BY ZONING CLASSIFICATION

Zoning Classification	Additional Square Footage
Commercial Neighborhood (CA)	322,548 – 403,185
Commercial Roadside (CB)	477,817 – 597,272
Shopping Center (CC)	259,956 – 324,946
General Commercial (CD)	283,080 – 353,850
Limited Industrial (IA)	837,332 – 1,046,665
Total	2,180,733 – 2,725,918

Source: 2010 Chelmsford Build-out Analysis prepared by the Community Development Department

TABLE 2.11
BUILD-OUT ANALYSIS SUMMARY BY LAND USE TYPE

Land Use Type	Additional Square Footage
Commercial	1,360,000 – 1,719,658
Auto-related	38,858 – 48,573
Office	381,201 – 476,502
Industrial/Manufacturing	325,955 – 407,444
Total	2,106,014 – 2,652,177

Source: 2010 Chelmsford Build-out Analysis prepared by the Community Development Department

The additional square footages, presented in Tables 2.10 and 2.11, reflect a range based upon a projected low and high. The specific methodology for determining the ranges is presented in Appendix B of this Master Plan.

Consolidated Commercial / Industrial Build Out

The consolidated build out provides a glimpse of “Trends continued”, if and when all land is developed to the maximum extent allowed under law. More importantly, the associated outputs or impacts of the build-out analysis should help inform community discussions regarding land use, housing and economic development. For example, is there too much or too little of a particular land use projected for the community, such as enough residential development to support the amount of commercial development desired, or enough industrial to provide a balanced tax and employment base? Is the mix of uses appropriate to create a vibrant Village Center? Is there too much residential development proposed, based on the level of services the Town can provide? Ultimately, the build out should help the community identify changes needed to its Master Plan, Zoning Bylaw and development regulations.

Based upon the vacant land and under-developed land build outs, as presented above, Table 2.12 on the following page presents a consolidated summary.

**TABLE 2.12
CONSOLIDATED COMMERCIAL/INDUSTRIAL BUILD OUT ANALYSIS SUMMARY**

Zoning Classification	New Square Footage on Vacant Lands	Additional Square Footage on Under-developed Lands
Commercial Neighborhood (CA)	N/A	322,548 – 403,185
Commercial Roadside (CB)	N/A	477,817 – 597,272
Shopping Center (CC)	N/A	259,956 – 324,946
General Commercial (CD)	N/A	283,080 – 353,850
Limited Industrial (IA)	1,676,370	837,332 – 1,046,665
Adult Commercial (CX)	439,801	N/A
Special Industrial (IS)	1,104,463	N/A
Total	3,220,634	2,180,733 – 2,725,918

Table 2.13 below details the future redevelopment opportunities in the Town, as identified by the Community Development Director, the 2008 Chelmsford Build-out Analysis Update and the town’s Economic Development Plan, 2008. Although all parcels listed in Table 2.13 may not be redeveloped, there are nearly 352 acres of land on 66 parcels that may hold potential as redevelopment sites for future commercial, industrial, residential and mixed-use developments. These parcels have been further reviewed by the Master Plan Committee to ascertain their highest and best use, whether, it be for economic development purposes, housing or open space. The results of the review will be described in the Economic Development, Housing and Open Space and Recreation elements of the Master Plan.

**TABLE 2.13
POTENTIAL REDEVELOPMENT SITES**

Location	Map	Block	Lot	Acreage	Zoning District	Land Use Code	Land Use Description
100 Wotton Street ^{1,2}	9	6	3	12.53	Limited Industrial (IA)	400	Former Southwell Combing Co. mill. 127,321 sq. ft. consists of one manufacturing tenant with the remainder of the mill being vacant.
Ledge Road/Off ²	10	4	2	21.27	Residential B (RB)	909	Congregational Church - East of Route 3 and northwest of Scotty Hollow Road
540 Groton Road/off ²	10	22	1	20.9	Limited Industrial (IA)	440	Vacant developable industrial land
Groton Road/off ²	10	22	2	1.80	Limited Industrial (IA)	440	Vacant developable industrial land
Dunstable Road/Off ^{2,3}	11	4	1	66.37	Special Industrial (IS)	903	Oak Hill Road Parcel - Municipal vacant land
51 Middlesex Street ²	13	36	1	6.10	Limited Industrial (IA)	400	Occupied mill: Building app. 221,544 sq. ft.
61 Middlesex Street ²	13	36	3	1.45	Limited Industrial (IA)	401	Occupied mill: Building app. 112,860 sq. ft.
70 Princeton Street ²	13	36	8	1.28	Limited Industrial (IA)	401	Occupied mill: Building app. 45,594 sq. ft.
31 Princeton Street ²	13	39	3	0.21	General Commercial (CD)	903	North Chelmsford Town Hall (circa 1898)
107 Princeton Street ²	19	59	4	0.64	Roadside Commercial (CB)	105	Three-family residential

**TABLE 2.13
POTENTIAL REDEVELOPMENT SITES**

Location	Map	Block	Lot	Acreage	Zoning District	Land Use Code	Land Use Description
117 Princeton Street ²	19	59	6	0.84	Roadside Commercial (CB)	332	Auto repair service
123 Princeton Street ²	19	59	8	0.70	Roadside Commercial (CB)	332	Auto repair service
133 Princeton Street ²	19	59	9	1.30	Roadside Commercial (CB)	401	Abandoned 16,000 sq. ft. industrial warehouse that is in disrepair
147 Princeton Street ²	19	59	10	3.11	Roadside Commercial (CB)	326	Restaurant/Club
165 Princeton Street ²	20	59	1	4.26	Roadside Commercial (CB)	322	Disc. store
255 Princeton Street ^{1,2,3}	20	74	1	34.00	Residential B (RB)	902	UMass Lowell West Campus
10 Technology Drive ²	27	74	1	3.90	Limited Industrial (IA)	440	40,000 sq. ft. office space potential after environmental constraints. Vacant industrial developable land
152 Stedman Street ^{2,3}	32	110	1	30.78	Limited Industrial (IA)	402	Former Glenview Sand and Gravel. Vacant industrial developable land
3 Jean Avenue ^{1,2}	32	110	11	1.02	Roadside Commercial (CB)	390	Developable land
59 Parkhurst Road ^{1,2}	32	110	12	1.09	Roadside Commercial (CB)	335	Car wash
110 Drum Hill Road ²	32	113	4	0.23	Shopping Center (CC)	101	Single-family residential
6 Wesley Street ²	32	113	5	0.33	Shopping Center (CC)	340	Office building
11 School Street ¹	35	142	5	13.77	Residential B (RB)	340	Office building
27 Katrina Road ^{1,2}	52	234	2	3.12	Limited Industrial (IA)	903	Municipal land – Light Industrial
283 Chelmsford Street ²	52	203	3	0.54	Shopping Center (CC)	390	Developable vacant land
265 Chelmsford Street ²	52	203	4	18.28	Neighborhood Commercial (CA)	323	Shopping mall
279 Chelmsford Street ²	52	203	5	0.39	Neighborhood Commercial (CA)	130	Residential vacant land
277 Chelmsford Street ²	52	203	6	0.22	Neighborhood Commercial (CA)	392	Undevelopable vacant land
271 Chelmsford Street ²	52	203	7	0.48	Neighborhood Commercial (CA)	032	Store/Shop
280 Chelmsford Street ²	52	140	18	0.48	Residential B (RB)	130	Residential vacant land
299 Chelmsford Street ²	53	201	1	6.92	Shopping Center (CC)	362	Permitted for supermarket
25 Katrina Road ^{2,3}	63	234	2	3.91	Limited Industrial (IA)	400	Manufacturing building – Brownfield site. Town’s only Priority Development Site (PDS)
53 Chelmsford Street ²	73	289	5	1.50	General Commercial (CD)	N/A	McFarlin Field (Possible site for new fire station)
92 Chelmsford Street ²	73	295	10	0.39	General Commercial (CD)	322	Commercial disc. store
95 Chelmsford Street ²	73	301	2	0.23	General Commercial (CD)	334	Vacant gas station
93 Chelmsford Street ²	73	301	3	0.26	General Commercial (CD)	322	Commercial Disc. Store (3-4 tenant strip plaza)
1A North Road ²	73	319	12	0.76	Residential A (RA)	903	Old Town Hall
39 Chelmsford Street ²	73	327	4	0.93	General Commercial (CD)	322	Current CVS location

