

TOWN OF WEBSTER

Community Development Plan



June 12, 2003

A VISION PLAN, ANALYSIS, AND ACTION STRATEGIES FOR HOUSING, ECONOMIC DEVELOPMENT, AND TRANSPORTATION

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Planning Context

Background

Utilizing \$30,000 in 418 Community Development Plan funding, the Town of Webster, acting through the Town's Office of Community Development and with the assistance of the Central Massachusetts Regional Plan Association, retained the services of three consulting firms to carry out the preparation of a Community Development Plan. The firm of Larry Koff & Associates is coordinating this effort and has prepared the introductory Vision Element, the Housing Element, and the Action Plan-"Putting It All Together." This work has been carried out in conjunction with Todreas Hanley Associates which has prepared the Economic Development Element and the transportation planning firm of The Beta Group, Inc. which has carried out a Route 16 Corridor Study focused at Indian Ranch and the intersection with Upper Gore Road.

The purpose of this planning initiative is to identify a Vision Plan and Action Strategy which will address issues of affordable housing, economic development, resource protection, and transportation. Specific activities will be proposed to be carried out by the Town in conjunction with the private sector. This document consists of three elements.

1. A **Vision Plan** is presented in the context of a Build-out/Land Use Suitability Analysis. Base line conditions, trends, resource and infrastructure mapping provide a general framework for the subsequent preparation of the Community Development Plan. A Vision Problems and Opportunities assessment of Housing, Resource Protection, Economic Development, and Transportation issues are presented. This preliminary assessment identifies the issues which will be the subject of further analysis. The South Main Street Corridor is identified as a priority study area for community development planning.
2. A **Housing, Economic Development, and a Route 12 Transportation Corridor Plan** have been prepared by each of the consultants.
3. A final **Action Plan** will *Put It All Together* into a concept plan and an identified series of next steps for housing, economic development and transportation corridor planning and improvements.

It is our assessment that if the town is going to enhance its tax base, protect its natural resources and rural heritage, and provide a range of housing opportunities, a coordinated community development program is needed. Of first priority is the opportunity to rezone some of the town's commercial, industrial, and residential areas so that they support the recent public investments in sewer infrastructure, the construction of Route 395, and the market demand for housing and commercial growth. At the same time with the support of local property owners, a revitalization plan for downtown as a specialty center for restaurants, artist live work space, and professional offices needs to be prepared. Concurrently other opportunities for economic growth outside the downtown such as the development of Indian Ranch, possibly as a regional destination recreation tourist center have to be pursued. Additional transportation improvements along the corridor and the pursuit of commercial and industrial development to provide new job opportunities for a range of skill levels as well as a variety of housing opportunities in the new growth areas should be considered.

Assessment: "Where Are We?"

The Town of Webster is located in Worcester County adjacent to the tri-state area of Massachusetts, Connecticut, and Rhode Island, equidistant between Hartford and Boston. See Map 1, Webster Regional Map.

Projected Buildout Analysis

In 2001, the Executive Office of Environmental Affairs (EOEA) oversaw the preparation of a buildout analysis for the Town of Webster. The build-out analysis estimated that a total of 2,691 dwelling units could be created, the majority of which would be single family housing, with about 3% being multi-family units. Local officials think that this analysis exaggerates the amount of available land for development, due to the amount of conservation land that exists in Webster (EOEA does take conservation land into consideration, but some think it could have been more accurately depicted).

Table 1 provides a summary of the buildout results. More detailed analysis is provided in Appendix 1.

Table 1, Buildout Summary

Buildout Impact	
Additional Developable Land Area	3,153 acres
Additional Residential Units	2,611 single family units 80 multi family units
Additional Residents	5,919
Additional Students (K-12)	1,345
Additional Commercial/Industrial Buildable Floor Space	4,605,316 sq. ft.
Additional Water Demand	789,324gpd
<i>Residential</i>	443,925gpd
<i>Commercial and Industrial</i>	345,399gpd
Additional Solid Waste	3,569 tons/year
<i>Recyclable</i>	1,409 tons/year
<i>Non-recyclable</i>	2,160 tons/year
Additional Roadway	29.0 miles

A buildout analysis provides an estimate of what might result if all of the remaining land in town were developed under existing zoning regulations. The potential for redevelopment of underutilized properties, or development that does not conform to zoning (such as Chapter 40B) is not accounted for.

The buildout analysis also finds the potential for an additional 4.6 million square feet of commercial and industrial space. This could provide jobs for about 9,675 new employees, who need to have residence in and around the town of Webster.

This analysis does not give any indication of the rate of development or the time frame for reaching full buildout. It is likely that residential zoning districts will be built out in a much shorter time frame than commercial and industrial districts, especially given the household projections for 2020.

Getting Started in Preparing a Community Development Plan

A review of various documents and preliminary discussions with staff and citizen representatives has generated this preliminary assessment of town strengths and weaknesses. From this assessment, a preliminary Vision Statement has been prepared which highlights goals and objectives for Open Space, Housing, Economic Development, and Transportation; the four elements of a Community Development Plan.

The Town of Webster Strengths and Weaknesses¹

Strengths

- Eastern Webster has vacant woodlands and rich open space
- Western Webster (downtown) contains historically important buildings and houses
- Scenic hillsides throughout town from the steeply to the moderately sloped terrain
- Interstate 395 runs north-south through the Town, bringing regional employment, shopping and service opportunities
- Land is relatively inexpensive
- Large percentage of the town is serviced by water and sewer

Weaknesses

- Economically depressed community with the poverty and residential density concentrated in the western half of town.
 - Lack of diversity in terms of job opportunities
 - Transient, under-employed population attracted to large multi-family housing stock
 - Storm water run-off, septic systems failure, sedimentation and erosion threaten water quality; Town public water supply not interconnected with regional systems
 - Much of the open space in eastern Webster is unprotected
 - Many recreational needs unmet, facilities in need of improvements
 - Municipal finances inadequate to support capital expenditures
 - Lack of professional staff in town government positions, lack of coordination between elected Town boards
 - Insufficient use of local regulatory powers to control growth; inconsistent record-keeping to track and measure growth
-

¹ From Open space Plan and Housing Certification Report

Land Use Suitability Analysis

The table and map on Land Use Suitability locate those areas of town which are best suited for various types of land uses. Existing development is noted, with residential and other low-impact uses in light gray, and more intensive uses such as commercial and industrial development in a dark gray tone. Protected open space is shown in dark green. Natural resources having some regulatory protection, including wetlands, flood zones and Zone II aquifers are noted in light green. Sensitive natural resources with little or no protection, including ACEC, NHESP Priority Habitats, Certified Vernal Pools, potential vernal pools, and BioMap areas are noted in pink. The Zoning map subdivides the town into various use districts. A comparison of the land use suitability to the zoning map leads to the following conclusions highlighted on the Vision Plan Map:

There are four locations where new residential development should be explored. Two of these locations might accommodate mixed use residential/commercial, while two are better suited for only residential uses. An additional fifth area (not highlighted below) might accommodate business and light manufacturing development.

1. **Lake Parkway:** This area is zoned for residential/agriculture. Much of the backland remains undeveloped without major resource constraints. It is a desirable location for residential uses serving families, individuals with special needs, and the elderly, particularly open space cluster and accessory or in-law apartments in new or existing homes.
2. **Webster Street (Route 16)** This area is zoned for agricultural single family residential uses. While there are environmental limitations due to habitat areas, the area is well suited for residential uses such as open space cluster developments and homes with accessory or in-law apartments.
3. **Downtown Main Street/Riverfront:** this is a nine block area which extends from Main Street to the French River and west to the intersection with East Main Street. This historic downtown developed area has over 100,000 sq. ft. of vacant primarily commercial and mixed commercial/residential space as well as over 300,000 sq. ft (7.5 acres) of land. The multifamily residential district abuts the commercial core. The downtown commercial district is the locus of public infrastructure, i.e., sewer, water, roads, public facilities as well as current public investment in a public new parking lot to the rear of Commerce Insurance. The downtown is served by bus transit to Worcester. A downtown revitalization strategy for this district could include investment in condominiums, loft live/work space and new office and restaurant commercial uses. Some of the vacant parcels might be an appropriate location for higher density housing to serve young adults, seniors, or the elderly.
4. **Interstate 395/Thompson Road Intersection:** With good highway access North/ South and some public infrastructure, this area is a rapidly growing commercial center. There are some resource constraints; portions of this locus include flood zones and wetlands which abut Lake Webster. Otherwise the vacant buildable land in the northern part of this area is zoned B-5, General Business without sewer, while the southern side is zoned for agricultural single family uses. This area is an ideal spot to construct townhouses, which would serve the needs of young adults, empty nesters, small families, special needs citizens, and others seeking smaller than traditional housing.
5. **Cudworth/Sutton Roads**
 Located adjacent to Route 395, this relatively hilly, wooded area is zoned for industry. Single family homes are allowed as of right. Much of the industrial district is being built out with single family homes. An industrial park on the Oxford town line is being built out with a mix of office and warehouse uses. If a sewer line was extended to this environmentally sensitive area, additional industry could be developed in appropriate locations.

Suitability Factors	Land Use													
	Multifamily	Special Needs Residential	Moderate Density/Cluster Single Family	Low Density Single Family	General/Central Business District	Highway Business	Limited Business	Office/Research	Manufacturing	Limited Manufacturing	Public Facilities	Recreation	Agriculture	Protected Open Space
Highway Access	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
Transit Access (bus to Worcester)	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
Good Soils	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
Developed Area: Residential	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
Developed Area: Commercial	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
Redevelopment sites	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
Historic Resources	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
Rural Area	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
Agricultural soils	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
Habitats/Ecosystems	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
Contributing to water resource/aquifer	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good
Scenic Views	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good

-  = Good site criteria for proposed use
-  = Site conditions incompatible with proposed use or proposed use would threaten resource
-  = Neutral match between site criteria and proposed use or potential impact from proposed use is indeterminable.

Vision/Goals

A Vision for the Town of Webster

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*A desirable community to live, work and relax in for families, the elderly, young adults and single-headed households of all income levels with good regional vehicular access to an array of employment, service and shopping opportunities. Increased economic vitality, especially in the historic downtown area, will provide an attractive center for people to enjoy, enhanced in part by the development of the Indian Ranch area as a regional destination for entertainment and recreation tourism. Interstate 395 will bring people into the town to enjoy the downtown and Webster Lake and other recreational opportunities. Traffic congestion will be mitigated through careful planning of transportation infrastructure. Together Webster's eastern, more rural and suburban residential side and the western, more historic and developed side, will both identify with the richness of the historic character, open spaces, economic activity and future employment and housing opportunities that will be created in Webster.*

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See Map 9, Vision Plan Map, for a visual image of the Vision Statement above.

Goals

Open Space, Natural and Historic Resources

- Protect the character and heritage of Webster by enhancing a town-wide system of urban parks and rural open space areas that correspond to the Town's growth and development purposes.
- Preserve the natural resources, the town's remaining open space, wetland and wildlife communities and scenic views.
- Protect the Town's water resources, giving primacy to the long-term quality, public access to and enjoyment of Webster Lake (Chargoggagoggmanchaugagoggchaubunagungamaugg).
- Increase the amount of permanent open space, particularly in the eastern half of Webster where undeveloped land remains available for conservation and passive recreation uses.
- Protect and preserve Webster's rich legacy of historic buildings, village spaces and areas of historic or cultural interest.
- Upgrade existing recreation facilities, whether on school or municipal property, and improve their accessibility to persons with disabilities.

Housing

- Redevelop seriously substandard, vacant or abandoned buildings for high-quality rental and first-time homeownership units.
- Increase in the percentage of owner-occupied housing units.
- Identify opportunities to develop higher-end housing units that are both affordable and desirable to families at 150% of the region's median family income.
- Encourage new housing in areas with public water and sewer, and ready access to businesses and town services.
- Preserve the existing rental stock affordable to low and moderate income households.
- Discourage housing in environmentally sensitive areas around and near Webster Lake.

Economic Development

- Broaden the diversity of employment opportunities to attract professionals.
- Rehabilitate dilapidated/vacant commercial buildings in the downtown area.

Transportation

- Minimize the environmental impacts of I-395, especially along the western shores of Webster Lake.
 - Identify solutions to queuing issues at the 395 ramps that cause backup on 395 from Route 16.
 - Evaluate intersection of Lower Gore Road and Route 16 for geometric or other improvements.
 - Evaluate need for climbing lanes between Lower Gore Road and Douglas town line on Route 16.
 - Identify ways to mitigate pavement rutting caused by heavy truck traffic on Route 16.
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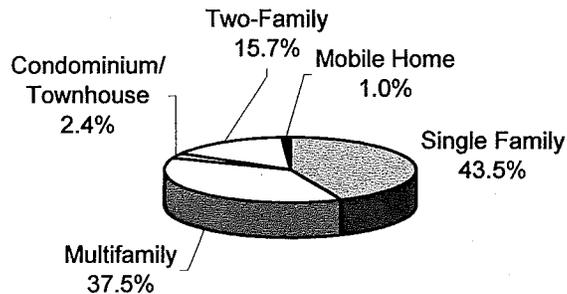
Housing Action Plan

1. HOUSING SUPPLY INVENTORY

Housing Inventory

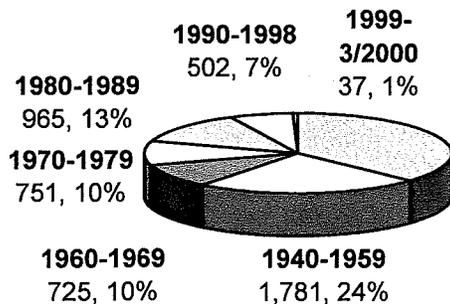
According to the U.S. Census, there were 7,554 housing units in Webster in 2000, an increase of 206 units since 1990. The Assessor reported a total of 3,281 single family units for FY 2000. The distribution of units by types is shown utilizing data from the 2000 U.S. Census.

Figure 1, Housing Types, 2000



- ◆ The town's housing stock is relatively old; over 60% of the homes were built before 1960.

Figure 2, Homes in Webster by Year Built



- ◆ A large amount of the housing stock is rental units; 54% of the units are owner-occupied and 46% are renter occupied (2000). This is comparable to 1990 figures of 53% owner-occupied and 47% renter-occupied units.

- ◆ Webster's slow rate of housing growth is relatively average compared to neighboring towns (Table 1), although it lags behind other communities in the number of units being constructed in multi-family housing structures. The rate of new construction for owner-occupied housing was significantly higher over the last decade than for renter-occupied housing.

Table 1, Housing Growth, 1996-2001

Municipality	Avg. units in single family structure/Year	Avg. units in multi-family structure/Year
Auburn	22	32
Douglas	84	0
Dudley	50	1
Oxford	50	4
Putnam, CT	11	3
Southbridge	22	0
Sturbridge	39	5
Thompson, CT	30	0
Webster	36	1

- ◆ According to the 2000 Census, about 8.6% of homes in Webster are vacant, mainly rental units. A major contributor to the rental vacancy rate is the substandard condition of older multi-unit buildings. 56% of vacant units are located in structures built before 1950, and nearly 60% consist of two to eight unit buildings, located primarily in and around the downtown area.

Housing Cost

The average assessed value of all single family homes in Webster in FY 2002 was \$125,488, up slightly from \$123,116 in FY 2000. The 2000 U.S. Census reports the average value for owner-occupied housing units to be \$127,500.

In 2000 there were 326 properties sold in Webster, including 133 single family and 18 condominium residences. The average sales price for single family homes was \$119,900, while the average sales price for condos was \$92,750. Home prices have been rising over the past decade, with a 57% increase between 1991 and 2001 for single family homes, and an increase of 59% for condos. The average rent for a one-bedroom apartment is approximately \$425 per month, and for a two-bedroom apartment the price is in the range of \$450-\$550. These rents reflect a noticeable rise from the past year, with an increase of approximately \$75 to \$100, according to local officials.

In the current housing market, new homes have higher than average values compared with the town's existing housing stock. Most of the new homes are single-family residences, and many are being built east of Interstate 395, which is seen as a natural divider of the Town in terms of the real estate market.

There were 43 new single-family homes constructed in FY2000, and 61 constructed in 2001; there were no multi-family units constructed either of these years. Local realtors report the average selling price of a new single-family home on the housing market is approximately \$225,000. If the new home is on or near the waterfront of Lake Webster, this number increases significantly; the average selling price of these homes is approximately \$325,000.

Local realtors report that the length of time the average home remains on the market fluctuates greatly, depending on where the home is located and whether it is of new construction. The rental housing that is available in town is usually processed through a landlord-tenant transaction as opposed to through realtors, who claim there is a range of availability on the market. The 2000 U.S. Census reports the total vacancy rate to be 8.6%, of which 2.8% is for seasonal, recreation or occasional use. The homeowner vacancy rate is 1.0% and the rental vacancy rate is 5.8%; there are 38 vacant homeowner units out of a total 3,766 homeownership units, and 194 vacant rental units out of a total 3,371 rental units.

According to local property owners, the vacancy rate in Webster is linked to two contradictory factors, the overall image of the Town and improved access. The run-down character of the downtown is a drag on values. However increases in regional employment and Webster's improved accessibility (I-395 and the Mass Pike) contribute to an increasing demand and escalation in residential property and rental rates.

Affordable/Subsidized Housing Units

- ◆ Other than Putnam Court, the town of Webster has the highest percentages of affordable (subsidized) housing units of any of the neighboring communities.
- ◆ According to the standard set by Massachusetts Chapter 40B, Webster should have 755 subsidized housing units, or 10% of the number of permanent residences counted

in the 2000 census, i.e., an additional **117 units of affordable housing**. Unfortunately this standard does not credit the town with having provided affordable unsubsidized homes, such as age restricted mobile homes.

- ◆ Of the town's affordable housing, 179 units (28.1%) are owned by the Webster Housing Authority, and the balance is owned by private developers and/or non-profit organizations. In order to qualify for the federal and state funding available, private developers often form a Limited Liability Corporation (LLC) to manage and develop the project.
- ◆ The Webster Home-Owner Rehab (HOR) Program assists homeowners to redevelop their homes and bring them up to code. Although this program is not specifically for elderly people, many elderly people have benefited from this program.
- ◆ Two-thirds of the subsidized housing units in Webster, i.e., 434 of 638 units will lose their subsidies between 2006 and the year 2030. Only those units owned/managed by the Housing Authority have long term, guaranteed subsidies.
- ◆ The Webster Housing Authority administers 42 Section 8 vouchers. Although these vouchers allow lessees to apply the credit anywhere in the nation, the majority of the people with the vouchers stay in Webster, due to the affordable price of homes in town in comparison to the region. There is currently a five year waiting list to obtain a Section 8 voucher through the Housing Authority. The vouchers are for 110% of the Fair Market Rent set for the Worcester MA-CT PMSA set by HUD.

Table 2, Comparison of Affordable Housing Availability*

	Ch. 40B Units**	Total Units in 2000	% Subsidized Units of 2000 Total Units
Auburn	190	6,651	2.90%
Douglas	137	2,510	5.46%
Dudley	88	3,877	2.27%
Oxford	400	5,209	7.68%
Putnam, CT	791	3,895	20.31%
Southbridge	460	7,486	6.14%
Sturbridge	164	3,141	5.22%
Thompson, CT	223	3,824	5.83%
Webster	638	7,343	8.69%

*Does not include Section 8 Mobile Vouchers or Massachusetts MRVP vouchers

**Subsidized units for Connecticut towns are not titled Ch. 40B, but are subsidized through other programs

Source: Mass DHCD, Connecticut Department of Economic and Community Development

Table 3, Chapter 40B Subsidized Housing Inventory

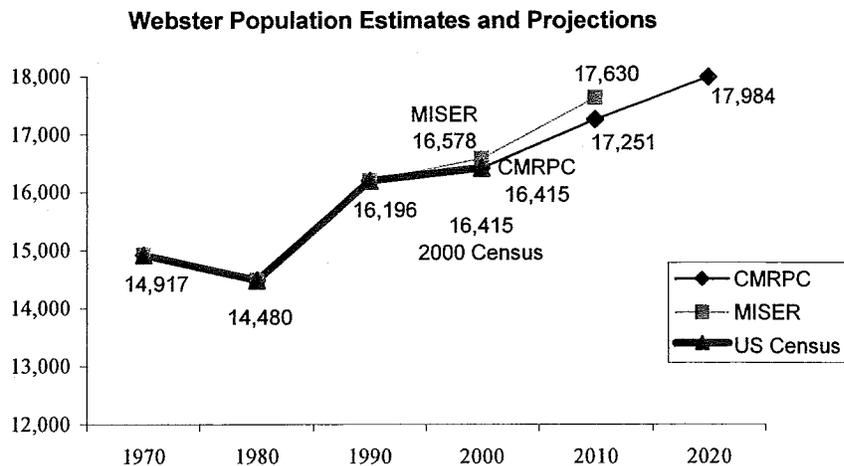
Project Name	Address	Funding Agency	# of 40B Units	Year Ending
Golden Heights II		HUD	61	Perp
Chapter 167-1	North Main St	DHCD	8	Perp
Second Island Rd	Second Island Rd	DHCD	30	Perp
Golden Heights I	1-9 Golden Heights 17-18 Golden Heights	DHCD DHCD	72 8	Perp Perp
40 Union and 32 Mechanic	40 Union St, 32 Mechanic St	DHCD	7	2019
Christopher House Webster	338 Thompson Rd	FHLB, DHCD	83	2024
Cutler St	22 & 25 Cutler St	DHCD	7	2020
North Village at Webster	18A Crystal St/18 Village Way	DHCD, HUD, MHFA	134	2024
Prospect Estates	10, 39, ½ Prospect St	DHCD	25	Perp
Richard Apartments	52 Hartley St	MHFA, MHP, DHCD	54	2030
Webster HOR Program	Scattered Site	DHCD-CDBG	24	2006
Webster Meadows	96 Slater St	HUD	70	2030
Webster HOR Program	Scattered Site	DHCD-CDBG	14	2007
Webster HOR Program	Scattered Site	DHCD-CDBG	20	2008
Webster HOR Program	Scattered Site	DHCD-CDBG	11	2009
Webster HOR Program	Scattered Site	DHCD-CDBG	3	2010
Webster HOR Program	Scattered Site	DHCD-CDBG	7	2011
Webster Total			638	

PROJECTIONS

Population

- ◆ In contrast to its neighbors, Webster has experienced moderate population growth in the past 20 years. Webster's population grew 13.4% or 1,935 persons to 16,415 residents. Most of the growth in Webster during this period occurred between 1980 and 1990; the growth rate from 1990 to 2000 was only 1.4%

Figure 3, Population and Household Growth in Webster



- ◆ Douglas has experienced the largest population growth, and Sturbridge increased greatly as well. The growth of these areas, in contrast to a relatively level growth for neighboring Dudley, Oxford, and Webster is due to an increase of technological firms in the area, as well as the availability of land in these towns.

