3.0 FUTURE CONDITIONS

A. LAND USE, DEMOGRAPHIC AND POPULATION PROJECTIONS

1. Recent Land Use Changes

Table 2-4 in Chapter 2 of this report presented the current zoning districts and the approximate percentage of land area each district encompassed in 2002. These districts help categorize and direct existing and future land use. Table 3-1 below shows how the zoning districts in Oxford have changed between 1985 and 2002 in Oxford from 2002 and 1985. Some of the district designations have changed since 1985.

Table 3-1
Zoning District Changes in Oxford
1985 – 2002

Zoning Code	District	2002 Percentage	1985 Percentage
R-1	Rural Residential	32.60	8.6
R-2	Suburban Residential	36.30	63
R-3	Residential	11.20	
R-4	Multi-Family Residential	2.45	
CB	Central Business/ North Oxford Business	0.45	4.0
GB	General Business	3.80	
HI	Highway Interchange	1.50	1.5
CP	Central Professional	0.10	0.1
LI	Light Industrial	2.90	1.2
I	Industrial	5.50	9.1
C	Conservation	3.10	12.5

Sources: MA Executive Office of Environmental Affairs (EOEA), *Oxford Buildout Projections*, 2002 and CMRPC, *Land Use Management Plan*, 1986.

2. Demographic Trends

As development has spread outward from the Boston Metropolitan area, the Central Massachusetts region has grown significantly. According to the CMRPC 2007 *Regional*

Transportation Plan, "the Region's central location and excellent highway access make it possible for workers with jobs in Boston or along I-495 to live within driving distance of work and to buy a less expensive home with a rural or suburban lifestyle." Table II-1 in that plan states that between 1995 and 2004 the number of building permits issued to the 40 towns and cities in the CMRPC District increased from 1,966 to 2,645, with an average of 2,220 per year.

An example of this migration from the city and suburbs can be seen by the population growth in Oxford. The population of Oxford has grown relatively steadily in the last 35 years. Table 3-2 shows past and projected population growth in Oxford between 1940 and 2030. The largest growth, in the 1950s, can be attributed to people leaving urban areas and moving to the suburbs. Many neighborhoods in Oxford date to this time. Relatively steady growth is expected during the next twenty years. While this table indicates modest increases in population over the next two decades, the Town Clerk's Office reported a population of 12,758 in 2007, which represents a 4.4% decline in the U.S. Census estimate in 2000. This report will adhere to the CMRPC projections, which is a conservative approach.

Table 3-2
Past and Projected Population Growth in Oxford
1940 – 2030

Year	**1940**	**1950**	**1960**	**1970**	**1980**	**1990**	**2000**	**2010**	**2020**	**2030**
Population	4,623	5,821	9,281	10,345	11,680	12,588	13,352	13,900	14,500	15,200
Rate of Increase		26%	59%	11%	13%	8%	6%	4%	4%	5%

Source: U.S. Census and CMRPC

CMRPC also provides estimates for future number of households. Table 3-3 indicates that the number of households in Oxford will increase from 5,058 in 2000 to 5,940 in 2030, an increase of 14.8% in this period, compared to a 12% overall population growth for the region.

The Table 3-4 presents the number of building permits issued for selected categories between 1998 and 2007. The "commercial" category includes both commercial and industrial uses.

3. Residential Development

New home construction has varied between 30 and 58 units per year over the last ten years. A growth management restriction was enacted in 2005 to limit growth: no more than 36 new building permits can be issued in any twelve-month period with no more than five in any month. However, subdivisions approved prior to 2005 had zoning protection from the growth restriction requirement.

