

CHAPTER 2

ECONOMIC DEVELOPMENT

Introduction

The purpose of local economic development planning is to assist a community in achieving a sustainable economy that creates an environment that supports business development. At the core of this is employment that provides a favorable standard of living for residents. It is jobs that provide wages to residents, bring employees and visitors from outside the community to spend money, and in of itself, represents business expansion and success.

There are several approaches to advancing a community's wealth and well-being. Strategies may include recruitment of industrial firms from outside the area, development of tourism, small business creation and entrepreneurship, and business retention efforts. Each of these strategies addresses the nurturing of employment opportunities through existing job preservation or new job creation. However, to make any of these strategies successful, a coordination of efforts must be in place regarding workforce, business location, adequate infrastructure and access to financing. All of these elements must be in careful balance to encourage new business development while maintaining community character.

A town's economic health impacts services provided by that community on several levels. Employment opportunities that offer benefits, stability and a living wage for residents contribute to the economic well-being of individuals and families. A sizeable, consistent commercial and industrial tax base provides funding for schools, libraries, infrastructure, recreational facilities and other town services. Increased commercial activity in a downtown area allows resident shopping dollars to continue in circulation within the Town as opposed to exporting the dollars out of the area. A commercial center that attracts visitors also expands the amount of money in circulation in town. In addition, increased commercial activity in a community's downtown contributes to the overall quality of life and promotes a positive feeling for the community.

The Economic Development chapter, which was also part of the Town's Community Development Plan (2004), is organized into the following main sections:

- A listing of the goals and objectives for economic development in Orange, which were developed during the planning process, and through the results of the Orange Community Survey;
- A review of the demographic characteristics of Orange's population, including age distribution, education, and income;

- A discussion of Orange's local labor force and economic base;
- A discussion of the primary business factors and issues influencing economic development in Orange;
- A summary of the advantages and challenges for economic development in Orange;
- An analysis of which geographic areas in Orange may be potentially the most suitable for new industrial or commercial development; and
- Recommendations and strategies for helping the Town meet its economic goals and objectives.

Economic Development Goals and Objectives

One description of local economic development planning says that it is a process to give an area "a greater capacity to contribute to determining its own economic destiny"¹. A vibrant, stable, diversified economy is the desire of every locality. How that economy is created may take many forms. Of primary importance is determining the residents' desired vision for growth and development, and for the level of balance between the preservation of natural resources and rural character and for development, and forming the goals and objectives to guide actions to achieve the Town's vision.

As part of the Master Planning process, a Community Survey of Orange residents' opinions and attitudes on a variety of topics was conducted during the summer of 2002. The survey was mailed to all Orange households and over 350 surveys were returned. The top priority issue for Orange identified by survey respondents was economic development. The availability of jobs, the revitalization of the downtown, and the overall state of the economy were all identified as serious issues confronting Orange. In addition, two priorities supported for additional budget expenditures were the redevelopment of abandoned/vacant properties and the promotion of business development.

There were three questions on the survey that specifically addressed economic growth and development. The first question addressed the types of businesses residents wanted in the community and where they should be located (*see Table 2-1*). Favored for the downtown area were five types of businesses identified by at least 60 percent of the question respondents. These types of businesses would offer a mix in the types of goods and services offered in the downtown area. They were business offices, small to medium-sized retail businesses, restaurants, tourist services, arts and cultural services, and recreational services. Along the busy roadways outside of the downtown area, most respondents favored either restaurants or tourist service-based businesses. Most respondents favored small and medium-sized manufacturers and light industrial firms to be located in the existing industrial parks, instead of in other areas of the community. Finally, for the current residential areas of Orange no particular type of desirable business or industry was identified by over 50 percent

¹ Blakely, Edward J. *Planning Local Economic Development: Theory and Practice*, 2nd Edition, Thousand Oaks, CA: Sage Publications Inc., 1994.

of the respondents. However, 46 percent of the respondents did favor home-based businesses in residential areas.

Table 2-1: Top Businesses and Industries by Location

Location	Most Favored Types of Businesses & Industries
In current commercial areas of downtown	76% favor Business Offices 64% favor Small to medium sized retail businesses 63% favor Restaurants 60% favor Tourist services 60% favor Arts and cultural services 52% favor Recreational services
Along busy roads outside of downtown	71% favor Restaurants 50% favor Tourist services
In existing industrial parks	81% favor Medium sized manufacturers 80% favor Light industrial firms 75% favor Small sized manufacture firms
Residential areas	46% favor Home-based businesses

Source: Orange Community Survey, 2002.

The survey also asked respondents to identify which potential impacts of new business growth and economic development concerned them. The top three concerns, for those who responded to the question, were:

- Types of businesses that could come to Orange (supported by 54% of respondents);
- Appearance of commercial buildings and businesses (52%); and
- Negative impacts on the area's natural resources (43%).

The last survey question related to economic development asked residents about the types of policies they would like in place to guide economic growth. For those who responded to the question, the most favored types of policies or regulations were the following:

- Incentives to encourage new businesses to locate in the downtown (supported by 77% of respondents);
- More control over where different businesses are located (63%);
- Requiring businesses to provide more off-street parking than under current regulations (51%); and
- More control over the design of commercial sites including the location and landscaping of parking areas, lighting, types of signage, and building materials (50%).

Using the results of the Orange Community Survey and with the input of the Master Planning Committee, the following economic development goals and corresponding objectives have been established to offer guidance in the pursuit of an economic vision for the Town.

Goals

- To encourage and support economic development which is balanced with the preservation of natural, historic and cultural resources in order to maintain and enhance Orange's economic, environmental, and cultural integrity.
- To sustain and diversify Orange's economy;
 - By providing a climate in which local businesses and industry can succeed and expand;
 - By supporting businesses and industry in the creation and maintenance of stable long-term jobs, particularly those that have benefits and pay a living wage;
 - By promoting an environment to attract new businesses and industry;
 - By encouraging the development of tourism-related businesses; and
 - By protecting natural resource and historic assets which encourage recreation and tourism.
- To support the vitality of the downtown area and promote the re-use of underutilized or vacant commercial and industrial sites.
- To improve the quality of life for residents and preserve the character of the community.

Objectives

- Encourage the development of:
 - Local, owner-operated businesses;
 - Professional or technical service companies; and
 - Businesses that sell or produce locally created goods or services, such as farming, forestry, food products, restaurants, retailers, and artisans.
- Encourage the re-use of vacant or underutilized commercial buildings and industrial sites through the redevelopment of those properties for the expansion of businesses and industry.
- Assist in the development of a regional labor force that is reliable and well-equipped to compete in an increasingly complex and technology-based economy.
- Ensure that all residents, particularly low income, marginally skilled, underemployed or unemployed people, benefit from the enhancement of the economy by providing opportunities for education and access to social need programs.
- Promote historic, cultural, and recreational assets for residents and to foster a market for tourism.
- Diversify the types and sizes of businesses so that Orange may be better able to weather the cyclical nature of the economy.
- Encourage and support businesses that export products outside of Orange, to the region, state, and/or the country, in order to benefit the local economy.

Demographic Characteristics

To determine the need for employment opportunities and the size of the labor pool available to businesses in the community, some overall demographic trends must be understood. Factors such as the age distribution and educational level of residents, offer a glimpse into the type of workforce presently available. The incomes of Orange residents are reviewed as well to give a sense of the present wages offered and a direction for the type of jobs and wages needed to support residents.

Population

In 2000, the U.S. Census Bureau reported that Orange had a population of 7,518 people. This makes Orange the third largest municipality in Franklin County. In the North Quabbin area² of selected Franklin and Worcester County municipalities, Orange is the second most populous town after Athol, which had a population of 11,299 in the year 2000. The surrounding towns in Worcester County of Petersham, Phillipston and Royalston are much smaller with populations of between 1,100 and 1,700 in each community. Similarly, the surrounding towns in Franklin County of New Salem, Wendell, Erving and Warwick also have much smaller populations, ranging from 900 to 1,500 people. Given the small populations in the surrounding towns and indications from commuter data, Orange is recognized as a major employment center for residents in the North Quabbin and Eastern Franklin County areas.

From 1970 to 2000, the population in the Town of Orange grew 23 percent, with a net gain of 1,414. During this time frame, the greatest increase in population occurred from 1970 to 1980 with 12.1 percent growth. The rate of population growth diminished to 6.8 percent from 1980 to 1990, and then continued to slow to 2.8 percent from 1990 to 2000. In comparison, for Franklin County overall, the rate of population growth was fairly consistent from 1970 to 1980 and 1980 to 1990 with 8.6 percent and 9.0 percent growth rates respectively. Similar to the Town of Orange, Franklin County's growth rate from 1990 to 2000 at 2.1 percent was lower as well. In contrast to these trends, the State did not grow as much since 1970. However, the State's rate of growth has continued to rise each decade.

Table 2-2: Total Population, 1970, 1980, 1990, and 2000

Geography	1970 Population	1980 Population	1990 Population	2000 Population
Orange	6,104	6,844	7,312	7,518
Franklin County	59,223	64,317	70,092	71,535
Massachusetts	5,689,377	5,737,037	6,016,425	6,349,097

Source: U.S. Census Bureau, *Census of Population and Housing, 1970, 1980, 1990, 2000*.

² The North Quabbin area is defined as including following towns: Orange, Erving, New Salem, Warwick and Wendell in Franklin County; and Athol, Phillipston, Petersham and Royalston in Worcester County.

Table 2-3: Population Change, 1970 to 2000

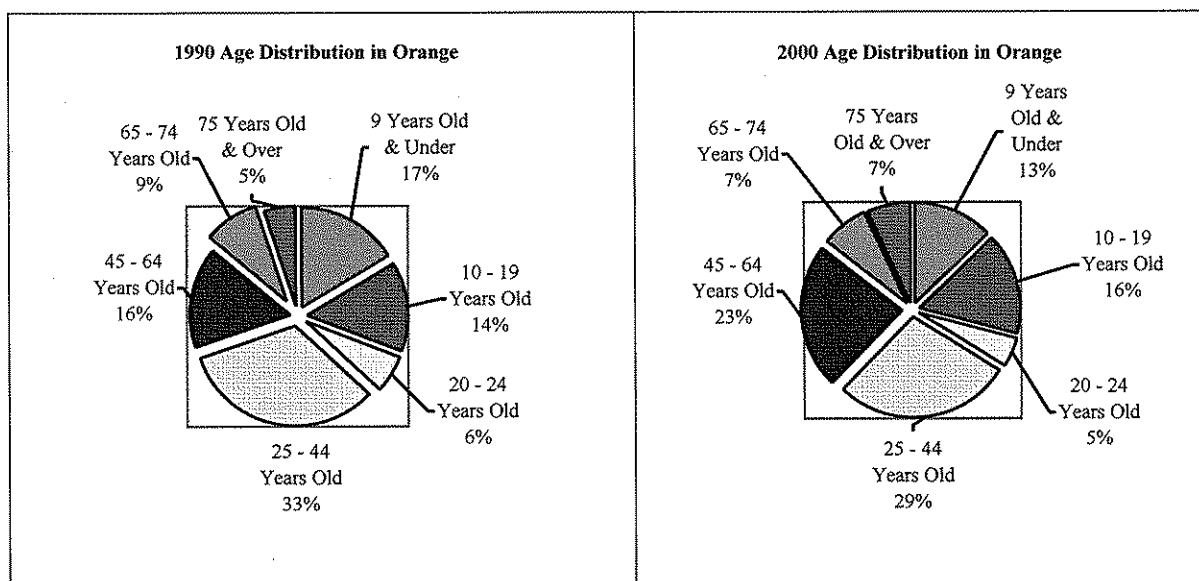
Geography	1970-1980 Change	1980-1990 Change	1990-2000 Change	1970-2000 Change
Orange	12.1%	6.8%	2.8%	23.2%
Franklin County	8.6%	9.0%	2.1%	20.8%
Massachusetts	0.8%	4.9%	5.5%	11.6%

Source: U.S. Census Bureau, *Census of Population and Housing, 1970, 1980, 1990, 2000.*

Age Distribution

It is important to know the size of various population age groups and how they are changing over time. The rise and fall in the number of people in different age groups (called cohorts) can affect demand for various municipal services, including schools and housing. It can also impact the number of people in the labor pool that is available to local businesses.