Table 4, Comparison of Population Growth in Webster and Region

Municipality	Population 2000	1980 - 2000	
		Population Increase	% Change
Auburn	15,901	1,056	7.1
Douglas	7,045	3,315	88.9
Dudley	10,036	1,319	15.1
Oxford	13,352	1,672	14.3
Putnam, CT	9,002	422	4.9
Southbridge	17,214	549	3.3
Sturbridge	7,837	1,861	31.1
Thompson, CT	8,878	738	9.1
Webster	16,415	1,935	13.4

Source: U.S. Census

Buildout Analysis

- ◆ According to the buildout analysis prepared by EOE (2001), a total 2,651 new housing units can be constructed in the town on 1,419 acres of land. In addition, 4.6 million square feet of commercial and industrial space can be developed under existing zoning.

Regulatory and Physical Environment

Existing Development

- ◆ The Town of Webster is characterized by its rural nature, especially Lake Webster, and its diverse residential atmosphere. The majority of the land in town is dedicated to uses that enhance this vision; approximately 90% of the land in town is used for residential purposes or is in some sort of natural landscape. (See Map 5, Land Use)

Table 5, Existing Land Use

Land Use Category	Area (Acres)	% of Town Area	% of Developed Area
Residential (Single Family)	2,272.4	24.4	69.1
(Multi-Family)	73.7	0.8	2.2
Commercial	218.0	2.3	6.6
Industrial	143.8	1.5	4.4
Public/Recreation	333.4	3.6	10.1
Transportation/Utilities	247.0	2.6	7.5
Total Developed	3,288.3	35.3	100.0
Agriculture	51.2	0.5	
Vacant	4,602.9	49.3	
Total Undeveloped	4,654.1	49.9	
Water	1,385.6	14.9	
Total Town Area	9,328.0	100.0	

Source: MassGIS, Planning Department, Larry Koff & Associates

Zoning

- ◆ See Map 2: Zoning. Appendix 2 highlights the Town's Zoning Bylaw.

The Town of Webster has seven underlying zoning districts, all of which allow single family residential use. Minimum lot sizes are listed in Appendix 2. Multifamily homes are allowed in the Multiple Family Residential (R3), the Business 4 (B4) {Downtown}, and Business 5 (B5) districts as of right, and are not allowed in the Agricultural Single Family Residential (R2), the Single Family Residential (R1), Industrial (IND) and Lake Residential (LR) districts. Mobile homes as permanent residences are not allowed in any of the districts.

Residential	
Single Family Residential	R1
Agricultural Single Family Residential	R2
Multifamily Residential	R3
Lake Residential	LR
Nonresidential	
General Business (with sewers)	B4
General Business (w/out sewers)	B5
Industrial	IND
Overlay/Restricted Development	
Flood Plain District	
Conservation District	CD

Any development within the Conservation Overlay District must be authorized by the Board of Appeals. All uses must be consistent with generally accepted conservation practices regarding woodlands or Park areas. A draft was submitted on Jan 18, 2000 that would amend the provisions under District 9; Conservation to allow for certain uses as of right, including municipal uses, windmills, private clubs, recreation trails, public and private water supplies and maintenance and other outdoor recreation uses.

All development within the Flood Plain District has to follow guidelines set in the Massachusetts State Building Code which addresses Flood Plain Areas, Wetlands Protection Regulations, Department of Wetlands Restriction (DEP), and the Minimum Requirements for the Subsurface Disposal of Sanitary Sewage (DEP).

- ◆ Currently there are no provisions in the Town Zoning Bylaws for “cluster” or “Open Space Residential Development”, inclusionary zoning, in-law or accessory apartments, flexible development, planned unit development (PUD), or incentives for providing open space, affordable or special needs housing or other public benefit. The Town may consider adopting some of these widely used zoning tools to ensure a diversity of housing options and protect sensitive resources, and encourage development that fits with the town’s goals.
- ◆ 51% of the Town is zoned primarily for residential uses (R1, R2 and R3), of which approximately 1,279 acres are developable, mainly in the R2 district. Approximately 15% of the town is zoned for commercial/industrial use (B4, B5 and IND), of which 318 acres are developable, mainly in the Industrial district.

Development Context

- ◆ The state’s recent build-out study finds the potential for 2,651 new housing units on 1,419 acres of land. However, a detailed analysis of land parcel data shows that Webster’s developable residential land consists of about 1,300 residential acres. The remaining undeveloped acreage is land-locked or lacks enough frontage to comply with Webster’s very modest zoning requirements. It also includes residentially zoned land owned by churches or other organizations who are unlikely to sell or develop the land. Many potential sites are not feasible to develop or redevelop for residential use under current market conditions. A substantial rise in residential property values that would enable such development is unlikely in the foreseeable future. *Since Webster’s zoning is so unrestrictive compared to many Worcester County communities, it is clear that market forces, not zoning, are responsible not only for a very low growth rate in the past 30 years but also for the modest value of new homes.*²
- ◆ The majority of the undeveloped land is concentrated in two areas of town; the eastern side of Lake Webster, especially the northeastern region of town, and a smaller area to the west of Lake Webster and south of downtown Webster. (See Map 8, Land Use Suitability). Rather than focusing on the undeveloped areas, the Town might more effectively utilize its limited resources on encouraging the redevelopment of underutilized areas within the downtown/riverfront corridor.
- ◆ Much of the land east of Lake Webster is a designated NHESP Biomap Core Habitat or Supporting Natural Landscape (See Map 7, Core Habitat Areas). There are several endangered flora and fauna in this part of Webster. These habitats house the marbled salamanders, spotted turtles, wood turtles, the Northern Dropseed, and Maple, Oak and Cherry Trees.
- ◆ It is well understood in town that home-owners' property taxes do not cover educational costs. Therefore, family housing is a net loss to the town, in contrast to one and two bedroom garden condominiums, for example, which would be revenue positive (See Table 6 below).

² From DHCD EO418 Housing Certification Community Report FY2003

Table 6, Cost of Services: Fiscal Impacts of Development

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

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

Factors that Promote Growth

Infrastructure

- ◆ A large portion of Webster has both sewer and water systems. Public water supplies approximately 90-95% of the town, with some residents still relying on their own well systems for water. Public sewer services approximately 90% of Webster, and the Town is working systematically to supply service to all of the town; the Oxford/Webster line in the northeastern part of town is the least-served by the current sewer system.
- ◆ There are access points in the Town of Webster to Interstate 395; at Cudworth Road near Oxford, at Route 12, and at Thompson Road near Connecticut. These access points serve as possible nodes to concentrate further development.

Location

- ◆ Many people have begun to move past the Interstate 495 ring to find comfortable housing at a reasonable value. As more people continue to migrate west looking for affordable housing, residential values will continue to escalate.
- ◆ Due to good regional access of Interstate 395 with connection to the Mass Pike and Worcester coupled with reasonable regional housing prices, it is assumed that Webster will increasingly compete as a desirable place to live

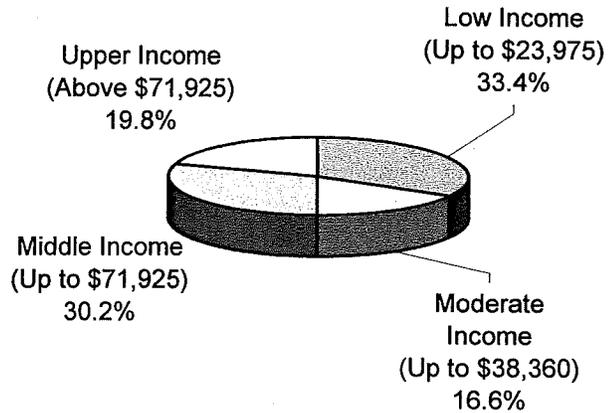
2. NEEDS ANALYSIS/GAP ANALYSIS

Housing Demand

Incomes

- ◆ Webster residents are as likely to be of low/moderate as middle or upper income.
- ◆ Income levels are based on the 2000 area-wide median income for the Worcester MSA (of which Webster is a part) of \$47,949.

Figure 4, Webster Residents by Income Level



* Income data is from 2000 U.S. Census.

Demographics

- ◆ The number of persons per households is declining. According to the 2000 U.S. Census, 27.9% of the households in Webster have children under the age of 18. The proportion of one-person households (38%) and non-family households (32%) exceeds state norms.

Table 7, Population and Household Growth

	Population	% Change	Households	% Change	Persons per Household
1970	14,917		5,137		2.90
1980	14,480	-2.9	5,626	9.5	2.57
1990	16,196	11.9	6,529	16.1	2.48
2000	16,415	1.4	6,905	5.8	2.38
2010	17,251	5.1	7,393	7.1	2.33
2020	17,984	4.2	7,878	6.6	2.28

Source: U.S. Census Occupied Housing Units, Central Massachusetts Regional Planning Commission

- ◆ The population of children and young adults declined in Webster over the past decade, as did the population of older adults, aged 60-74.
- ◆ The greatest population growth in the last decade took place in the 35-59 age bracket. The number of people aged 75 and older also increased.
- ◆ Population growth is expected in the coming decade in all age brackets.

Table 8, Town of Webster Age Profile, 1980 – 2010

	1980 (Census)	%	1990 (Census)	%	2000 (Census)	%	2010 (MISER)	%	2020 (CMRPC)
0 – 19 years	4,227	29.2	4,150	25.6	4,118	25.1	4,339	24.6	
20 – 34 years	3,119	21.5	4,089	25.2	3,275	20.0	3,333	18.9	
35 – 59 years	3,770	26.0	4,233	26.1	5,630	34.3	6,616	37.5	
60 – 74 years	2,487	17.2	2,312	14.3	1,818	11.1	2,009	11.4	
Over 75	877	6.1	1,412	8.7	1,574	9.6	1,333	7.6	
Total	14,480		16,196		16,415		17,630		17,984
Median Age	34.8		34.8		37.9				

Source: U.S. Census, MISER, CMRPC

- ◆ There has been a large growth in the percentage of school children in Webster over the past decade; preprimary and kindergarten enrollment has increased by 96% while elementary and high school enrollment has increased more modestly, by 21%. The number of pupils enrolled in college has decreased 14%.

Table 9, School Enrollment in Webster, 1990 and 2000

Type of Educational Institution	1990 Enrollment Figures			2000 Enrollment Figures			Total % change
	Public	Private	Total	Public	Private	Total	
Preprimary				149	72		
Kindergarten				126	55		
Preprimary/Kindergarten	77	128	205	275	127	402	96%
Grades 1-4				695	191		
Grades 5-8				767	183		
Grades 9-12				737	60		
Elementary/High School	1,844	324	2,168	2,199	434	2,633	21%
College undergrad.				315	200		
College graduate				45	77		
College	428	316	744	360	277	637	-14%
Total			3,117			3,672	18%

Source: U.S. Census

- ◆ Overall school enrollment has increased by 18% since 1990. However, the public school reports a loss of students between 1996-2001. There are three parochial schools in town both with growing enrollment that serve primarily the residents east of Rt. 395.
- ◆ School enrollment is expected to continue to increase

Disabled Individuals

- ◆ There are 3,983 non-institutionalized individuals aged 5 and over (26% of total population over age 5) that report to have a disability (2000 Census).³ Throughout the state, 18.5% of the total population over age 5 have disabilities.

³ The Census defines a disability as "A long-lasting physical, mental or emotional condition. This condition can make it difficult for a person to do activities such as walking, climbing stairs, dressing, bathing, learning or remembering. This condition can also impede a person from being able to go outside the home alone or to work at a job or business".

- ◆ 39% of elderly residences (over age 65) report to have a disability.
- ◆ Of the reported disabilities, 8.0% are sensory in nature, 22.4% are physical, 15.2% are mental, 7.4% require assistance for self-care, 18.4% are unable to go outside of the home, and 28.6% impede employment.

Employment and a Local Labor Force

Being an old mill town as well as now the locus of a major insurance company, almost one-half of the employed residents find work in town. Businesses in Webster employed a total of 7,850 people in 2000. The number of jobs in town falls just short of the number of people in the Webster labor force by approximately 279 jobs, or 3.4% of the resident labor force.

Table 10

Jobs to Labor Force Ratio 2000	
Webster jobs	7,850
Webster resident labor force	8,129
Jobs/Labor Force Ratio	0.97

The unemployment rate in Webster in 2000 was 3.4%, compared to the statewide average of 2.6%. 2001 statistics place the rate in Webster at 4.4% and the statewide average at 3.7%.

Webster jobs provided an average annual wage of \$30,763 in 2000. Approximately 75% of the jobs are in industries where the average annual wage falls within low and moderate income guidelines (below \$38,360/year). The only industry whose median wage falls higher than this is jobs in Finance, Real Estate and Insurance sector, which have an average annual wage of \$41,471. (Many employees live in households with more than one income, thus they may fall in a higher income bracket, and/or many residents may not be employees in the town.) None of the jobs available in Webster are in industries where the average wage exceeds the median income for the Worcester MSA of \$47,959.

According to CMRPC, the number of jobs in Webster is expected to increase by 1,119 jobs, or 15.4% between 2000 and 2020. It is also noted by CMRPC, however, that this projection needs to be adjusted because of the present economic downturn and the optimistic nature of the estimation. Nevertheless, people who occupy these new positions will need to find housing within the region.

Housing Affordability/Gap Analysis

For a housing unit to be affordable, a household should spend no more than 30% of its household income on housing costs. In Webster, over 33% of all household units spend more than 30% of their incomes on housing costs, making them technically unaffordable. 17% of households in owner-occupied housing units spend more than 30% of their incomes on housing, while 27% of households in renter-occupied housing units spend more than 30% of their household incomes (U.S. Census).

Another indicator of change in housing affordability is to compare the increase in average housing costs to the increase in median income. Between 1990 and 2000, the average price of single family homes rose by 6.2% (\$112,500 in 1990, \$119,900 in 2000), while average rents rose 16.4% (\$444 in 1990, \$517 in 2000). Over this same period, the

median household income in Webster increased by 27%⁴. This indicates that homeowners and renters have enjoyed a relative increase in affordability.

Figure 5, Percent of income spent on housing costs for Webster homeowners

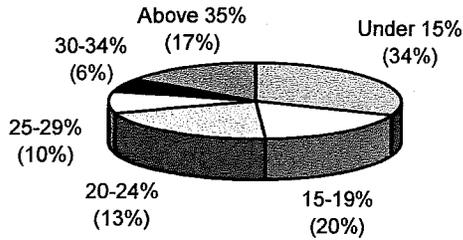
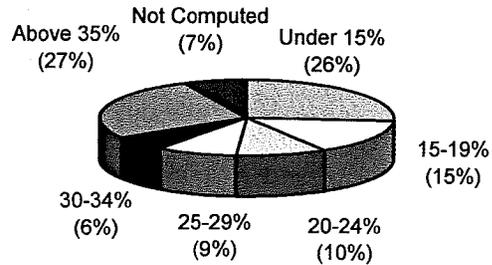


Figure 6, Percent of income spent on housing costs for Webster renters



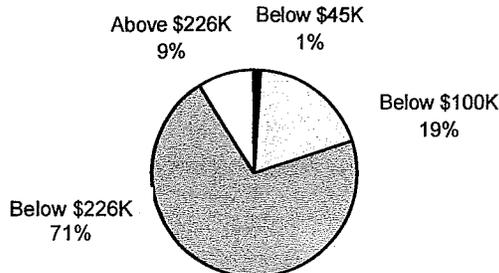
In order to afford the average rent in Webster of \$517, a household must have an annual income of \$24,816. 35% of Webster households do not meet this threshold, as they report annual incomes of less than \$25,000. In order to afford the average 2001 selling price of homes in Webster of \$149,000, a household must have an annual income of \$51,500. In order to afford the average selling price for a home in 2002 (Jan-Nov), a household must have an annual income of \$58,500. 57% of the homes in Webster do not meet this income threshold.

Figure 7 illustrates the income thresholds for affordable living units based on household income levels.

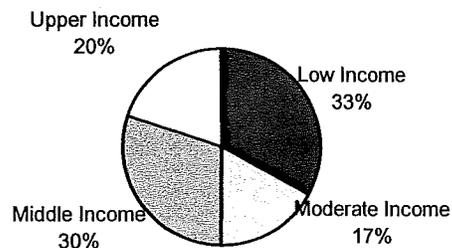
Figure 7, Homeowners Affordability Index



Home Values in Webster



Households by Income in Webster



Calculated assuming 5% down, 7.5%APR mortgage for 30 years, 30% of income for housing costs and \$300/month for taxes and insurance.

⁴ Home prices from Banker and Tradesman, rents and median incomes from US Census.

Housing Gap: Homeowners

There is a gap in the amount of housing for very low income and upper income households in Webster, while a disproportionate number of homes fall into the middle income price range. Figure 7 above illustrates this concept. For example, low income households, 33% of all households, can afford the price of a house below \$45,000; however, almost none of the housing stock falls in this price range. By contrast, middle income households comprise 30% of households in the town, while 70% of owner-occupied homes fall in a price range affordable to this group. Table 11 demonstrates these findings for each income level.

Table 11, Home-Owners Housing Gap

Household Income Level	% of Households	# of Households	Affordable Housing Cost	% of Owner-Occupied Housing Stock	# of Owner-Occupied Homes
Low income, <\$24,000	33%	2,300	<\$45K	1%	32
Moderate income, <\$38,400	17%	1,148	<\$100 K	19%	527
Middle income, <\$71,900	30%	2,068	<\$226K	71%	2,013
Upper income, >\$71,900	20%	1,379	>\$226K	9%	259
Totals	100%	6,895		100%	2,831

Note: There are more households than owner-occupied housing units because 46% of households occupy rental housing.

The above exercise demonstrates that there is a shortage of home-ownership opportunities for all income levels in Webster. The largest gap occurs in owner-occupied housing available to low income households, or those households making less than \$24,000/year. The next most substantial gap is in homes for upper-income households. Although households from all income groups may choose to rent rather than own their homes, a large number of households would probably prefer to own if housing were available.

Housing Gap: Renters

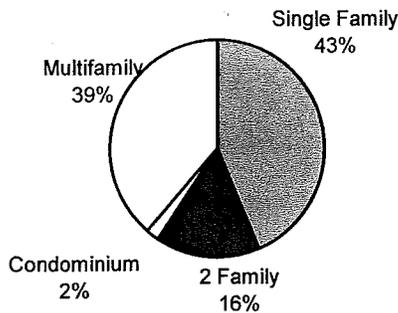
1,025 rental households, or 32.5% of all renters, are paying more than 30% of their income on housing. 1,025 units of new affordable rental housing are needed. In addition, market rate rental units for seniors, households with special needs and/or upper income households are needed. (See Table __ below.)

Alternative Housing Types

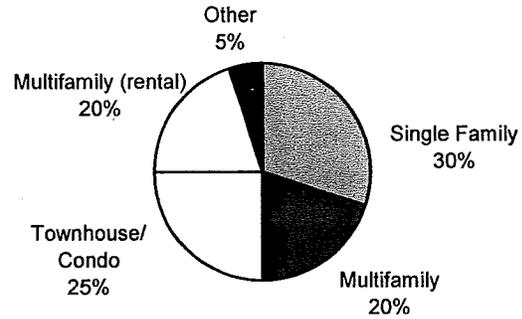
The existing supply of housing types does not meet the current demand. There are many households which, given their needs and preferences, would like to have alternative housing types than currently exist in the housing supply, such as condominiums, apartments, and in-law apartments. The current Zoning Bylaw does not allow the construction of all of these alternative housing types, or limits where they can be built. The Planning Committee has assessed a very preliminary estimate by the consultant of the approximated demand for different housing types on Table 12.

Figure 8, Supply and Estimated Demand of Housing Types

Existing Housing Types in Webster, 2000



Demand for Housing Types



To complete the pie chart above, an estimation of housing demand among different population groups was made by the consultants and reviewed by the Committee. The following table includes several types of households and housing alternatives. An estimate of what percentage of households in Webster would desire to live in each type of housing, if it were available, has been provided.

Table 12, Housing Demand: Alternative Housing Types

Household Types	% of Total Population	Total Housing Units	Estimated Housing Type Preference				
			Single Family Homes	Two Family Homes*	Condo	Multi-Family*	Other
Single Individuals or Couples, Age 85 +	4%	276	(0%)	(0%)	(0%)	138 (50%)	138 (50%)
Single Individuals or Couples, Age 65-85	17%	1,172	234 (20%)	176 (15%)	352 (30%)	234 (20%)	176 (15%)
Indiv./Couples, Age 34-65, No Children	10%	690	207 (30%)	138 (20%)	207 (30%)	104 (15%)	34 (5%)
Young Adults, up to age 34	18%	1,241	124 (10%)	372 (30%)	248 (20%)	497 (40%)	- (0%)
Households with Children/Families	39%	2,689	1,344 (50%)	538 (20%)	538 (20%)	269 (10%)	- (0%)
Single Parent Families	12%	827	207 (25%)	206 (25%)	207 (25%)	207 (25%)	- (0%)
Total (% of total)	100%	6,895	2,116 (30%)	1,430 (20%)	1,552 (25%)	1,449 (20%)	348 (5%)

*Approximately half of the two-family homes and the majority of the multi-family homes are assumed to be rental units. Most condos and single family homes are assumed to be for ownership.

* Other includes in-law apartments, nursing homes, assisted living, and other congregate living arrangements.

3. GOALS AND OBJECTIVES

The vision, goals, and strategies which follow are developed to meet the requirements for housing plans under Executive Order 418. While EO 418 is concerned with the creation of housing that is affordable to households earning up to 150% of the median income, Chapter 40B has more stringent requirements for units to be counted as affordable. Targets for the number of and types units to be created differ between the two mandates, however many of the same strategies will satisfy both.

418 Housing Plan and Chapter 40B Requirements

- ◆ According to the standards set by Massachusetts Chapter 40B, Webster should have 755 subsidized housing units, or 10% of the number of permanent residences counted in the 2000 census. Utilizing this standard, Webster should consider encouraging the development of an additional 117 units of affordable housing to meet its local housing needs. There are currently 638 units of affordable housing in town. Ideally, Webster would encourage the development of three-fourths of one percent of the total number of housing units/year (approximately 57 units) until it reaches over the next 2-3 year period the total of 10% of its total housing units.