Recently a few large subdivisions have been proposed for North Oxford. These proposals are consistent with zoning for this area, which allows for multifamily housing at a much greater

Table 3-3
Household Projections for Town of Oxford
2000 - 2030

Year	Households	Persons per Household	% Change in Households	Yearly Avg. Increase in Households
2000	5,058	2.64	-	-
2010	5,330	2.61	5.4	272
2020	5,620	2.58	5.4	290
2030	5,940	2.56	5.7	320

Sources: U.S. Census, CMRPC

Table 3-4
Building Permits Issued in Oxford
1998 – 2007

Category	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total
Additions	13	17	31	18	32	33	32	34	25	8	243
Apartments	2	0	2	2	1	1	0	2	1	0	11
Commercial	18	6	7	9	8	10	6	11	10	30	115
New Homes	55	51	58	37	31	36	30	45	46	35	373
All Permits	**260**	**256**	**296**	**290**	**313**	**330**	**334**	**427**	**369**	**337**	**3212**
ANR Plans*							34	21	14	11	80

*ANR = Approval Not Required
Source: Town of Oxford Annual Reports, 1998 – 2007

density than single family residential. This portion of Town is accessible to Routes 56 and 20, and is less than ten minutes' travel time to I-90, I-290, and I-395. Thus, the Town believes it is an appealing area for future growth.

4. Commercial and Industrial Development

Commercial and industrial development has varied from 6 permits to 30 permits during the last ten years (The "Commercial" category in Table 3-4 includes industrial uses as well as commercial.). This is up significantly from the late 1970s/early 1980s when there were typically 2-8 permits per year. Commercial properties tend to be clustered along Route 12, Route 20, and Sutton Avenue, in accordance with Town zoning. Commercial development is varied, from many small businesses, to a Home Depot and a Wal-Mart. A lack of a single grocery store in

Town can arguably demonstrate the continued potential for growth of commercial activities in Oxford.

Two industrial parks were created in the southern end of Town near exit 3 off Route I-395 (Industrial Park East and Industrial Park West). In addition, Old Webster Road has large business and industrial uses with land available for continued development. Two industrial parks are being built out in North Oxford, along Route 20 (Pioneer Drive and Boulder Industrial Park).

5. Geographic Distribution of Development

Development over the last twenty years has been primarily occurring in three areas: North Oxford, along the Route 20 corridor; Downtown Oxford between the French River and I-395; and along Route 12 at the southern end of the Town. North Oxford contains a commercial/industrial corridor along Route 20 as well as zoning for multifamily development. Downtown Oxford includes an active business district along Route 12 as well as smaller, more densely settled residential lots dating to the growth in the 1950s. The southern end of Town has multiple industrial parks as well as a general business district along Route 12.

6. Open Space

Open space consists mostly of land owned and operated by ACOE. Although in 1986 over 12% of the Town was considered part of a watershed district, zoning currently has been changed so that approximately 3% of the Town is part of a conservation district. This is generally land owned and administered by ACOE as floodplain protection around the French River.

7. Anticipated Development Trends Over the Next Twenty Years

Based on development trends over the past twenty years, there are a number of expected development trends the Town can anticipate between 2010 and 2030. They include the following:

a. **Fair population growth with much occurring in North Oxford**. CMRPC population projections show overall population growth for Oxford of approximately 9% between 2010 and 2030 as compared to a slightly greater growth of 12% in the CMRPC region. Due to its zoning and proximity to regional transportation, North Oxford can expect to see much of this growth.

b. **Continued Commercial and Industrial Development**. The Town is bisected by I-395 and currently has much land along the I-395 interchanges available for development. Small and medium business development will continue to grow and evolve in the downtown area near I-395, Exit 4. Large business and industrial uses will continue to develop in the southern portion of Town near I-395, Exit 5.

8. Buildout Analysis

A buildout analysis determines how a community will look if all the buildable land is developed in accordance with the current zoning. The analysis also determines the impact of new development in terms of its demand on municipal services, environmental resources, and

transportation infrastructure. This information can help in the fiscal and physical planning of new facilities to accommodate future development.

We note that the buildout analysis provides a picture of the ultimate (final) developed state of a town, but does not establish the rate of future development, or how quickly buildout will be reached. The discussion in the previous section provides an indication of how development might occur between 2010 and 2030.