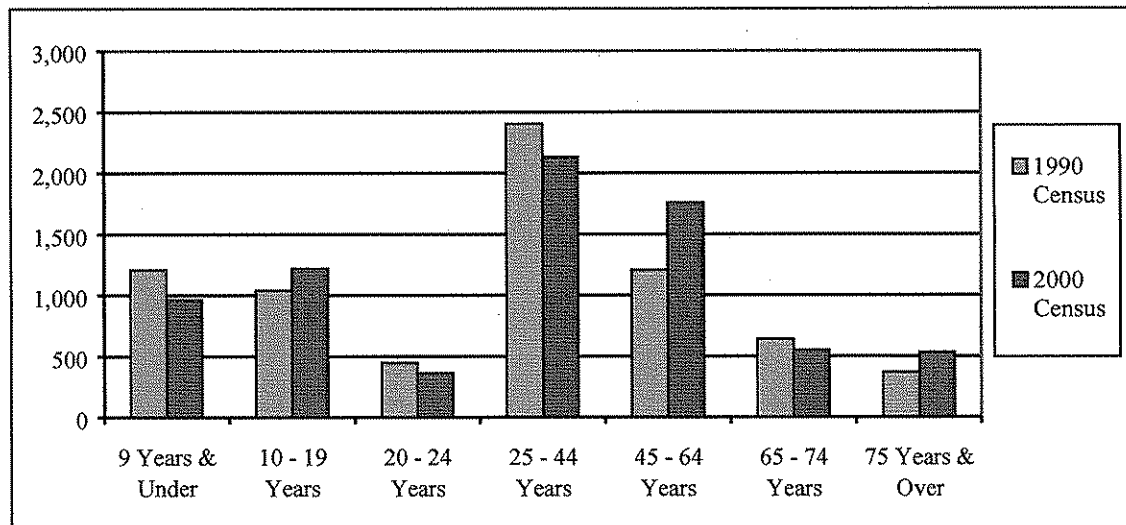
Figure 2-1: Age Distribution in Orange, 1990 and 2000



Source: U.S. Census Bureau, 1990 Census STF3A and 2000 Census SF3.

U.S. Census Bureau age distribution data are used to predict how the labor force may change over time. Both the Town of Orange and Franklin County share similar age distribution patterns. From 1990 to 2000, there were significant decreases in the number of children under 9 years old, while the number of young adults from 10 to 19 years old increased 17.3 percent in Orange and 16.3 percent in Franklin County. In contrast, during the same time period, Massachusetts experienced a moderate increase in the number of children under 9 years old (4.9%), and an increase in young adults aged 10 to 19 (11.9%). In the 20 to 24 year old age range, there were been significant population decreases in Orange (-19.2%), Franklin County (-13.7%) and Massachusetts (-20.4%).

Figure 2-2: Orange Age Distribution Changes, 1990 to 2000



Source: U.S. Census Bureau, 1990 Census STF3A and 2000 Census SF3.

Table 2-4: Age Distribution, 1990 and 2000

Geography	Total Population	9 Years & Under	10 - 19 Years	20 - 24 Years	25 - 44 Years	45 - 64 Years	65 - 74 Years	75 Years & Over
Orange								
1990	7,312	16.5%	14.2%	6.1%	32.9%	16.5%	8.8%	5.0%
2000	7,518	12.8%	16.2%	4.8%	28.3%	23.4%	7.3%	7.0%
% Difference		-3.7%	+2.0%	-1.3%	-4.5%	+6.9%	-1.4%	+2.0%
Franklin County								
1990	70,092	14.5%	12.6%	6.4%	34.2%	17.7%	8.2%	6.3%
2000	71,535	11.5%	14.3%	5.4%	28.5%	25.9%	6.7%	7.5%
% Difference		-3.0%	+1.8%	-1.0%	-5.7%	+8.2%	-1.5%	+1.2%
Massachusetts								
1990	6,016,425	13.1%	12.6%	8.4%	33.6%	18.6%	7.7%	5.9%
2000	6,349,097	13.0%	13.3%	6.4%	31.3%	22.4%	6.7%	6.8%
% Difference		-0.1%	+0.8%	-2.1%	-2.3%	+3.7%	-1.0%	+0.9%

Source: U.S. Census Bureau, 1990 Census STF3A and 2000 Census SF3.

In the Town of Orange, the loss of 20 to 24 year olds may be a result of these young adults leaving the area to attend college or to search for better job opportunities elsewhere. While it is a positive trend for these individuals to advance their educational and work experiences, a problem may arise if they do not return to Orange afterwards. An increase in the number of jobs available that offer living wage, entry-level positions with the opportunity for advancement is necessary to retain this segment of the labor force. It is also important to recognize that businesses often consider the availability of this labor segment when deciding where to locate or expand, due to this segment's flexibility and knowledge of technology. Given the number of young people aged 10 to 19 years old presently in Orange, actions must be taken to provide the Town's young adults with jobs or the out-migration of young workers may continue.

Traditional workforce cohorts are 25 to 44 year olds and the 45 to 64 year olds. Each of these age groups is likely to have an interest in specific amenities and services that will influence their desire to remain in or move to the Town of Orange. For example, the 25 to 44 year olds are more likely to examine a community's real estate options and daycare and early educational systems for their children. In comparison, the 45 to 64 year olds are more likely to consider educational opportunities for their older children and future retirement options.

Important characteristics for today's workforce include adaptability and experience. Support programs are necessary to take advantage of the experience of older workers and provide training to maintain greater adaptability to new technologies. Considering that Orange has a significant percentage of its workforce in the 45 to 64 age group, it is of primary importance to offer skills training to maintain a competitive workforce. As this segment of the workforce approaches retirement, job vacancies will likely occur. These vacancies need to be filled to maintain employment levels; it is therefore essential for the younger segments of the workforce to be encouraged to come to or remain in Orange.

One additional comment regarding the workforce and age distribution is in regards to the 65 to 74 age group. This age group may have an increasing role in the workforce in the future, as postponement of retirement for financial or career reasons is increasing. Often, members of this age group can be a valuable resource of experienced, part-time workers.

Education and Skills

The educational attainment level of the population is important from a business owner's perspective, as it demonstrates the ability of a community to provide labor and expertise. This may be a vital factor in a company's decision to remain in or relocate to Orange.

According to 1990 and 2000 Census data, Orange has a higher proportion of residents with only a high school diploma, or no high school diploma, than does both Franklin County and Massachusetts. Correspondingly, Orange also has a lower proportion of residents with a bachelor or graduate degree than the County and the State. While this data may seem discouraging, it is important to note that there was an increase in the percentage of Orange residents with a bachelor or graduate degree from 1990 to 2000. Specifically, the percentage of residents with a bachelor degree as their highest educational attainment increased to 9.9 percent and those with a graduate degree increased to 6.0 percent in 2000 (*see Table 2-5*).

Table 2-5: Highest Educational Attainment Level, 1990 and 2000

Geography	Population 25 years and over	% Less than High School Graduate*	% High School Graduate*	% Some College*	% Associate Degree*	% Bachelor Degree*	% Graduate Degree*
Orange							
1990	4,617	25.0%	39.7%	17.2%	8.0%	7.2%	2.9%
2000	4,984	20.4%	39.5%	16.6%	7.7%	9.9%	6.0%
Difference	367	-4.6%	-0.2%	-0.6%	-0.3%	+2.7%	+3.1%
Franklin County							
1990	46,559	17.6%	33.2%	16.9%	8.0%	14.5%	9.8%
2000	49,121	12.0%	31.2%	19.0%	8.6%	16.2%	12.9%
Difference	2,562	-5.6%	-2.0%	+2.1%	+0.6%	+1.7%	+3.1%
Massachusetts							
1990	3,962,223	20.0%	29.7%	15.8%	7.2%	16.6%	10.6%
2000	4,273,275	15.2%	27.3%	17.1%	7.2%	19.5%	13.7%
Difference	311,052	-4.8%	-2.4%	+1.3%	+0.0%	+2.9%	+3.1%

* All percentages are for persons 25 years of age and over.

Source: U.S. Census Bureau, 1990 Census STF3A and 2000 Census SF3.

The percentage of students that drop out of high school is released on an annual basis by the Massachusetts Department of Education.³ The Ralph C. Mahar Regional School District serves students from Orange, New Salem, Petersham and Wendell. This district has among the highest drop-out rates in the region. The table below shows the drop-out rates for school districts near Orange. From 1997 to 2001, the Ralph C. Mahar Regional School District had the highest drop-out rate of these selected school districts three out of the five years.

Table 2-6: School District Drop-out Data, 1997 to 2001

School District	1997 Drop- out Rate	1998 Drop- out Rate	1999 Drop- out Rate	2000 Drop- out Rate	2001 Drop- out Rate	2001 Enroll- ment
Ralph C. Mahar Regional High School, Orange	6.6%	5.9%	7.5%	5.9%	5.6%	463
Athol-Royalston Regional High School, Athol	5.4%	5.5%	4.1%	4.4%	3.0%	597
Franklin County Vocational Technical School, Turners Falls	6.4%	2.8%	5.3%	3.7%	3.1%	508
Turners Falls High School, Turners Falls	5.3%	3.3%	4.9%	5.7%	6.9%	437
Greenfield High School, Greenfield	6.3%	8.0%	5.8%	4.1%	5.3%	617
Montachusett Regional Vocational Technical School, Fitchburg	4.7%	3.1%	4.6%	3.3%	2.3%	1,120
Narragansett Regional School District, Baldwinville	3.5%	1.8%	6.2%	2.6%	4.2%	379
Statewide	3.4%	3.4%	3.6%	3.5%	3.5%	-

Source: Massachusetts Department of Education, 2001 School District Profiles; September 2002.

³ The annual drop-out rate is determined by the number of students enrolled in grades nine through twelve who dropped out of their respective school district and did not return to their original school by October 1st. The drop-out rate does not include students who withdrew and enrolled in a different school during the same school-calendar year.

In Orange, there are programs in place to support students who drop out of high school and help them pursue their General Equivalency Diploma (GED) or attain other skills training. The North Quabbin Adult Education Center, located in the Central School building on North Main Street in Orange, offers GED preparation, pre-GED education, and basic skills training through a non-profit organization, The Literacy Project. The Center also hosts additional programs that provide children and families with educational services. The Franklin/Hampshire Career Center has a counselor available at this location one day a week to assist individuals in the welfare-to-work program.

According to the Massachusetts Department of Education, a survey of high school seniors was conducted in 2000 to determine their plans upon graduation. For students at the Ralph C. Mahar Regional High School, the survey indicated that 42 percent planned to attend a four-year college, 30 percent planned to attend a two-year college, 4 percent planned to attend another post-secondary educational program, 6 percent planned to enter the military, and 13 percent planned to enter the workforce. In comparison, students statewide indicated that 54 percent planned to attend a four-year college, 21 percent planned to attend a two-year college, 2 percent planned to attend another post-secondary educational program, 3 percent planned to enter the military, and 15 percent planned to enter the workforce.