**TABLE 2.13
POTENTIAL REDEVELOPMENT SITES**

Location	Map	Block	Lot	Acreage	Zoning District	Land Use Code	Land Use Description
29 Chelmsford Street ²	73	327	7	0.55	General Commercial (CD)	326	Current Papa Gino's
34 Turnpike Road ¹	74	328	5	1.10	Limited Industrial (IA)	101	Single-family
36 Turnpike Road ¹	74	328	6	1.23	Limited Industrial (IA)	101	Single-family
163 Billerica Road ²	74	331	2	2.74	Limited Industrial (IA)	032	Mulch processing plant on 5 acre site. Office building future development option
242 Billerica Road ¹	75	291	52	5.62	Limited Industrial (IA)	101	Industrial land
41 Central Square ²	84	334	11	0.39	General Commercial (CD)	341	Bank building
16-20 Boston Road ^{1,3}	84	334	17	8.45	Shopping Center (CC)	324	Stop & Shop Site
11 Cushing Place ¹	84	336	5	5.00	General Commercial (CD)	332	Disc. store/Commercial warehouse
Blackmer Street ¹	85	331	3	0.22	Limited Industrial (IA)	442	Industrial vacant land
221 Billerica Road ¹	86	328	5	1.00	Limited Industrial (IA)	101	Single-family residential
199 Billerica Road ¹	86	328	6	0.38	Limited Industrial (IA)	101	Single-family residential
205 Billerica Road ¹	86	328	8	6.70	Limited Industrial (IA)	101	Single-family residential
Tracy Road/104 Turnpike Road ²	86	328	21	8.93	Limited Industrial (IA)	440	Industrial developable vacant land. Could support a 200,000 sq. ft. building.
8 Blackmer Street ¹	86	331	2	0.66	Limited Industrial (IA)	101	Single-family residential
Hunt Road ¹	91	378	3	6.66	Limited Industrial (IA)	440	Industrial developable land
235 Littleton Road ¹	91	378	11	6.06	Roadside Commercial (CB)	112	Apartment 8+ Units
233 Littleton Road ^{1,2}	91	378	15	0.92	Roadside Commercial (CB)	390	Developable vacant land
50 Hunt Road/Littleton Road ^{1,2}	92	337	4	11.20	Residential B (RB)	105	Three-family residential with contractor's yard
12 Kidder Road ²	99	403	4	2.45	Limited Industrial (IA)	440	Industrial vacant developable land
261-7 Littleton Road ^{1,2}	100	378	1	8.54	Roadside Commercial (CB)	332	Store/Shop/Apts. 4 + Units
269 Littleton Road ²	100	378	6	0.46	Roadside Commercial (CB)	340	Office building
273 Littleton Road ²	100	378	7	0.57	Roadside Commercial (CB)	105	Three-family residential
241 Littleton Road ^{1,2}	100	378	8	0.92	Roadside Commercial (CB)	390	Developable vacant land
289 Littleton Road ²	100	403	5	0.92	Limited Industrial (IA)	322	Commercial building
293 Littleton Road ²	100	403	6	0.92	Limited Industrial (IA)	322	Auto repair facility
295 Littleton Road ²	100	403	7	0.97	Limited Industrial (IA)	300	Auto repair facility
297 Littleton Road ²	100	403	8	0.97	Limited Industrial (IA)	332	Auto repair facility
Total	66 Parcels			351.34			

Sources: 1 - Identified in the 2008 Chelmsford Build-out Analysis Update as a potential redevelopment site.

2 - Identified in the Chelmsford Economic Development Plan, 2008, as a potential redevelopment site.

3 - Evan Belansky, Community Development Director indicated the parcel holds a significant potential for redevelopment

ZONING OVERVIEW

Chelmsford regulates development through zoning, subdivision control, Board of Health regulations, and wetlands regulations. Zoning is the most important of these regulatory tools. In a mature suburb like Chelmsford, a zoning bylaw’s capacity to steer redevelopment is as important as its capacity to guide the development of vacant land.

Chelmsford’s zoning framework includes fifteen (15) conventional use districts (Map 4) and four (4) overlay districts (Map 5). A use district is a geographic area delineated on a zoning map and designated for specific land uses. An overlay district, also delineated on a zoning map, may encourage or limit certain uses within one or more districts, depending on the purposes of the overlay. In Chelmsford, for example, the Billboard Overlay District is designed to only allow billboards in very specific targeted locations – Oak Hill on Route 3 near Scotty Hollow, Chelmsford High School land along Route 3, and at the Route 3/Interstate 495 interchange.

Each zoning district has dimensional and use requirements, and many uses require a special permit, i.e., an approval granted at the discretion of either the Zoning Board of Appeals or the Planning Board. The Planning Board exercises control over activities and uses that require site plan review. Table 2.14 below identifies each zoning district and describes its intended use(s).

**TABLE 2.14
CURRENT ZONING DISTRICTS AND INTENDED USES**

Land Use Categories	Zoning District	Intended Uses
Low Density Residential	Residential A (RA)	At 100% single-family residential, these are the lowest density single-family residences.
	Residential B (RB)	Low density single-family residential.
Moderate Density Residential	Residential C (RC)	Medium density with 50% single-family residential and 50% duplex.
High Density Residential	Residential Multi-Family (RM)	High density residential district with 15% single-family, 5% duplex and 80% multi-family.
Office & Retail	Neighborhood Commercial (CA)	Commercial districts for neighborhood areas with a development mix of three-story buildings, 50% office and 50% retail.
	Roadside Commercial (CB)	General commercial districts with high traffic generation and a development mix of 25% four-story office buildings, 65% single-story retail and 10% single-story restaurants.
	Shopping Center (CC)	Commercial districts designed to allow clustering of stores around a central parking area; it assumes a development mix of 80% single-story retail, 10% three-story office and 10% single-story restaurants.
	General Commercial (CD)	Primarily retail commercial offices (60%), restaurants (10%) and entertainment commercial uses (30%) located along major existing thoroughfares.
	Center Village (CV)	Mixed-use district intended to promote downtown revitalization

**TABLE 2.14
CURRENT ZONING DISTRICTS AND INTENDED USES**

Land Use Categories	Zoning District	Intended Uses
Industrial/High Tech	Limited Industrial (IA)	Primarily used for office, R & D, manufacturing (20%) and warehousing (20%).
	Special Industrial (IS)	Suited for heavy industrial, this use has a mix of 50% single-story manufacturing and 50% single-story warehouse.
Public/Semi-Public	Public (P)	Lands owned or leased by federal, state or municipal governments for governmental purposes.
Open Space/Recreation	Open Space (OS)	Privately owned lands used for open space.
	Residential Mobile Home (RMH)	District for mobile homes.
	Adult Entertainment District (CX)	This is a commercial district created for adult entertainment establishments and other permitted uses. There is only one CX District in town, located east of Route 3 and north of Route 40.

Source: Town of Chelmsford Zoning Bylaw, Chapter 195

Table 2.15 depicts the acreage for each zoning district within Chelmsford. Approximately 73% of the town is zoned for residential use, with 65% of the town zoned specifically for single-family residences. Commercial zoning districts (CA, CB, CC, CD, and CV) cover 2.87% of the community, while 10.79% of the town is zoned for industrial use. The public zoning district represents 12.15 % of the town and consists of lands owned or leased by federal, state or municipal governments for governmental purposes.

**TABLE 2.15
ZONING DISTRICT CLASSIFICATIONS**

Zoning District	Acres	Percentage
Residential A (RA)	419.00	2.84%
Residential B (RB)	9,637.78	65.34%
Residential C (RC)	410.18	2.78%
Residential Multi-family (RM)	317.42	2.15%
Center Village (CV)	26.79	0.18%
Neighborhood Commercial (CA)	41.64	0.28%
Roadside Commercial (CB)	134.15	0.91%
Shopping Center (CC)	120.34	0.82%
General Commercial (CD)	100.81	0.68%
Adult Entertainment (CX)	24.96	0.17%
Limited Industrial (IA)	1,527.41	10.35%
Special Industrial (IS)	65.54	0.44%
Residential Mobile Home (RMH)	37.80	0.26%
Public (P)	1,792.31	12.15%
Open Space (OS)	94.77	0.64%
Total	14,750.88	100%

Source: Northern Middlesex Council of Governments

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MAP 4: ZONING DISTRICTS

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MAP 5: ZONING OVERLAY DISTRICTS

The Chelmsford Zoning Map and Bylaw has been subsequently updated and reorganized after the completion of each Master Plan, with the most recent comprehensive revision completed in 1998. Some examples of the zoning amendments approved by Town Meeting over the past several years include the following:

- Billboard Overlay Zoning District
- Center Village District
- Residential Mobile Home District

Residential Zoning

Chelmsford is predominately zoned for residential development. As a result, the town's residential zoning regulations will significantly impact its overall land use pattern at build-out, just as residential development already influences Chelmsford's land use pattern and character today. Chelmsford has four residential zones, all of which allow single-family dwellings. Two-family dwellings are allowed only in the RC and RM Districts; multifamily dwellings are allowed in the RM district and the Center Village (CV) only by Planning Board special permit. The minimum lot size for residential uses ranges from 20,000 to 60,000 square feet depending on the district. Planned Open Space Residential Developments (POS) are only permitted in the RA and RB zoning districts, by special permit from the Planning Board. POS developments, however, require a minimum of 10 acres of land, with a minimum of 25% being set aside for open space.