The Massachusetts EOEA recently sponsored a buildout analysis for Oxford. The buildout analysis consisted of four steps:

1. Determine the amount of developable land in Oxford. This number is calculated by subtracting from the Town's total land area all land that is already developed or is unavailable for development for a variety of reasons, as shown below:

Total Oxford land area:	17,548 acres
Less developed and constrained land: [1]	- 7,954 acres
= Total Developable Land	**9,594 acres**

2. Determine the amount of developable land in each zoning district (Table 3-5).

3. Determine development intensity allowed in each zoning district under current zoning. Multiply these intensity formulas by the total amount of buildable land in each district to arrive at the overall developed acreage in residential, commercial and industrial districts.

4. Estimate the potential impact of the buildout on public services, environmental resources, and transportation infrastructure by using pre-determined formulas.

The results of this analysis are provided in Tables 3-6 through 3-8.

Table 3-5
Developable Land by Zoning District

Developable land in Highway Interchange	120 acres
Developable land in General Business	267 acres
Developable land in Industrial	539 acres
Developable land in Light Industrial	316 acres
Developable land in Rural Residential (R-1)	3,859 acres
Developable land in Suburban Residential (R-2)	3,838 acres
Developable land in Residential (R-3)	375 acres
Developable land in Multi-Family Residential (R-4)	280 acres
Total Developable Land	**9,594 acres**

Source: EOEA Buildout Analysis.

[1] Constrained land includes protected open space, utility corridors, and certain lands where environmental regulations prohibit development.

Table 3-6
Residential Buildout Calculations

District	Total Buildable Lots
R-1	1,677
R-2	2,554
R-3	476
R-4	345
Total Lots:	**5,052**

Source: EOEA Buildout Analysis

Table 3-7
Commercial and Industrial Development

District	Developable Lots	Buildable Sq. Ft.
Highway Interchange	60	657,059
General business	290	1,083,716
Industrial	393	3,035,895
Light Industrial	229	1,776,650
Total	**972**	**6,553,320**

Source: EOEA Buildout Analysis

Table 3-8
Potential Impacts of Buildout Development

Potential Impact Area	Total Impact
Developable Land Area (acres)	9,594
Total Residential Lots	5,052
Total Residential Units	5,397
Commercial/Industrial Buildable Floor Area (sq. ft.)	6,553,320
Residential Water Use (gpd)	1,093,084
Commercial/Industrial Water Use (gpd)	491,499
Municipal Solid Waste (tons)	8,788
Non-Recycled Solid Waste (tons)	5,320
New Residents	14,574
New Students	3,973
New Residential Subdivision Roads (miles)	87.6

Source: EOEA Buildout Analysis

The buildout analysis was prepared using a standard buildout methodology that EOEA developed. However, determining the development capacity of a town is a somewhat inexact science, given the large number of variables involved. For example, the presence of steep slopes is not usually an *absolute* constraint to development, but it may be a *partial* constraint.

The buildout analysis provides a conservative estimate of Oxford's total buildout capacity (i.e., it tends to overstate the buildout capacity) because it does not subtract *partial* constraints such as steep slopes, poor soils, floodplains, and wetlands from Oxford's total buildable land area. On the other hand, the buildout analysis does not consider the fact that some of Oxford's already-developed land may be redeveloped in a more intensive way, particularly in the commercial and industrial districts.

The buildout scenario for Oxford presents several challenges and implications for future planning in the Town. Specifically:

- Buildout of the Town would result in a 109% increase in its population, from 13,352 (2000 U.S. Census estimate) to 27,926, with commensurate increases in the demand for water and sewage disposal, schools and other public services, and solid waste disposal.

- Presently, the Town has about 9,594 acres of buildable land, or about 55% of the Town's area. The Town is certainly not in a position to protect this amount of land as open space to try to maintain the "character of the Town" by relying solely upon purchasing undeveloped land for conservation purposes. If Oxford wishes to protect its open space and pockets of rural character, it will need to couple land purchases with effective regulatory and design tools to maintain the character of unprotected lands, some of which will, inevitably, be developed.

- Between 1995 and 1999, an average of about 35 new dwelling units per year have been built in Oxford. If this growth rate continues, it will take 154 years for Oxford to reach buildout.