The number of Orange students planning to enter college is encouraging. It is important that access to two and four-year colleges remain available to Orange students. In 2002, Greenfield Community College (GCC) suspended its "Step Up" program due to funding constraints. This program offered transitional assistance to GED earners and high school graduates entering community college. In 2003, Mt. Wachusett Community College began offering a Practical Nurse Certification Program at the West River Health Center in Orange. Strategies need to be developed to increase support to and improve linkages among the various educational service providers, including governmental employment and training agencies, community colleges, high school school-to-work programs, and non-profit educational organizations. In addition, the Town of Orange would benefit if a "distant learning center" was established by either GCC or Mt. Wachusett in the downtown area to expand course offering for local residents. Such a center could also contribute to the downtown's revitalization.

Income and Wealth

There are three measures of wealth in the decennial U.S. Census that help characterize the health of the local economy by describing the incomes of local residents. These statistics indicate that Orange residents earn low incomes than residents in Franklin County or Massachusetts overall.

One measure is per capita income, which is determined by dividing the total amount of income earned in the area by the total number of the residents (which includes residents who may not be generating much income, such as children and the elderly). The Orange per

capita income reported for 1999⁴ was \$17,361, which was lower than both the County figure of \$20,672, and the State figure of \$25,952. In fact, the per capita income for Orange was not only among the lowest of the twenty-six towns in Franklin County, but within the lowest 5 percent of all the municipalities in Massachusetts. Of the nine towns in the North Quabbin region, six had per capita incomes in 2000 that ranked among the lowest 15 percent of all the 351 municipalities in Massachusetts.

Median household income is another statistic for understanding the wealth of the community. Median income figures describe the middle income among residents, thus eliminating any extreme numbers (either the very wealthy or very poor) from influencing the overall figure. Median household figures include data for families, for households of non-related people, and for individuals living alone. In 1999, the median household income for Orange was \$36,849, which was lower than the County (\$40,768) and the State (\$50,502) figures.

Poverty level is another measure used to understand a community's income and prosperity. Using determined income thresholds that vary by family size, the Census Bureau determines whether an individual lives below the established poverty level. In 1999, the poverty level was set at an income of \$16,700 for a family of four. Poverty status is not determined for all individuals living in the community, but for a large sample of the total population. For Orange, the sample includes over 95 percent of the total population. According to the 2000 Census, 7.8 percent of Orange residents for whom poverty status was determined were living below the poverty level. This percentage was lower than that for Franklin County (9.4%) and the State (9.3%). However, when comparing the poverty rate for individuals over the age of 65, Orange has a higher rate (10.5%) than the County (8.8%) and the State (8.9%). Higher poverty rates for this segment of the population are a concern. Affordable housing options and special services may be needed for this group because of their greater financial hardship.

Labor Force Characteristics and the Local Economy

This section discusses the quantity of labor available in the regional labor force, and the labor force's characteristics. In the section, data are provided primarily for the Town of Orange. However, due to the close economic ties that Orange has with other nearby North Quabbin communities, the same tables with data for additional communities, such as Athol, are included in the Economic Development Appendix. The appendix appears after page 2-38.

Data for this section come from three different sources, two federal and one state. The federal sources are the 2000 Census and County Business Pattern data. The 2000 Census data offer a snapshot in time of the employment status and characteristics of the labor force, and may be compared to data from previous Censuses.

⁴ Income data are from the 2000 Census (SF3), and are reported for the previous year, 1999, of when the Census survey was taken.

However, yearly data may be of greater value for identifying current trends. State data from the Massachusetts Division of Employment and Training (DET) are available on an annual basis for unemployment rates and for employment level by sector.

In addition, the County Business Pattern data are used to identify major employment trends by industry sectors for the Franklin County and the State. This information is used in comparison to town-level data provided by the DET. While the methodologies used to collect these two sets of data are different, this information is useful for general comparisons.

Commuting and the Regional Labor Force

Orange is considered a regional employment center in the greater Franklin County area, and draws workers from surrounding areas. In the North Quabbin region, the towns of both Orange and Athol serve as economic hubs. The available workforce is often shared among these two larger towns and the surrounding communities. The size of the workforce is an important consideration for determining the location of new businesses or for expanding an existing business.

Commuting pattern data for Orange show that the percentage of Orange residents working within the Town has remained relatively stable over the last decade, representing approximately one-third of workers in both 1990 and 2000 (*Table 2-7*). Over the decade, Orange saw an increase in the percentage of its employed residents who worked outside of the Town elsewhere in Franklin County, and a decrease in the percentage of employed residents working outside of the County. This latter decrease may be related to a decline in the number of employment opportunities in Athol during this time period.

Table 2-7: Worker Commute Patterns, 1990 and 2000

Geography	Total Workers*	Worked in Town of Residence	Worked out of Town but in County of Residence	Worked out of County but in State of Residence	Worked out of State of Residence
Orange					
1990	3,183	34.0%	14.4%	50.0%	1.7%
2000	3,611	33.6%	16.9%	46.4%	3.0%
Franklin County					
1990	34,674	35.8%	35.8%	24.9%	3.4%
2000	37,053	27.6%	34.9%	33.4%	4.1%
Massachusetts					
1990	2,979,594	36.5%	35.9%	24.5%	3.1%
2000	3,102,837	31.3%	35.4%	30.1%	3.3%

* Employed workers 16 years of age and over.

Source: U.S. Census Bureau, 1990 Census STF3A and 2000 Census SF3.

Commuting data from the Census also includes information on the number of employed residents who work at home, and the travel time to work for those who commute to their jobs (*Table 2-8*). In Orange, the percentage of workers who work at home decreased between 1990 and 2000. This was an opposite trend of what occurred in Franklin County and the

State. Orange residents who desire to work at home may have been hindered by the lack of broadband telecommunications in the community. Increasing opportunities for residential and business class broadband service are being sought presently.

Table 2-8: Travel Time to Work, 1990 and 2000

Geography	Total Workers*	Work at home	Less than 10 Min.	10 - 19 Min.	20 - 29 Min.	30 - 39 Min.	40 - 59 Min.	60 - 89 Min.	90 or More Min.
Orange									
1990	3,183	4.5%	21.4%	33.4%	12.6%	7.9%	11.9%	6.8%	1.5%
2000	3,611	3.8%	19.1%	31.5%	10.9%	12.9%	13.9%	5.6%	2.3%
Franklin County									
1990	34,674	4.7%	21.8%	32.1%	17.8%	11.5%	7.7%	3.2%	1.1%
2000	37,053	5.1%	16.3%	30.0%	19.1%	14.2%	9.7%	3.3%	2.3%
Massachusetts									
1990	2,979,594	2.5%	15.6%	31.3%	18.7%	15.5%	10.7%	4.7%	1.0%
2000	3,102,837	3.1%	12.6%	27.4%	18.6%	16.3%	13.0%	6.5%	2.4%

* Employed workers 16 years of age and over.

Source: U.S. Census Bureau, 1990 Census STF3A and 2000 Census SF3.

Labor Force Participation and Employment

The labor force is defined as the pool of individuals 16 years of age and older who are employed or who are actively seeking employment. Enrolled students, retirees, stay-at-home parents and other persons not actively seeking employment are excluded from the labor force. When comparing 1990 and 2000 labor force characteristics, it is important to consider the very different economic climates of the respective years. The recession of the early 1990s led to high unemployment rates for most areas across the country. By the latter part of the decade, many areas had recovered their previous employment levels. A good demonstration of this is available through state employment data. Federal Census data are also useful and provide important statistics that are not collected by the State.

One important statistic collected by the Census Bureau and not the State is the labor force participation rate. The difference between the number of people in the labor force and the total number of people who are 16 years of age and older is termed the participation rate. The participation rate indicates a potential source of additional workers. Flexible, part-time employment opportunities or additional support services, such as skills training, public transportation or day-care facilities, can influence the number of people in the labor force, and lead to a higher participation rate. According to the 2000 Census, the Town of Orange had a participation rate of 65.8 percent, which was higher than some neighboring communities (see Table A-8 in the chapter Appendix), but lower than the County (69.1%) and State (66.1%) rates.

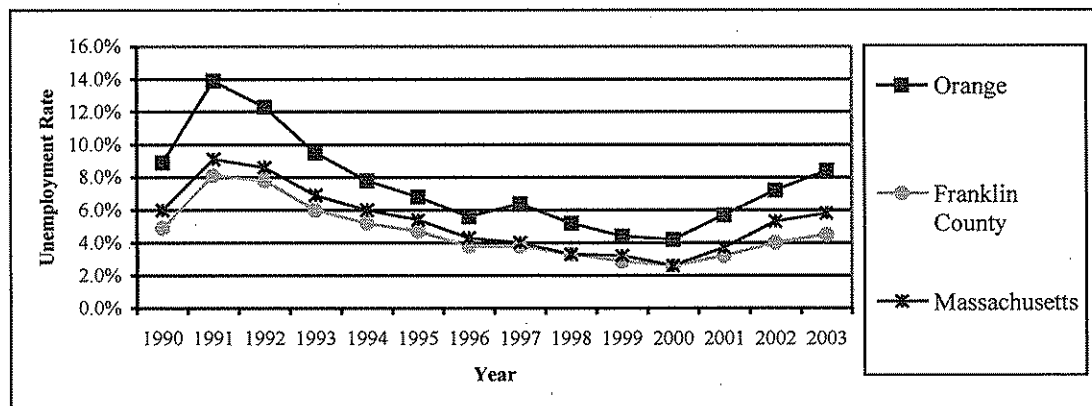
In regards to the participation rate for females, the rate in Orange was 59.7 percent, which was much higher than some neighboring communities and which was consistent with the State rate of 60.4 percent. Historically, Franklin County has had a higher female participation rate than other areas of Massachusetts. This high rate reinforces the necessity

for a region to offer adequate child-care facilities and worker support services. An additional consideration when discussing the participation rate in Orange is the impact of increasing numbers of elderly residents. This segment of the population may be a good resource for experienced workers seeking part-time employment.

The next section features employment information released by the Massachusetts Division of Employment and Training (DET). DET data are derived from several statistical sources, such as federal annual surveys and the unemployment insurance program. Employment information released by the U.S. Census Bureau is based on the decennial Census survey. Due to the different methodologies used by the DET and the U.S. Census Bureau, these figures are not directly comparable.

The unemployment rate describes the percentage of people in the labor force who are presently not employed, but who are actively seeking employment (*Figure 2-3*). The unemployment rate may be influenced by an over abundance or drastic decline in the number of employment opportunities in an area, as well by significant changes in the size of the labor force (e.g. out-migration of individuals seeking work to other areas with more job opportunities). This statistic is often used as a gauge of economic prosperity or distress.

Figure 2-3: Unemployment Rates, 1990 to 2003



Source: Massachusetts Division of Employment and Training, ES-202 Data.