There are several zoning provisions that have been adopted to specifically promote the development of specialized housing, such as: Article XVII, "facilitated and independent senior living facilities, Article XII, multi-family dwellings, and Section 195-13, conversion of dwelling units. Facilitated and independent senior living facilities are not allowed within any residential zoning district except the Residential Multi-Family District (RM).

Special permit uses include multi-family dwellings in RM and CV Districts, conversion of dwellings in the RB and RM Districts, and group residences in the RM and all commercial districts. Accessory residential uses are not permitted in any of the residential zoning districts within the Town other than the Center Village District.

Residential A

The Residential A (RA) District was adopted in 1998 to protect the groundwater supply. It covers 419 acres (2.84%) and is a conventional district for single-family homes. According to the 2008 build-out analysis, approximately 79.75 acres of vacant RA land are considered developable. Areas included in the RA zoning district can be found throughout town, including portions of West Chelmsford and North Chelmsford, and areas off Steadman Street, along Route 27, and along Route 4 south of the Center.

The RA district is the lowest density residential zoning district in Chelmsford, with a minimum lot area of 60,000 sq. ft. required. A minimum frontage of 150 feet is needed and structures must be set back at least 40 feet from the road, 25 feet from the side boundary of the lot, and 30 feet from the rear boundary. Buildings height is capped at the traditional suburban maximum of 35 feet or 3 stories.

Residential B

The Residential B (RB) district was adopted in 1998 and covers approximately 9,637 (65.34%) acres of land. It is the dominant residential district in Chelmsford. The RB district requires a minimum lot area of 40,000 sq. ft. and a minimum lot frontage of 150 feet. As is the case in the RA district, structures must be set back at least 40 feet from the road, 25 feet from the side boundary of the lot, and 30 feet from the rear boundary. There are, however, differences in the dimensional requirements for the RA and RB zoning districts, specifically in the maximum building coverage (15% in RB and 10% in RA) and the floor area ratio (.20 in RB and .15 in RA). Building height in the RB zoning is limited to 35 feet or 3 stories. Of the 9,637 acres of land that comprise the RB District, there are approximately 397.74 acres identified as developable in the 2008 build-out analysis.

Residential C

The Residential C (RC) zoning district allows for single-family homes on moderate-density lots of 20,000 sq. ft, with a minimum lot frontage of 125 feet. Structures must be set back at least 20 feet from the road, 12 feet from the side boundary of the lot, and 20 feet from the rear boundary. Building height is restricted to 45 feet or 4 stories.

The RC district covers only 410 (2.78%) acres of land and allows for the most flexible residential uses, including single-family residences, duplexes and boardinghouses, all of which are permitted by right within the district. This zoning district is most prevalent in North Chelmsford and in an area just southeast of the Town Center. According to the 2008 build-out, there is no developable land remaining within this zoning district.

Residential Multi-Family

The Residential Multi-Family District (RM) was adopted in 1998 and allows for high-density residential development. Single-family and two-family residences are permitted by right and multi-family dwellings are be allowed by special permit from the Planning Board. The RM district requires a minimum lot area of 40,000 sq. ft. and minimum lot frontage of 150 feet. The dimensional requirements are identical for RB and RM districts, except that the RM district has a floor area ratio of .30 compared to the RB district floor area ratio of .20. It is important to note that projects constructed in the RM district must comply with additional minimum yard requirements when abutting an RA or RB district.

The RM district covers approximately 317 (2.15%) acres of land, and allows for the widest array of permitted uses among town's residential districts. The RM district is designed to bring greater housing options to persons and families with a limited income. Under Section 195-63 of the town's zoning bylaw, the Planning Board may grant a density bonus of 10% to an applicant willing to set aside 10% of the units for low and moderate income persons and families, for a period of at least ten years. In order to make progress toward meeting the affordability provisions of Chapter 40B, the town should consider revising the affordability incentives by increasing the percentage of affordable units to 25% and require a deed restriction of at least 30 years, in order that the affordable units may be counted in DHCD's Subsidized Housing Inventory (SHI).

Facilitated and Independent Senior Living Facilities

Through zoning changes adopted in 1998, Facilitated and Independent Senior Living Facilities are allowed in a variety of zoning districts by Planning Board special permit, in order to promote the development of multifamily and communal housing most beneficial for the senior and elder population. Facilitated living accommodates persons who require some medical attention or supervision, and includes assisted living facilities, Alzheimer's facilities and congregate living facilities. Independent facilities are intended for a senior couple or individual who can live independently.

Development of Facilitated and Independent Senior Living Facilities requires a minimum lot area of five acres in most zoning districts, except for the CV district where only 3 acres are required, and the IA district where the minimum lot area requirement is 7 acres. The maximum number of units per acre allowed for facilitated living facilities is 7 in most zoning districts, except for the RM district where 8 units per acre are permitted. The maximum number of units per acre allowed for independent senior living facilities is 4 units for most zoning districts, except for the RM district where 4 units are allowed, and the CV district where 7 units are allowed. Any Facilitated and Independent Senior Living Facilities development must preserve at least 30% of the site as open space in all but the RM District, where there is no minimum open space requirement.

The Planning Board may grant a density bonus for a facilitated and independent senior living facilities project that provides rental units. Where there is more than one size or style of unit in a project, the affordable units must comprise the same percentage as the market rate units. One-half of all additional units created through the density bonus must be maintained as affordable, according to the HUD Section 8 Voucher Program or other such programs deemed agreeable by the Planning Board. Alternatively, the developer may make a contribution under MGL Chapter 44, Section 53A, for the creation of senior affordable housing.

Planned Open Space Development

Originally adopted in 1988 as cluster development, Planned Open Space (POS) residential developments are allowed by Planning Board special permit to promote the conservation of open space and efficient use of land. Developable land must be in an RA or RB zoning district, and a minimum lot size of 10 acres is required. The project must be permitted as a subdivision with a minimum lot size of 12,000 square feet. The number of dwelling units allowed may not exceed the number of units allowed under the base zoning. At least 25% of the site must consist of contiguous open space. The percentage of open space that is classified as wetland must not exceed the percentage of the overall site classified as wetland.

All Planned Open Space Developments must be governed by a homeowners association designated as a non-profit organization under the laws of the Commonwealth. The homeowners association is responsible for the use, care and maintenance of lands and improvements. Membership in the homeowners association is mandatory for all landowners within the POS development.

Commercial and Industrial Zoning

The Town of Chelmsford encourages commercial and industrial development in seven distinct zoning districts: Neighborhood Commercial (CA), Roadside Commercial (CB), Shopping Center (CC), General Commercial (CD), Center Village (CV), Limited Industrial (IA), and Special Industrial (IS). These zoning districts differ in terms of purpose, goals and requirements, as does their impact on the town from both a physical and fiscal perspective. Land zoned for commercial development comprises 423 acres of land, or 2.9 percent of the town's total area, while industrially zoned land comprises 1,592 acres or 10.8 percent.

Limited Industrial District

Adopted in 1963, the Limited Industrial District (IA) is the largest industrial zoning district in Chelmsford, covering 1,527 (10%) acres of land. The minimum lot size in the IA zone is 40,000 square feet, with 150 feet of frontage. Maximum building height allowed within the district is 45 feet or 4 stories. Thirty percent lot coverage and a .45 floor area ratio are allowed within the district.