The Housing Plan shall address the following:

1. A mix of housing opportunities for families, individuals, persons with special needs, and the elderly that are consistent with local and regional needs and feasible within the housing market in which they will be situated
2. A strategy by which the municipality will achieve its housing goals established by its comprehensive needs assessment

The Housing Plan shall include the following:

1. The identification of zoning districts or geographic areas which will permit the proposed residential uses
2. The identification of specific sites for which the municipality will encourage the filing of comprehensive permit applications
3. Characteristics of proposed developments that would be preferred by the municipality (cluster, mixed-use, etc)
4. Municipally owned parcels for which the municipality commits to issue request for proposals to develop low or moderate income housing.

Quantifying and Locating Housing Needs: A Summary

Given the gap analysis and the community development needs and constraints discussed above, the community must identify the location, types, and quantity of affordable and market-rate housing units that it would like to see developed.

See Appendix 3 for a discussion of various standards or definitions of housing affordability that the town might use in defining its goals for affordable housing creation.

Table 13, Summary of Webster Housing Needs

WEBSTER AFFORDABLE HOUSING NEEDS (Generalized Estimate)				
	Number of Units			Total #
	Owner-Occupied	Renter-occupied	Total %	
• Elderly	0	26	23%	26
• Older Adults	18	5	20%	23
• Special Needs	0	12	10%	12
• Young Adults	3	9	10%	12
• Families	30	0	25%	30
• Single Parent Families	10	2	10%	12
• Other	1	1	2%	2
Total	62	55	100%	117

PROPOSED ALTERNATIVE HOUSING TYPES TO SERVE NEEDS			
	Number of Affordable Units	Target Household Type	Location
• Townhouse (mostly ownership, some rental) (may be age restricted)	35	Families, single-parent families, special needs, older adults, young adults	Thompson Road, Lake Parkway, Cudworth/Sutton Roads
• Mixed Residential/Commercial (rental)	8	Young adults, older adults	Downtown/Main Street/Riverfront, Interstate 395/Thompson Road
• Multifamily (rental) (may be age restricted)	30	Elderly, young adults, older adults	Downtown/Main Street, Thompson Road,
• Open Space Cluster (mostly ownership, some rental)	32	Families, single parent families, special needs, older adults	Webster Street, Lake Parkway, Cudworth/Sutton Roads
• In-Law Apartment	10	Elderly, special needs	Webster Street, Lake Parkway
• Other (rental/ownership)	2	Young Adults	Main Street
Total	117		

This vision has been compiled by viewing Town documents and reports (Open Space Plan, EO418 Housing Certification, etc.), and needs to be approved by the Housing Committee. A range of strategies to achieve this vision must be assessed and put into action. On the basis of this assessment the goals identify those strategies which will best assist the town achieve that mix of housing which will meet Webster's future. Photographs could be taken by Committee members to represent housing types which would be welcome in town.

Housing Vision Statement

To redevelop substandard, vacant or abandoned buildings and sites for high-quality rental and first-time homeownership units, increase the percentage of owner-occupied housing units including those available to moderate income individuals and families, develop higher-end housing units that are both affordable and desirable to families at 110% to 150% of the region's median family income, encourage new housing in areas with public water and sewer and ready access to businesses and town services, preserve the existing rental stock affordable to low and moderate income households, and discourage housing in environmentally sensitive areas around and near Webster Lake.

Goals

- ❖ Preserve the existing rental stock affordable to low and moderate income households.
- ❖ Increase the percentage of owner-occupied housing units, through providing more alternative housing types such as townhouses and condominium.
- ❖ Create new units affordable to persons at or below 80% of median family income by making efficient use of existing structures.
- ❖ Reduce vacancy rate in existing residential or mixed-use buildings, particularly those built before 1940.
- ❖ Encourage new housing in blighted and under-utilized areas with public water and sewer, and ready access to businesses and town services, such as the Downtown/Main Street area as well as the area at the intersection of Interstate 395 and Thompson Road.
- ❖ Redevelop seriously substandard, vacant or abandoned buildings in the Downtown Main Street area for live work space and first-time homeownership units.
- ❖ Identify opportunities in the Webster Street, Lake Parkway, Cudworth/Sutton Road areas to develop higher-end housing units that are both affordable and desirable to families at 125% to 130% of the region's median family income.
- ❖ Discourage housing in environmentally sensitive areas around and near Lake Webster.

4. HOUSING ACTION PLAN

(See Map 10: Housing Action Plan.)

An active Housing Committee is the key to success in carrying out the revised goals and policies (see Appendix 5). A number of strategies for both the **production** of housing units as well as **incentives** to encourage developers to build the type of housing needed in town were identified to encourage the achievement of the proposed housing plan.

The following represents an Action Plan Program of incentives as well as production related tasks which should be undertaken with the support of the Planning Board, the Office of Community Development, and the Selectmen. Most of these strategies deal with zoning and related regulatory changes to ensure that a variety of housing is available which more closely approximates the range of needs to accommodate both local housing demand as well as facilitate downtown revitalization. With the proposed zoning changes, the development of 117 units by type as shown on page 17 should be pursued over the next 5-10 years. Second, the Town should consider initiating a First Time Homebuyers program to address what the Housing Authority considers a major unmet need. Third, the Office of Community Development needs to continue to develop on an accelerated schedule and with the support of local property owners a Main Street Revitalization Plan.

The elements of a Housing Action Plan are summarized on the following table. The Implementation strategy which includes a variety of economic development strategies is summarized in the concluding section, Putting It All Together.

TASK	TIMING/		RESPONSIBILITY
	Short Term 2003-2005	Long Term 2006-	
Adopt Action Plan	X		Planning Board
Submit with Town support Housing Certification and 418 Housing Plan	X		Planning Board Selectmen
Work with Housing Authority to Initiate First Time Home Buyers program	X		Planning Board
Work with Housing Authority to address issues of Expiring Use Permits on affordable housing developments	X	X	Selectmen
Undertake zoning changes to increase lot sizes	X		Planning Board
Multifamily and GB 4 from 12,000/2,500 sq. ft (11-17 units/acre). to 7,000or 10,000 sq.ft. (4-6 units/acre)			
Single Family from 12,000 to 20,000 sq. Ft. unless set asides for open space and affordability			
Require special permit for single family and 2-6 units within Industrial Districts	X		
Encourage zoning changes to facilitate development of:			Planning Board
Condo Village Zoning (allow cluster condo within SF, MF, B-4)) restricting number of bedrooms in development, require sewer, open space set aside, flexible dimensional standards	X		
Flexible/Open Space zoning for Agricultural Single Family	X		↓
Assisted Living and Age Restricted	X		
Phased Growth by-law	X		
Inclusionary Housing Mandate for affordable housing for developments over 15 units	X	X	↓
Change from GB-4 to MF Residential area located on Main Street between Bartlett Street and East St.	X		Planning Board
Prepare for local review of 40-B developments	X		Selectmen
Adopt Board of Appeal Rules and Regulations for reviewing Ch. 40B developments	X		Selectmen Board of Appeals
Adopt Town development review and tenant admission Guidelines for reviewing Chpt 40B affordable housing developments (See Appendices 4, 5 and 6)	X		Planning Board Selectmen ZBA
Adopt consistent Stormwater Regulation standards for Planning Board, Conservation Commission, Subdivisions	X		Planning Board, Conservation Commission

Economic Development

Introduction

This document is part of a Comprehensive Plan funded under Executive Order 418. EO 418 establishes a planning process that includes housing and transportation elements and builds upon previous plans prepared in the fields of open space and recreation. This section of the Comprehensive plan examines economic conditions in the Town of Webster and serves as a basis for a public meeting which will provide for public input into establishing economic development goals and making recommendations for specific objectives and action items. The results of the economic planning effort will be incorporated with the housing and transportation planning elements into a single document that will serve to guide more detailed plans and further decision making in Webster.

Under guidelines established by the EO-418 program, this Economic Development section of the planning document contains available information on current and projected economic conditions in Webster. In designing the planning effort in conjunction with Webster's Director of Community Development and the Community Development Department of Central Mass Regional Planning Commission the consultants were directed to focus their attention on the conditions in Webster's downtown and on the remaining mill complexes.

Economic History of Webster

Webster is a town on Massachusetts's southern border with Connecticut. Originally a farming community, waterpower from the French River attracted mills. The mills served as a basis for textile factories. As a result, Webster developed a manufacturing economy in the western part of the community with urban housing and a commercial downtown to serve the needs of mill workers.

The eastern half of the Town, far from the river, remained largely in agricultural uses. Webster's famous Lake Chargoggagoggmanchaugagoggchaubunagungamaugg attracted residential and recreation uses that also helped shape the future of the community.

In 1977 Interstate Route I-395 opened after 12 years of construction and twice that of planning. I-395 bisected Webster from north to south. It provides high-speed access to Worcester and the Massachusetts Turnpike, and then (as I-290) on to Manchester, NH to the north. It connects to the south to New London, CT and I-95. I-395 carries an average daily traffic volume of 20,000 vehicles. It serves as the main access point from major Massachusetts' metropolitan areas to Connecticut's gambling casinos

While this high-speed access increased the attractiveness of the Town for businesses and residential development, it also physically split the Town with more developed and urban uses located west of the highway. Industrial parks have been developed east of I-395 and north of Route 16. Commerce Insurance Company, Webster's largest business and largest employer has been growing steadily in buildings on both sides of route 16 just east of I-395 and other buildings in the downtown.

Another result of the new highway was the development of suburban style commercial areas west of I-395. While this new development provided jobs, taxes, goods and services, it also became took business from, the Town's older downtown. The newer stores with their ample parking lots and nationally advertised companies and franchises intercepted customers that formerly shopped in the downtown. At the same time, the retail related traffic and numerous curb cuts made the drive into downtown longer and more difficult, thus the new development served as a barrier between the highway and the old downtown.

Starting as early as 1962 with the closing of Webster Manufacturing Company, the original manufacturing plants began to go out of business or be sold to larger national firms. In 1965 Webster's Industrial Development Commission was formed to stimulate economic growth. It established and sold land in the 122 acre Webster Industrial Park. Parcels were sold to 11 different businesses, bringing new employment to the Town.

In 1972 local residents pooled their resources to start Commerce Insurance Company, now the town's largest employer. The growth of Commerce Insurance helped make up for the decline in manufacturing jobs.

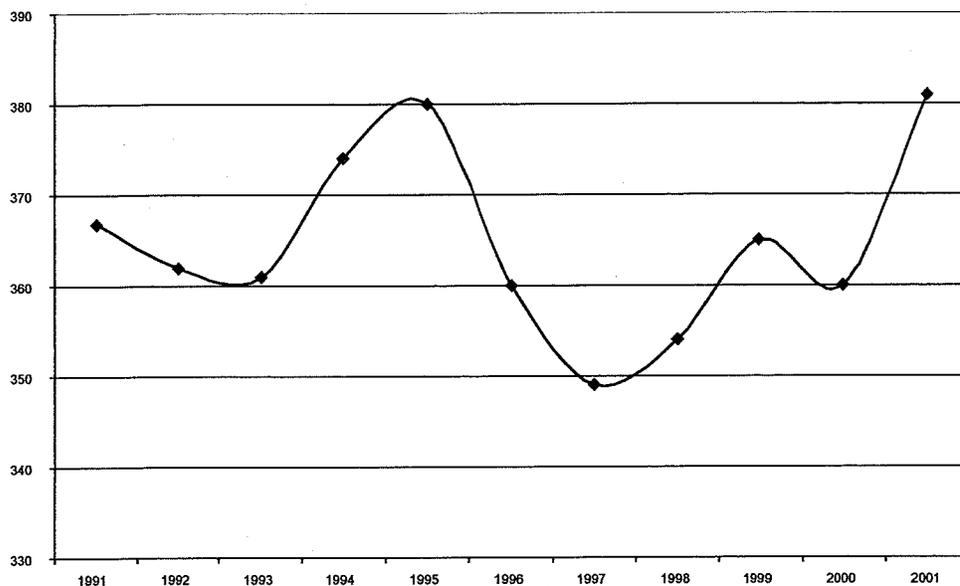
1. EXISTING ECONOMIC CONDITIONS

Existing Businesses

This section addresses the businesses and employment located in Webster. Employees working in these businesses come from Webster and other communities in the region, including the near-by states of Connecticut and Rhode Island.

According to Commonwealth of Massachusetts, Division of Employment and Training (ES-202 Series), there were 381 business establishments in Webster in 2001. Figure 1 shows the number of establishments over the last decade.

Figure 1, Number of Business Establishments in Webster, 1991-2001



Source: Commonwealth of Massachusetts, Division of Employment and Training (ES-202 Series)

However, Verizon Telephone, publishers of the “Superpages” yellow pages reports a total of 1,510 businesses in Webster. Another source, *The Reference USA* database of 12,000,000 businesses in the United States found a total of 729 employers in Webster. However, this listing includes schools, government offices and other employers that are not for profit businesses.

The following table shows the number and size of businesses in Webster at the two-digit SIC code level.

Table 1, Businesses in Webster by 2-digit SIC Code and Number of Employees

SIC Code	Standard Industrial Classification Description	Total Estab.	1-4	5-9	10-19	20-49	50-99	100-249	250-499	500-999	1000 +
07--	Agricultural Services, Forestry, and Fishing	5	4	0	0	0	1	0	0	0	0
15--	Construction	32	20	7	5	0	0	0	0	0	0
20--	Manufacturing	28	5	6	6	6	0	3	2	0	0
40--	Transportation and Public Utilities	15	8	0	6	1	0	0	0	0	0
50--	Wholesale Trade	13	5	4	2	2	0	0	0	0	0
52--	Retail Trade	114	55	29	11	14	3	2	0	0	0
60--	Finance, Insurance and Real Estate ("FIRE")	28	16	5	5	0	1	0	0	0	1
70--	Services	119	74	19	13	6	3	4	0	0	0
99--	Unclassified Establishments	2	2	0	0	0	0	0	0	0	0
----	Total	356	189	70	48	29	8	9	2	0	1

Source: U.S. Census Bureau

The above table shows that the largest number of business establishments is in retail trade and services. However, the largest employers are in the Finance, Insurance and Real Estate or "FIRE" and manufacturing sectors. Making the unlikely assumption that in each category all businesses employ the maximum in each employment category, the 189 firms with 1-4 employees and 70 firms with 5-9 employees would have a maximum of 1,389 employees. By contrast, making the opposite assumption that the minimum in each category, three largest firms employ at least 1,500 people. They certainly employ many more than the lowest estimates.

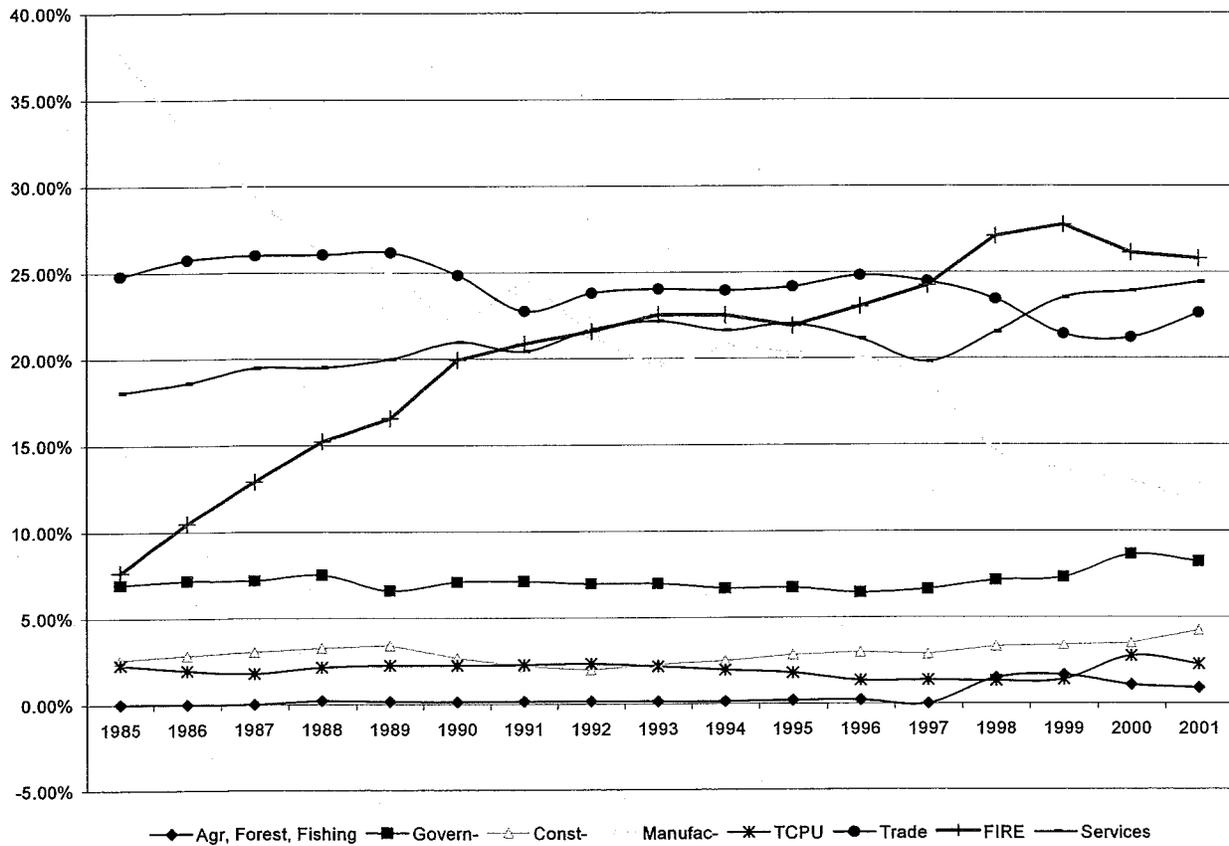
The Table 4 in Appendix 9 lists the employers in Webster that employ 20 people or more.

Trends in Employment

Change in Structure of Employment

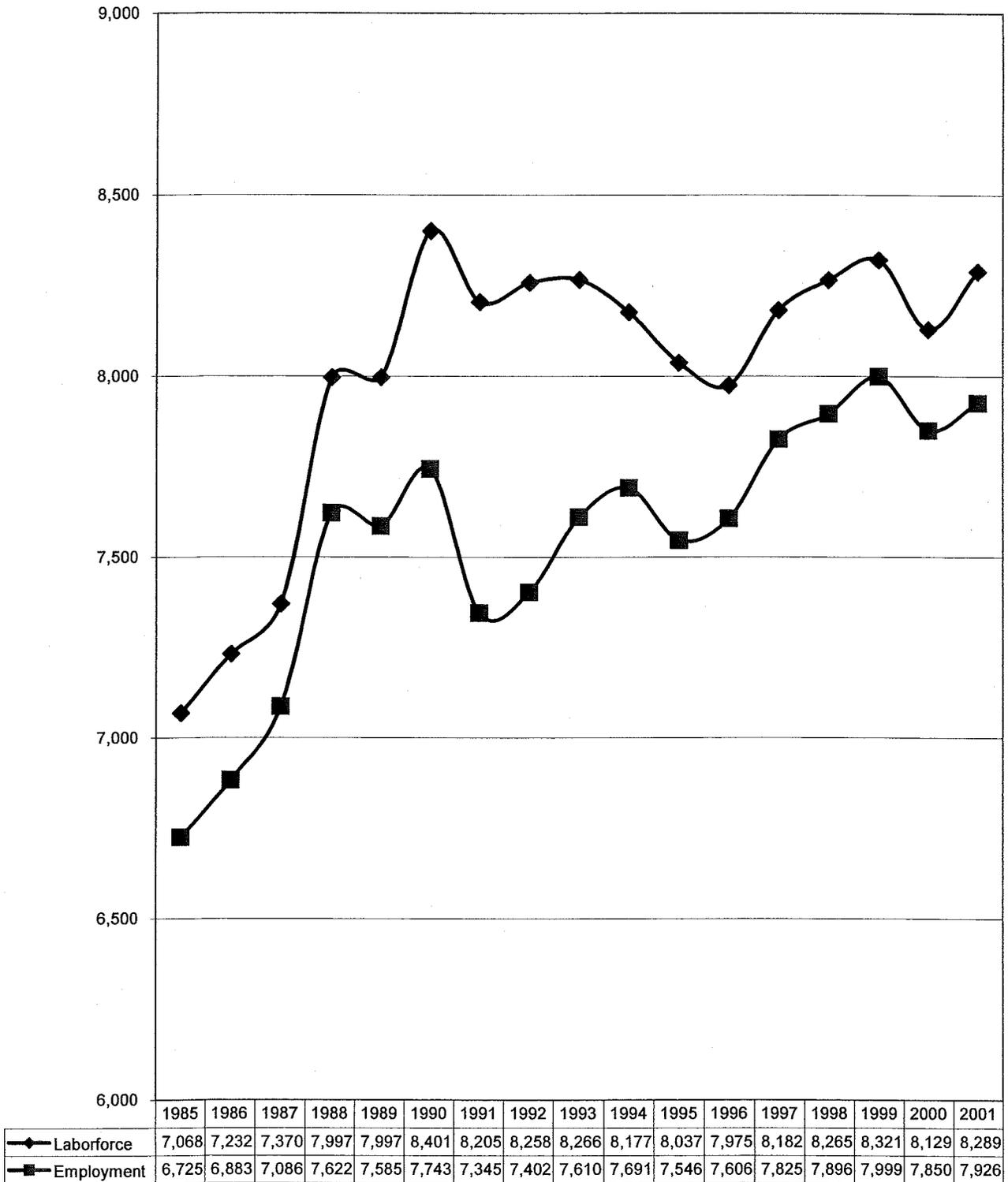
Similar to the rest of New England and, indeed, much of the United States in the 1980's and 1990's Webster suffered major declines in the number of the manufacturing jobs. However, as the following graph shows, Webster was able to counteract much of these losses by expansion in the Finance, Insurance, Real Estate or "FIRE" sector. This increase was primarily due to the rapid growth of Commerce Insurance Company headquartered in Webster.

Figure 2, Employment by Sector



The following chart confirms that employment grew in most years, despite the dramatic loss of manufacturing jobs.

Figure 3, Employment and Workforce in Webster



Source: Commonwealth of Massachusetts, Division of Employment and Training (Local Area Unemployment Statistics)

Wages paid by companies located in Webster grew along with employment.