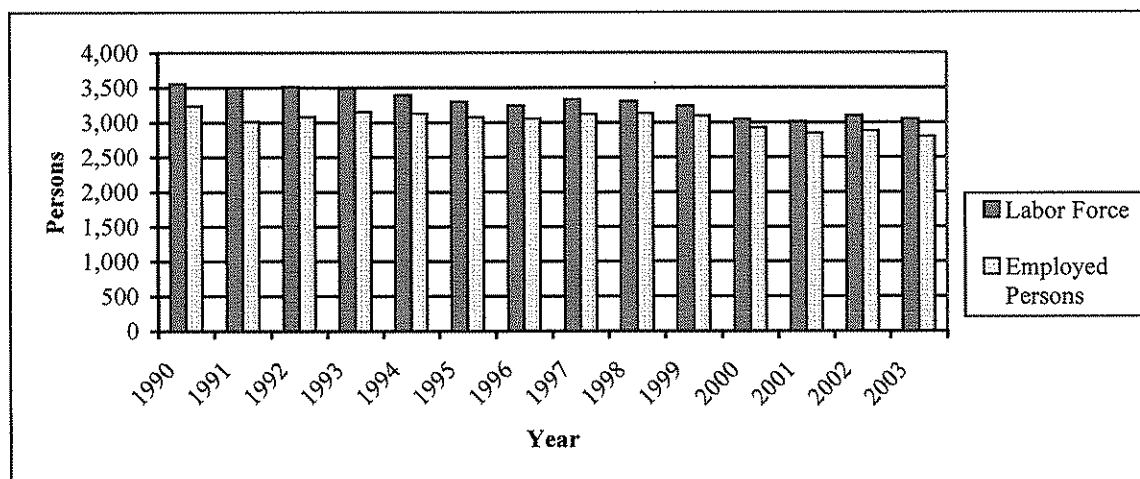
The higher unemployment rates for Orange in comparison to the region have been consistent over the past decade. The Town of Orange was greatly impacted by the economic recession in the early 1990s and did not recover to the same degree as other areas of the Massachusetts and the country. For example, the unemployment rate in Orange declined from a high of 13.9 percent in 1991 to its low of 4.1 percent in 2000, while the State's unemployment rate went from a high of 8.1 percent to a low of 2.6 percent for the same time period. The higher overall unemployment rates in Orange in comparison to the region at large indicate the economic difficulties confronting Orange and other North Quabbin communities.

In Figure 2-4, annual data for Orange show a slow decline in the size of the labor force between 1990 and 2003. Considering that Orange's population is increasing, the labor force

decline suggests that there is a decreasing workforce participation rate among residents. This is the same trend that was seen in the Census data.

Given the shrinking of Orange's labor force and the identified population trends, it appears that there are two factors at play: (1) there are fewer Orange residents participating in the workforce; and (2) the out-migration of the younger working age population is depleting the remaining labor pool. This decrease in human capital is a disadvantage to the Town's business climate and to economic development efforts. It is of primary importance for Orange to increase workforce participation and corresponding employment opportunities.

Figure 2-4: Town of Orange Labor Force and Employment, 1990 to 2003



Source: Massachusetts Division of Employment and Training, ES-202 Data.

An element not incorporated into the DET data is under-employment. Information about factors such as whether the jobs are part time, include benefits, or pay a living wage is not readily available. The low per capita income and median household incomes for Orange reported in the U.S. Census data, suggest that many of the jobs available to Orange residents may not offer a living wage or desired benefits.

Occupation Profile

The types of occupations that Orange residents currently have reflect the skills available in the community. A person's occupation describes the kind of work done and does not indicate the industry they serve. For example, the occupation of manager is found in both the retail trade industry and the manufacturing industry. The U.S. Census Bureau reported on The occupations of employed persons 16 years of age and over are reported in the U.S. Census data for 1990 and 2000. However, some of the occupation categories differed from one Census to the next, so only the 2000 Census information is presented here. Table 2-9, on the next page, shows occupation statistics for Orange, Franklin County, and Massachusetts from the 2000 Census.

Table 2-9: Worker Occupation, 2000

Type of Occupation (for workers 16 years of age and over)	Orange		Franklin County		Massachusetts	
	Number	Percent	Number	Percent	Number	Percent
Management, professional, & related occupations	815	22.5%	13,250	35.3%	1,298,704	41.1%
Sales & office occupations	767	21.2%	8,714	23.2%	818,844	25.9%
Service occupations	616	17.0%	5,819	15.5%	444,298	14.1%
Construction, extraction, & maintenance occupations	321	8.9%	3,678	9.8%	235,876	7.5%
Farming, fishing, & forestry occupations	0	0.0%	250	0.7%	6,642	0.2%
Production, transportation, & material moving occupations	1,100	30.4%	5,866	15.6%	356,723	11.3%
Total	3,619	100.0%	37,577	100.0%	3,161,087	100.0%

Source: U.S. Census Bureau, 2000 Census SF3.

Overall, these data demonstrate that there are a generally high number of workers in management, professional & related occupations. However, the overall percentage of workers in these types of occupations is lower in Orange than in the County and the State. It is known anecdotally that there has been an increase in Orange residents in management occupations in the past few years. A relative comparison of 2000 and 1990 management, professional and related occupations data is possible because the occupation categories are very similar. In 1990, there were 779 Orange residents who worked in management and professional related occupations. This number increased by 5 percent to 815 in 2000.

For other occupations, the percentages of Orange workers in sales & office occupations, service occupations, the construction, extraction & maintenance occupations are relatively consistent with proportions of county and state workers in these occupations. The lack of workers in the farming, forestry, & fishing occupations may not be an accurate depiction of the number of Orange residents employed in these areas. There is a trend for many who work in agricultural businesses to have other primary occupations in addition to their agricultural work. Only primary occupations are reported in the U.S. Census.

The high percentage of Orange workers in production, transportation & material moving occupations is a reflection of the large economic role of manufacturing businesses located in Orange and Athol. The percentage of Orange workers in these occupations (30.4%) is significantly higher than in Franklin County (15.6%) and Massachusetts (11.3%) overall.

Industry Sectors and Major Employers

The national economy is in transition. With each passing year, the services sector has grown, and the manufacturing sector has weakened. This shift in economic sector significance has been noticeable in every part of the country through downsizing and the closures of many factories. In recent decades, Franklin County has similarly endured plant closures and layoffs. Nonetheless, Franklin County continues to have a strong manufacturing sector overall. In fact, according to federal County Business Pattern data, the percentage of Franklin County workers employed in the manufacturing industry has increased in recent

years. This is a remarkable trend when compared to manufacturing sector declines at the state and national levels over the same period.

Economists use an industry classification system to compare the performances of similar types of economic activities in different geographical locations. The North American Industry Classification System (NAICS), published by the Executive Office of the President's Office of Management and Budget in 1997, organized all economic activities into general categories. The NAICS classifies all economic activities into twenty industry sectors.

The employment statistics presented in this section are from two sources. The county and state figures are from the Census Bureau's County Business Pattern program. The employment statistics describing Orange's employment figures are from a different source, the Massachusetts Division of Employment and Training (DET). County Business Pattern data do not include employment in the government sector, while DET data do include employment in the government sector. Comparison between the two types of data is used to reflect the relative importance of a particular regional industry sector in a community and to help identify important trends over time.

Table 2-10: Selected Industry Sector Employment, 1999

NAICS Industry Sectors	Franklin County		Massachusetts	
	% of Total Employees	Average per Employee Payroll	% of Total Employees	Average per Employee Payroll
Construction	3.1%	\$36,087	4.0%	\$48,414
Manufacturing	30.4%	\$31,746	12.9%	\$49,983
Wholesale Trade	3.7%	\$38,610	5.1%	\$58,334
Retail Trade	13.5%	\$18,660	11.4%	\$21,886
Transportation & Warehousing	2.1%	\$27,996	2.4%	\$31,303
Information Services	3.2%	\$33,592	4.2%	\$68,029
Financial & Insurance	2.9%	\$30,107	7.0%	\$77,192
Real Estate	0.4%	\$19,369	1.5%	\$41,137
Professional, Scientific & Technical Services	1.6%	\$29,506	7.5%	\$72,713
Administrative, Support, & Waste Management Services	2.9%	\$20,562	6.8%	\$28,799
Education Services	7.1%	\$27,293	5.4%	\$27,503
Health Care & Social Assistance	14.1%	\$22,590	14.5%	\$32,135
Arts, Recreation, & Entertainment	2.4%	\$15,290	1.4%	\$25,129
Accommodations & Food Service	6.8%	\$10,004	7.7%	\$14,638
Total	24,758	\$25,742	3,087,044	\$42,579

Source: U.S. Census Bureau, County Business Patterns program.

Some important trends to note from County Business Pattern data include the significant difference in average per employee payroll between Franklin County and the State. In 1999, the estimated 24,758 employees working in Franklin County earned on average \$25,742 per year. In contrast, the estimated 3,087,044 employees working in Massachusetts earned on average \$42,579 per year. The salary differences were most dramatic in the following sectors: construction, manufacturing, wholesale trade, information services, financial & insurance, real estate, and professional scientific & technical services.

The manufacturing, health care & social assistance, and retail trade sectors have the greatest percentage of employees for both Franklin County and Massachusetts. However, the significance of the manufacturing sector in Franklin County as compared to the rest of the State is very apparent. In Franklin County, the manufacturing sector accounts for 30 percent of all employees, whereas for the Massachusetts as a whole, the sector comprises 13 percent of all employees. In Franklin County, there is also a greater percentage of employment in the retail trade, education services, and the arts, recreation & entertainment sectors than there is in Massachusetts overall. Unfortunately, these sectors have some of the lower annual average per employee pay rates. The sectors with higher annual average per employee pay rates, such as financial & insurance and professional, scientific & technical services, represent only a small portion of employment in Franklin County.

In Orange, there is a rich manufacturing tradition; and the Town has long been a prominent industrial center in the greater Franklin County region. It has been stated that town settlers used the Millers River as a source of hydropower for manufacturing for at least twenty years before the Town of Orange was founded in 1810. In the last half of the 19th Century, Orange experienced its greatest period of population growth, reflecting the community's high level of participation in the industrial revolution. From 1870 to 1900, the Town's population grew 164% from 2,091 to 5,520. During that time, Orange was the site of the nation's first automobile factory, the Grout Automobile Company. Both steam and gas powered cars were produced over the years until the company went out of business in 1912. Throughout the 20th and into the 21st Century, Orange has been known for its various manufacturing businesses, particularly with respect to metalwork. Not unexpectedly, manufacturing has continuously been the largest employment sector within Orange.

It is important to understand which businesses and sectors provide employment within a community. In 2002, seven employers in Orange had fifty or greater employees. These employers were in the public, manufacturing and retail sectors.

Table 2-11: List of Major Employers in Orange

Employer	Industry Sector	Full-time Employees	Part-time Employees	Total Employees
Town of Orange	Government/Education	<i>Not Available</i>	<i>Not Available</i>	272
Wal-Mart Stores Inc	Retail	152	76	228
Thomas & Betts	Manufacturing (Plastics)	170	96	266
Rodney Hunt Co	Manufacturing (Metal)	210	0	210
Ralph C. Mahar School District	Education	123	3	126
Seaman Paper Co. Inc	Manufacturing (Paper)	<i>Not Available</i>	<i>Not Available</i>	98
Hannaford Super Market	Retail	<i>Not Available</i>	<i>Not Available</i>	62
Total		-	-	1,262

Source: Franklin Regional Council of Governments, Interviews with Employers, 2002 & 2003.

The Massachusetts Division of Employment and Training (DET) releases data describing the number of employees in eight industry sectors on an annual basis. These data reveal the increases, declines and fluctuations of the various sectors in recent years (*see Table 2-12*). Generally speaking, the trends of these employment sectors reflect the experience of the national economy at large. The recession of the early 1990s affected the economic status of communities across the country, including Orange. Between 1988 and 2001, the lowest total

employment in Orange was in 1991. Since 1991, total employment levels in the Town have increased.

The level of total employment in Orange indicated by the DET data in Table 2-12 has two peaks: the first in pre-recession 1989 and the second in the economic recovery of 2000. The number of establishments in Orange mirrors this trend. In the middle of the 1990s, two significant events impacted the total employment level. The first event was the opening of the Wal-Mart retail store, which brought over 200 jobs to town. The second event was the closure of the Baker School Specialty manufacturing plant in 1997, which resulted in a loss of over 100 jobs.