The IA district consists primarily of office uses, research and development,



Route 129 Technology Corridor (Source: Pictometry International, 2008)

manufacturing and warehousing. Professional offices, medical centers, wood operations and wireless communications facilities are other uses allowed by right. Contractor's yards, motel, hotels, health clubs, and self-storage mini-warehouse are allowed by special permit.

This is the primary zoning district encompassing the Route 129 technology corridor, by far the largest office and industrial area in Town. Smaller, but sizable IA zoned areas can be found on the west side of Route 3 at the Route 40 exit, the east side of Route 3A near Tyngsborough border, at the mills in North Chelmsford, near Wellman Avenue in North Chelmsford, Technology Drive near Drum Hill, the Glenview Sand and Gravel parcel near Jean Street, Katrina Road off Route 110 near the Route 3, and a small area off Maple Road in South Chelmsford.

Of the two (2) industrial zoning districts in Chelmsford, the IA District is the only industrial zone in which residential uses of any kind are allowed by special permit – facilitated and independent senior living and group residences. The IA District also allows adult daycare facilities by special permit.

Special Industrial District

Adopted in 1998, the Special Industrial District (IS) is intended for heavy industrial uses. A wide variety of uses are allowed by right including transport terminals, wood operations, light manufacturing, educational uses, wireless communications facilities and childcare facilities. Granite operations are allowed only with a Special Permit. The minimum lot size in the IS zone is 40,000 square feet, with 150 feet of frontage. Maximum building height permitted within the district is 45 feet or 4 stories. Forty percent lot coverage and a .45 floor area ratio are allowed within the district.

This zoning district is limited to a 66-acre town-owned parcel off Swain Road, to the east of the Route 40 Exit on Route 3. This parcel is currently land-locked and sits adjacent to the Swain Road landfill, which is currently zoned for adult entertainment and various commercial and institutional uses.

General Commercial District

Adopted in 1963, the General Commercial District (CD) encompasses 101 acres of land, less than 1% of the town's land area. Uses allowed within the district include retail, commercial offices, restaurants and commercial entertainment uses. Wireless communications facilities are also permitted by right. Motels, indoor recreation facilities, golf courses, auto repair and health clubs are allowed by special permit from the Zoning Board of Appeals.

There are three areas in the town with a CD zoning designation: Route 110 between the Center and I-495, Vinal Square and a portion of the North Chelmsford mills, and a parcel next to the Drum Hill Technology Park. The minimum lot size in the CD zone is 10,000 square feet, with

50 feet of frontage. Maximum building height permitted within the district is 45 feet or 4 stories. Forty percent lot coverage and a .45 floor area ratio are allowed within the district.

Shopping Center District

Adopted in 1963, the Shopping Center District (CC) is designed to allow the clustering of stores, offices, etc., around a central parking area. The CC zone encompasses 120 acres of land within Chelmsford, and represents less than 1% of the town's land area. The minimum lot size in the CD zone is 100,000 square feet, with 200 feet of frontage. Maximum building height allowed within the district is 35 feet or 3 stories. Thirty percent lot coverage and a .45 floor area ratio are permitted within the district.

Allowed uses are similar to the CD District. In addition, indoor commercial recreation is allowed by right and fast food restaurants, clubs or lodges are allowed by special permit. Wireless communications facilities are also permitted by right in the CC District. There are three such areas in town: Drum Hill, Route 110 near the Lowell border (Eastgate Plaza, Chelmsford Mall) and the Stop and Shop Plaza/Summer Street area near the Town Center.

Roadside Commercial District

Adopted in 1967, the Roadside Commercial District (CB) is a general commercial district, and includes uses that are high traffic generators. The CB district encompasses 134 acres of land, representing less than 1% of the town's land area. The minimum lot size in the CB zone is 40,000 square feet, with 150 feet of frontage. Maximum building height allowed within the district is 45 feet or 4 stories. Thirty percent lot coverage and a .45 floor area ratio are allowed within the district. Allowable uses within the CB district are similar to the CC District, except that mini storage is also allowed by special permit. Uses allowed by right include clubs or lodges, motels/hotels, motor vehicle sales, vehicle service and repair, and wireless communications facilities.

CB Districts are located throughout town, including along Route 110 near the Westford border, Route 3A north and south of Vinal Square, Middlesex Street near the Lowell line, the north side of Drum Hill Road, Parkhurst Road, and along Route 110 east of Route 495. A small area in South Chelmsford along Maple Street also has this designation.

Neighborhood Commercial District

Adopted in 1963, the Neighborhood Commercial District (CA) is intended for small retail establishments (less than 3,000 square feet) and professional offices serving neighborhood needs. The CA district comprises approximately 42 acres, including parcels in South Chelmsford Village, along Route 110 in the Westlands, West Chelmsford village, and at the intersection of Route 4 and Mill Road, near the Billerica line. The minimum lot size in the CA zone is 20,000 square feet, with 125 feet of frontage. Maximum building height allowed within the district is 35

feet or 3 stories. Fifteen percent lot coverage and a .45 floor area ratio are allowed within the district.

Center Village District

Adopted in 1998, the Center Village District (CV) was designed for maintaining the village-style character of the Town Center. The CV District encompasses 27 acres of land and is Chelmsford's only true mixed-used district, allowing commercial and residential uses (multifamily housing). Other uses allowed by special permit include offices, banks, medical centers, restaurants, motel/hotel uses and fast food restaurants. According to the Use Regulation Schedule in the



Chelmsford Center Village District

Zoning Bylaw, drive-through restaurants are not permitted by right or by special permit. The minimum lot size in the CV zone is 50,000 square feet, with 50 feet of frontage. The minimum building height requirement is 20 feet and the maximum building height allowed within the district is 35 feet or 3 stories. Forty percent lot coverage and a .60 floor area ratio are allowed within the district.

The intent of Center Village (CV) Zoning is to aid in revitalizing, preserving and expanding the village character of Chelmsford's traditional business district. The bylaw encourages small business development and residential uses as an accessory use in certain areas. Parking requirements are reduced by up to 50%, and shared parking is encouraged, in order to promote a pedestrian-friendly environment. Multi-family dwellings and facilitated and independent senior living facilities are the only residential uses allowed in the CV District, and require a special permit from the Planning Board.

Adult Entertainment District

The Adult Entertainment District (CX) is a commercial district created for adult entertainment establishments. Other uses allowed by right within the district include business and professional offices, and banks or financial agencies. There is only one CX District in town, located east of Route 3 and north of Route 40. The CX zone encompasses 25 acres of land and is located at the former Swain Road landfill. The minimum lot size in the CX zone is 40,000 square feet, with 150 feet of frontage. Maximum building height allowed within the district is 45 feet or 4 stories. Thirty percent lot coverage and a .45 floor area ratio are allowed within the district.

In addition to the CX District, an Adult Entertainment Overlay District was established and is subject to the use regulations pertaining to the CX District. Special permits are required from the Zoning Board of Appeals, and cannot be granted for an adult use establishment if it is located less than 1,000 feet from another adult entertainment establishment, residential uses, public or private nursery and day care schools, public or private kindergartens, public or private elementary and secondary schools, playgrounds or parks and religious institutions.

Major Business Complexes

Adopted in 1983, the Major Business Complexes provision within the town's zoning bylaw is intended to increase the diversity and convenience of goods and services, and to provide entrepreneurial and employment opportunities for area residents. It is also intended to focus development in locations that are able to support business development with relatively minimal environmental or municipal costs. Any industrial or commercial development of more than 20,000 square feet in gross floor area is considered a major business complex and requires a Special Permit from the Planning Board.

Home Occupations

The most recent version of the Chelmsford's home occupation bylaw was adopted in 1998 and is similar to that of other communities. Home occupations as of right are businesses or professions incidental to and customarily associated with the principal residential use. The bylaw, however, seems restrictive in light of the town's suburban character and development pattern, and in light of the current economic climate. For example, the bylaw only allows one non-resident to be employed on the premises, which requires a special permit by the Zoning Board of Appeals (ZBA). It is common for home occupations or at-home business regulations to limit the number of non-resident employees, but it is equally common to provide some flexibility by allowing the ZBA to grant exceptions by special permit.

Public and Open Space Districts

Public District

Adopted in 1988, the Public District (P) is composed of lands that are owned and leased by federal, state or municipal governments for governmental purposes. The P District encompasses 1,792 acres (12.5% of the town's land area) scattered throughout town. The minimum lot size in the P district is 20,000 square feet, with 125 feet of frontage. Maximum building height allowed within the district is 35 feet or 3 stories. Fifteen percent lot coverage and a .35 floor area ratio are allowed within the district.