Figure 4, Average Annual Wage in Webster

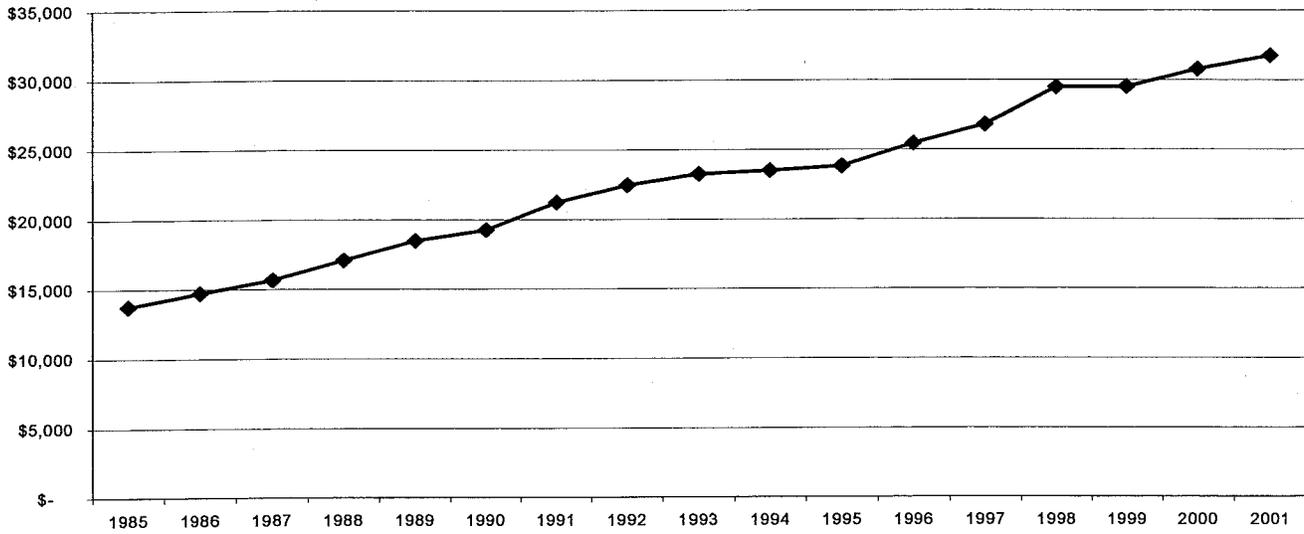
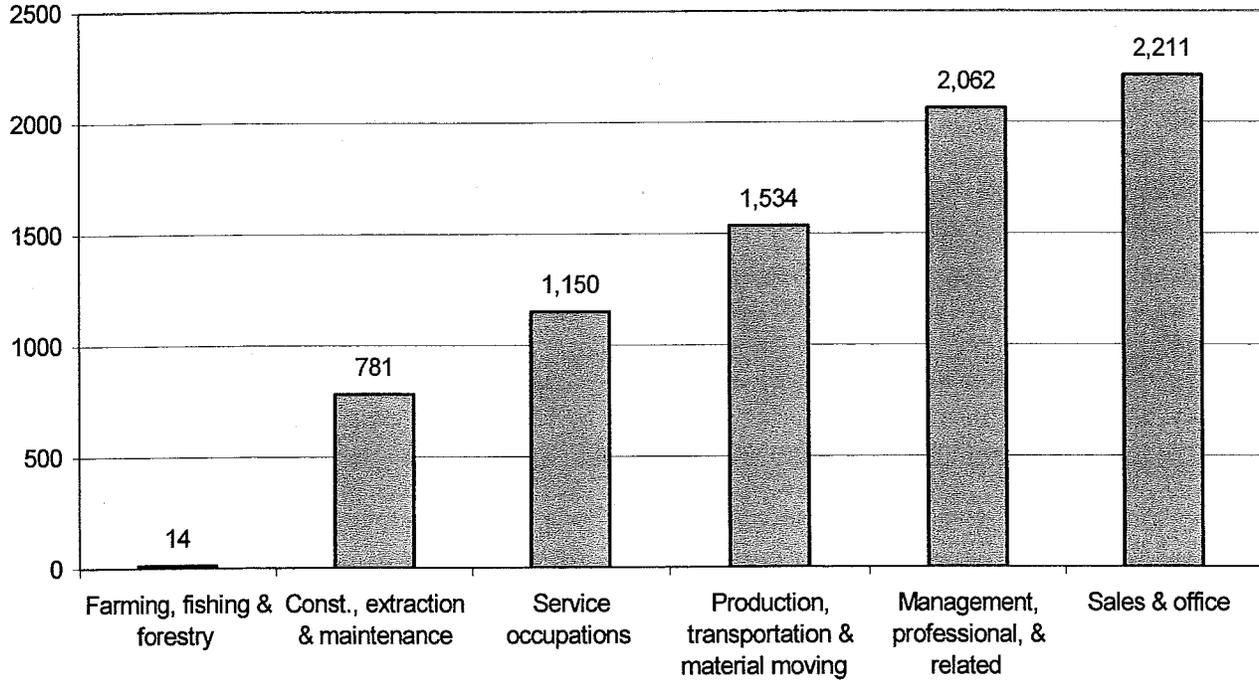


Figure 5, Occupations in Webster, 2000



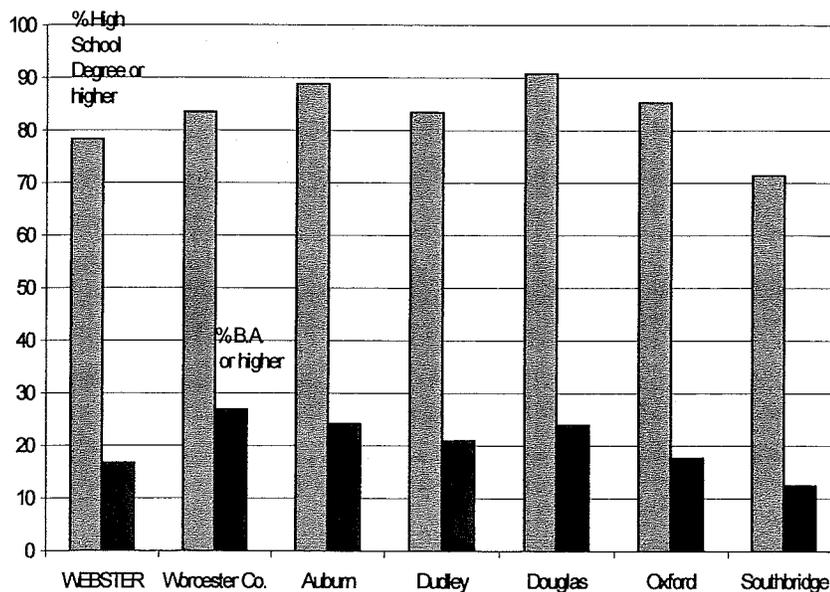
Skill Level and Training Needs

Neither meetings held with owners of Webster based businesses nor direct interviews turned up complaints about specific skill gaps. However, because of the ease of access to Webster from the adjacent communities as well as those north and south on I-395, employers are not limited to Webster residents. If Webster residents fail to maintain the needed educational and skills level they may lose the opportunity to work even in businesses located in their own town.

The Massachusetts Department of Employment and Training’s projection of job growth in the period from 1998 to 2008 projects that 64% of the new jobs produced in the state during that period will require at least an associate degree. For the South Worcester Service Delivery Area of which Webster is a part, the share is slightly lower at 54%, still more than half. However, as the following graph shows, only 17% of the current Webster labor force is qualified for the 54% of the new jobs projected for the next 5 years.

Figure 6 compares educational attainment of residents 25 years and older in Webster, nearby towns, and Worcester County. Webster has smaller percentage of high school and college graduates than any of the other communities except Southbridge.

Figure 6, Educational Levels of Workforce in Webster & Surrounding Communities



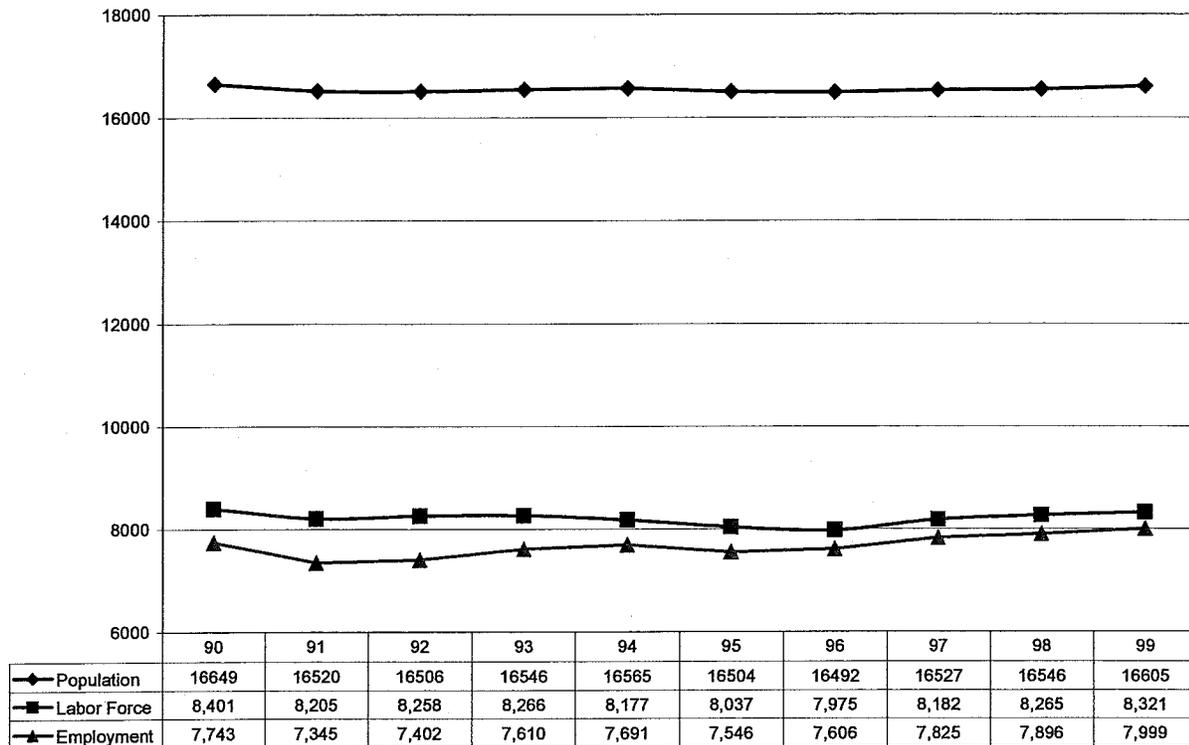
Source: Census 2000 Summary File 3 (SF 3) - Sample Data

In view of the actual and projected changes from manufacturing economy to a service economy (see section on Workforce Projections, following) current students and the existing workforce will benefit greatly from additional educational and training opportunities. These educational opportunities should be focused on preparing students to meet the needs of the service and professional sectors of the economy which are projected to provide the most new jobs in the Southern Worcester region.

Workforce Projections

According to the 2000 U.S. census Webster had a total population of 16,145. Of that number 10,446 or 64% were in the 15 to 65 age range.

Figure 7, Population, labor Force & Employment



Source: Commonwealth of Massachusetts, Division of Employment and Training (Local Area Unemployment Statistics)

Massachusetts Department of Revenue, Division of Local Services data for the year 2000 counted 8,110 in Webster's Labor Force of which 7,832 were working and 278 were unemployed giving the Town and unemployment rate of 3.4%. The Webster's labor force in 2000 was 50.2% of the population and 77.6% of the typical employment age group.

2002 data from the same source shows a labor force of 8,735 with 8,220 working and 515 unemployed giving an unemployment rate of 5.9%, 73% higher than two years previously.

A study of the projected employment growth in Massachusetts by Service Delivery Area (SDA)⁵ projects statewide employment to grow at 10.1% between 1998 and 2008. The Southern Worcester SDA of which Webster is a part is projected to add 21,140 new jobs growing 20% slower than the state at a rate of 8.3%.

The same study projects that by far the largest sector of employment growth throughout the Commonwealth will be in the service sector. The service sector makes up a minimum

⁵ SDA Long-Term Job Outlook through 2008, available at www.detma.org/forms/pdf/2059A_0203.pdf

of 60% of the projected growth in each of the 16 SDA's in the Commonwealth. Within the Southern Worcester SDA, services make up 90% of the projected 1998-2008 growth. Within the service sector the largest area of growth are Health and Social at 45% of the Services Sector growth and Business at 37%. Engineering and Management make up 5% and the remaining 13% is classified as "other".

Given the technical nature of the jobs where growth is projected to take place, more than half (53%) of the new jobs projected for the Southern Worcester SDA will be for professional and technical positions.

Since that study was undertaken the national and regional economy has reversed directions and gone from overheated to recession. In many areas job loss has replaced job growth as weaker companies, both old and new, have reduced employment or disappeared altogether. However, there is every reason to assume that any job growth that takes place will take place in the professional/technical sector as projected by the SDA.

Based on the SDA study we recommend that education and training programs focus on preparing residents for professional and technical jobs

2. POTENTIAL DEVELOPMENT AND REDEVELOPMENT SITES

Zoning

Webster has 3 zoning districts in which commercial activities are allowed. These are:

Table 2, Commercial Zones

Zone	Use	% of Land	Acres
B-4	General Business (with sewer)	2.38	75
B-5	General Business (without sewer)	4.22	133
IND	Industrial	8.63	272
	Total Commercial	15.23	480

Source: Commonwealth of Massachusetts Summary Buildout Statistics

Areas Suitable for Development

The Commonwealth of Massachusetts through its interdepartmental "Community Preservation Initiative" undertook a Build-out Analysis of all cities and towns. This analysis, based on existing development, physical barriers to development and local zoning, estimated the maximum residential and commercial development that could occur in each community. The build-out analysis then projected the impacts of this potential growth in terms of population, school children and demand for new roads and water as well as production of solid waste.

In reviewing the build-out data prepared by the State, it is important to keep in mind that it is an estimate of maximum potential growth (development potential) under current laws and real estate development practices. It is not a projection of how much and what kinds of development will take place. Many factors such as development potential, demand for new space, economic conditions, access and environmental quality determine actual development.

In addition, new business trends and technologies can change a parcel's suitability for development. For example, new smaller scale sewage treatment technologies can open to development that was previously closed due to poor soil conditions. Likewise, new infrastructure such as roads, water and sewer connections can change the development potential of a site or area.

Finally, zoning regulations and laws limiting development in environmental sensitive areas can change, increasing or decreasing the supply of land suitable for development. Some Massachusetts communities reviewed or revised their zoning code and maps after receiving the build-out information from the State.

Table 3, Build-out Analysis for Commercial Zones

Town-Zone	Raw Area (Acres)	Net Land Area (Acres)	Net Build-Able Area (Acres)	Build-Able Lots	Building Sq. Ft. Per Minimum Lot Size	Effective Floor Area Ratio (Far)	Buildable Sq. Ft.
General Business (B-4)							
No Constraints	11	9.90	9.90	36	2,700	0.225	97,200
Partial (8-15% Slopes)	1	0.90	0.45	2	2,700	0.225	4,418
Partial (River Protection Act)	1	0.90	0.90	3	780	0.065	2,553
Subtotal	13	11.70	11.25	41			
General Business (B-5)							
No Constraints	73	62.05	62.05	108.10	6,000	0.240	648,606
Partial (8-15% Slope & Wetlands)	37	31.45	15.73	27.40	6,000	0.240	164,373
Partial (15-25% Slope)	2	1.70	0.43	0.74	6,000	0.240	4,443
Partial (River Protection Act)	4	3.40	3.40	5.92	1,200	0.048	7,108
Partial (River Protection Act & Wetlands)	3	2.55	1.28	2.22	1,200	0.048	2,666
Subtotal	119	101.15	82.88	144			827,195
Subtotal General Business	132	112.85	94.13	185.29			931,366
Industrial (I.N.D.)							
No Constraints	169	141.96	141.96	141.96	17,500	0.436	2,484,300
Partial (8-15% Slope and Wetland)	125	105.00	52.50	52.50	17,500	0.436	918,750
Partial (15-25% Slope)	60	50.40	12.60	12.60	17,500	0.436	220,500
Partial (Rivers Protection Act)	15	12.60	12.60	12.60	3,000	0.069	37,800
Partial (Rivers Protection Act & Other Constraints)	9	7.56	3.78	3.78	3,000	0.069	11,340
Partial (Rivers Protection Act & 15-25% Slopes)	2	1.68	0.42	0.42	3,000	0.069	1,260
Subtotal	380	319.20	223.86	224			3,673,950

Source: http://www.cmrpc.org/GIS/GIS_Buildout.htm

According to the Commonwealth's buildout analysis, Webster has the potential to develop 930,000 square feet of additional business space and 3.6 million square feet of industrial space, under existing regulations and conditions.

A map of suitable land for development in the appendix shows the location of developable land in Webster. An analysis of the map shows that the much of the area listed for potential future development is isolated or otherwise difficult to develop.

Infrastructure

Energy Utilities

Interviews with New England Electric and Keyspan Gas show that Webster has adequate energy supply to meet foreseeable growth. Keyspan is in the process of bringing a new gas line south from Oxford that will increase the supply available.

Although energy supply is adequate, distribution is another issue. Some areas of Webster currently lack high voltage distribution systems necessary for large users such as biotech that can require up to 15 watts per square foot. However, both energy companies support economic development and are willing to participate in the capital costs of expansion of their distribution network to meet the needs of new customers that require significant amounts of energy. In addition, representatives both energy companies expressed interest in working with new businesses to lower their energy consumption and costs by supporting energy efficient building design and processing equipment.

Water and Sewer

Webster has made great strides in expanding its water and sewer system so much of the build-up areas are currently serviced. The sewer plan is reported to have excess capacity that has been sought after by adjoining towns.

Barriers/Aids to Economic Development

Interviews with town officials, businessmen and realtors identified no structural problems to business expansion with the following exceptions:

- lack of parking in the downtown;
- deficient school buildings;
- feeling of lack of security in the downtown after dark;
- rush hour traffic congestion at the Route 16/I-395 intersection.

A common theme in discussions with officials, businesspeople and others in Webster was the lack of organizations that support participation in the planning, development and growth of Webster. Even working with Town officials the consultants had difficulty in attracting participants to meetings to discuss the community planning effort.

We could find no evidence of a currently active local business association. The Chamber of Commerce, formerly a joint effort with adjacent towns, has become a sub-chapter of the Greater Worcester Chamber.

Compatibility/Synergy with neighboring towns and the region

Opportunities to coordinate with other towns include:

- extending water and sewer to an industrial park that while partially in Webster is primarily located in Oxford;
- coordinating riverfront protection, enhancement and development with Dudley;
- improving east-west traffic movements as presented in the transportation segment of this planning effort; and
- joint marketing efforts to attract tourists, regional visitors, new businesses.

3. PROPOSED DRAFT GOALS

The following section recommends economic development goals for Webster. The goals are identified by capital letters and are in bold face type. Following each goal are points explaining why the goal is important.

STRENGTHEN EXISTING BUSINESSES

- Webster is home to three major companies which provide for the majority of local employment
- It is easier and more efficient to keep an existing businesses and help them grow than to try to attract new businesses
- New businesses may bring part of their current labor force, straining the housing market and changing the Town in other ways

ENCOURAGE ADDITIONAL USE OF DOWNTOWN AND MILL BUILDINGS

- Putting an existing structure to use has the double advantage of removing an eyesore that creates a negative community image and possibly reducing the cost to the current occupants
- Existing buildings frequently have utilities other infrastructure and commercial facilities in place, reducing costs and disruption to the Town and existing businesses
- Reuse of existing structures helps to maintain town character and sense of place
- Additional uses help the landlord pay the cost of maintenance and improvement of valuable buildings that are part of Webster's history and attractiveness
- New users may be able to afford to improve the surrounding environment, especially the river edge
- New uses strengthen tax base, reducing the tax burden on residences and existing businesses

ENCOURAGE RETAIL/COMMERCIAL DEVELOPMENT TO SUPPLY GOODS & SERVICES

- Keep Webster an active community that provides the goods and services needed by its residents and businesses
- Commercial facilities attract new businesses and residents
- Commercial facilities provide employment for young, old, handicapped and less educated residents

COORDINATE REGULAR AND ADULT EDUCATION PROGRAMS WITH THE NEEDS OF LOCAL BUSINESSES

- The education and work ethic of the labor force is a major attraction for today's and tomorrow's service and knowledge based businesses. They are looking for both well educated job applicants and opportunities for staff to improve their skills and keep up with new developments

COORDINATE ECONOMIC DEVELOPMENT EFFORTS WITH ADJACENT COMMUNITIES, REGIONAL AND STATE-WIDE PROGRAMS

- Successful economic development programs benefit from a regional approach

- The adjacent commercial areas of Webster and Dudley will jointly benefit from coordinated planning, design and development
- Increasing the use and attractiveness of the river in the downtown will require joint efforts.
- While Massachusetts Communities are used to competing among themselves for additions to their local tax base, in today's world the real competition is with other regions and even other countries. It is the economic and environmental climate of the region that first impacts businesses location decisions.

DEVELOP GOVERNMENT, CITIZEN AND BUSINESS GROUPS TO SUPPORT ACHIEVEMENT OF ECONOMIC DEVELOPMENT GOALS

- Implementation of the Economic Development Section of the Community Development Plan will require an ongoing effort by the town administration, the citizens and the existing businesses
- Obtaining financial support from the State and Federal Governments and other sources requires a coordinated approach supported by the community's demonstrated agreement on its goals and strategies and commitment to their implementation

IDENTIFY & EVALUATE DOWNTOWN NICHE MARKETING REVITALIZATION STRATEGY

What is Niche Marketing?

Niche marketing is a very special aspect of community economic development. When successfully done, it can enhance the both the economy and the quality of life in the community. However, it is a long-term effort that requires a high level of community commitment before financial benefits match the costs.

Niche market is most successful when it is undertaken because of interest and enthusiasm of members of the community as opposed to only as an economic development strategy. Although there are many definitions of niche marketing, we propose two:

- A niche market exists when the mention or thought of the market automatically brings the name of the town to mind.
- A niche market exists when the mention or thought of the town brings to mind a specific market or activity.

Examples of Niche Marketing

"Movie making" and Hollywood is perhaps the best-known niche market. Niagara Falls and honeymoons is another.