Table 2-12: Employment within Orange by Industry Sector, 1988 to 2001

Year	Total Employment	Sector Percentage of Total Employment							
		Construction	TCPU *	FIRE *	Agriculture, forestry & fishing	Services	Government	Trade	Manufacturing
1988	1,967	3.6%	1.2%	2.3%	0.9%	10.7%	23.2%	21.6%	36.5%
1989	2,145	2.1%	2.1%	2.2%	1.3%	10.4%	23.1%	24.8%	34.0%
1990	1,868	1.9%	3.4%	2.2%	1.4%	11.8%	22.0%	17.3%	39.9%
1991	1,795	1.3%	3.3%	2.4%	1.2%	10.1%	19.0%	23.6%	39.1%
1992	1,841	0.7%	2.3%	2.4%	1.1%	10.5%	21.5%	21.4%	40.1%
1993	1,909	0.7%	1.9%	1.9%	1.1%	9.0%	21.0%	20.2%	44.2%
1994	1,933	0.6%	1.7%	2.0%	1.2%	7.1%	19.1%	22.2%	46.0%
1995	2,022	0.8%	1.5%	2.4%	1.1%	6.7%	21.3%	25.8%	40.4%
1996	2,021	0.9%	3.8%	2.3%	1.4%	5.5%	21.3%	25.7%	39.1%
1997	1,962	0.8%	5.3%	2.3%	1.4%	6.4%	22.6%	24.8%	36.4%
1998	2,030	1.0%	6.0%	1.9%	1.4%	5.9%	24.1%	25.3%	34.4%
1999	2,092	1.1%	1.8%	1.5%	3.0%	7.8%	22.7%	24.5%	37.6%
2000	2,150	1.2%	1.6%	1.5%	2.6%	8.1%	19.8%	25.2%	40.1%
2001	2,079	1.3%	1.3%	1.5%	2.6%	10.2%	21.1%	25.7%	36.2%

* TCPU: Transportation, Communication and Public Utilities sector; FIRE: Finance, Insurance and Real Estate.

Source: Massachusetts Division of Employment and Training; ES-202 series data.

The three smallest employment sectors in Orange are the construction, TCPU (Transportation, Communication and Public Utilities), and FIRE (Finance, Insurance and Real Estate) sectors. The size of construction sector has fluctuated with the general economic cycles. The TCPU sector had a period of greater employment from 1996 to 1998, but fell to previous levels in 1999. The percentage of total employees in the FIRE sector declined during the 1988-2001 period, suggesting that residents and businesses must seek these necessary services from outside of Orange.

Another trend seen in the DET data is the increase in agricultural and forestry sector employment. This sector is traditionally among the smallest in most communities. In Orange, this sector has grown steadily, and presently has three times as many workers than it did in 1988. In 2001, there were 55 workers employed in this sector in the Town of Orange. Much of the growth in this sector is likely related to the increase in forestry operations in town. It is important to note that a strong agricultural and forestry sector can help protect

many of the scenic and natural resources that contribute to Town's character and quality of life for residents.

The trade sector includes both retail and wholesale establishments. This sector is the second largest employer within Orange. In the early 1990s, this sector was in decline, reaching a low of 430 employees in 1990. With the opening of the Wal-Mart store in 1995, trade sector employment grew. Presently, it is estimated that Wal-Mart accounts for approximately 40 percent of Orange's jobs in this sector.

For many smaller communities, the government sector is one of the largest employers because it includes public education workers. In Orange, this sector is the third largest, behind manufacturing and trade, and includes employees at the three elementary schools, the high school, the town offices, as well as any state or federal agency offices. There have been relatively minor fluctuations in the employment levels of this sector in recent years.

In recent years, the services sector has experienced the greatest fluctuations of all the sectors in Orange. This sector includes a wide variety of establishments such as restaurants, beauty salons, automotive repair shops, and health practitioners. The percentage of Orange employment in this sector decreased significantly in the mid to late-1990s and then recovered in 2001. The relatively low percentage of employment in this sector is counter to state and national trends in which service employment has steadily increased. Residents universally use these types of services. The local decline in employment in this sector indicates that residents and workers in Orange are going to other communities for these functions. Revitalization and redevelopment efforts in Orange's downtown area could provide an opportunity to support these types of businesses in the community.

In terms of the manufacturing sector, the DET data show the prominence of manufacturing in Orange, and the sector's varying employment levels during the 1988-2001 period. The decreases in this sector's employment level experienced in 1997 may be related to the closure of the Baker Specialty School Supply manufacturing facility that year. The large manufacturing base is a function of the tradition this sector has had in Orange as well as in Athol. Three of the largest employers located in Orange are manufacturers: Rodney Hunt Company, Thomas & Betts Corporation, and Seaman Paper Company. As of Fall 2002, these three companies together employed approximately 530 workers. Using the 2001 manufacturing sector data in Table 2-12, it can be estimated that these three employers represent approximately 70 percent of the total local employment in the sector.

As some of the larger factories in Orange and Athol have reduced the size of their workforces, some workers have gone on to start new businesses in specific niche markets within the same field. Due to the presence of L.S. Starrett in Athol and other similar businesses, much of the employment in this sector is related to metalworking. An examination of local employers verifies that smaller manufacturing companies and "job shops" comprise a significant portion of the total manufacturing sector, estimated at about 30 percent of all local manufacturing jobs.

In today's economy, there are inherent risks for areas that are dependent on the manufacturing sector, especially due to the globalization of these industries. Factors such as competitive taxes and labor costs, in combination with the increased efficiency of transportation and communication systems, allow manufacturers to locate virtually anywhere. This is particularly true for large facilities that are a part of national or multi-national corporations. Factors that contribute to the retention of these businesses in an area include the presence of a skilled workforce and an employer's commitment to the community. Local support for these employers is imperative to keep them viable and retain them in the area. Support may take the form of access to resources (such as training funds or assistance with government regulatory processes) or programs to help enhance the skills of the existing labor pool.

For small manufacturers, and other small businesses, an important element for success is the ability to be flexible and adapt to niche markets. The entrepreneurs behind successful small ventures understand the markets they are in and have thrived due to their ability to identify trends and adapt to them. Access to a skilled labor force lowers training costs, which is a great expense for smaller firms. Access to financial and technical resources that help these businesses grow is very important as well. It is important to note that when the management personnel of smaller businesses and start-up ventures have close ties to their community, there is a greater likelihood that these companies will stay in the community as they grow.

A common need for manufacturers, as well as businesses in other sectors, is access to adequate infrastructure, including transportation networks and telecommunications systems. To keep manufacturers viable, adoption and integration of more efficient distribution systems and new technologies must occur. A community must be able to provide businesses with the needed infrastructure. The current infrastructure and resources in Orange will be discussed more later in this chapter.

To encourage local entrepreneurship, attract new businesses, and retain expanding businesses, adequate space for businesses must be available. This space can be generated by the development of previous undeveloped land or through the redevelopment of previously developed parcels or vacant or under-utilized buildings. There are advantages and disadvantages to both approaches. This will be discussed further in the next section.

Commercial and Industrial Areas

For an existing business, the quality and condition of its location is a determining factor in its vitality and success. For new business development, the availability of appropriate space to locate and expand is a primary driver. There are two types of space that businesses can use for development or expansion: (1) "green space" or currently undeveloped land, and (2) the redevelopment of existing structures or previously developed, underutilized or vacant land. Both of these options have inherent advantages and disadvantages that require communities to balance different interests when determining what approach is best. Currently, the Town of Orange has a supply of appropriately zoned land that can accommodate both new business

development, and the redevelopment of previous business sites. The following text describes these areas.

Downtown Area

Bisected by the Millers River, the downtown area of Orange is an historic town center on the State Register of Historic Places. While the scenic potential of the downtown area is an asset, there are challenges to the area's successful revitalization.

One measure of economic stability in a downtown area is the commercial vacancy rate. The vacancy rate is the relationship between available, usable commercial space, and the total amount of space in the market. The most widely utilized basis for the evaluation and classification of space comes from the American National Standards Institute, which produces guidelines for determining a community's commercial vacancy rate. Under these guidelines, a vacant building or part of a building may not be included if, because of physical or legal reasons or because of owner intent, the space is not available for rent. Often, vacant upper floor areas, basement areas, and abandoned buildings fit into this category. This is an important factor in surveys of small towns since one or two such buildings, if counted, can have a dramatic effect on the town's vacancy rate.

Commercial vacancy rates for different town centers in Franklin County have been calculated annually based on surveys conducted during the course of each year by Levitch Associates of Greenfield. Generally, the basic structural vacancy rate (the average vacancy rate) for most communities is approximately 5 percent to 6 percent.

Table 2-13: Commercial Vacancy Rates for Major Employment Centers

Town Center	1995	1996	1997	1998	1999	2000	2001
Orange	25%	32%	24%	27%	22%	12%	21%
Athol	12%	15%	18%	18%	5%	8%	7%
Bernardston	6%	6%	6%	6%	5%	5%	5%
Deerfield	12%	8%	6%	6%	8%	6%	5%
Gill	6%	5%	5%	5%	5%	5%	5%
Greenfield (1 st floor only)	12%	9%	9%	13%	11%	13%	10%
Northfield	6%	6%	6%	5%	5%	N/A	5%
Shelburne Falls Village	12%	5%	5%	8%	5%	6%	5%
Turners Falls (Montague)	14%	8%	19%	17%	20%	13%	19%

N/A: Not available.

Source: K. Levitch Associates, Real Estate Appraisers; Greenfield, MA; June 2002.

As shown in Table 2-13, commercial vacancy rates in Orange Center fluctuated over the 1995-2001 period, but overall, were quite high. For example, downtown Orange had commercial vacancy rates of 27 percent in 1998, 12 percent in 2000 and 21 percent in 2001. It should be noted that some of the decline in Orange's vacancy rate in 2000 may be attributable to buildings being classified as no longer useable. Vacant "unusable" buildings are not factored into the percentage according to the guidelines explained previously. Using

a different set of criteria, a recent feasibility study for the reuse of Putnam Hall⁵ stated that the vacancy rate in downtown Orange was approximately 40 percent. When vacant rates are high, it often leads to lower rents. Lower rents, while good for leasees, can be problematic for landlords who see their property as an investment and source of income. Lower rents can also discourage landlords from reinvesting in their properties.

In Orange's downtown area, there are several mill buildings located along the Millers River that are remainders of the Town's great manufacturing heritage. Some of these structures continue to be manufacturing facilities, while others are used for retail and office space or are simply empty. Any revitalization plan for downtown Orange must address the redevelopment of some of these structures. Complications may arise in the redevelopment process due to potential on-site contaminants that would need to be cleaned up before another use could be established. While site clean-up is not an easy process, the outcomes of clean-up and redevelopment benefit the community in several ways. The reuse of vacant or under-utilized industrial buildings often removes blight and potentially hazardous conditions. It also enhances the vitality and economic activity in an area. Additionally, businesses that locate in historic downtown structures have the advantage of infrastructure, such as water and sewer systems, already being in place. Reusing existing buildings also reduces the need to converting open space to developed uses. Some of downtown mill buildings may be a good location for small businesses or start-up ventures seeking to establish themselves.

On July 26, 2003, a public forum was conducted by the Town of Orange and the Franklin Regional Council of Governments (FRCOG) to facilitate the creation of goals for downtown Orange. Forty residents, businesspeople, and staff from the Town of Orange and the FRCOG attended the Saturday morning forum in the Orange Town Hall. The discussion participants brought forward a variety of topics and issues they saw as important to promoting the economic health and social well-being of the downtown. Issues discussed included the redevelopment of vacant or under-utilized buildings, improving the overall maintenance and appearance of the downtown, and supporting the development of a variety of businesses. Based on the meeting's most frequent comments, the highest priorities for the downtown area were:

- To create a riverfront park and associated boat ramp to provide community space and allow for the development of outdoor recreation-related businesses;
- To establish a paid position in town government to promote Orange and to move community development projects forward;
- To create an information resource center to support the development of small businesses;
- To establish small neighborhood parks in the residential areas in and surrounding the downtown;
- To identify additional resources to maintain the downtown area, including cleaning parking lots, planting trees, replacing tree grates, and picking up trash; and
- To redevelop a blighted building or site, such as the Putnam Hall or Getty lot.