Uses allowed by right within the P district include religious and educational institutions, child-care facilities, agricultural uses, wine and dairy facilities, cemeteries, municipal facilities and garages, golf courses, and wireless communication facilities. The following uses are allowed by special permit from the Zoning Board of Appeals: essential services, indoor and outdoor commercial recreation facility, club/lodge, riding academy, fairs/carnivals and health clubs.



Farmers' market and art festival located at the Town Center Common

Essential services are defined as services provided by a public service corporation or by a governmental agency through erection, construction, alteration or maintenance of gas, electrical, steam, water or sewer transmission/distribution systems, or communication systems, whether underground or overhead, but not including wireless communications facilities. Facilities necessary for the provision of essential services include poles, wires, drains, sewers, pipes, conduits, cables, fire alarm boxes, police call boxes, traffic signals, hydrants and other similar equipment.

Open Space District

Adopted in 1988, the Open Space District (OS) is composed of privately-owned lands used for open space. The OS district encompasses 95 acres, or less than 1% of the town's land area. The minimum lot size in the P district is 20,000 square feet, with 125 feet of frontage. Maximum building height allowed within the district is 35 feet or 3 stories. Fifteen percent lot coverage and a .35 floor area ratio are allowed within the OS district.

Uses allowed by right within the OS district include religious and educational institutions, child-care facilities, agricultural purposes, wine and dairy facilities, municipal facilities, indoor/outdoor commercial recreation facilities, club/lodge and health club. The following uses require a special permit from the Zoning Board of Appeals: essential services, riding academy, golf course, wireless communications facilities and fairs/carnivals. For more information pertaining to open space, refer to the Natural Resources and Open Space section of this Plan.

Overlay Districts

Chelmsford has three (3) zoning overlay districts: the Aquifer Protection Overlay District, the Floodplain Overlay District, and the Billboard Overlay District. Each district is discussed in greater detail below.

Aquifer Protection Overlay District

Adopted in 1988, the Aquifer Protection Overlay District consists of three (3) separate Wellhead Protection Areas (WHPAs) within Chelmsford, as defined by the Massachusetts Department of Environmental Protection (DEP). Zone I includes a 400 ft. radius around the wellhead (assuming a greater than 100,000 gpd withdrawal rate). Zone II includes all land deemed influential to the quality and quantity of water drawn from a well under stressed pumping conditions (i.e., the recharge area), and Zone III includes the larger watershed surrounding a water supply.

Development in the Aquifer Protection Overlay District is subject to regulations that supersede the requirements of the underlying districts. Much like the Massachusetts DEP's model regulation, Chelmsford's bylaw prohibits uses that pose a heightened risk to public drinking water supplies, such as landfills, chemical storage, hazardous waste facilities, and junkyards. Some uses are subject to a special permit from the Planning Board if located within the Aquifer Protection Overlay District, such as motor vehicle repair facility, dry cleaners with on-site cleaning facilities, dam construction, salt storage facilities/sheds, and furniture and wood stripping operations, to name a few. Also, the enlargement or alteration of existing uses that are nonconforming in the Overlay District would be subject to a special permit, as described in Section 195-73 of the Zoning By-law.

Floodplain Overlay District

Adopted in 1977, Chelmsford's Floodplain Overlay District is similar to that of other communities across the Commonwealth. It includes all areas within the 100-year floodplain and floodways shown on the Flood Insurance Rate Maps (FIRM), prepared by FEMA and dated January 16, 2004. The 100-year flood zones are Special Flood Hazard Areas (SFHA), with a 1% annual chance of flooding. Regardless of the underlying zoning district use regulations, the Floodplain Overlay District limits permitted uses to those unlikely to cause flooding in a 100-year storm event.

The Floodplain Overlay District is established as an overlay district to all other districts. All development in the district, including structural and nonstructural activities, whether permitted by right or special permit, must be in compliance with M.G.L. c. 131, § 40. The Zoning Board of Appeals can grant a special permit for new construction in the floodplain, as long as the applicant demonstrates that a proposed project conforms to the State Building Code and provides an engineer's certification that it will not increase flood levels during the 100-year flood.

Billboard Overlay District

The Billboard Overlay District, approved at Town Meeting on April 30, 2009, is designed to allow billboards at only three locations – Oak Hill on Route 3 near Scotty Hollow, Chelmsford High School land along Route 3, and at the Route 3/Interstate 495 interchange. The bylaw also

requires that the billboards be located at least 500 feet from a residential use, and that at least 1,000 feet be provided between signs.

DEVELOPMENT STANDARDS

Chelmsford has adopted development standards or requirements that govern site design, off-street parking and loading, environmental standards, landscaping, signage and outdoor lighting, especially in the commercial and industrial zoning districts. The Site Plan review process as well as landscaping, parking and signage requirements, are outlined in the following narrative.

Site Plan Review

The Massachusetts Zoning Act does not specifically authorize site plan review, but the courts have upheld it as valid exercise of zoning authority, and most communities have some type of site plan review procedure. Site plan review is a vital component of the planning process because it creates a mechanism for reviewing development plans for projects that are likely to have a noticeable impact on the surrounding land uses, natural resources and traffic. Site plan review also provides a mechanism for placing reasonable conditions on projects prior to the issuance of a building permit. However, it does not create authority to disapprove uses permitted by right. Unlike a subdivision plan or special permit, an approved site plan does not “grandfather” any zoning rights. Site plan approval lapses after two years from the approval date, if substantial use has not commenced, except for good cause.

Originally adopted in 1975, Chelmsford requires site plan review for the building, alteration, or expansion of any nonresidential building, structure or use in all zoning districts. This is required if such construction will exceed a total gross floor area of 500 square feet. In Chelmsford, Site Plan Review under Section 195-104 of the Zoning By-law applies to the following:

- Construction, exterior alteration or exterior expansion of, or change of use within, a municipal, institutional, commercial, industrial or multi-family structure involving more than 500 square feet;
- Construction or expansion of a parking lot/area for a municipal, institutional, commercial, industrial or multi-family structure or purpose (construction or expansion from 500 to 2,500 sq. ft. shall require minor site plan review);
- Grading or clearing more than 10% of a lot, except for the following: landscaping on a lot with a existing structure or a proposed single-or two-family dwelling; and
- Construction or exterior expansion of a single- or two-family structure that will result in habitable space of more than 4,000 sq. ft. on a lot which held a single- or two-family structure within the past two years.

Chelmsford does not require site plan review for a building that was wholly or partially destroyed and the rebuilt using the same footprint or the square footage of usable space.

Landscaping

Landscaping plans are an important component of the overall development plan and are required by most communities as part of the Site Plan Review process. Adopted in 1998, the Chelmsford Zoning Bylaw requires a landscaping plan for all non-residential and multi-family projects. However, landscaping requirements may be reduced through a special permit, if the Planning Board finds that the proposed project will not detract from the objectives set forth in Section 159-41 of the Zoning Bylaw.

Parking areas with more than ten (10) spaces must contain 150 square feet of planted area for every 1,000 square feet of pavement related to parking spaces and aisles. The screening of parking areas facing public ways and residential zones or uses is required. Each nonresidential development facing a residential use or district is required to meet the required buffer area setbacks. Planted areas must contain indigenous plant species and avoid planting invasive species. As part of the Site Plan approval process, the Planning Board may require the applicant to submit a landscaping plan.

Off-Street Parking and Loading

Zoning bylaws normally set minimum off-street parking and loading standards for various land uses. Adopted in 1975, Chelmsford's minimum parking requirements for businesses uses are expressed as a minimum number of spaces per square foot of office or retail space, while residential and transient uses are expressed as a minimum number of spaces per bedroom or room/unit. The Planning Board has the discretion to reduce the number of parking spaces required if the project proponent can document that fewer spaces will meet the parking needs of the proposed project.

Chelmsford's off-street parking and loading regulations also impose design, landscaping and lighting requirements, in addition to minimum dimensions for parking spaces. Notably, unlike some communities, Chelmsford requires that any reduction in area required for parking is reserved as landscaped open space.

Signage and Outdoor Lighting

Signage and outdoor lighting is usually the most restrictive and exhaustive section of a zoning bylaw, given the need to accommodate and provide uniformity for each zoning district. Chelmsford requires a sign permit for the erection, enlargement or alteration of any sign. Signage must be maintained in a safe and sanitary condition to the satisfaction of the Inspector of Buildings, and in accordance with Section 1404.0 and 1405.0 of the State Building Code. The Inspector of Buildings is responsible for the issuance, approval and denial of all sign permit applications.