For Webster the consultants propose several possible niche markets for consideration by the community. However, as stated above, for a niche market to be successful it must be fully supported and "owned" by significant members of the community. Therefore is both possible and appropriate for the community to investigate and recommend its own niche. The following suggestions are intended to be the beginning of a discussion by people who know Webster well, not final recommendations.

Further Study of Niche Market Ideas

Once a niche has been identified for consideration, the next step would be a feasibility study and a plan for action including:

- *Niche Concept Definition and Development*
- *Evaluation of Potential Market(s)*
- *Evaluation of Current and Potential Competitive Sites*
- *Physical*
- *Requirements*
- *Financial Requirements*
- *Political Requirements*
- *Costs and Benefits*
- *Action Plan leading to implementation*
- *Marketing Plan*

Possible Niche Concept for Downtown Revitalization

District of Craftsman and Artisan Lofts/ Work and Living Space combined with Eating and Entertainment.

This implies that the upper levels of buildings would be rented below market rents to local and regional artisans. Tenants would be able to work, live, demonstrate, and sell their wares. Ground floor uses would gradually be rented to restaurants, coffeehouses and cafes.

Market. Tenants would come from the Worcester Metropolitan Region, The Blackstone Valley, Connecticut, and Rhode Island.

The Town of Webster would provide financial assistance for physical improvements to the buildings, including sign and façade improvements; local banks would participate by providing low-interest loans for start-up operations. Tenants would improve the interior space; owners would be responsible for bringing buildings up to code.

The Town of Webster would provide easy access for Beer and wine licenses and live entertainment permits.

Improvements to Main Street would include signs with the district identity and logo, enhancement of Main Street with benches, trees, flower pots, lighting, and police presence.

4. Recommended Action Items

- Rezone downtown area to make it easier to develop artists studios and entertainment uses
- Utilize Urban Renewal Program to remove dilapidated theater building and replace it with parking
- Improve landscaping in downtown and along river
- Create visual entrances (“Gateways”) to Webster on the main roads. Add signs giving directions and listing stores, historic buildings, museums and attractions in downtown
- Create and maintain a Webster Business Association with dues and a budget
- Market the downtown through press releases and advertisements
- Encourage ethnic restaurants and stores in vacant spaces
- Keep an inventory of space available for rent or sale, with size, zoning and other characteristics. Publicize available sites as appropriate
- Sponsor special events such as street fairs, sidewalk sales, art sales, ethnic celebrations
- Take a pro-active approach towards parking and traffic to encourage customers to the downtown

“PUTTING IT ALL TOGETHER” IMPLEMENTATION STRATEGIES

The following strategies have been identified for carrying out a Community Development Plan for the Town of Webster:

1. A Downtown Main Street Revitalization Plan: The Opportunities

Downtown Webster has a mix of commercial, industrial, residential, public service and mixed use (residential, commercial, office) parcels and buildings. Based upon an analysis of the buildings that are vacant and/or in poor or fair condition, as well as the vacant developable land that exists along Main Street, a number of sites for redevelopment or revitalization have been identified.

There is currently 113,754 sq. ft. of vacant space in the Main Street area, comprised of commercial, residential, and mixed use buildings. There is an additional 283,723 sq. ft. of building space in poor or fair condition. The opportunities to revitalize this space are scattered throughout the study area and might be distributed to the following uses:

- **Commercial:** approximately 64,000 s.f. of vacant space and 148,000 s.f. of building space in poor/fair condition
- **Mixed Use:** approximately 47,000 s.f. of vacant space and 136,000 s.f. of building space in poor/fair condition which could provide some 100 loft residential units, assuming two-thirds of the space would be used for residential purposes at 1,200 sq. ft./unit
- **Residential:** approximately 7,000 s.f. of vacant residential space and 4,000 s.f. of building space in poor/fair condition which could be rehabilitated.

Current vacant space in buildings offers the opportunity to redevelop 33 units for residential purposes. In addition, approximately 79 units could be revitalized to bring the buildings up to good condition (currently in fair and poor condition), which are concentrated in mixed use buildings.

There are a variety of parcels scattered throughout the Main Street area that are developable, vacant parcels. These parcels consist of some seven acres (328,000 s.f.) of land, which could be used for primarily residential and commercial purposes.

For a detailed analysis of the revitalization opportunities in the Main Street area of Webster, see Appendix 10, Land Use Analysis for Main Street Revitalization Plan.

2. Continuing a Main Street Revitalization Project: Planning and Funding

In order to develop an accessible, scenic and functional space along the Main Street, with enhanced economic attractions in revitalized old buildings, including a mix of housing and artist live/work space above retail uses on the ground floor, the Town of Webster needs to expand the Downtown revitalization planning process. At a cost of \$ 50,000, the Town is currently in the process of demolishing an old movie theater and utilizing public funding to develop a public parking lot. The following steps in planning and funding should be pursued.

Planning Strategies:

1. Expand private sector participation on the Main Street Revitalization Committee (MSRC)
2. Plan for a Main Street Revitalization (MSR) charrette, with the purpose of creating a public process to develop the vision, goals and strategies for the revitalization of the Main Street area
3. Structure of the charrette:
 - a. Break into working groups, concentrating on housing, economic development options of the buildings and streetscaping
 - b. Have the working groups first do a visioning session to explore the possibilities for redevelopment
 - c. Second, share the ideas of each working group with the whole
 - d. Third, have the working groups reconvene to work on strategies of how to reach the vision, including timeframe and funding sources
4. After the charrette, the MSRC compiles the information from the public process into a comprehensive action plan
5. The members of each working group from the charrette can be the framework for subcommittees of the MSRC.

Possible towns to look to for model ideas include Easthampton, Worcester and Southbridge, which have completed or are in the process of completing downtown Main Street revitalization projects.

Funding Strategies

A. Downtown Public Works Economic Development Project (PWED)

Funding for this project has finally been obtained. Local business and property owners as well as local officials need to celebrate the start of this project in order to build momentum for the needed additional next steps.

B. The CDBG Housing Rehabilitation Program for private property owners

In appropriate locations, CDBG Sign and Façade and Building rehabilitation funding should be applied to target buildings whose owners are willing to pursue the option the development option of live/work space. The First Time Homebuyers Program might also be utilized to provide financing.

C. Support of the Private Sector

Local property and business owners must take the initiative to ensure that there is support for this initiative

D. An Urban Renewal Project

The Town of Webster needs to continue to pursue State Urban Renewal funding of the proposed revitalization concept.

3. Modification of the Zoning Bylaws

Under the Webster Town Charter the zoning bylaws are to be reviewed every five years. Despite modest changes to the zoning bylaws (telecommunications overlay district, water

protection overlay, conservation overlay and over 55 by-law), there have no major alterations of the bylaws for approximately 20 years. The Planning Board is currently proposing two zoning amendments, an upland provision which would require 75% of the minimum lot size to be dry (not wetlands defined) in order to be built upon, as well as a two-year moratorium on multi-family developments (of three or more units) which would help slow the development and protect natural resources (projects for low-and moderate-income households would be excluded from this provision). The moratorium is intended to protect the public interest and environmental resources which are affected by large scale residential development while a master planning process is conducted to more properly guide development in Town. In addition to these efforts, the Town needs to review the current bylaws in their totality to make needed adjustments which reflect the changes in infrastructure, land use patterns, and development pressures.

In the past ten years much of the Town of Webster has received public sewer systems through a series of three major infrastructure projects. Given the way the zoning by-law was crafted, greater densities than those initially contemplated now might be possible unless the town changes its zoning to accord with its goals of resource protection, sustainable residential and commercial growth.

This issue takes on particular importance as the owner of Indian Ranch is in the process of considering the sale of this property for condos and business uses. The area is located within a Business-5 (without sewer) district. The current allowed use as of right would permit a density of just under 2 units per acre as the lot sizes are 25,000 s.f. While the site now has sewers which would permit a density of between 11 and 17 units/acre, the district has not been changed to allow for a greater density which would greatly impact the natural resources in this area. While the town might want to encourage a greater density than currently exists as well as to allow for hotel/convention uses on this site in order to facilitate some economic development, a density far below that permitted in the B-4 district should be considered.

The recommended zoning changes which should be considered are identified below:

- 1) **Flexible zoning**, allows for variable dimensional standards so that subdivision plans can be proposed that protect the natural environment. This zoning can be further modified to require set sides for open space protection and to permit condo village zoning as described below.
- 2) **Condo Village Zoning**
Flexible zoning could be permitted within Single Family, Multi Family, and B-4 districts. This could be drafted to permit a range of housing types within these districts with limitations on the number of bedrooms and a bonus for open space and affordable units.

3) New Uses: Assisted Living, and Convention Facilities

These uses which are not identified would be incorporated into the Zoning By-law. A convention facility is a use which might be incorporated into a mixed use development under consideration at Indian Ranch. Assisted living facilities might be developed in some of the areas targeted for new housing types.

4) Modify Residential Lot sizes

The multifamily (R-3) and GB 4 districts would have their lot sizes changed from 12,000 sq for the first two units and 2,500 for units thereafter (i.e., 11-17 units/acre to a density which would permit in total some 4-6 units per acre assuming sewers were available). Lot sizes for Single Family (R-1) would be increased from 12,000 sq ft. to 20,000 sq. ft. Bonus provisions for open space and affordable housing could be adopted.

5) Re-draw Zoning district Boundaries:

a. Main Street Zoning from B-4 to MF Residential.

The Main Street corridor has a surplus of retail space and there are substantial vacant parcels. A MF Residential District needs to be crafted for this area to encourage new residential uses which might support a revitalized downtown. The purpose of this recommendation is to concentrate the commercial (retail and office) activity in the area west of Lake Street and east of the French River. Multifamily residential development could then be encouraged adjacent to the downtown for household types, young adults and the elderly, who are less interested in a suburban house and who might support a revitalized Main Street district. A limited percentage of this housing could be set aside as affordable. (see Vision Plan, 3b district)

b. Modify Industrial District The boundaries of the Cudsworth/Sutton Roads industrial district would be re-drawn to limit this district to the Cudsworth Road/Oxford town line area. Single family uses would not be allowed within the Industrial Districts.

6) Adopt Phased Growth by-law

New subdivisions would be built out at a pace, 40-60 units, consistent with the past annual average rate of building permits. Building permits have increased from a five year average of 36 units to now over 100 units/year.

7) Adopt Inclusionary Zoning

The town could encourage the development of affordable housing by requiring developers of projects containing 15 or more units to set aside a percentage of units for affordable housing.

8) Adopt various rules and policies for managing 40-B development projects

9) Adopt Storm Water Management Regulations

In order to be in compliance with EPA's Phase II requirements, the town should adopt a uniform set of guidelines to ensure that untreated stormwater runoff will not discharge directly into rivers, streams, and wetlands. This regulation should be incorporated into the Zoning, Subdivision, and Conservation Commission regulations.

10) Modify parking regulations for the downtown

Concepts of shared parking need to be adopted to allow residential units and live/work space to be developed in the downtown. Many of these properties do not have sufficient parking yet they are located in close proximity to a public lot.

4. Initiate a First Time Homebuyers program

A First Time Homebuyers Program includes a cluster of marketing, training, and financial services which are made available to residents interested in purchasing their own home. These programs require the joint participation of Town Hall, local banks, State and non-profit agencies. Citizens are encouraged to undertake a training course on how to purchase a home, maintain a budget, and manage property. The Town assists with publicity and the provision of some staff to coordinate the effort. Local banks offer a variety of mortgage financing tools and discounts. The banks obtain financial assistance from the State Department of Community Affairs and the Massachusetts Housing Partnership.

In terms of addressing housing needs, assistance to First Time Homebuyers is one of the top priorities identified in the town's Housing Certification Strategy⁶ as well as in this proposed 418 Housing Action Plan. While affordable housing in Webster is available to those of middle income, there is a substantial gap in the availability of homeownership opportunities for those of low and moderate income. A major reason for the abundance of rental housing is the lack of ownership opportunities. The First Time Homebuyers Program is designed for those households whose incomes fall within 80% of median income. The income limits are provided in Appendix 3. With additional subsidies, these can be modified to address those of low income as well as for those between 80% and 100% of median income. A concerted effort will need to be undertaken to prepare a program which meets the needs of Webster's residents.

Recently, Governor Romney agreed to expand the SoftSecond mortgage program by lowering downpayments from 5% to 3% and to increase income limits to \$80,800 for a family of four (median income for the Boston Metropolitan area). The expansion will allow thousands of families to purchase a home. Since its inception in 1991, the program has given almost 7,000 families in 250 communities the opportunity to buy a home. The program's delinquency rate is a low 2.8% and the foreclosure rate is only 0.33%.

The Town of Webster had participated in a First Time Homebuyers program but this effort has been allowed to languish. Although a local Webster bank does not currently participate in a SoftSecond Program, branches of regional banks located in or near

⁶ Housing Certification Report, Town of Webster, FY2003, Office of Community Development

Webster, such as Fleet, Bank North, Citizens, and Sovereign do participate in this program. However, as training and funding resources can again be made available to citizens of Webster, and as the Webster Five Cent Bank is currently in the process of taking a lead on initiating this program, a new network of assistance should be initiated.

The Office of Community Development, possibly with the assistance of the Housing Authority, needs to take the leadership in initiating such a program. Heather Hennessey Whelehan, of the Massachusetts Housing Partnership (617-338-7868) needs to be contacted along with Susan Birch of Webster Five (800-696-9401), and Miguel Rivera of Worcester Community Housing Resources (508-799-0322) with possibly a representative of the Board of Selectmen. Another person to contact is Bryan Peloquin of the Oakhill Community Development Corp. (508-754-2858) for information on Homebuyer Education Programs. After agreeing on an initial program, the Town will need to assist with marketing. In addition, the town will want to send a letter to Catherine Raceer, Director of Private Housing, requesting that DHCD allocate funding this fall for homeowners interested in supporting this program.

Currently, the Webster Five Cent Bank has adjustable rates for mortgages for first time homebuyers (five year fixed rate, adjustable after that) as well as a closing cost credit of \$500. The bank also allows one to prequalify for a mortgage to help the homeowner know what is affordable to him/her. A unified program for First Time Homebuyers would allow potential homeowners to access the subsidies available in a Soft Second Program, sign-up for conveniently available training programs, and possibly assist in launching an initiative to upgrade the proposed loft live/work space program for the downtown.

Four partnership organizations, the City of Worcester, the Oakhill CDC, the WCHR, and the Central Mass Housing Alliance, have merged into a central resource for assistance to First Time Homebuyers. This resource, the Homeownership Center of Worcester, will open a central site later this year. Currently, Worcester Community Housing Resources is the main resource for homebuyer education courses in the area. According to Miguel Rivera, Director of Lending for WCHR, these courses could be held in the Webster area (they are currently offered in Worcester) to facilitate the loan process for Webster residents.

5. Lake Webster/ Indian Ranch Recreation/Tourism Center

Indian Ranch has long served as a regional attraction during the summer for entertainment and recreation. The property is now on the market. If the reuse of this property can be continued and expanded under a new ownership possibly attracting a hotel and year round entertainment, this might complement efforts to revitalize the downtown. Other, residential only options which would have less spill-over economic impacts should be discouraged.

6. Support economic development outside the downtown

A number of zoning changes and infrastructure improvements have been suggested in the the Cudsworth/Sutton Roads area to improve the development potential of this area. Industrial uses in Webster and Oxford town line have grown in recent years. This would be an area that with the extension of sewers, intersection improvements, and appropriate zoning could attract additional investment and employment that would met the needs of Webster's residents.

7. Improve Transportation Infrastructure

The provision of convenient parking to the downtown and improved access to this area will be needed to facilitate revitalization. In addition, improvements to the intersection in the vicinity of the ramps and adjoining properties at Route 395 and Route 16 will upgrade access to Commerce Insurance Company, the town's largest employer.

Appendix 1: EOEA Buildout Analysis

Table 1, Summary of Buildout Capacity

Zoning District	Dwelling Units	Future Residents	Future Students	Commercial/Industrial	Potential Employees	Additional Roads (miles)
General Business (B4)				104,171 s..	260	2.5 in industrial districts
General Business (B5)				827,195 s.f.	2,067	
Industrial (IND)				3,673,950 s.f.	7,348	
Single Family Residential (R1)	837	1,841	418			26.5 in new subdivisions
Agricultural Single Family Residential (R2)	1,178	2,591	589			
Multifamily Residential (R3)	80	175	40			
Lake Residential (LR)	596	1,312	298			
Total	2,691	5,919	1,345	4,605,316 s.f.	9,675	29.0

Source: EOEA Buildout Analysis, 2001

Note: Potential employees based on 1 employee per 400 square feet for commercial use and 1 employee per 500 square feet for manufacturing/warehousing uses.

APPENDIX 2: Zoning Summary

Table 1, Zoning Summary

Use/District	R1	R2	R3	B4	B5	IND	LR
Detached single family dwelling	Y	Y	Y	Y	Y	Y	Y
Two to six family dwelling	-	-	Y	Y	Y	-	-
Apartment with more than six units	-	-	SP	SP	SP	-	-
Religious educational or municipal use	Y	Y	Y	Y	Y	Y	Y
Hospital, convalescent home	Y	Y	Y	Y	Y	Y	Y
Accessory use	SP	Y	SP	SP	Y	Y	SP
Home occupation (no more than two employees)	SP	SP	SP	SP	SP	SP	SP
Farm or nursery (includes display/sale of natural products)	-	Y	-	-	Y	Y	-
Road side stands	-	SP	-	-	Y	SP	-
Retail establishment	-	-	-	Y	Y	-	-
Auto sales/service stations	-	-	-	Y	Y	-	-
Banks or financial institutions	-	-	-	Y	Y	-	-
Personal services	-	-	-	Y	Y	-	-
Office/professional services	-	-	-	Y	Y	Y	-
Printing or publishing	-	-	-	Y	Y	-	-
Building material, sales and storage	-	-	-	Y	Y	Y	-
Hotel, motel, nursing home: FAR 0.5	-	-	Y	Y	Y	-	-
Restaurant, tea room	-	SP	-	Y	Y	SP	-
Theaters, amusement, bowling	-	-	-	Y	Y	-	-
Adult Uses (requirements in District 4 Section 5)	-	-	-	Y	Y	-	-
Public or commercial garages/parking areas	-	-	-	Y	Y	-	-
Trucking terminal or bus garage	-	-	-	Y	Y	Y	-
Wholesale distribution plant/warehouse	-	-	-	Y	Y	Y	-
Any manufacturing or industrial use, including processing	-	-	-	-	-	Y	-
Gravel, loam, sand and stone removal	-	SP	-	-	Y	SP	-
Junk yard/auto dismantling or used-parts	-	-	-	-	-	SP	-

Zoning Districts: R1= Single Family Residential, R2=Agricultural Single Family Residential, R3=Multi-Family Residential, B4=General Business with sewer, B5=General Business without sewer, IND=Industrial, LR=Lake Residential

Y = A use permitted by right in the District

SP = A use which may be permitted in the District by a Special Permit from the Board of Appeals in accordance with Chapter 40A.

(-) = A use which is not permitted in the District.

Table 2, Zoning Characteristics

Zoning District	% of Town covered by this zoning district	Minimum Lot Area	Floor Area Ratio to Land Area
Single Family Residential (R1)	14.57%	12,000 sq. ft.	
Agricultural Single Family Residential (R2)	31.58%	43,560 sq. ft.	
Multiple Family Residential (2 Family) (R3)	5.25%	12,000 sq. ft.	
Each additional family		2,500 sq. ft.	
General Business (within sewer district) (B-4)	2.38%	Same as R3	1.0
General Business (outside sewer district) (B-5)	4.22%	25,000 sq. ft.	0.5
Industrial (IND)	8.63%	43,560 sq. ft.	0.5
Lake Residential	8.16%	5,000 sq. ft.	0.5
Conservation District (CD)	25.22%		
Flood Plain			

APPENDIX 3: Standards for Affordability

What is affordable housing?

There are now two standards for identifying what is considered affordable housing. Executive Order 418 has provided a broader benchmark for communities so as to include the substantial unmet needs for providing middle income housing which would support teachers, public safety personnel and other residents currently living and working in our communities.

Low/Moderate Income Standard

Standards for subsidized affordable housing typically target low and moderate income households earning up to 80% of the median family income. Various housing subsidy programs have their own requirements for affordability and income eligibility for specific housing developments differently, but for the most part housing that meets 40B requirements serves households in this income group. Webster is in the Worcester Primary Metropolitan Statistical Area (PMSA), for which the median family income in 2002 was estimated to be \$58,400. Under this standard, low/moderate income households earn up to \$46,720. Households with this income are assumed to afford a maximum monthly rent of \$1,168, or 30% of their income.

Middle Income Standard

Some state programs which do not rely on subsidized housing allow for a higher income standard in their definition of affordability. Executive Order 418 states that rental units are considered affordable if they cost a middle-income household earning 100% of median family income no more than 30% of the household income or \$1,460/month (in 2002). Owner-occupied housing units have been defined as affordable if they can be purchased by middle-income households earning up to 150% of the median income, or \$87,600 (in 2002). Homes valued at up to \$285,592 are considered to be affordable under this standard.

Town vision, another standard for assessing housing needs.

What type of community do the residents of Webster vision for themselves? Should there be a mix of housing types, affordable to individuals and families with a range of incomes? Are there locations where density can be accommodated in order to meet the housing needs of individuals or families who do not need to live in single family homes? Are those with disabilities offered opportunities to live in town? Are there housing choices for young families, the elderly, public employees? Are there opportunities for inclusive patterns of housing occupancy regardless of race, color, religion, sex, familial status, disability and national origin? What role should local government and local non-profit organizations play in protecting and improving the mix of housing to retain town character?

Soft Second Income Limits

Table 1, Soft Second Income Limits for Webster

Household Size	Maximum Income
1	\$43,500
2	\$43,500
3	\$48,950
4	\$54,400
5	\$58,750
6	\$63,100
7	\$67,450
8	\$71,800

Note: Must count total household income. Lower income limits may apply if homebuyer receives down payment or closing cost assistance from local fund source.