⁵ ConsultEcon, Inc. (Cambridge, MA), Final Report on Putnam Hall Reuse, January 2003.

A complete listing of public comments is included in the Economic Development Appendix. The perspectives and issues discussed at the public forum can help guide the planning process to initiate programs and projects to revitalize the downtown Orange area. One such initiative may be the creation of a Downtown Revitalization Master Plan. This type of plan presents the community's overall vision for its downtown, and then identifies issues and recommends strategies to address those issues and realize the presented vision. Elements of a Downtown Revitalization Master Plan could include: a marketing plan; an inventory of current building, their conditions and obstacles to redevelopment; the prioritization of revitalization projects; the assigning of tasks to specific staff and committees; and the estimating of redevelopment project costs. The elements included in a Downtown Revitalization Master Plan are important to build support for future projects. These plan components are also often necessary to pursue federal and state grant funding.

Industrial Park Areas

Orange is the only town in Franklin County with two industrial parks, the Orange Industrial Park and the Randall Pond Industrial Park. The Orange Economic Development and Industrial Corporation (OEDIC) created these parks with funding provided by local, state and federal sources.

Established in 1980, the Orange Industrial Park has eight businesses employing approximately 450 workers located in its 75 acres. These businesses include two lumber and wood product companies, a fabricator of metal industrial rolls, a specialty cutting tools manufacturer, a cable connector assembly facility, a moving company, a plastic cable manufacturer and a specialty paper manufacturer. This industrial park has municipal water available on site but is not part of the municipal sewer system and does not have natural gas service. The telecommunications infrastructure in the industrial park is limited and does not currently allow for DSL broadband service. There are no longer any undeveloped lots for sale in the Orange Industrial Park. Most of the structures in the park were built in the mid-1980s. The need for a second industrial park was recognized and acted upon in the 1990s.

The newest industrial park in Franklin County is the Randall Pond Industrial Park built in 2000. This industrial park features on-site municipal water and sewer systems but does not offer natural gas service. Presently, improvements are being made to offer broadband telecommunications service. Since the industrial park's creation, five of the 13 subdivided lots have been sold. The businesses that now operate in the industrial park include a precision metalworking shop, an electronic circuit board testing company, an organic coffee roaster, and a metal forming company. Collectively, these businesses employ about 40 people and generate over \$5 million in annual revenues (2002). The remaining lots for sale in the Randall Pond Industrial Park total 35 acres and range in size from 2.3 acres to 8.5 acres. The selling price for these lots is \$25,000 per acre. Environmental constraints in the industrial park have been addressed and are on parcels owned by either the Orange Conservation Commission or the Orange Economic Development Industrial Corporation (OEDIC). According to the performance standards established for the industrial park, light manufacturing and industrial uses are allowed. The required minimum lot size is two acres.

The opportunity for additional manufacturing businesses to be established in the Randall Pond Industrial Park is a potential valuable resource for the Town of Orange. The creation of additional employment opportunities in the manufacturing field is desirable because the jobs in this sector generally are full-time, benefited positions that pay a living wage.

Both of Orange's industrial parks are part of a Tax Increment Finance zone created through the Massachusetts Economic Development Incentive Program. This status allows businesses to petition the Town for a property tax exemption based on a percentage of the value added through new construction or significant improvements. Projects that are certified by the Town of Orange and the State are eligible for tax reductions for a term of five to twenty years. The goal of this incentive is to stimulate job creation in a community. Of the thirteen certified projects in Orange, seven are in the industrial parks. These seven projects are estimated to have created 106 new jobs and retained 255 existing jobs while leveraging over \$42 million in private investment. It is important to note that while participation in the tax incentive program has encouraged the locating or expanding of some businesses in the community, it also has impacted how the costs of community services are balanced within the Town. Typically, industrial and commercial uses generate more in tax revenues than they cost a town in services. The use of TIF property tax exemptions changes this equation.

Economic Development Factors and Issues

There are many factors to consider when planning for economic development. This section reviews and highlights some of the primary ones, including transportation infrastructure, entrepreneurship and business development resources, telecommunications, property tax rates, natural-resource based businesses, and tourism.

Transportation Infrastructure

There are two perspectives when considering a community's transportation infrastructure: the level of ease and safety of moving people and goods *within* the community and the level of ease and safety of moving people and goods *to and from* the community. The transportation network in Orange is coherent and well-planned. The downtown part of the network focuses on Main and River Streets. However, this section is dependent on the condition of the South Main Street Bridge, which serves as the primary link between East and West River Streets, and East and West Main Streets. The Town of Orange is well served by the presence of Routes 2A, 122, and 202. These state roadways offer multiple connections to the region's primary east-west transportation corridor, Route 2.

The Route 2 corridor is Orange's most significant transportation feature in terms of the transport of people and goods. Route 2 connects Boston to numerous points west, including Fitchburg, Gardner, Greenfield, Williamstown, and Albany, New York. Route 2 traverses the width of Orange and offers three exits to enter the Town, each of which connect to state routes (Routes 2A, 122, and 202). The eastern approach from Boston is mostly a double lane

divided highway until approximately the last 20 miles, at which point it is single lane and no longer a divided highway. The western approach from Greenfield is single lane and not a divided highway. The condition of Route 2 has been a challenge for communities along the corridor for many years. Enhancements over the last few years and future plans to alleviate specific safety problems will continue to improve the efficiency of this route.

In terms of transit services, the G-Link transit route was established in 1997 to connect Greenfield and Gardner, and provide weekday bus service along Route 2/2A. The G-Link route includes stops in Orange, Gill, Erving, and Athol (and Turners Falls only upon request), and runs seven times each weekday. The route is operated by the Franklin Regional Transit Authority (FRTA). In Athol, the service connects to Montachusett Regional Transit Authority (MART) routes to Gardner and the intermodal transportation station in Fitchburg, which offers commuter rail service to the Boston area. The G-Link route was originally funded for three years (1997-2000) though the FRTA has so far managed to find funding to keep the route going. The ridership on the route continues to grow each year, with many riders using the bus service for transportation to and from work.

Another important transit service in Orange is Community Transportation Service (CTS), operated out of Athol. CTS is a dial-a-ride transit service available for workers to commute between their homes and their place of employment. Community Transportation Service also provides rides to Orange and Athol residents around town and from their homes to connection points with the G-Link route. CTS operates primarily during weekdays, but also provides workers with job transportation at night and on weekends. More employment opportunities and access to services within and outside of Orange have been made available to residents in the region through these transportation services.

In terms of other transportation modes within the region, the Guilford Rail System operates an east-west freight rail line service. With no public loading depot in Orange, the closest rail stations are located in Millers Falls in Franklin County and in Athol in Worcester County. Presently, there is no passenger rail service in Franklin County. The closest connection for passenger rail service for Orange residents is in Fitchburg in Worcester County.

In terms of aviation, there are two major international airports located with two hours drive: Logan Airport in Boston and Bradley Airport in Windsor Locks, Connecticut. Locally, there is the Orange Municipal Airport. The Orange Municipal Airport is a general aviation airport able to support some jet traffic and is the largest airport in Franklin County. On either side of the airport are Orange's two industrial parks. Aviation-based businesses located at the airport include aircraft maintenance, flight instruction and charter services. However, the most prominent business activity at the airport is the parachuting club. In the past, the airport has also been used as a site of concerts and community events. The recreational activities at the airport have been cited as an attractor of "out of town" visitors to the community.

Entrepreneurship and Business Development Resources

Economic growth is created through the development of new businesses and the expansion of existing businesses. In particular, resources to assist entrepreneurs are vital to help local businesses and cottage industries become established and grow. One advantage of locally based businesses is that they are more likely to stay in the area where they originated. Supporting locally owned businesses, local entrepreneurship, and linkages between local producers and retailers are a few ways to encourage local business development.

There are three financial institutions available in Orange. They are the large, statewide banks of Fleet Bank and BankNorth, and the Workers Credit Union, a Fitchburg-based institution. In addition to these traditional financial institutions, some public and non-profit organizations provide loan and business assistance programs. The Franklin County Community Development Corporation in Greenfield has programs available to assist startup and existing businesses with both loans and technical assistance. Also operating in the region is the Western Massachusetts Enterprise Fund in Greenfield, which offers loans and technical assistance to entrepreneurs, small businesses, and non-profits. Located within Orange is the Young Entrepreneurs Society, Inc (YES). This organization offers entrepreneurship and business skills training as well as micro-loan services to young adults. Since 1999, YES has helped a number of small, mostly services-based businesses to be established. On several occasions, the business planning activities begun by these young adults have encouraged parents and families to become entrepreneurs as well.

In addition to YES, three other economic and business development organizations are also based in Orange. The Orange Business Association promotes activities in downtown Orange. Another organization is the Orange Revitalization Partnership. While some of the efforts of this community development group have recently been scaled back from previous years due to funding considerations, the group continues to meet and develop ideas to enhance the business climate and vitality of Orange. One example of the partnership's efforts is the Orange farmers' market, which the partnership helped initiate and which now functions independently. Another organization, the Orange Economic Development Industrial Corporation (OEDIC), functions as the primary developer of municipally initiated industrial land development in Orange. This organization is responsible for the creation of the Randall Pond Industrial Park. In addition, the OEDIC offers consultation services to businesses on management and financing issues.

Technical and financial resources are also available on a regional scale. The North Quabbin Chamber of Commerce serves businesses and promotes tourism in Orange and the surrounding communities. The Franklin Regional Council of Governments operates a revolving loan fund for "brownfield" (potentially contaminated buildings and sites) clean-up projects in selected areas. The Franklin County Housing and Redevelopment Authority has extensive experience with downtown redevelopment and revitalization projects. The Franklin County Community Development Corporation offers technical assistance and manages a loan program that supports small business development.

Telecommunications

The telecommunications infrastructure and services available in Orange and the greater Franklin County region are often inadequate for present day business functions. Issues of reliability, affordability and access are significant obstacles for both large and small businesses. Access to affordable broadband and telephony services is stifled by the absence of regional competition in the telecommunications services sector. Telecommunications services are critical to attract and cultivate new employers as well as keep existing businesses competitive. Telecommunication services such as Digital Subscriber Lines (DSL) and T-1 class broadband allow for “always on”, high speed access to the Internet and private networks. As more business-to-business transactions are occurring electronically, this type of service is important for large manufacturers to communicate with their suppliers. For smaller businesses and at-home workers, affordable broadband access is important for efficient communication to retailers and clients.

Fortunately, some recent developments will improve the availability of broadband telecommunications. In January 2003, the incumbent telephone company, Verizon, advertised a DSL-class service to some Orange residents depending on where they lived. Also, the local cable television service provider, Warner Cable, has announced that they will offer their RoadRunner cable broadband business class service as well. Some areas of downtown and near the Randall Pond Industrial Park appear to have these services available. While these advances provide new opportunities for some businesses and residents, these services are not available everywhere in town. These new developments also do not address the T-1 class services required by larger scale or high Internet traffic volume businesses. Without competition and without network infrastructure improvements, T-1 class services remain limited in availability and are very expensive.

Municipal Tax Rate

In economic development terms, commercial and industrial areas are important for two reasons. First, they are the locales of economic activity in a community, which provide services and employment opportunities. Secondly, commercial and industrial properties are often quite valuable, and the taxes they generate every year can help pay for a significant portion of municipal service costs.