Chelmsford is similar to many other communities regarding the types of signage and illumination which are prohibited. However, it is extremely difficult for a code enforcement

officer or the Inspector of Buildings to monitor all signage in Town. Chelmsford has strict standards for signs placed in the residential, commercial and industrial districts, with regard to lettering, illumination, height, square footage, setbacks and maintenance. Signs permitted in the business districts are also permitted in the two industrial districts, with the exception of window signs. Outdoor lighting is required to be designed, located, installed, and directed in a fashion that prevents observable shadows at the property line or glare at any location on or off the property.

Chelmsford has a Sign Advisory Committee, comprised of five members appointed by the Town Manager. The Committee reviews all appeals to the Zoning Board of Appeals involving signs, as well as applications for sign permits and all applications for special permits.

PUBLIC INPUT

On June 3, 2009, the Master Plan Committee held a public forum at the Chelmsford Senior Center focusing on Land Use, Economic Development and Housing. The session was televised on local cable television and viewers were also encouraged to submit additional recommendations and comments. At the beginning of the session, participants were provided with a draft goal statement regarding land use which was developed by the Master Plan Committee:

“Manage and direct growth, including new development and redevelopment 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.”

Comments offered by the participants relative to land use and zoning have been summarized as follows:

- Chapter 40B development has consumed industrial and commercial property, producing an adverse fiscal impact
- Density provisions in the town’s zoning bylaw should be revisited
- Town character should be protected
- Planning for development of vacant parcels should emphasize preservation of open space
- New construction has negative fiscal implications
- Chelmsford needs a stronger tax base
- The town needs to be proactive in creating affordable housing; rezone town-owned parcels for multi-family use
- Large-lot zoning should be explored (1-acre vs. 2-acre lots)
- Revise the existing zoning bylaw so that dimensional requirements are consistent with neighborhood character (e.g. Westlands and North Chelmsford)
- Apply special permit standards rather than requiring a variance—allow the ZBA to issue use variances

- Revise zoning bylaw in a way that is “redevelopment friendly”; create standards for redevelopment that are less onerous
- Adopt an “optional inclusionary” bylaw in exchange for providing affordable units; include developer incentives
- Promote “village center” and “new urbanism” type development (e.g. Cornerstone Square Lifestyle Center in Westford)
- Implement mixed-use zoning in the Town Center and Vinal Square
- Mixed-use development should include interconnected green space
- Redevelopment should occur in Vinal Square, along Route 110 and on town-owned land
- Zoning should be modified to allow service establishments along Route 129

ISSUES AND OPPORTUNITIES

The build-out analysis performed by the Northern Middlesex Council of Governments (NMCOG) clearly indicates that the Town of Chelmsford is nearly built out. With only 179 acres of developable land for commercial and industrial use remaining, future economic development opportunities in Town will, in large part, be in the form of redevelopment projects. It is evident that the town’s zoning bylaw will need to be modified and strengthened to incentivize and control redevelopment activities. At a minimum, these modifications should include adjustments to the setback, landscaping and parking requirements outlined in the existing zoning bylaw. The need for these modifications to the zoning bylaw is further detailed in an April 1, 2010 technical memo prepared for the Town of Chelmsford by Concord Square Planning and Development, Inc.⁸ A copy of the memorandum is included in Appendix C.

The Master Plan Committee has identified the following general areas as being suitable for redevelopment: Route 129 corridor (from Riverneck Road to Route 3), Vinal Square, Center Village, the Route 110 corridor between the town center⁹ and I-495, and the Drum Hill area in the vicinity of Glenview Sand and Gravel. It is also recommended that the upper parking lots and four commercially zoned parcels in front of the Chelmsford Mall be rezoned for neighborhood commercial type uses, thereby providing additional buffering and screening for abutters and protecting neighborhood character. Furthermore, the Master Plan Committee recommends that expedited permitting be established for projects within the Route 129 corridor. The concept of expedited permitting is discussed in greater detail within the Economic Development component of this Master Plan.

The Master Plan Committee recommends that the establishment of a mixed-use Redevelopment District along Route 110, from Hunt Road to Chamberlain Road, be further explored. Mixed-use development incorporates complementary residential, commercial, civic and business uses

⁸ Technical memorandum dated April 1, 2010 to Evan Belansky, Community Development Director from Karen Cullen, Concord Square Planning and Development, Inc.

⁹ The town center geographic boundaries include Academy Street, both ends of Fletcher Street, Route 110 to just beyond Ginger Ale Plaza, Route 129 to Town Hall, Summer Street, and Route 4 to Summer Street.

into a single building, parcel or development/redevelopment area. Mixed-use is a key component in many contemporary development trends and concepts such as Transit-Oriented Development (TOD), Traditional Neighborhood Development (TND), Livable Communities and Smart Growth. There are multiple benefits of mixed-used development, such as increased housing options for diverse household types, reduced auto dependence, and healthier lifestyles for residents living within a mixed-use district.

Currently, many features of the zoning bylaw work to separate land uses rather than encouraging mixed-use development in appropriate areas. Areas in which mixed-use development would be appropriate include the Town Center, Route 110 from the Town Center to Fletcher Street, Technology Drive, Vinal Square, and the mill complexes of North Chelmsford. Allowing residential uses above retail, offices or shops within the Town Center and Vinal Square would add vitality and additional foot traffic to these areas creating a more vibrant village community. The creation of design guidelines for mixed-use development and redevelopment projects within the Town Center and Vinal Square will ensure that future projects are consistent with the character of these areas and that the historic integrity of the villages is preserved and enhanced.

The establishment of a Mill Reuse Overlay District in North Chelmsford is a concept that the Town should pursue. Overlay zoning is designed to encourage additional uses not addressed in the base zoning. Creation of an overlay district maintains all of the uses allowed in the base zone, but provides greater flexibility in redeveloping or reusing existing structures, and in developing vacant parcels, and increases potential property values for current owners. Overlay zoning bylaws often focus on protecting historic resources or environmental resource areas. The purpose of a mill reuse overlay district is to:

- Protect the neighborhood from the loss of historic buildings, new construction not in character with the neighborhood, or alterations to existing buildings that would lessen their architectural significance;
- Facilitate and encourage the reuse of the North Chelmsford historic mill buildings should a vacancy occur;
- Promote diverse housing choices in the community; and
- Provide flexibility in meeting the town's housing and economic development goals.

Uses other than those allowed under the base zoning would require a Special Permit and Site Plan review, with the Planning Board serving as the Special Permit Granting Authority (SPGA). Design guidelines should be developed for projects undertaken through the overlay bylaw.

Providing that there is proper community input and adequate traffic mitigation in North Chelmsford and elsewhere, the Master Plan Committee is supportive of the extension of commuter rail service from Lowell to Nashua and Manchester, New Hampshire. Should this project go forward, the town has expressed an interest in establishing a commuter rail station within North Chelmsford. The addition of commuter rail service to the area creates future

opportunities for transit-oriented development. To ensure that the project benefits Chelmsford and its neighboring communities, the town should continue to work with the New Hampshire Department of Transportation (NHDOT), MassDOT, the Nashua Regional Planning Commission (NRPC), the Lowell Regional Transit Authority (LRTA), and NMCOG to guide the progress of the commuter rail project by participating in the design and environmental review processes. Should a commuter rail station be established, the town will need to review the zoning in this area in order to take advantage of state funding opportunities for transit-oriented development programs, which promote moderate and high density mixed-use development within walking and bicycling distance of public transit facilities. The Town should also work with the LRTA to maximize transit access, particularly for residents with mobility issues.

The Route 129 Corridor is the town's principal technology corridor. Currently, the maximum building height allowed within this area is 45 feet or 4 stories. Based on conversations with local officials and input received from the public, the Master Plan Committee recommends that the zoning bylaw be amended to allow structures of four to six stories for lots abutting Route 129 in the area extending from the Billerica town line to Alpha Road, provided that these taller structures do not negatively impact abutting residences, while gaining a significant increase in open space exceeding our existing requirements. This may require some modifications to the town building and safety regulations. The Chelmsford Fire Department has indicated that they have the capability of providing sufficient fire protection to structures of this height.