Source: Massachusetts Housing Partnership Fund

APPENDIX 4: Webster Housing Committee Tasks

1. Webster Housing Committee (WHC)

The Massachusetts Housing Partnership has prepared a guide Getting Started: Building Local Housing Partnerships, to assist communities develop a housing program which best reflects the local community's needs and goals. The membership of the Housing Committee needs to be expanded to include housing advocates. The tasks of the WHC include:

- A. Adopt goals and action
- B. Establish criteria to evaluate affordable housing proposals submitted under Comprehensive Permits.
- C. Make recommendations on the pros and cons of particular housing proposals with particular reference to housing quality, type, and affordable issues.
- D. Review land use regulations and zoning bylaws, support appropriate changes

2. Establish Subcommittees

Two priority issues need to be addressed by a WHC; establishing criteria and a process for reviewing projects submitted under Comprehensive Permits and reviewing recommendations for zoning changes which will promote the goals of expanded housing options. Sample Review Guidelines, (shown below) and Sample Development Evaluation Checklist are included in the report Getting Started (Appendices E and F). These should be edited by the WHC and subsequently adopted.

The following criteria should be given priority consideration by the WHP in reviewing proposed affordable housing developments.

1. **The project should meet one or more of the town's priority housing needs.**
2. **The site should be well located for the population served.**
3. The proposed development should preserve and protect environmental resources and, where appropriate, accommodate the Town's Open Space Plan.
4. A management plan must be provided to ensure quality maintenance and management.
5. **The developer should work with the town's Housing Committee to ensure that there is adequate coordination in tenant selection, provision of social services, public transportation, and needed infrastructure improvements.**
6. **The project should meet all affordable housing program requirements as described in**
7. **Development Evaluation Checklist (See Appendices 6 and 7)**
8. **Encourage proposed zoning changes**

APPENDIX 5: 40B Check-list

1. Has the ZBA Promulgated rules for administering the Comprehensive Permit Process

2. Pro Forma:

All review, analysis, and discussion should begin with, and focus on, the pro forma (the developer's projected income/expense/profit estimate).⁷

The ZBA might well require a full compilation and certification of total development costs and total revenues, on a federal income tax basis, prepared and certified by a CPA.⁸

3. Proposed Subsidy Programs

4. Affordability Issues (See checklist attached Appendix 6⁹) including:

- Calculation of sale and resale price of affordable units
- Income Mix: Number and % of affordable units
- Duration of Affordability

5. Zoning and Subdivision Rules and Regulations Conformity Analysis

6. Site Design and Environmental Impact Checklist (attached Appendix 5)

7. Preferences for local residents

⁷ How to Evaluate a Project Under GL Chapter 40B, Horsley & Whitten, Inc., July, 2001 p. 4

⁸ Comprehensive Permits and the Anti-Snob Zoning Act, Edith M. Neetter & Associates, April, 2000, p. 6

⁹ Checklist of Affordability Issues Under Chapter 40B, CHAPA, June 2000

APPENDIX 6: Sample Development Evaluation Checklist (From GETTING STARTED, Appendix F)

The following guide is a tool for City/Town boards and departments to evaluate development proposals. The checklist will also prove useful to developers and builders as it identifies which aspects of their proposals will be examined closely. The intent of the guide is to give order to the development review process, promote high quality residential developments and ensure that the development will have no adverse impact upon the environment.

ENVIRONMENTAL CHECKLIST

A. GROUNDWATER

1. Will the project alter the water cycle (the natural movement of water through the natural system) in any way?
2. Will the project adversely impact in any way upon existing wells or future well sites?
3. Are there any existing or potential water supply problems in the general area (quality or quantity concerns)?
4. Is the project area part of a municipal water distribution system? If not, what will be the source of water?
5. Will the water supply needs of the completed development be adequately met?
6. What is the average depth of the seasonal water table? Minimum and maximum depth?
7. Is the percolation rate acceptable?
8. Will the project be served by a municipal or other sewer system? If not, what will be the method of sanitary waste disposal?
9. Are there any existing or potential problems concerning sanitary waste disposal in the general area?
10. What is the relationship on site to the provision of water and the disposal of sanitary waste?
11. Are any special safeguards necessary to ensure future groundwater protection?

B. SOILS/SLOPES

1. If no sewer, is the soil type conducive to efficient septic system operation?
2. What is the depth to bedrock?
3. Will the soil type(s) provide good structural support?
4. Is the soil subject to erosion? If so, what safeguards will be taken?
5. What are the existing drainage patterns? Will or should these be altered?
6. Will the topography be changed due to excavating, grading or filling? Why?
7. Is the degree of slope conducive to development?

C WETLANDS/SURFACE WATER

1. What is the proximity of wetlands or surface water to the project site?
2. What is the direction of any surface water flow?
3. Are there adequate setbacks from surface water/surface flow?
4. Will there be any changes or potential changes in the direction of water movement or the configuration of salt or fresh water bodies?
5. Will the project generate pollutants that could damage surface waters or wetlands?
6. Is there a "track record" of the developer/builders regarding environmental protection sound?
7. Is a buffer necessary or recommended to protect environmentally sensitive areas?
8. Is wetland vegetation on site or very close to proposed development?
9. Will construction expose people or property to hazards?
10. What is the source of runoff water?
11. What is the runoff rate and destination?
12. Will the proposed project impair the capacity of the land to serve as a home, breeding, or feeding habitat for animal or marine life?
13. Is a conservation or other restriction appropriate to ensure the protection of surface water or wetlands?
14. Is the stability of a coastal or inland bank threatened?

D. SIGNIFICANT AND UNIQUE FEATURES

1. Will scenic vistas be preserved?

2. Will historical landmarks (buildings or sites) be protected?
3. Is the site archaeologically significant?
4. Does the site have unusual mineral or geological formations?
5. Are rare plants or animals present on or near the site?
6. Will the site be in close proximity to an existing public recreation area?

SITE DESIGN CHECKLIST

A. THE LANDSCAPE

1. Is the project in harmony with the landscape and does it blend in with the natural surrounding?
2. Is the project complementary to the existing character of the neighborhood?
3. Will the development pose any conflicting land use concerns?
4. Is the scale of the project consistent with the immediate area?
5. Will the development block scenic vistas with buildings, signs or parking lots?
6. Does the plan keep as much the existing ground covered as possible?
7. Should additional planting be required?
8. Will the plan preserve all significant natural features?
9. Will the development destroy the natural quality and attractiveness of the area?
10. What means will be used to protect the site from poor drainage, erosion, etc.?
11. What consideration has been given to construction damage to the site?
12. What precautions will be taken to eliminate construction damage both on and off site?

B. SUBDIVISION DESIGN

1. Does the proposal meet all structural requirements?
2. Is the plan well organized for good lot arrangement?
3. Does siting of structures promote energy conservation?
4. Does construction avoid hilltops?
5. What is the planned construction sequence and timetable?
6. What is the relationship of the project to commercial shopping areas, schools, etc.?
7. Does the project abut conservation land?
8. What precautions will be taken to protect conservation land?
9. Is there a buffer that separates the development from major roads, commercial areas or conflicting land uses?
10. Should a buffer be considered?
11. Are dwellings placed to look away from unsightly views?
12. How much of the site is dedicated to open space? (For aesthetic, safety and privacy reasons.)
13. Is the open space arrangement good?
14. Is an active recreation area planned? (i.e. playground)
15. Could setbacks be improved or be more effective?
16. What are the existing and/or proposed storm drainage systems / structures?
17. What is the planned utility placement?
18. Are the landscaping plans for structures, parking lots, open space, and buffers sufficient?
19. Is the proposed development attractive?
20. Are the placement and size of the signs appropriate?

C. FACILITIES, UTILITIES AND SAFETY

1. Does the circulation pattern follow natural contours?
2. Are there any traffic safety concerns?
3. What is the public access?
4. Does the circulation design discourage outside traffic?
5. What is the street capacity?
6. Does the design meet the projected need?
7. Does the traffic plan meet the community's design standards?
8. Are the parking plans for residents and visitors adequate?
9. Does the traffic plan provide good vehicular movement?
10. Will pedestrian movement be both safe and convenient?

11. Are any adverse traffic impacts possible?
12. What is the utility capacity of the site?
13. What will the energy source be for the development?
14. Is emergency access adequate?
15. Are the plans for exterior/safety lighting adequate?
16. Are there any potentially hazardous areas in the immediate vicinity of the planned development

APPENDIX 7: Checklist of Affordability Issues Under Chapter 40B

Prepared by CHAPA's Chapter 40B Legal Subcommittee
June 2000

Introduction

Availability of construction funding for affordable housing through the New England Fund, which is not subject to state agency review, is giving rise to new levels of responsibility for municipalities in their consideration, review, documentation and enforcement of such proposed projects.

CHAPA's 40B Legal Subcommittee has considered:

- Current enforcement of affordability requirements
- Potential monitoring of New England Fund projects
- Existing and potential documentation, including regulatory agreement documents
- Periods of affordability of units
- Underlying zoning and comprehensive permit considerations
- Current concerns in home ownership/condominium and rental projects
- Related state and local policy and implementation concerns

We have developed a checklist of affordability parameters. This will aid municipalities in addressing the complex range of issues of affordability for both homeownership and rental affordable housing developments. We have made separate checklists for homeownership and rental projects.

We hope this checklist will be a useful starting point for municipalities and developers seeking to tailor a project to particular subsidy programs. With respect to Chapter 40B projects, it is intended to supplement the Chapter 40B guidelines issued by the Massachusetts Housing Appeals Committee. In any event, it is a working document designed to trigger talking points. It is not intended to be a complete list of affordability parameters.

Although this checklist is principally intended for informing municipalities, including their elected and appointed officials, board and committee members, and employees, we also hope it will be useful for initial discussions between municipal officials and potential developers (and their attorneys) about the development of affordable housing in a particular community.

Homeownership Projects

1. General Project Information

1. Who are the parties involved in the project?
2. What are the sources of public subsidy?
3. What percentage of the units in the project is designated as affordable? Are specific unit types designated as affordable?
4. Where are the affordable units located within the project? Are they dispersed throughout the project so that they are indistinguishable from the market rate units? How comparable are the affordable housing units (size, amenities) with the market rate units?
5. What is the length of the affordability restriction?

II. Income Restrictions for Buyers

1. Who is eligible to occupy the units (e.g., first-time homebuyer definition, are students eligible)?
2. What is the maximum income for a household to be eligible to purchase a unit? Is it adjusted for household size or for number of bedrooms in the unit?
3. How is income determined (e.g., three years of tax returns, etc.)?
4. What is the household asset limit, if any, to be eligible for affordable units?
5. Is the development creating opportunities for a range of incomes (e.g., households between 50%-80% of area median income)?
6. What geographic area is being used to set income limits? (e.g., HUD definition of area median income, county income, local median income, other?)

III. Initial Sales Prices

1. What are the initial sales prices and how are they set?
2. Is the sales price being set based on size of the unit (number of bedrooms) or household size? What is the assumption regarding the number of persons per bedroom?

IV. Resale Restrictions, Ongoing Buyer Restrictions, and Recapture Provisions

1. What is the formula for determining maximum resale price?
2. Does the municipality have an option to purchase or a right of first refusal in the event of a resale?
3. What happens if an eligible purchaser who qualifies to buy the unit cannot be found?
4. What are the recapture provisions for the municipality should the property need to be sold (as a last resort) for fair market value to a non-income eligible buyer?
5. How do you address or anticipate potential foreclosure problems?
6. What are the restrictions on additional debt, refinancing, or home equity loans?
7. Will the affordability restrictions have the protection of M.G.L. Chapter 184, Sections 3 1-33? (In some cases, this protection is needed to assure that the restriction will be enforceable against future owners)
8. What is the restriction on owners of affordable units being able to rent their units?

V. Developer Restrictions

1. What are the restrictions on developer's fee, profit, equity, etc.?

VI. Selecting Buyers

1. What is the method for selecting buyers (lottery, residency and minority preferences)?
2. What are the affirmative marketing requirements?
3. What are other fair housing requirements?

VII. Condominium Issues

1. How are condominium fees structured?
2. How are affordable buyers treated vs. market rate buyers in terms of voting power and decision making?

VIII. Monitoring and Enforcement

1. Is the municipality a party to the regulatory agreement between the developer and the subsidy provider and/or does it have rights to enforce the affordability restrictions?
2. Who is responsible for monitoring and enforcement?

3. What is the payment for monitoring services? How/when is the payment made?
4. What are the reporting requirements of the owner and developer?
5. What are the mechanisms for enforcement of the resale and use restrictions?

Rental Projects

1. General Project Information

1. Who are the parties involved in the project?
2. What are the sources of public subsidy?
3. What percentage of the units in the project is designated as affordable?
4. Where are the affordable units located within the project? Are they dispersed throughout the project so that they are indistinguishable from the market rate units? How comparable are the affordable housing units (size, amenities) with the market rate units?
5. What is the length of the affordability restriction?

II. Income Restrictions for Renters

1. Who is eligible to occupy the units (are students eligible)?
2. What is the maximum income eligibility for the project? Is it adjusted for household size or for number of bedrooms in the unit?
3. Is the development creating opportunities for a range of incomes (e.g., households below 30% of median income, 30-50% of median income, and 50-80% of median income)?
4. How is income determined? Are assets counted?
5. What is the household asset limit, if any, to be eligible for affordable units?
6. What if the tenant's income increases over time?
7. What geographic area is being used to set income limits? (e.g., HUD definition of area median income, county income, local median income, other?)

III. Initial Rental Prices

1. What are the initial rental prices and how are they set?
2. Is the rent being set based on size of the unit (number of bedrooms) or household size? What is the assumption of number of persons per bedroom?

IV. Developer Restrictions

1. What are the restrictions on developer's fee, profit, equity, etc.?
2. What is the restriction on the sale of the rental property?
3. Are there restrictions on additional debt or mortgages on the rental property?

V. Selecting Tenants

1. What is the method for selecting renters (lottery, residency preferences)?
2. What are the affirmative marketing requirements?
3. What are other fair housing requirements?

VI. Monitoring and Enforcement

1. Is the municipality a party to the regulatory agreement between the developer (and the subsidy provider) and/or have rights to enforce the regulatory agreement?
2. Who is responsible for monitoring and enforcement?
3. What is the payment for monitoring services? How/when is the payment made?
4. What are the reporting requirements of the developer?
5. Does the monitoring agent have a right to inspect the property and the owner's tenant files for compliance?
6. Will the affordability restrictions have the protection of M.G.L. Chapter 184, Sections 31-33? (In some cases, this protection is needed to assure that the restriction will be enforceable against future owners)

APPENDIX 8: Webster Profile for EO 418

		Massachusetts	Community
A	Total households, 2000 Census	2,443,580	6,905
B	Total households, 1990 Census	2,247,110	6,529
C	Total household growth, 1990 - 2000	8.7%	5.8%
D	Average annual household growth, 1990 - 2000	0.9%	0.6%
		$C=(A/B)-1$	
		$D=C/10$	
E	Total housing units, 2000 Census	2,621,989	7,554
F	Total housing units, 1990 Census	2,472,711	7,348
G	Total housing unit growth, 1990 - 2000	6.0%	2.8%
H	Average annual housing unit growth, 1990 - 2000	0.6%	0.3%
		$G=(E/F)-1$	
		$H=G/10$	
I	Total occupied year-round ownership units, 2000 Census	1,508,052	3,728
J	Total occupied year-round ownership units, 1990 Census	1,331,493	3,459
K	Growth in year round ownership units, 1990-2000	13.3%	7.8%
		$K=(I/J)-1$	
L	Total occupied year-round rental units, 2000 Census	935,528	3,177
M	Total occupied year-round rental units, 1990 Census	915,617	3,070
N	Growth in year round rental units, 1990-2000	2.2%	3.5%
		$N=(L/M)-1$	
O	Vacancy rate for year-round ownership units, 2000 Census	0.7%	1.0%
P	Vacancy rate for year-round rental units, 2000 Census	3.5%	5.8%
Q	Vacancy rate for year-round ownership units, 1990 Census	1.7%	2.8%
R	Vacancy rate for year-round rental units, 1990 Census	6.9%	8.1%

APPENDIX 9: Land Use Analysis for Main Street Revitalization Plan

Table 1, Summary of Land Uses (square footage)

	Commercial	Industrial	Residential	Mixed Use	Public Service	Total
Developed Land	736,615	301,890	262,831	377,067	185,334	1,863,737
Developable Land*	197,644	103,855	26,695	n/a	n/a	328,194
Undevelopable Land*	52,357	n/a	n/a	n/a	n/a	52,357
	986,616	405,745	289,526	377,067	185,334	2,244,288

*Developable vs. undevelopable land is based on parcel lot size

Table 2, Summary of Vacancies

	Commercial	Residential	Mixed Use*		Total
			Residential	Commercial	
# of buildings with vacancy	9	2	8	6**	20
Parcel sf	128,879	17,566	46,218		192,663
Vacant building sf	63,727	3,076	35,426	11,525	113,754

*The ground floor is commercial use, the upper floor(s) are residential.

**Two of the mixed use buildings do not have vacant commercial uses; only the upper residential floor(s) are vacant.

Table 3, Vacancy as % of total building area

	Commercial	Industrial	Residential	Mixed Use	Public Service	Total
Vacant building sf	63,727	0	3,076	46,951	0	113,754
Total building sf	313,621	353,352	97,793	255,695	66,710	1,087,171
% vacant	20.3%	0.0%	3.1%	18.4%	0.0%	10.5%

Table 4, Building Vacancy by Building Type

	Commercial	Industrial	Mixed Use	Residential	Public Service	Total
Parcels	83	11	32	38	10	174
Buildings	41	5	32	34	9	121
Vacancy in Building	10	0	8	2	0	20
Vacancy Rate	24.4%	0.0%	25.0%	5.9%	0.0%	16.5%

Table 5, Building Condition by Building Type

	Commercial		Industrial		Mixed Use		Residential		Public Service		Total	
	#	%	#	%	#	%	#	%	#	%	#	%
Poor	6	14.6%	0	0%	1	3.1%	0	0.0%	0	0.0%	7	5.8%
Fair	14	34.1%	0	0.0%	18	56.2%	0	0.0%	0	0.0%	32	26.4%
Good	21	51.2%	5	100.0%	13	40.6%	34	100.0%	9	100.0%	82	67.8%
Total	41		5		32		34		9		121	

Table 6, Square Footage of Current Uses by Use Type

	Parcel		Building	
	Total square footage	% of total	Total square footage	% of total
Commercial	986,616	44.0%	313,621	28.8%
Industrial	405,745	18.1%	353,352	32.5%
Mixed Use	377,067	16.8%	255,695	23.5%
Residential	289,526	12.9%	97,793	9.0%
Public Service	185,334	8.3%	66,710	6.1%
Total	2,244,288 square feet	100%	1,087,171 square feet	100%

Table 7, Land Area by Use

	Appr. % of use	Appr. acreage of land
Commercial	44%	24
Industrial	16%	9
Mixed Use	16%	9
Residential	13%	7
Public Service	10%	6
Total	100%	55 acres

Table 8, Parking Spaces in Webster

Use	# of parcels	App. square feet of parcels	# of spaces*
Commercial	15	236,557	675
Public Service	2	39,446	112
Total	17	276,003	787

*# of spaces based upon 1 car/350 sf.

Table 9, Summary of Land Uses (square footage)

Use	Commercial	% of Comm	% of total use	Industrial	% of Ind	% of total use	Residential	% of res	% of total use	Mixed Use	% of m u	% of total use	Public Service	% of pub serv	% of total use	Total	% of total	% of total use
Developed Land	736,615	74.6	39.5	301,890	74.4	16.2	262,831	90.8	14.1	377,067	100.0	20.2	185,334	100.0	9.9	1,863,737	83.0	100.0
Developable Land*	197,644	20.0	60.2	103,855	25.6	37.6	26,695	9.2	8.1	n/a	0.0	0.0	n/a	0.0	0.0	328,194	14.6	100.0
Undevelopable Land*	52,357	5.3	100.0	n/a	0.0	0.0	n/a	0.0	0.0	n/a	0.0	0.0	n/a	0.0	0.0	52,357	2.3	100.0
Total Land Area	986,616	100	44.0	405,745	100	18.7	289,526	100	72.9	377,067	100	16.8	185,334	100	8.2	2,244,288	100	100

*Developable vs. undevelopable land is based on parcel lot size

Table 10, Potential Revitalization Project for Downtown/Main Street Webster

	Underutilized Space (Vacancies and Building Condition)										Vacant Land		
	Total building sf	% of total	Vacant space sf	% of total	Bldgs in poor/fair cond sf	% of total	Estimated ratio for new units	Potential new res. units from vacant space	Potential revitalized res. units from poor/fair buildings	Total Land SF	Developable land SF	% of total	
Commercial	313,621	28.8%	63,727	20.3%	147,872	47.1%				986,616	197,644	20.0%	
Industrial	353,352	32.5%	0	0.0%	0	0.0%				405,745	103,855	25.6%	
Mixed Use*	255,695	23.5%	46,951	18.4%	135,851	53.1%	1/1,200 sf	26	75	377,067	0	0.0%	
Residential	97,793	9.0%	3,076	3.1%	0	0.0%	1/1,000 sf	3	0	289,526	26,695	9.2%	
Public Service	66,710	6.1%	0	0.0%	0	0.0%				185,334	0	0.0%	
Total	1,087,171	100%	113,754	10.5%	283,723	26.1%		29 units	75 units	2,244,288	328,194	14.6%	

*Assumes 2/3 of building sf will be residential use of the mixed use buildings.