The amount of money needed to fund schools, highway maintenance, public safety, libraries and municipal government is always rising. Potential options for generating the necessary funding through new development must be examined carefully. While some types of development generate more tax revenue, they may also generate the need for more services. The process to determine whether a land use has a positive or negative fiscal impact is called a Cost of Community Services analysis.

In 1992, the American Farmland Trust (AFT) conducted a Cost of Community Services analysis for several towns in the region including Deerfield and Gill. The results of that study showed that in Deerfield and Gill, the protection of farmland and open space and

support of industrial and commercial uses and can be effective strategy for promoting a stable tax base. For example, the AFT study found that in Deerfield, for every dollar generated by farmland and open space, the municipal services required by that land cost approximately twenty-nine cents (\$0.29) resulting in a positive fiscal impact to the Town. In contrast, the study found that for every dollar generated by residential development, the municipal services required by that land cost one dollar and sixteen cents (\$1.16) indicating that the residential development costs more in terms of town services than it generates in tax revenues. For every dollar generated by commercial and industrial tax revenues, only thirty-eight cents (\$0.38) were spent by the Town in municipal services. It is important to note that this figure does not take into account other costs associated with commercial and industrial development, such as the potential for increased residential development due to new workers, increased traffic and noise pollution, the loss of open space, or the need to provide new recreational opportunities and services for new workers and residents.

In 1995, the Southern New England Forest Consortium (SNEFC) commissioned a study of eleven southern New England towns that confirmed the findings of the earlier AFT study. The study concluded that for southern New England towns, the conversion of open space for residential development is generally not advisable on a financial basis alone. The results also showed that the protection of farmland and open space not only plays an important role in protecting natural resources, but like commercial and industrial land, can also have a function in balancing the municipal tax base.

In recent years, the Town of Orange has had a consistently higher tax rate for industrial and commercial property than the nearby communities of Athol and Gardner, and a lower tax rate than Greenfield and Montague (*see Table 2-14*). Orange has participated in the Massachusetts Economic Development Incentive Program, which gives graduated tax credits for new or expanding business development that meets specific employment creation or retention thresholds. In Orange, thirteen certified projects were approved for Tax Increment Financing (TIF) agreements between 1995 and 2002. A TIF agreement allows the municipality and the certified project candidate to develop a property tax exemption based on the estimated value added through new construction or significant improvement. This tax exemption may be level or graduated, and is valid for a predetermined, finite number of years. Of the 13 certified projects in Orange since 1995, including seven in the Town's two industrial parks, over \$55 million of private investment has been leveraged, which has led to the estimated retention of 551 jobs and the creation of 157 more jobs. The use of this program has influenced several businesses in their decision to remain in or locate to Orange. It is important to note that the TIF property tax reductions affect the municipal tax revenues generated by these businesses and impact how the costs of community services are balanced within the community.

**Table 2-14: Residential, Commercial and Industrial Property Tax Rates, 1990 to 2003
(per \$1,000 of property valuation)**

Fiscal Year	Orange	Athol	Gardner	Greenfield	Montague*
1990	\$10.59	\$8.00	\$10.67	\$11.04	\$10.16 / \$15.71
1991	\$12.74	\$9.20	\$10.93	\$13.25	\$10.08 / \$15.91
1992	\$13.55	\$10.10	\$11.26	\$14.50	\$10.55 / \$16.71
1993	\$15.16	\$10.50	\$14.17	\$17.30	\$11.12 / \$17.09
1994	\$15.49	\$12.50	\$14.59	\$17.50	\$12.32 / \$19.08
1995	\$15.93	\$13.00	\$15.17	\$18.04	\$13.17 / \$19.75
1996	\$18.50	\$13.44	\$17.26	\$19.48	\$13.69 / \$20.49
1997	\$19.33	\$14.40	\$17.26	\$19.72	\$14.76 / \$20.12
1998	\$20.10	\$14.33	\$18.30	\$20.50	\$15.92 / \$21.00
1999	\$20.45	\$14.79	\$18.30	\$20.47	\$16.73 / \$22.08
2000	\$20.18	\$14.95	\$19.19	\$21.68	\$16.74 / \$22.26
2001	\$20.87	\$15.63	\$19.92	\$22.36	\$16.74 / \$22.31
2002	\$18.77	\$16.71	\$17.11	\$21.23	\$17.36 / \$22.90
2003	\$18.98	\$16.37	\$17.72	\$21.21	\$19.08/\$24.13

* The Town of Montague has a split tax rate. The first figure is the residential and open space land property tax rate; the second figure is the commercial and industrial land property tax rate.

Source: Massachusetts Department of Revenue, Division of Local Services.

Agriculture and Natural Resource Businesses

Farming and forestry in Orange clearly encompass aspects of the quality of life that the area provides for its residents. Open spaces, access to fresh produce, and the retention of some of the area's most significant historic farming structures and landscapes are some of the features people associate with the agricultural sector but often take for granted.

As discussed earlier, Orange had an increase in the number of workers in the agricultural and forestry sector⁶ in recent years. This is a promising trend for an industry that is diminishing in other areas of the nation. However, the future of agriculturally based businesses in Orange is not guaranteed. Encouraging the purchase of locally grown produce is one step in the right direction. Providing business development help to farms, forest product, and other natural resources based businesses of all sizes is another. Orange should identify ways to support the profitability of these operations. This can be done by either reducing their overhead costs (such as lowering their excise and property taxes), or by helping increasing their revenues. For example, Orange residents can help a vegetable farmer by increasing their demand and support for locally grown produce. Continued support for the local farmers market and similar activities, such as the Garlic & Arts Festival and the Seeds of Leadership (SOL) Garden project, are excellent examples of ways to achieve this objective.

Another way to expand the revenue potential of agricultural and forestry-based businesses is to increase the retail value of their products through additional processing, packaging or marketing. Creating "value-added" goods has been identified as a way for these businesses to increase their profit margin. To accomplish this, businesses should access the resources

⁶ It is important to note that agricultural sector data include farming, forestry, fishery and other natural resource based business activities. Within Orange, both farming and forestry operations are present.

and facilities available to support such an effort. Entrepreneurial training and technical assistance available through local, regional or state organizations is an important first step towards establishing a business plan for value-added products. Often the facilities and equipment necessary to process these value-added goods may be too capital intensive for individual farmers or forestry-based businesses. However, by networking and sharing resources, and supporting development and operation of regional facilities that are accessible to multiple users, local producers may be able to cost effectively add value to their products. One example of such a facility is the Western Massachusetts Food Processing Center in Greenfield, which has a USDA approved, commercial kitchen and professional staff that provides technical assistance in the manufacture of food products for a small fee.

Another way for the Town of Orange to support natural resource based businesses is to participate in the Massachusetts APR program to purchase the development rights of a farm parcel. The Town could offer a partial financial match to fund such purchases. The selling of development rights prohibits a farm owner from selling the farm for development, or otherwise converting it to developed uses, in the future, in exchange for reducing the parcel's property taxes. This type of program may work well in conjunction with activities to address future threats to farmland, such as the pressure upon farmers to sell their land for both residential and commercial/industrial development. By offering a partial financial match on behalf of these landowners, the Town could become an active participant in these land preservation programs.

The growth of agriculturally based businesses in Orange is not expected to significantly increase employment as much as would a large-scale manufacturer. However, the bolstering of businesses in this sector would increase the likelihood of retaining farming and forestry land, which compliments the rural landscape of Orange and does not adversely impact municipal property tax rates. At the same time, the success of locally based businesses, such as farms and forestry operations, allows for revenues to circulate in the area for a longer period of time. Efforts to retain business transactions in Orange and to encourage spending by visitors on local products will increase the local dollar circulation and wealth to the community.

Tourism

The tourism industry may act as a driver of economic development in two ways. The most apparent economic benefit is from visitors spending money on activities and services offered in town, and from encouraging local tourism-related enterprises, including those that promote the community's natural, historic, and culture resources. The development of stores, restaurants, lodging, and recreational service providers (such as tour operators) contributes employment opportunities and increases the amount of dollars earned and spent locally. A secondary impact of a vibrant tourism economy is that the same assets that are attracting visitors may also encourage revitalization and additional economic development.

There are various types of tourism that focus on different segments of the travel industry. For example, heritage and cultural tourism focuses on local history, artisans and museums.

Eco-tourism is another type of tourism and is based on promoting natural resources and outdoor recreation activities that are ecologically friendly. It is important that as Orange encourages economic growth and development, the community also works to preserve its local historic, cultural, recreational and natural resource assets which support tourism in the community, and which could be impacted by development projects.

According to the North Quabbin Chamber of Commerce, most visitors to the Orange and greater North Quabbin region are visiting friends and family, or grew up in the region. Visitors to the region generally come from metropolitan areas within a short car ride away, such as Boston, Springfield or Hartford. They are attracted to the North Quabbin area because of their ties to the region or because of the beautiful natural landscape and historic New England character. A special attraction in the area is the Quabbin Reservoir due to its scenic and recreational qualities and its unique history.

A regional effort is underway to use the area's natural assets to build a tourism industry. Recreation-based ecotourism is a way for Orange and the surrounding towns to diversify their economic base by encouraging a new market for small business creation while at the same time valuing and protecting the natural landscape. In 2002, the North Quabbin Ecotourism Task Force, led by the New England Forestry Foundation, developed a report to provide information about the potential for this ecotourism in the region. Ecotourist visits are often based on outdoor recreational activities, such as hiking, skiing, rafting, fishing, or hunting. Tour operators, equipment rental vendors, antique and crafts based stores, restaurants, and bed-and-breakfast lodging accommodations support this type of tourism. The North Quabbin Ecotourism Task Force report includes a market analysis and strategies to encourage the development of eco-tourism in the region.

Local proponents of ecotourism in the region are working to develop the regional identity and build the infrastructure needed to support this economic sector. One such initiative is the North Quabbin Woods project established by the New England Forestry Foundation. This project includes programs to educate landowners on sustainable forest management; market locally produced wood products; train forests guides; and raise community awareness of the potential benefits that result from sustainable use of local forest resources.

An important factor in the development of ecotourism, or any other type of tourism economy, is the emphasis on a regional approach. From the perspective of funding these development efforts, communities and businesses working together will be the most successful in accessing financial and marketing resources and using them most effectively. In addition, a region with varied activities and multiple attractions, and a cohesive marketing plan, will be most successful in attracting visitors.

Orange may position itself to take advantage of this opportunity by encouraging its town officials and businesspeople to participate in these regional efforts to promote tourism. In addition, any downtown revitalization plan for Orange would compliment and benefit from a more active tourist economy. An attractive downtown area for shopping and dining in Orange will encourage more visitors and tourism-related activities. As discussed previously,

a revitalized downtown area would also improve the overall quality of life for residents as well as influence business location and growth.

Summary of Economic Development Assets and Issues

From the information contained in this chapter, a brief listing of assets and issues for economic development in the Town of Orange has been assembled. This list is provided below in Table 2-15. These advantages and challenges should be considered and incorporated in recommendations for future action.

Table 2-15: Summary of Economic Development Assets and Issues

<u>Assets</u>	<u>Issues</u>
<ul style="list-style-type: none"> o Regional workforce available. o Affordable wages for businesses. o High participation rate in the labor force. o Agricultural and forestry sector employment growth. o Retention of good manufacturing jobs. o Tradition of manufacturing entrepreneurship. o Presence of two industrial parks. o Developable space available in the Randall Pond Industrial Park. o Three access points to Route 2 corridor. o Presence of the Orange Municipal Airport. o Access to regional business development resources. o Historic downtown center. o Plentiful natural and recreational resources, and local ecotourism potential. o Availability of transit services. o Ongoing adult education resources. o Improving broadband telecommunications options. 	<ul style="list-style-type: none"> o Decrease in younger workforce. o Higher drop-out rate of high school students, and lower proportion of college educated residents. o Lower wages paid to residents in region. o Higher local unemployment rates. o Less financial, insurance, real estate and technical service sector jobs. o Over dependence on manufacturing sector employment. o Under-utilized mill buildings, with potential environmental contamination. o High downtown commercial vacancy rate. o Route 2 corridor safety. o Currently limited broadband telecommunications infrastructure.