It is further recommended that the zoning for this area of Route 129 be modified to allow for commercial uses that provide support services to the office park developments located along the corridor. Such uses would include restaurants, dry cleaners, personal and professional services, and similar retail establishments. In addition, the zoning bylaw should be modified to allow an extended stay facility on Billerica Road, either side of Route 3 between the town line and Mill Road, to serve the needs of corporate tenants and businesses located along the Route 129 corridor. The Planning Board should establish a reasonable size limit for service establishments to ensure the type of development constructed is what is desired in the area and to minimize the traffic impacts of such businesses. The intent of these recommendations is to encourage the reuse of existing vacant and underutilized properties, and to encourage businesses that complement the town's downtown area. Given that Route 129 is an important gateway to Chelmsford, design standards should be developed for this area, which address building form and materials, lighting, landscaping, parking, access control, and bicycle and pedestrian amenities.

The town could improve the visual quality of commercial and industrial development through the adoption of a design review process. The intent of creating design guidelines is to provide guidance and suggestions regarding the future development of retail, commercial, and industrial projects within the community. The guidelines provide a means by which the commercial and retail districts can thrive, the transportation network can function more efficiently, and the visual quality of the area can be improved. This represents an opportunity for the community to

improve the quality of future development and redevelopment, ensuring that the projects meet the visual and design standards that the community prefers.

Design guidelines would allow the Planning Board to consider factors beyond engineering and site design as outlined in the Zoning Bylaw. Generally, design guidelines address building massing, materials and articulation; reinforce the form and architecture to be compatible with the surrounding area; promote facade treatments that are in keeping with the overall context of the community; and provide appropriate signage, lighting and landscaping. Design review could begin as an advisory review coordinated within the town's existing approval process. The process could be activated by commercial and industrial projects of a certain size threshold, e.g. 10,000 square feet or more. Design guidelines are not intended to stifle creativity or to limit a property owner's opportunity to maximize the value of his or her property. Well written design guidelines recognize the value of diverse design, and in fact, encourage innovative and unique design solutions. The use of design guidelines helps to avoid the visual chaos and functional inefficiencies of design decisions that are made independent of the context in which the project is located.

Input received during the Master Plan development process indicated that residents and local officials generally feel that the town's zoning is not always consistent with neighborhood character. This is particularly true in the Westlands, including, but not limited to, Manahan Street, Morgan Drive and Maple Avenue, and in the areas around Freeman Lake and Heart Pond, where previous development generally occurred on smaller size lots and at a higher density than in other sections of town. The town's zoning requirements should focus on maintaining the existing character of its neighborhoods. The bylaw and zoning districts should be revised to encourage development that is consistent with the existing physical characteristics of the Westlands and lake neighborhoods.

There are obvious zoning and land use conflicts along the Route 40 corridor between Route 3 and the Westford town line, where some lots are split-zoned for industrial and commercial uses. The town has an opportunity to revise the zoning in this area to eliminate future land use conflicts in a way that benefits the neighborhood and the community overall. The use of transitional zoning should be further explored as a means of reducing existing and future conflicts between residential and industrial uses and districts. Transitional zoning districts allow for a set of land uses that will effectively create a transitional area between higher intensity commercial and industrial uses and adjacent residential neighborhoods. Transition zoning is used to ensure that new development and redevelopment projects are compatible with the scale and aesthetics of the surrounding area, and to provide appropriate buffering for residential neighborhoods.

The town's zoning bylaw currently makes it difficult for the town to attain the 10% affordable housing goal outlined in Chapter 40B. The current density bonus provision in the RM zones provides for 10% affordability with a ten-year deed restriction. In order for affordable units to

be included in the state's Subsidized Housing Inventory (SHI), a deed restriction for each affordable unit must be in place for a minimum of thirty (30) years. The town should revise this portion of the zoning bylaw to require 25% affordability with a deed restriction in perpetuity on each affordable unit. In addition, the town should establish design guidelines for 40B development projects, similar to what is in place in Westford, to ensure compatibility with community character.

The Town should consider establishing an RM zoning overlay district for select parcels to allow for future multi-family housing opportunities within the limits of the town's carrying capacity, so that the town's resources are not strained and community character is not negatively impacted. According to a report prepared by Taintor and Associates, Inc.¹⁰ in July 2006, very few parcels of developable land remain in the RM zones. The current bylaw requires that new RM districts have 5 acres of land and 250 feet of frontage on a state highway, a right-of-way that is 60 feet wide or a right-of-way that carries 1,000 or more vehicles per day. These requirements limit the potential for new RM districts to be created. The zoning bylaw should be modified to establish much more reasonable and achievable criteria for creating districts for multi-family housing. The following parcels have been identified by the Master Plan Committee as potential candidates for rezoning within the RM district:

- 11 Cushing Place
- 51-57 and 61-63 Middlesex Street
- 100 Wotten Street
- 26 and 32 North Road
- 233, 235, and 241 Littleton Road.

To promote affordable housing in a way that provides additional units while having local regulatory control over the process, the town should consider adopting a comprehensive inclusionary zoning bylaw. The new bylaw must have a fair system of density bonuses or other cost offsets for on-site affordable units, and allow the option to provide equivalent housing through off-site units or through land donations to the Chelmsford Housing Authority. The bylaw should apply to multi-family development, as well as large-scale single-family subdivisions above a certain size threshold. In addition, the development of rental housing within the Center Village zoning district should be allowed by right. The town should also revisit the issue of in-law apartments with the objective of improving the permitting process and developing criteria that meet the needs of today's families.

Low Impact Development (LID) is an approach to environmentally friendly land use development that includes landscaping and design techniques that maintain the natural, pre-developed ability of a site to manage rainfall. The LID approach protects the natural ability of the site to capture precipitation and allow it to recharge the local water table. This is achieved by applying a suite of tools including:

¹⁰ Chelmsford Affordable Housing-Zoning Analysis and Options for Modification, Taintor and Associates, Inc., July 28, 2006.

- Planning: preserve the site's natural features such as wetlands, native vegetation, flood plains, woodlands and soils to the greatest extent possible;
- Landscaping: plant native vegetation in buffer strips and in rain gardens (small planted depressions that can trap and filter runoff);
- Prevention: use vegetated areas to slow down runoff; maximizing infiltration and reducing contact with paved surfaces; and
- Innovating: reduce impervious surfaces wherever possible through alternative street design, such as omission of curbs and use of narrower streets, and through use of shared parking areas.

Presently, the town's subdivision regulations do not permit the use of low impact development techniques. The use of these techniques should be permitted and encouraged within the town's development regulations.

The special needs of agricultural uses are not considered within the current zoning bylaw. The zoning bylaw should be amended to address the unique needs of agricultural enterprises and operations, in order to encourage the preservation of the town's remaining agricultural lands, and to allow agricultural enterprises to remain economically viable.

The Town's Zoning Bylaw and development regulations should provide stronger incentives to encourage developers to contribute to the town's open space goals. As highlighted in the Open Space and Recreation of this Master Plan, the existing Planned Open Space Development zoning bylaw, Section 195-92, could be revised to specifically target the remaining large developable tracts of land by providing incentives such as density bonuses in exchange for providing open space.

The current condition of the University of Massachusetts Lowell West Campus off Princeton Boulevard is unacceptable to the Town of Chelmsford. The buildings are in a serious state of disrepair and the campus has not seen any significant reinvestment in decades. The Master Plan Committee recommends that a redevelopment master plan be prepared for the overall campus which strives to maintain the character of the area, preserves historic resources and structures, protects environmental resources and respects the concerns of the neighborhood and the abutters. The town will need to actively engage the neighborhood and the University and establish an open dialogue, in terms of the future disposition and use of this property.

A similar master planning effort is needed to address the future use(s) for the 66-acre Oak Hill parcel acquired by the Town in 1998. The Master Plan Committee feels that this parcel would be best used for housing and active and passive recreation, or a combination thereof. . The majority of the property is currently zoned for industrial use, and therefore, rezoning may be required, depending on the outcome of the site master planning process.

During the Master Plan public input sessions, citizens and area business leaders noted that the town's budgetary challenges have led to the elimination of the zoning enforcement officer. Zoning enforcement is now the sole responsibility of the building inspector. Residents cited the fact that the town is not always timely in its response to resident complaints, given the other responsibilities and duties with which the building inspector is tasked. The lack of enforcement of the sign and lighting sections of the zoning bylaw were particularly noted. As the economy improves, reinstating the zoning enforcement officer position should be among the town's priorities. The reactivation or re-establishment of the Sign Advisory Committee should also be considered.