Table 11, Webster Businesses with 20 or more Employees

SIC CODE	Sic Description	Name	EMP SIZE	SALES	SQUARE FOOTAGE
782.06	Lawn & Grounds Maintenance	Trugreen Chemlawn	20-49	\$2.5-\$5 Mil.	2,500 - 9,999
1761.09	Roofing Contractors	Applied Roofing Systems Inc	20-49	\$2.5-\$5 Mil.	2,500 - 9,999
2261.01	Textile Finishing (Manufacturers)	Cranston Print Works Co	250-499	\$50-\$100 Mil.	40,000+
2296.98	Tire Cord & Fabrics (Manufacturers)	Anglo Silver Liner Co Inc	20-49	\$5-\$10 Mil.	2,500 - 9,999
2823.98	Cellulosic Manmade Fibers (Mfrs.)	Jeffco Fibres Inc	50-99	\$20-\$50 Mil.	40,000+
3211.01	Glass-Manufacturers	Guardian Industries Corp	100-249	\$20-\$50 Mil.	40,000+
3541.07	Machine Tools-Manufacturers	Bridgeport Machines Inc	20-49	\$2.5-\$5 Mil.	10,000 - 39,999
3541.07	Machine Tools-Manufacturers	Gould & Eberhardt Gear Mach	20-49	\$1-\$2.5 Mil.	10,000 - 39,999
3599.03	Machine Shops	H T Machine Co	20-49	\$1-\$2.5 Mil.	10,000 - 39,999
3999.01	Aerosols (Manufacturers)	Shield Packaging Co	50-99	\$10-\$20 Mil.	40,000+
3999.06	Assembly & Fabricating Service	ASAP	20-49	\$2.5-\$5 Mil.	40,000+
4142.01	Buses-Charter & Rental	A A Transportation Co	20-49	\$2.5-\$5 Mil.	10,000 - 39,999
4213.04	Trucking	AWM Transportation	20-49	\$2.5-\$5 Mil.	10,000 - 39,999
4213.09	Trucking-Motor Freight	Specialized Machinery Trnsprt	20-49	\$2.5-\$5 Mil.	10,000 - 39,999
4213.09	Trucking-Motor Freight	A Duie Pyle Inc	100-249	\$10-\$20 Mil.	40,000+
4225.01	Storage	Burriss Foods Inc	100-249	\$10-\$20 Mil.	40,000+
5015.01	Automobile Parts-Used & Rebuilt (Whol.)	Lkg Rt 16 Used Auto Parts	20-49	\$2.5-\$5 Mil.	2,500 - 9,999
5047.12	Hospital Equipment & Supplies (Whol.)	Aprta Healthcare Inc	20-49	\$10-\$20 Mil.	2,500 - 9,999
5063.59	Insulation Materials-Electric (Whol.)	Chase & Sons Div	20-49	\$10-\$20 Mil.	10,000 - 39,999
5113.08	Packaging Materials-Wholesale	Lelantie Corp	20-49	\$20-\$50 Mil.	40,000+
5211.31	Doors	Moore Of Webster Inc	20-49	\$5-\$10 Mil.	10,000 - 39,999
5311.02	Department Stores	K Mart	100-249	\$10-\$20 Mil.	40,000+
5461.05	Doughnuts	Dunkin Donuts	20-49	\$1-\$2.5 Mil.	2,500 - 9,999
5511.02	Automobile Dealers-New Cars	Place Motor Inc	20-49	>\$500,000	10,000 - 39,999
5531.11	Automobile Parts & Supplies-Retail-New	Tri-State Subaru Parts Dept	20-49	\$5-\$10 Mil.	2,500 - 9,999
5712.16	Furniture-Dealers-Retail	Jamae Appliance & Furn Ctr	20-49	\$5-\$10 Mil.	10,000 - 39,999
5812.08	Restaurants	Lic's Restaurant	50-99	\$1-\$2.5 Mil.	2,500 - 9,999
5812.08	Restaurants	KFC	20-49	\$500,000-\$1 Mil.	2,500 - 9,999
5812.08	Restaurants	Lake Pizza & Restaurant	20-49	\$500,000-\$1 Mil.	2,500 - 9,999

SIC CODE	Sic Description	Name	EMP SIZE	SALES	SQUARE FOOTAGE
5812.08	Restaurants	Lodge Restaurant	20-49	\$500,000-\$1 Mil.	2,500 - 9,999
5812.08	Restaurants	Point Breeze On The Lake	20-49	\$500,000-\$1 Mil.	2,500 - 9,999
5812.08	Restaurants	Burger King	20-49	\$1-\$2.5 Mil.	2,500 - 9,999
5812.08	Restaurants	Colonial Restaurant	20-49	\$1-\$2.5 Mil.	2,500 - 9,999
5812.08	Restaurants	Friendly's Restaurant	20-49	\$1-\$2.5 Mil.	2,500 - 9,999
5812.08	Restaurants	Papa Gino's	20-49	\$1-\$2.5 Mil.	2,500 - 9,999
5812.08	Restaurants	Wind Tiki Restaurant Inc	20-49	\$1-\$2.5 Mil.	2,500 - 9,999
5912.05	Pharmacies	Brooks Pharmacy	20-49	\$2.5-\$5 Mil.	10,000 - 39,999
5912.05	Pharmacies	CVS Pharmacy	20-49	\$2.5-\$5 Mil.	10,000 - 39,999
6021.01	Banks	Webster 5 Cents Savings Bank	50-99	\$100-\$500 Mil.	2,500 - 9,999
6021.01	Banks	Hometown Bank	50-99	\$10-\$20 Mil.	2,500 - 9,999
6061.01	Credit Unions	Webster First Fed Credit Union	100-249	\$100-\$500 Mil.	40,000+
6411.12	Insurance	Commerce Insurance Co	1,000-4,999	OVER \$1 Bil.	40,000+
6411.33	Insurance-Holding Companies	Commerce Holdings Inc	1,000-4,999	OVER \$1 Bil.	40,000+
6411.33	Insurance-Holding Companies	Commerce Group Inc		\$1,153,838,000	2,500 - 9,999
7231.06	Beauty Salons	Elite Hair Design	20-49	\$500,000-\$1 Mil.	2,500 - 9,999
7349.02	Janitor Service	Alnein Cleaning Svc	20-49	\$500,000-\$1 Mil.	2,500 - 9,999
7319.08	Distribution Services	Goya Foods Inc	100-249	\$10-\$20 Mil.	40,000+
7629.23	Telephone Equipment & Systems-Svc/Repair	Trinet Systems Of Central MA	20-49	\$2.5-\$5 Mil.	2,500 - 9,999
8062.02	Hospitals	Hubbard Regional Hospital	250-499	\$20-\$50 Mil.	40,000+
8051.01	Nursing & Convalescent Homes	Lanessa Healthcare Ctr	100-249	\$5-\$10 Mil.	40,000+
8051.01	Nursing & Convalescent Homes	Oakwood Rehab & Nursing Ctr	100-249	\$5-\$10 Mil.	40,000+
8051.01	Nursing & Convalescent Homes	Webster Manor Healthcare Ctr	100-249	\$5-\$10 Mil.	40,000+
8082.01	Home Health Service	Vna-Southern Worcester Cnty	100-249	\$5-\$10 Mil.	40,000+

SIC CODE	Sic Description	Name	EMP SIZE	SALES	SQUARE FOOTAGE
8211.03	Schools	Central Massachusetts Spcl Ed	50-99		40,000+
8211.03	Schools	Park Avenue Elementary	50-99		40,000+
8211.03	Schools	Webster Middle	50-99		40,000+
8211.03	Schools	Dudley Intermediate	20-49		40,000+
8211.03	Schools	Shepherd Hills Regional High	20-49		40,000+
8211.03	Schools	St Joseph's	20-49		40,000+
8211.03	Schools	Bartlett Jr Sr High 1	100-249		40,000+
8361.05	Residential Care Homes	Christopher Heights Of Webster	50-99	\$2.5-\$5 Mil.	10,000 - 39,999
8322.18	Social Service & Welfare Organizations	Tri-Valley Elder Services.	50-99		10,000 - 39,999
8399.98	Non-Profit Organizations	Southern Worc. County Rehab	50-99		10,000 - 39,999
8322.18	Social Service & Welfare Organizations	S. W. County Rehabilitation	20-49		10,000 - 39,999
8641.01	Fraternal Organizations	Elks Lodge	20-49		2,500 - 9,999
9121.04	Government Offices-City, Village & Twp	Webster Ambulance	20-49		2,500 - 9,999
9121.04	Government Offices-City, Village & Twp	Webster Town Administrators	20-49		2,500 - 9,999
9224.04	Fire Departments	Webster Fire Dept	50-99		40,000+
9221.04	Police Departments	Webster Police Dept	20-49		10,000 - 39,999
9229.04	Civil Defense Agencies	Webster Civil Defense	20-49		2,500 - 9,999
9711.02	State Government-National Security	National Guard	100-249		40,000+

Source: Reference USA electronic database accessed in March 2003

August 5, 2003

Mr. William Scanlan, AICP
Community Development Manager
Central Massachusetts Regional Planning Commission
35 Harvard Street
Worcester, MA 01609-2801

Re: DRAFT Transportation Component for EO 418 in Webster, MA

Enclosed is a copy of the DRAFT Transportation Component to Webster's EO 418. Due to the size of the electronic file, I was not able to email it. Please review and let me know your comments. The appendix has not been included with this draft submission.

I look forward to hearing your comments. Enjoy the remaining part of summer.

Sincerely,



Bonnie Polin

CC: Ms. Carol Cyr, Community Development Director, Office of Community Development, P.O. Box 207, Webster, M 01570

Mr. Larry Koff, Larry Koff & Associates 20 Harrison Street, Brookline, MA 02446-6958

Mr. Dennis Westgate, Acting Webster DPW , sent via Carol Cyr

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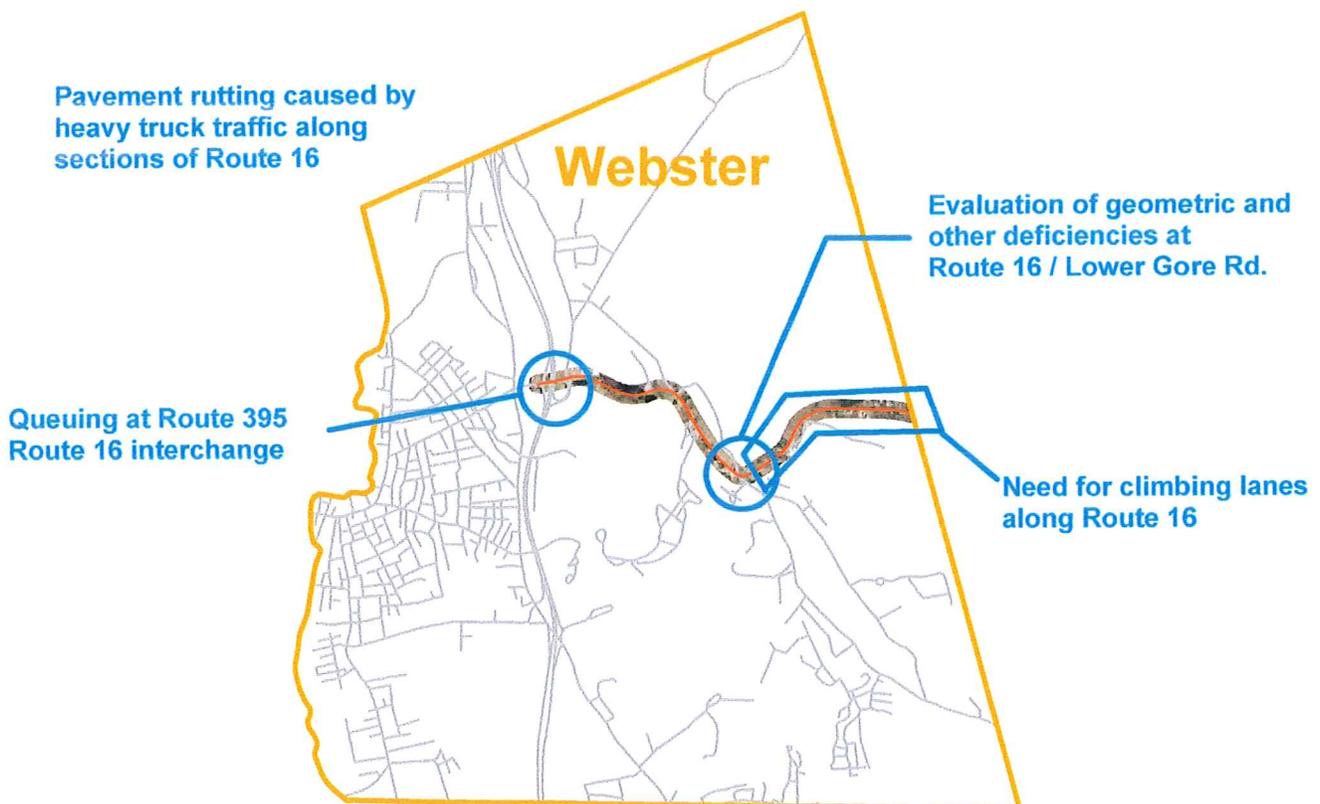
**FOR INSERTION INTO EO418 DOCUMENT –
COMMUNITY DEVELOPMENT PLAN**

Transportation

INTRODUCTION

This document is part of a Community Development Plan funded under Executive Order 418. EO-418 establishes a planning process that includes open space and recreation, economic development, housing and transportation elements. This section of the Comprehensive Plan focuses on the transportation conditions in the Town of Webster and works to establish goals, makes recommendations and provides action plans which will serve as a base for future transportation work within the Town.

Under guidelines established by the EO-418 program, this section contains information on both existing and future conditions. Based on input and scope of services development with the Town of Webster and the Central Massachusetts Regional Planning Commission (CMRPC), the consultant, Beta Group, Inc. was directed to focus on four elements, as shown below:



CMRPC is currently working on the *Blackstone Valley Corridor Planning Study* which is in response to indications that congestion is increasingly restricting movements within the CMRPC region. While the study does not specifically address the Town of Webster, much of the study's long range planning involves a transportation model which does include the Town of Webster. Information from the existing and future build-out

conditions of the *Blackstone Valley Corridor Planning Study* has been used in this document. Furthermore, information contained in the economic development and housing elements of this Comprehensive Plan have also been used to develop the transportation build-out.

1. EXISTING TRANSPORTATION CONDITIONS

Existing Volumes

Traffic data were recorded in late June and early July of 2003. The data collection process focused on the study intersection of Route 16 and Lower Gore Rd. A seven day speed, volume and classification ATR (Automatic Traffic Recorder) was placed west of the intersection to obtain traffic volumes, speeds and vehicle classifications. Also, a 48-hour speed, volume and classification ATR was placed just east of the intersection, at the start of the eastbound upgrade. In addition, a turning movement count (TMC) was performed at the study intersection for both the AM peak (6-10AM) and PM peak (3-7PM) to determine the flow pattern of traffic through the intersection. Figure 1 shows the average daily traffic (ADT) along with the turning movement count at the intersection.



In addition to the volumes collected by BETA, the CMRPC also provided a historical account of traffic count information. This data is useful for comparison purposes and determining growth rates over the past two decades. Table 1 shows a summary of the currently available traffic count information from CMRPC for the Town of Webster. As can be seen from the table, it appears that there is a large fluctuation in ADT values at the

study intersection over the last twenty years. The ATRs, collected as part of this study, are similar to some of the previous counts. The June 2003 ATR, west of the study intersection yielded a count of approximately 11,800 vehicles/day with an average speed of 41 mph (43 mph eastbound and 40 mph westbound) and comprised of 10% trucks. From the July 2003 ATR, east of the intersection and at the start of the eastbound climb, approximately 7,150 vehicles/day were recorded. The average speed was 45 mph with 17% trucks.

Table 1 Traffic Count Information Provided by CMRPC

Date	Street/Highway	Location	Direction	NB/EB	SB/WB	Total
08/20/87	Bigelow Rd	W of Old Worcester Rd	EB	1499	1837	3336
04/09/86	Church St	S of Route 12 (Main St)	NB	1291	1460	2751
08/18/87	Hillside Ave	S of Route 12 (E Main St)	NB	384	841	1225
11/20/90	Lake Pkwy	W of Route 193	EB	2791	2497	5288
04/09/86	Lake St	E of Route 12 (S Main St)	EB	4283	3125	7408
06/11/96	Lake St	W of Dresser St	EB	4799	4838	9637
04/13/95	Lake St	W of Route 193 (Thompson Rd)	EB	4385	4941	9326
08/20/87	North Main St	N of Route 12 (S Main St)	NB	2387	2558	4945
10/14/99	North Main St	N of Route 12 (S Main St)	NB	1863	2005	3868
06/17/02	North Main St	N of Route 12 (S Main St)	NB	2037	1994	4031
08/18/87	Park Ave	S of Route 12 (E Main St)	NB	1644	1421	3065
09/24/92	Pleasant St	N of Route 12 (Main St)	NB	1893	2198	4091
11/14/95	Route 12 (E Main St)	E of N Main St	EB			14057
11/14/95	Route 12 (E Main St)	E of Slater St	EB	9423	8603	18026
04/12/88	Route 12 (E Main St)	W of Lincoln St	EB	9420	9369	18789
06/11/96	Route 12 (E Main St)	W of Lincoln St	EB			18701
04/13/95	Route 12 (E Main St)	W of Route 193 (Thompson Rd)	EB	20691	3895	24586
11/14/95	Route 12 (E Main St)	W of Route 193 (Thompson Rd)	EB	8640	8258	16898
10/14/99	Route 12 (E Main St)	W of Route 193 (Thompson Rd)	EB	11402	9358	20760
06/24/02	Route 12 (E Main St)	W of Route 193 (Thompson Rd)	EB	11332	8755	20087
08/25/87	Route 12 (E Main St)	W of Slater St	EB	10681	10283	20964
11/14/95	Route 12 (E Main St)	W of Slater St	EB			17026
06/11/96	Route 12 (E Main St)	W of Slater St	EB			22640
11/16/95	Route 12 (Main St)	At Dudley TL	EB	15984	25	16009
10/07/99	Route 12 (Main St)	At Dudley TL	EB	8608	7521	16129
06/17/02	Route 12 (Main St)	At Dudley TL	EB	8523	7936	16459
04/09/86	Route 12 (Main St)	E of Pleasant St	EB	9387	9658	19045
04/09/86	Route 12 (Main St)	W of Church St	EB	10580	10170	20750
04/09/86	Route 12 (S Main St)	N of Lake St	NB	7952	9347	17299
11/16/95	Route 12 (S Main St)	N of Lake St	NB	8572	8006	16578
04/11/95	Route 12 (Worcester Rd)	At Oxford TL	NB	4746	5584	10330
10/14/99	Route 12 (Worcester Rd)	At Oxford TL	NB	5285	6438	11723
06/24/02	Route 12 (Worcester Rd)	At Oxford TL	NB	5503	6582	12085
08/20/87	Route 12 (Worcester Rd)	N of Route 16 (Gore Rd)	NB	4886	5206	10092
04/11/95	Route 12 (Worcester Rd)	N of Route 16 (Gore Rd)	NB	4670	4967	9637
10/15/87	Route 16 (Douglas Rd)	At Douglas TL	EB	4296	4192	8488
05/24/88	Route 16 (Douglas Rd)	At Douglas TL	EB	1898	1981	3879
07/30/91	Route 16 (Douglas Rd)	At Douglas TL	EB	2034	2698	4732
09/21/99	Route 16 (Douglas Rd)	At Douglas TL	EB	2650	2257	4907

Date	Street/Highway	Location	Direction	NB/EB	SB/WB	Total
10/14/99	Route 16 (Douglas Rd)	At Douglas TL	EB	2696	2647	5343
06/24/02	Route 16 (Douglas Rd)	At Douglas TL	EB	3343	3295	6638
08/09/90	Route 16 (Gore Rd)	E of I-395	EB	6547	7808	14355
07/19/84	Route 16 (Gore Rd)	E of Rawson Rd	EB	4976	5323	10299
04/11/88	Route 16 (Gore Rd)	E of Rawson Rd	EB	4688	4873	9561
09/20/88	Route 16 (Gore Rd)	E of Rawson Rd	EB	4205	4249	8454
08/09/90	Route 16 (Gore Rd)	E of Rawson Rd	EB	5497	8098	13595
06/24/02	Route 16 (Gore Rd)	E of Rawson Rd	EB	3078	3215	6293
08/20/87	Route 16 (Gore Rd)	E of Route 12 (Worcester Rd)	EB	9207	7523	16730
04/10/95	Route 16 (Gore Rd)	E of Route 12 (Worcester Rd)	EB	10037	8513	18550
11/14/95	Route 16 (Gore Rd)	E of Route 12 (Worcester Rd)	EB			15046
09/29/92	Route 193 (Thompson Rd)	At Connecticut SL	NB	2208	2118	4326
10/14/99	Route 193 (Thompson Rd)	At Connecticut SL	NB	2607	2577	5184
06/24/02	Route 193 (Thompson Rd)	At Connecticut SL	NB	2671	2732	5403
11/20/90	Route 193 (Thompson Rd)	S of Lake Pkwy	NB	4441	7598	12039
08/25/87	Route 193 (Thompson Rd)	S of Lake St	NB	5603	6036	11639
11/20/90	Route 193 (Thompson Rd)	N of Lake Pkwy	NB	5939	6256	12195
09/24/92	School St	At Connecticut SL	NB	275	298	573
10/14/99	School St	S of Route 12 (Main St)	NB	2157	2400	4557
08/18/87	Slater St	N of Route 12 (E Main St)	NB	1547	1801	3348
08/27/87	Sutton Rd	N of Mine Brook Rd	NB	661	681	1342
08/24/87	Sutton Rd	N of Route 16 (Gore Rd)	NB	2413	2160	4573
04/13/95	Sutton Rd	N of Route 16 (Gore Rd)	NB	2922	2456	5378
06/17/02	Sutton Rd	N of Route 16 (Gore Rd)	NB	3317	2004	5321
08/20/87	Upland Ave	E of North Main St	EB	202	540	742

Source: Central Massachusetts Regional Planning Commission

Nominal pedestrian and bike traffic was observed passing through this intersection. Truck traffic however is high, as this is the principle east/west arterial servicing the area. This large percentage of heavy vehicle traffic has implications to pavement deterioration, turning radii and the possible need for climbing lanes in areas of extended grade. These implications will be discussed later in this report.

Crash Records

In order to evaluate the safety of the Gore Road/Lower Gore Road/Douglas Road intersection, crash records were compiled and evaluated. Records were obtained from the MassHighway database, which provides information on type and severity of crashes throughout the state. The 1999-2001 records were evaluated for crashes that occur at the study intersection and are summarized in Table 2. As can be seen, this intersection averages more than seven crashes per year, and the calculated crash rate of 1.40 crashes / million entering vehicles is higher than both the state and district average, in fact it is more than double the state average. Details of the crashes are included in the appendix. Based on a review of the direction of the vehicles, a majority of the crashes involved a westbound traveling vehicle. Based on the alignment of the roadway, when approaching the intersection from the east (traveling westbound) vehicles are on a sustained downgrade and approach the intersection through a horizontal curve with a 320-foot radius.

Table 2 Intersection Crash Data Summary 1999-2001 at Route 16 / Lower Gore Road

	Totals	Angle	Rear End	Head On	Other/Unknown	Property	Injury	Fatality	Crash Rate
1999	8	5	2	0	1	6	2	0	1.40
2000	7	5	1	0	1	5	2	0	
2001	8	1	4	0	3	6	2	0	
Total	23	11	7	0	5	17	6	0	
Statewide Average Crash Rates: Signalized = 0.87, Unsignalized = 0.66									
District 3 Average Crash Rates: Signalized = 0.83, Unsignalized = 0.80									

Source: Massachusetts Highway Department

Concern has also been expressed over the stretch of Route 16 in the vicinity of the I-395 ramps and Sutton Road. This segment of roadway averages 20 crashes/year; however, many of the crashes were not specified as to the exact location. This stretch of roadway also carries the heaviest volumes in the Route 16 corridor, based on CMRPC information.