Potentially Suitable Locations for Future Commercial or Industrial Development

In order to promote economic development most effectively within the community, it is important for Orange to identify the locations that could be the most suitable for future commercial or industrial development. This section of the chapter discusses a methodology for identifying sites for future large-scale commercial and industrial development, besides the industrial parks, and the locations that were selected through this analysis. This section also discusses a similar methodology and analysis to assess which areas might be the most suitable for future smaller-scale businesses and commercial uses, such as small retail establishments and office uses.

Both methodologies start with the potentially developable land areas identified through the initial screening conducted as part of the Natural Resources and Open Space chapter (Chapter 1), and shown on the Land Use Suitability Map in that chapter. The areas that were removed from the potentially developable land coverage for the Land Use Suitability Map were areas with absolute constraints that would prohibit future development, such as areas with slopes in excess of 25 percent, and land that is permanently protected as open space.

In this section of the Economic Development chapter, additional screening criteria were used to identify the potentially most suitable areas for future development. These criteria are discussed below.

Potentially Most Suitable Areas for New Industrial or Large Commercial Development

Industrial or large commercial land uses could include an office park, a retail business larger than 5,000 square feet, or a manufacturing, materials testing, scientific research, or assembly work facility. The potentially suitable land areas for new industrial or large commercial development are located near transportation infrastructure and have slopes of 15 percent or less. They are also not situated near residential or recreational land uses, nor near historic, scenic, or environmental or open space resources with which they may not be compatible. Specifically, the potentially suitable areas meet the following criteria:

- They are included in the potentially developable areas shown on the Land Use Suitability Map.
- They have slopes of 15 percent or less. It is very challenging and often cost-prohibitive to create large-scale developments on slopes of greater than 15 percent.

- They are situated within a quarter-mile of an existing rail line, or with a half-mile of a major roadway or the Orange Airport. Major roadways have been defined to be those that are classified as Rural Principal Arterials or Rural Minor Arterials by MassHighway and that have an Average Daily Traffic (AADT) count of 5,000 cars or more. Roads in Orange that qualify as major roadways are the following: Route 2, Route 2A, Route 202, and Daniel Shays Highway.
- They are located within a half-mile of existing water and sewer services. Many industrial and large commercial uses require water and sewer infrastructure to comply with environmental regulations and to provide adequate protection for natural resources. Access to sewer infrastructure is particularly critical with respect to industrial uses to prevent hazardous materials from entering the groundwater. The area within a half-mile of current sewer and water services is shown on the Industrial/Large Commercial Development Suitability Map and is bordered by a thick red line. Not all of the area within this border could likely have water and sewer services in the future due to constraints such as slopes, and the costs of service extensions.
- They are not situated within 200 feet of existing residential land uses. Current residential land uses were determined from the 1999 MacConnell land use data. Residential land uses have the following MacConnell land use codes: 10, 11, 12, and 13. Locating industrial or large commercial uses closer than 200 feet to residential land could be detrimental to the quality of residential neighborhoods.
- They are not located within Zone II or Interim Wellhead Protection Areas. These areas surround the Town's public water supplies and include the sections of an aquifer from which a public well would be expected to draw during an extended dry period (up to 6 months) without precipitation. Land uses within wellhead protection areas can have an impact on drinking water quality.
- They are not currently used as farmland. It is important to protect current productive agricultural land in Orange. The identification of current farmland areas relies on the 1999 MacConnell land use data provided by MassGIS. Farmland uses have the following MacConnell land use codes: 1 (cropland), 2 (pasture), and 21 (perennials).
- They are not situated within areas that have been identified by the Natural Heritage Endangered Species Program (NHESP) as containing sensitive, rare, or endangered species. The NHESP has developed GIS data layers that show the Estimated Habitats of Rare Wildlife in wetland resource areas, the Priority Habitats of Rare Species, and the Core Habitats for Rare Species and Natural Communities. These sensitive habitat areas are considered unsuitable for large-scale industrial or commercial development.
- They are not located within the greenway identified in the Orange Open Space and Recreation Plan (2001). The greenway reflects the regional environmental corridors that were mapped for the Franklin County Regional Open Space Plan, and additional priority open space areas that were identified through the Orange Open Space Planning process.

Areas that meet all nine of the above criteria are shown on the Industrial/Large Commercial Development Suitability Map as being potentially suitable for this type of development. The areas that the Master Planning Committee considers potentially the most suitable for industrial or large commercial development are indicated on the map with red stars. Five sites for future industrial or large commercial development have been identified. Three of the sites are adjacent to the Orange Airport and Randall Pond Industrial Park. The other two sites are located north of East Main Street.

It will be essential for these locations to be investigated further before development of these areas is pursued. For each site, an engineering feasibility study will be needed to fully evaluate the site's development potential, possible environmental constraints, including wetlands issues, and the costs of extending water and sewer services as necessary. None of the sites are currently served by sewer lines and only one is served by town water lines.

Potentially Most Suitable Areas for New Small Business Development

For this discussion, small commercial development is considered any commercial use with a building footprint of 5,000 square feet or less. Such uses might include small offices or a small retail establishment. The Master Planning Committee has identified downtown Orange as the most suitable location for new small business development. The downtown has also been identified as the best place in Orange for mixed commercial and residential development. The downtown was historically and is still currently, an important center for civic, business, and residential activities. The downtown is also served by the FRTA's Link route, the FRTA's regional bus service that operates weekdays along Route 2/2A between Greenfield and Athol. In addition, the downtown has a number of structures and building lots that are presently underutilized or in disrepair. These sites could benefit from rehabilitation or redevelopment. The Master Planning Committee supports the idea of rehabilitating and redeveloping underutilized downtown locations and historic buildings, and promoting infill growth in the downtown, over development in open space areas. Infill development can help preserve Orange's open space and natural resources, and rural character, as well as the town's historic commercial structures. In addition, specific redevelopment projects downtown, especially high visibility projects, can help foster additional commercial growth and new business activity within the community.

Industrial/Large Commercial Development Suitability Map inserted here

Small Commercial & Residential Development Suitability Map inserted here

Economic Development Recommendations

The following recommendations for economic development are proposed to support Orange's principal economic development goals and objectives, and to promote new local job creation for residents.

- **Create a riverfront park and associated public boat ramp.**

The creation of a riverfront park was a recommendation of the Orange Open Space and Recreation Plan. A riverfront park would provide downtown greenspace for the community. The park could be used for outdoor community events and festivals, and could encourage the creation of businesses that would serve park visitors. Such businesses could include eateries and retail shops. A public boat launch at the park could help outdoor recreation and associated businesses such as boat and canoe rentals. Additional outdoor recreation opportunities could also tie into the community's interest in promoting recreational and heritage-related tourism. The new businesses created through the establishment of the riverfront park and boat ramp could provide jobs to people of diverse incomes and skills, and create new job opportunities for low and moderate-income residents. The riverfront park could also encourage additional revitalization and economic development downtown, which could further enhance job opportunities and options for residents.

- **Develop strategies for encouraging tourism-related businesses in Orange.**

Expanded tourism-related activities in Orange, and increased marketing of the Orange's and the region's attractions, could bring more visitors to Orange, and could complement other proposed business expansion. Centrally located within the North Quabbin region, Orange is ideally situated for attracting more recreational and heritage related tourism. The New England Forestry Foundation (NEFF) is working to revitalize the North Quabbin economy through initiatives that increase the public's access to the region's natural resources, and that promote local farming and forestry based businesses. Orange is working to obtain National Historic District designation for both the downtown and the North Orange village areas. National Historic District status is largely an honorary designation, and having a property or an area listed on the National Register of Historic Places generally does not place restrictions or conditions on individual properties. The creation of a National Historic District in Orange could help promote the Town's historic assets and attract additional tourism, as well as generate new tourist-based commercial activity. This, in turn, could then help protect the Town's historic and scenic resources from decline. Increased tourism in Orange could create new job opportunities for low and moderate-income residents.

- **Consider redeveloping a vacant building or site in the downtown for new commercial or residential use.**

Conduct an inventory of vacant and underutilized buildings in the downtown area with special attention given to any buildings that may have contamination issues. Those buildings identified to have potential contamination issues, should be assessed for their redevelopment potential and prioritized so as to make the best use of available financial and staff resources.

Any revitalization and redevelopment efforts should focus on ways to attract more people, both residents and visitors, to the downtown. The creation of a riverfront park and the promotion of Orange's historic, scenic, and natural resources can help with this. Strategies should also include ways to encourage mixed retail uses, including eating establishments and stores, which could potentially develop a large, core, base of customers who would travel to the downtown on a regular basis. Part of the downtown mix should also ideally include establishments that are open at nights and on weekends. Orange may want to conduct an analysis of existing successful businesses, and a market study to collect information on residents' buying habits, to assess which types of new businesses could be the most promising for filling downtown vacancies and promoting additional economic growth.

- **Create a community development planner town staff position to help promote economic development in Orange, coordinate redevelopment activities, and work with regional and town organizations and agencies on development initiatives.**

The community development planner's functions could include the following:

- Pursuing funding and grants for economic development initiatives and downtown revitalization and maintenance efforts;
- Coordinating and collaborating with local and regional economic organizations and agencies in Orange on development initiatives. These organization and agencies include, among others, the Franklin County Housing and Redevelopment Authority, Orange Revitalization Partnership, Orange Economic Development and Industrial Corporation, and the Orange Business Association;
- Identifying strategies to assist small business growth. These strategies may include improving access to technical assistance, develop networking opportunities, or creating business incubator space; and
- Promoting local-owned businesses and the Orange industrial parks.

- **Support the expansion of telecommunications services and the upgrading of other infrastructure to help local businesses remain competitive and to attract new businesses.** The telecommunications sector often offers good wages in comparison to many other sectors, and expanding telecommunications services in Orange could provide an opportunity for more residents, including those who are current unemployed or under-employed or working in low wage sectors, to earn a living wage. Helping local businesses remain competitive and promoting new businesses is important to help preserve employment opportunities for residents and to encourage the community's young adults to remain in Orange when they enter the workforce, instead of looking for jobs elsewhere.
- **Identify which technical skills are most in demand by Orange employers, and develop more opportunities and programs for residents to establish these skills.** Current businesses will be encouraged to remain in Orange, and new businesses will be encouraged to relocate to Orange, if their technical staffing needs can be met using local or regional workforces. It is important that outreach to local businesses be conducted to better understand what their staffing needs are. It is also essential that additional programs and opportunities be developed to increase the job skills and the educational attainment of the present workforce. The Ralph C. Mahar Regional High School has a higher drop-out rate (5.6%) than the state average (3.5%) (2001). Additionally, as discussed earlier, only 15 percent of Orange residents have earned a four-year college degree or higher. Greater skills training and education are essential to help low and moderate-income residents find better jobs with higher wages and more benefits. Programs to increase job skills could include continuing education and technical training courses taught at an in-town or nearby location, and expanded internship and apprenticeship opportunities through local businesses.
- **Develop performance standards for commercial uses that address noise, lighting, traffic, and other factors, and utilize these standards as criteria for determining which uses should be allowed in different areas.** The development of performance standards could help ensure that new businesses do not impact the community and its character in adverse ways. Performance standards could also help promote commercial uses with low impacts in areas where they are currently not allowed, and assist the Town of Orange with expanding its commercial base and in-town job opportunities.