Overall, the town's zoning bylaw has not been significantly revised or rewritten in many years, with the last major update occurring in 1998. The Master Plan Committee recommends that the Town review all of its bylaws every five years. Town staff has indicated that the zoning bylaw is not user friendly, that many sections of the bylaw need to be clarified, that there are inconsistencies between the zoning map and the zoning bylaw, and, in general, the document needs to be better organized. Many of the dimensional requirements outlined in the zoning bylaw are unachievable as presently written.

The dated nature of the bylaw is evident in that more recent commercial businesses that have come into vogue, such as family entertainment complexes, are not addressed in the table of permitted uses or allowed under the current bylaw. In addition, it has been noted that the bylaw does not presently allow the town to regulate certain businesses, such as landscaping companies or soil/compost/bark mulch sales and distribution establishments. Many proposals do not require any public notification or regulatory review. Many of the conflicts that arise between these businesses and abutting residences are also due to the fact that the town does not presently require site plan review for all new businesses.

The current zoning bylaw allows for 4-story buildings within the Residential C zoning district. The Master Plan Committee recommends that the maximum building height in this district be consistent with the town's other residential zoning districts, therefore the zoning bylaw should be modified to reduce the height limit to three stories.

Currently, the town does not have any means of enforcing the overnight garaging of commercial vehicles in residential neighborhoods. This issue should be resolved either through revisions to the town's zoning bylaw or the town's municipal code. The Bylaw Review Committee should be reinstated and the zoning bylaw should be improved and modernized through a comprehensive review of the entire bylaw, including zoning districts, permitted uses, definitions and dimensional requirements. The Planning Board and Community Development Department have identified the following sections of the Zoning Bylaw as being in need of updating and revision:

- Use and dimensional tables along with definitions.
- 195-6.1- Limited accessory apartment [In-Law Apartments]
- 195-7- Home Occupation
 - Antiquated, need to be updated to reflect current professions and work environment
 - Define Terms
- 195-8- Nonconforming Uses and Structures
- 195-17 -Minimum Parking Requirements
- 195-43- Property Lines
- 195-44 A,B, & C-Parking Areas
- Article XI-Major Business Complexes
- 195-55- Applicability
- 195-63-Density Bonus
- 195-100 -Administration and enforcement
- 195-101 -Violations
- Article XVII- Facilitated and Independent Living Facilities
- Article XVIII A- Center Village Zoning.

The town will need to retain the services of a zoning and land use consultant to assist with the review and re-write of the zoning bylaw. Any revisions to the bylaw should incorporate the changes needed to better accommodate redevelopment projects through the creation of redevelopment zoning overlay districts, as outlined above.

RECOMMENDATIONS

- Modify and revise the town’s Zoning Bylaw and subdivision regulations to better accommodate redevelopment projects. At a minimum, revisions should include allowing for reduced setbacks and providing greater flexibility in terms of parking and landscaping requirements. The Special Permitting process should also be modified to require the issuance of one consolidated special permit for a redevelopment that is not allowed by right. Redevelopment projects should be designed to provide significant improvement in the non-conforming nature of a property, where applicable.
- Establish a Redevelopment District along Route 110, from Hunt Road to Chamberlain Road. Regulations for this area should promote mixed-use development that provides additional economic development and housing opportunities for the community.
- Implement expedited permitting for projects located within the Route 129 corridor.
- Target the following areas for redevelopment: the Route 129 corridor, Vinal Square, Center Village, the Route 110 corridor between the Center and I-495, and the Drum Hill area, including the vicinity of Glenview Sand and Gravel.

- Rezone the upper parking lots and four commercially zoned parcels in front of the Chelmsford Mall to allow neighborhood commercial uses with strict design guidelines, thereby creating transitional zoning which would provide additional buffering and screening for abutting residences, thereby preserving the character of the neighborhood.
- Create mixed-use overlay zoning districts in the following areas: Vinal Square, the mill complexes of North Chelmsford, the Town Center, Route 110 from the Center to Fletcher Street, and Technology Drive.
- Create design guidelines for mixed-use development and redevelopment projects within the Town Center and Vinal Square to ensure consistency with the character and historic integrity of these villages.
- Establish a Mill Reuse Overlay District and Bylaw for the mill complexes in North Chelmsford to provide greater flexibility in redeveloping or reusing the existing structures, to add value to the properties, to protect the area's historic resources, and to provide flexibility in meeting the town's housing and economic development goals.
- Modify the current zoning bylaw to allow residential uses above retail, offices and shops within the Town Center and Vinal Square.
- Continue to monitor the progress of the Lowell to Nashua/Manchester commuter rail extension project, and position the community to take advantage of transit-oriented development opportunities should the extension project go forward.
- Revise the town's zoning bylaw to allow the construction of four to six story buildings for lots abutting the Route 129 corridor in the area extending from the Billerica town line to Alpha Road, provided that such structures do not negatively impact abutting residences, while gaining a significant increase in open space exceeding our existing requirements. Design standards should also be developed for this area that address architecture, lighting, landscaping, parking, signage, etc.
- Modify the zoning along the Route 129 corridor to provide support services for the office park developments located along the corridor. Desired support businesses include restaurants, dry cleaners, personal and professional services, and similar retail establishments.
- Modify the zoning bylaw to allow for the development of an extended stay facility on Billerica Road, either side of Route 3 from the town line to Mill Road, in order to serve the needs of corporate tenants and businesses located along the Route 129 corridor.

- Adopt a design review process that includes design guidelines for retail, commercial and industrial projects. Initiate design review as an advisory review coordinated within the town's existing approval process.
- Modify the town's current zoning bylaw to enhance and reflect the existing character of its neighborhoods. Particular attention should be paid to modifying the zoning requirements for the Westlands, including, but not limited to, Manahan Street, Morgan Drive and Maple Avenue, and for the neighborhoods surrounding Heart Pond and Freeman Lake, where development has occurred at a much higher density than in other areas of town.
- Address the land use and zoning conflicts that exist along the Route 40 corridor between Route 3 and the Westford town line. The Zoning Bylaw Review Committee should be reconvened and work with the neighborhood and the Planning Board to resolve these conflicts in a fashion that is amenable to the residents and beneficial to the community overall. The use of transitional zoning should be explored as a means of reducing existing and future conflicts between residential and commercial/industrial uses.
- Implement revisions to the zoning bylaw that promote the creation of additional units of housing to meet local needs. In the RM zoning district, increase the affordability requirement from 10% to 25% and require a deed restriction in perpetuity for each affordable unit. In addition, establish an RM overlay zoning district for select parcels to provide future opportunities for multi-family housing. Modify the restrictions outlined in the RM zoning bylaw to include more reasonable criteria for establishing RM districts.
- Adopt a comprehensive inclusionary zoning bylaw with a fair system of density bonuses or other cost offsets for on-site affordable units, and provide the option of creating equivalent housing through off-site units or through land donations to the Chelmsford Housing Authority.
- Revise the zoning bylaw to allow the development of rental housing by right within the Village Center zoning district.
- Review the in-law apartment regulations to improve the permitting process and to update the regulations to reflect the needs of today's families.
- Amend the town's subdivision regulations to allow for and encourage the use of Low Impact Development (LID) techniques for managing storm water.

- Amend the zoning bylaw to address the unique needs of agricultural enterprises and operations, in order to encourage the preservation of the town's remaining agricultural lands, and to allow agricultural enterprises to remain economically viable.
- Develop a master plan for the University of Massachusetts Lowell West Campus, working collaboratively with the University and the neighborhood.
- Develop a master plan for the 66-acre Oak Hill parcel, which was acquired by the town in 1998.
- Revise the Planned Open Space Development zoning bylaw (Section 195-92) to provide stronger incentives for developers to contribute to the Town's open space goals.
- Reinstate the position of the zoning enforcement officer.
- Update and revise the entire zoning bylaw to improve readability, add clarity and make the overall document more user-friendly. The bylaw also needs to be modernized in terms of the table of uses, dimensional requirements, definitions, and provisions for dealing with commercial vehicle storage, etc.
- Establish design guidelines for 40B projects to ensure compatibility with neighborhood and to maintain the community's character.
- Review and update all municipal bylaws every five years.
- Reduce the maximum building height allowed in the Residential C district from 4 stories (45 feet) to three stories (35 feet).