Roadway and Intersection Geometric and Operating Conditions

For the purposes of this study, Route 16 was investigated from Route 395 to the Douglas town line. On this stretch of road there are no posted speed limits in either direction. According to the MassHighway roadway inventory file the speed limit for Route 16 between Route 395 and the Gore Road/Lower Gore Road intersection is 45 MPH. From just east of the intersection to the Douglas town line the speed limit is 40 MPH.

The grade on Route 16 increases significantly between the study intersection and the Douglas town line. During this stretch the terrain can be described as rolling with grades reaching eight percent, the average grade over the 1.2 mile upgrade eastbound section is greater than 4%. With the high percentage of heavy vehicles that use this corridor and the elevated grade, the warrants for climbing lanes were explored. This is described later in this report.

There is a concern that the high percentage of heavy vehicles may lead to accelerated pavement degradation. The quality of pavement along Route 16 ranges from good to fair; there is currently no sign of advanced pavement rutting associated with heavy truck use.

The intersection of Route 16 and Lower Gore Road is an offset, three-way intersection, controlled by a flashing yellow / red light. Figure 2 shows a schematic of the current geometrics of the intersection. As mentioned earlier, the westbound approach to the intersection is on a sustained downgrade approaching a \pm 320-foot radius horizontal curve.



Immediately to the west of this intersection, and in fact practically part of this intersection, is Rawson Road. This road approaches from the north. Sight distance from Rawson Road is limited by the horizontal/vertical alignment of Route 16 from the east. The intersection sight distance is only 190' to the east due to a house on the corner and a combination horizontal/vertical curve that quickly takes Route 16 out of the line of sight. To the west the intersection sight distance is 240' and is limited by brush at the corner of the intersection. According to the American Association of State Highway and Transportation Officials (AASHTO) *Policy on Geometric Design of Highways and Streets*¹, the recommended intersection sight distance with an average travel speed of 40 mph on Route 16, is 440 feet. Thus the available intersection sight distance is less than adequate. Rawson Road approaches Route 16 on a -12% grade, which may present problems under winter conditions, further compromising safety on this approach.

The shoulder width on this stretch of Route 16 varies from eight-foot paved shoulders to almost no shoulder at all. Between the Route 16 / Lower Gore Road intersection and the Douglas town line, the shoulder is 2 feet or less. No passing is allowed on this stretch of roadway.

¹ A Policy of Geometric Design of Highways and Streets, AASHTO, 2001 Fourth Edition

Existing Roadway and Intersection Capacity Analysis

In order to evaluate the intersection, a level of service (LOS) analysis was performed for the study intersections using Synchro software, a standard analysis tool in the transportation industry. The methodology from the *Highway Capacity Manual (HCM)*², for unsignalized levels of service (A-F) was used and is based solely on delay. The delay is based on capacity which is based on gap acceptance and intersection volumes. Details of the LOS criteria are included in the Appendix. The LOS results for the intersection are summarized in the table below. During the traffic counts, vehicle queues and delays were recorded on the approaches as a way to verify the results of the Synchro model. A summary of the field measured data is included in the table as well.

It should be anecdotally noted that some town residents stated that the delay and queue on the Lower Gore Road approach can get quite lengthy at peak hours. Although these problems were not observed on our count day or at other observation times, it is possible that longer queues and delays could be observed on other days and that the variability of day-to-day fluctuations in traffic volumes affects the delays and queues.

Table 3 Existing Operation of the Route 16 / Lower Gore road Intersection

Approach	AM Peak Hour					PM Peak Hour				
	LOS	Computer Delay	Observed Delay	Computer 95% Queue	Observed 95% Queue	LOS	Computer Delay	Observed Delay	Computer 95% Queue	Observed 95% Queue
Left from Lower Gore onto Rt. 16	F	53.8	19.7 (LOS = C)	10	7	D	33.7	23.1 (LOS = C)	4	6
Right onto Rt. 16	A	9.9	9.3	<1	NA	B	11.2	8.1	<1	NA
Left onto Lower Gore	B	12.2	NA	<1	NA	B	12.8	NA	<1	NA
Left/Right Rawson to Rt. 16	C	16.1	NA	<1	NA	C	23.4	NA	<1	NA

Delay is in terms of seconds and queue is in terms of number of vehicles

The operation of Route 16 between the Route 16/Lower Gore Road intersection and the Douglas town line is of concern because of the heavy truck use (approximately 17%), and segments of sustained steep grades. The *Highway Capacity Manual (HCM)*³ analysis for a two-lane roadway is based on the concept that as volumes and geometric constraints increase, platoons form with the inability to pass and motorists in a platoon are subject to delays. The performance measures of a two lane roadway are percent-time-spent-following and travel speed. Percent-time-spent-following is the average percentage of

² *Highway Capacity Manual*; Transportation Research Board, 2000

³ *Highway Capacity Manual*; Transportation Research Board, 2000

travel time that vehicles must travel in platoons behind slower vehicles (particularly trucks on a sustained upgrade), due to the inability to pass. Average travel speed reflects the mobility of a two lane roadway. The level of service (LOS) of a two lane roadway uses both of these performance measures.

Because the eastbound segment of the roadway begins the climb just after the horizontal curve at Route 16 / Lower Gore Road, vehicles are starting the climb at a lower rate of speed than a true free flow rate (average eastbound speed is 43 miles per hour). Similarly, the westbound lane is on a sustained downgrade immediately followed by the substandard horizontal curve in the roadway. Vehicles are slowing to maneuver through the curve. In the westbound direction, the average speed is 46 mph just prior to the curve. The methodology used in HCM does not account for the slower speeds due to the horizontal curve, and therefore the resulting travel speeds which define the level of service cannot readily be used. However, based on numerous field observations and local anecdotal information, passenger cars are often seen platooning behind a slow-climbing truck. In fact, complaints have been made about the lack of mobility on the only east-west corridor in the immediate vicinity. This has implications for future economic development and livability.



The sustained upgrade averaging more than 4% and the large percentage of heavy vehicles makes the operation of this segment poor. To improve mobility, which in turn could foster economic development, warrants for climbing lanes were explored.

In order to construct climbing lanes, the following warrants must be met. However, meeting climbing lane warrants does not in itself mean they should be constructed. Environmental and economic impacts must certainly be factored into the process. To evaluate the need for climbing lanes, the following three criteria, reflecting economic considerations, should be satisfied, as per AASHTO guidelines⁴:

- Upgrade traffic flow rate in excess of 200 vehicles per hour.
- Upgrade truck flow rate in excess of 20 vehicles per hour.
- One of the following conditions exist:
 - A 10 mph or greater speed reduction is expected for a typical heavy truck,
 - Level of service E or F exists on the grade,

⁴ *A Policy of Geometric Design of Highways and Streets*, AASHTO, page 248.

- A reduction of two or more levels of service is experienced when moving from the approach segment to the grade.

Based on the ATR that was placed at the base of the incline, presently more than 300 vehicles per hour are traveling eastbound on Route 16. The classification information from the ATR yielded 25 trucks per hour. According to AASHTO, the average grade of more than 4% for 1.2 miles (or the peak grade of more than 7% for over 1,000 feet) will cause a speed reduction of more than 10 mph for trucks. Therefore, it appears that the climbing lane warrants have been met. (It should again be noted that the methodology used to determine level of service on this stretch of roadway is deficient because it is based on travel speed which is limited by the horizontal curve in the roadway, not only the grades and lack of ability to pass).

Concern was also expressed about the operation of Route 16 in the vicinity of the I-395 Ramps and Sutton Road. While this was not the focus of the study, observations were made at this location. As stated earlier, the traffic volume on this stretch of Route 16 is the highest in the Webster Route 16 corridor. According to the CMRPC Route 16 count, just east of Route 12, the roadway carried 18,550 vehicles per day in 1995. During ½ of the PM peak hour, Route 16 appeared to be queued back from the Route 12 / Route 16 / Route 193 intersection to the I-395 ramps and beyond. This coincided with the end of the work day at Commerce Insurance. The westbound queue prevented vehicles from getting onto and off of I-395. It should be noted that improvement plans are underway at the intersection of Route 16/Route 12 / Route 193. A Connecticut engineering firm will be submitting the 25% design plans to the MassHighway for review. Improvements include both signal upgrades and intersection widening. This will improve the intersection operation which should eliminate, or at least minimize, the westbound blockage during the afternoon peak hour.

During the morning peak hour, queues were noted in the eastbound direction, due to eastbound drivers getting stuck behind vehicles turning onto Sutton Road and the I-395 northbound on-ramp. In order to bypass a slowing vehicle turning onto the I-395 northbound on-ramp, a vehicle must pass on the left. Approximately 80 feet upstream is the intersection of Route 16 / Sutton Road. When



vehicles are waiting to turn left onto Sutton Road, drivers must pass on the right. This shifting from the left to the right, in order to pass stopped vehicles, creates inefficiencies in the traffic flow.

2. FUTURE TRANSPORTATION CONDITIONS

Development of Future Year Volumes

The CMRPC corridor study evaluated a future year condition of 2025. To be consistent with the regional corridor study, a future year condition of 2025 was selected. The CMRPC model contains networks for both existing and 2025 traffic projection volumes. The rate of growth between the two networks was used to increase the 2003 traffic conditions to 2025 conditions. The change in volume at the Route 16 / Lower Gore Road intersection, according to the CMRPC model, ranged from 26 – 30% increase between 2000 and 2025. The growth in volumes on various links within the model was not uniform because the model factored in specific potential development locations.

Relative to the growth projections for employees, residents and housing units, this traffic volume increase appears reasonable. A comparison in changes between present and anticipated future conditions is presented in Table 3 below

Table 3 Changes in Employees and Population in Webster and in the Blackstone Valley Region

Measure	Area	2000	2025	% Change
Population	Town of Webster	16,415	17,987 *	9.6% *
	Blackstone Valley Region	95,674	110,675	15.7%
Employees	Town of Webster	7,850	8,969 *	14.3%*
	Blackstone Valley Region	23,193	27,839	20.0%
Occupied Housing Units	Town of Webster	6,905	7,878*	14.1%*
	Blackstone Valley Region	NA	NA	NA

* Based on a future year of 2020 not 2025. If a full Build-out of all developable land the Town were to occur, population increase would be 36.1% and employee increase would be 123%

Source: CMRPC – *Blackstone Valley Corridor Planning Study* and Housing and Economic Development elements of the Community Development Plan.

A major trip generator on the Route 16 corridor is the Indian Ranch. Located just west of the Route 16/Lower Gore Road intersection, this facility offers a seasonal country music concert schedule along with a year-round trailer park. There are currently three different plans to re-develop the Indian Ranch. One plan is to turn the site into a hotel and another is to develop the site into condominiums, both of these options would maintain the amphitheater for concerts. Neither of these options is expected to have a dramatic change in the traffic flow since the hotel or condominiums would replace the trailer homes. The third development option consists of converting the site into affordable housing. The Town would like to maintain the ranch as a venue for country music and hopes to work with the site owner to accomplish this goal. Therefore, development plans for the Indian Ranch site were assumed not to significantly impact the traffic and were therefore included in the future build-out volumes as general background growth.

2025 Future Year Traffic Volumes

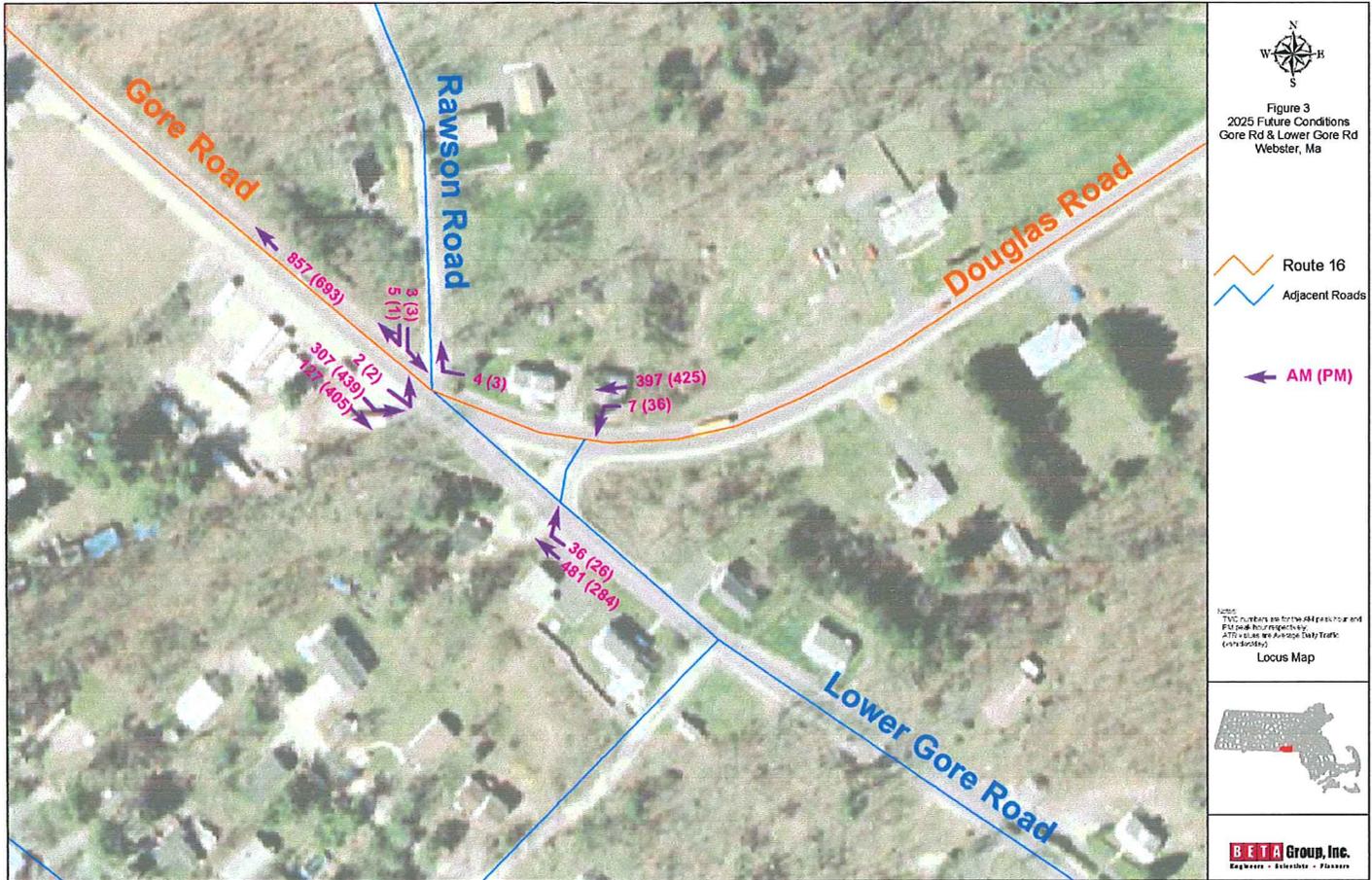
As stated in the previous section the 2025 traffic volumes at Route 16 / Lower Gore Road were determined by applying the rate of change between the two CMRPC traffic models for existing conditions and 2025 future conditions to the turning movement volumes recently collected at this intersection. Table 4 shows the existing conditions, the growth rate applied to each movement, determined from the CMRPC numbers, and the resulting 2025 volumes.

Figure 3 graphically illustrates the 2025 AM and PM peak hour volumes that were used to analyze future conditions.

Table 4 Route 16 / Lower Gore Road Intersection Existing , Growth Rates and 2025 Future Conditions

Movement	2003 AM Existing Volumes	2003 PM Existing Volumes	Total % Change AM	Total % Change PM	2025 AM Future Conditions Volumes	2025 PM Future Conditions Volumes
Gore Rd Left to Rawson Rd	1	1	35.1%	23.4%	2	2
Gore Rd Thru to Douglas Rd	227	356			307	439
Gore Rd Right to Lower Gore Rd	94	328			127	405
Lower Gore Rd Right to Douglas Rd	27	19	31.8%	36.4%	36	26
Lower Gore Rd Thru to Gore Rd	365	208			481	284
Douglas Rd Left to Lower Gore Rd	6	26	14.1%	38.8%	7	36
Douglas Rd Thru to Gore Rd	348	306			397	425
Douglas Rd Right to Rawson Rd	3	2			4	3

Note: Rawson Rd not included in CMRPC numbers, a 30% growth rate was applied to the present traffic volumes to get future volumes accounting for background growth.



2025 Future Year Traffic Conditions

A LOS analysis was performed on the intersection under 2025 conditions using the aforementioned Synchro software. The table below shows these values along with the existing LOS conditions for comparison purposes.

The left hand turn from Lower Gore Rd. onto Route 16 is clearly the problem approach for this intersection for both existing and future conditions. Under future conditions the approach experiences nearly five times as much delay as it currently does. Actual delay and resulting queue values may be lower than the computed values due to the acute angle of the intersection; however, it can safely be stated that future delays and queues will be significantly higher than those now experienced. To better deal with the ever increasing traffic levels and resulting operational delays, improvements were developed. These are discussed later in this report.

Table 5 Route 16 / Lower Gore Road Intersection Comparison Existing & 2025 LOS Conditions

Approach	AM Peak				PM Peak			
	Existing LOS	Existing Computer Delay (Queue)	2025 LOS	2025 Computer Delay (Queue)	Existing LOS	Existing Computer Delay (Queue)	2025 LOS	2025 Computer Delay (Queue)
Left from Lower Gore onto Rt. 16	F	53.8 (10)	F	253.6 (27)	D	33.7 (4)	F	181.2 (14)
Right onto Rt. 16	A	9.9 (0)	B	10.6 (0)	B	11.2 (0)	B	12.1 (0)
Left onto Lower Gore	B	12.2 (0)	B	14.1 (0)	B	12.8 (0)	C	15.2 (0)
Left/Right Rawson to Rt. 16	C	16.1 (0)	C	21.1 (0)	C	23.4 (0)	D	30.9 (0)

Delay is in terms of seconds and queue is in terms of number of vehicles

3. PROPOSED GOALS

The goal of the transportation element is to gain an understanding of the existing areas of concern and to seek ways to mitigate traffic congestion and improve safety. Improved mobility enables economic development and greater livability.

4. RECOMMENDED ACTION ITEMS

Route 16, West of The Study Area

While not the focus of this report, the congestion along Route 16, in the vicinity of the I-395 ramps and Route 16/Route 12/Route 193 intersection, will partly be addressed by the following:

- Proposed intersection improvements, soon to be filed with MassHighway, will cause a reduction in the PM peak hour westbound queue which will minimize blockages of the I-395 ramps.
- Staggering work day closings to spread the exit time of businesses in the area will help alleviate the existing critical ½ hour of the PM peak hour.

Route 16, Between Route 16/Lower Gore Road Intersection and Douglas Town Line

Climbing lane warrants were checked for this stretch of Route 16 and, under existing conditions, warrants appear to be met. The meeting of warrants is only the first step in a lengthy process of determining feasibility of climbing lanes. However, this discussion can now be opened and considered. A climbing lane will require clearing and roadway widening, possibly even land takings. If a climbing lane were constructed for the entire

length of the climb, approximately 1.2 miles, the cost could exceed two million dollars. Obviously, there are serious economic considerations for climbing lanes. It has been mentioned that development in both Webster and in the adjacent Town of Douglas has been stifled because of existing traffic conditions along Route 16. The construction of a climbing lane and intersection improvements, described below, might stimulate future development.

Intersection of Route 16 / Lower Gore Road

A high incidence of crashes is experienced at this intersection. Most notably the crashes are due to westbound traveling vehicles that are approaching a horizontal curve from a sustained downgrade. Although field observations did not confirm this, frustration has been expressed about the poor operation and lengthy queues of the Lower Gore Road left turning movement to Route 16 westbound. In the future, this approach is projected to operate deficiently. In addition, deficient sight lines presently exist from Rawson Road. The horizontal curve, just prior to a sustained upgrade, exacerbates the difficulty of trucks starting the climb at a higher rate of speed. The horizontal curve in the roadway is a 320-foot radius. Based on the Commonwealth of Massachusetts *Highway Design Manual*⁵, even with the maximum superelevation, the radius is substandard. For a travel speed of 45 miles per hour, the radius should be approximately 650 feet.

If the roadway were reconstructed to accommodate the minimum design standards for the horizontal alignment, the property north of Route 16 and east of Rawson Road would have to be taken to allow for the roadway realignment. The Lower Gore Road approach could be significantly improved by providing a more standard "T" type



intersection. The sight lines for Rawson Road could be improved. Certainly this would reduce the crash rate. Because of the potential environmental and economic impacts, this is a long term solution that should be studied. The ballpark estimate for the improvements described above and graphically shown on the sketch plan could be in the range of 1.2 – 1.5 million dollars, depending on the takings and specific design.

⁵ Commonwealth of Massachusetts *Highway Design Manual*, 1997 Massachusetts Highway Department

To further improve the operation of the Lower Gore Road approach, consideration was given to signalizing the intersection. Based on the Manual on Uniform Traffic Control Devices in order for an intersection to become signalized at least one of eight signal warrants must be met. (MUTCD)⁶. Under current conditions this intersection satisfies 3 of the 8 warrants (namely warrants 2, 3 and 8, see details in the Appendix). While signalization would improve the operation of the Lower Gore Road approach, there may be detrimental impacts along Route 16. Beginning a sustained climb from a stopped condition makes it extremely difficult for trucks to accelerate, which would exacerbate the deficient operation of Route 16 eastbound along the upgrade. Furthermore, a westbound queue at the intersection provides an obstacle for vehicles on the downgrade which may have difficulty in stopping, particularly in icy/snowy conditions. At first glance, it appears that signalization would have detrimental impacts to the safety of the intersection. However, these issues could certainly be explored in greater detail and signalization may become more feasible with the realignment of the roadway.

In the short-term, to guide eastbound drivers to stay on Route 16, which curves to the left, rather than to continue straight onto Lower Gore Road, the edge line pavement markings should be extended through the intersection, as shown on the marked up photo.



Other Recommendations

- Due to the large percentage of trucks along Route 16, the town should select pavements that can withstand the additional stresses that these trucks exert on the roadway.

⁶ *Manual on Uniform Traffic Control Devices (MUTCD) Millennium Edition*, U.S. Department of Transportation, FHWA.