

SECTION 3

COMMUNITY SETTING

The Town of Whately contains rural landscapes that have been established, developed, and formed by its human inhabitants over thousands of years. Planning for open space in Whately must consider the complex relationships between people and the open spaces and natural resources upon which they depend. If development occurs without consideration for natural resources, such as drinking water supplies, the quality of life for current and future generations of Whately residents could be diminished over time.

A. REGIONAL CONTEXT

The Town of Whately, an historic agricultural and residential community, is the southernmost town in Franklin County in western Massachusetts. It is bordered by Hatfield to the south, Williamsburg to the southwest and west, Conway and Deerfield to the north, and separated by the Connecticut River from Sunderland to the east. Whately is 11 miles south of Greenfield and 99 miles west of Boston. The town encompasses a geographic area of 20.66 miles and lies within the heart of the Pioneer Valley.

Within its boundaries, the Town of Whately contains two contrasting landscapes: a flat plain stretching between the Connecticut River and the Mill River in eastern Whately, and high hills with valleys carved by brooks in the western portion of town. The Connecticut Valley Lowland has a level, uniform topography, with deeply buried bedrock, and primarily supports agricultural land uses. The Western Highland physiography is comprised of rugged topography, shallow bedrock, and supports forested woodlands. The predominant mountains in Whately are Mount Esther, Chestnut Mountain, Dry Hill to the west of the Northampton Reservoir, and four hills south of Williamsburg and Webber Roads.

Whately is located entirely within the Connecticut River Watershed. Historically, the river played important roles in the transport of goods to markets in Boston, Connecticut and New York. The Mill River bisects the town, flowing north to south, and is a subwatershed of the Connecticut River Basin. As a result of Whately's abundant water resources, the neighboring towns of Deerfield and Northampton take their water from Whately's two largest streams, West Brook and Roaring Brook. In the future, if adequately protected and enhanced, these rivers and waterways may once again unite the region through the establishment of continuous greenway networks.

Whately is conveniently accessed from the primary north/south transportation corridors in western Massachusetts, I-91 and Routes 5/10. As Whately is bordered by the Connecticut

River to the east and the hills to the west, the primary east-west transportation routes are local roads.

Whately's location on the Connecticut and Mill Rivers has resulted in its settlement first as an agricultural center in the 17th century, then its development as a manufacturing center in the 18th and 19th centuries. Its close proximity to a key north/south transportation route and to major employment centers in Franklin and Hampshire counties has led to increasing development pressures in the latter part of 20th and the beginning of the 21st centuries. Throughout the centuries, however, the Town has maintained its historic ties to farming, with approximately 2,700 acres (20 percent) of the Town's total area, continuing to be devoted to agricultural uses.¹

In order to plan for the protection of open space and natural resources in the Town of Whately, residents should consider the role natural resources play across the region. The character of the landscape in Whately is dominated by the Connecticut River watershed; large blocks of dense, contiguous forestland; and farms located in the prime soils in the fertile valleys and uplands. Each of these characteristic landscapes is discussed in detail in Chapter 4, Environmental Inventory and Analysis. The presence and relatedness of these significant resources present both opportunities and challenges to open space and recreation planning for Whately.

B. HISTORY OF THE COMMUNITY

The information in this section was taken from the official Town website, from the Community Profile on the website of the Department of Housing and Community Development, and from the Massachusetts Historical Commission website.

Whately was settled in the 1600's, in an area along the Connecticut River that belonged to the Norwottucks, or Fresh Water Indians, under Chief (Sagamore) Quonquot. Originally part of Hadley, the land in Whately was purchased by Hatfield in 1695 from Quonquot's widow and children, by a deed which still exists.

Whately was incorporated on April 24, 1771, not long after the 55 people living there petitioned for separation from Hatfield because of the long distance they lived from the center of town. Hatfield had agreed to set off the district at their town meeting in May, 1770, and the boundary lines were already carefully drawn and agreed upon. The original draft of the Act of Incorporation passed through its many readings in the House of Representatives and received consent with no name. The original papers show the name of the town was inserted by Governor Thomas Hutchinson in honor of his British friend in Parliament, Thomas Whately, from whom he had received much political help. The town held its first town meeting May 6, 1771 at the house of Daniel Morton, innkeeper. The First Congregational Church was formed on August 21, 1771, with 19 men, 25 women and, listed separately, one slave. The first pastor was Reverend Rufus Wells from

¹ MacConnell Massachusetts GIS Land Use Coverage data for 1999.

Deerfield. Many of Whately's first citizens were descended from the people who settled Hadley and Hatfield. Among them were Lucius Allis, Samuel Baldwin, Robert Bardwell, Samuel Dickenson, John Field, David Graves, Richard Morton, Moses Sanderson, David Scott and John White.

Early settlers grew crops on the fertile valley and uplands, hunted in the forests, and built mills along the many brooks. Pits of red clay common to most New England towns had enough of granite and ferrous deposits to make good bricks and to provide material for twenty-one potters in Whately between 1778 and 1861. Beds of lead, potash, umber, and sienna supplied incomes for many in the late 1800's. Abundant streams allowed the development of numerous mills in the 18th and 19th centuries, first of grist and sawmills, later of woolen and furniture mills producing items such as chairs and coffins. Whately was also the site of the first gin distillery in the state.

Whately's three by six-mile area covers some of the most fertile Connecticut Valley land in New England, and is one of the few areas where the finest textured, truest flavored Sumatra tobacco could be grown north of Indonesia. Tobacco has been a cash crop since the mid-1800's, and was a particularly large source of income and a way of life in this area from the 1940's through the 1960's. Agriculture is still a vital element of the economy; in addition to tobacco, other important crops include vegetables, nursery plants, apples, berries, and maple syrup. Whately's farms today include innovative institutions such as Nourse Farms, renowned as a small fruit nursery, and Nasami Farm, home to the New England Wildflower Society. In addition, Whately is home to a significant acreage of Certified Organic vegetable farms.

Whately has two National Register Historic Districts, both of which were established in 2003. The first of these is the Whately Center Historic District which runs along Whately's main street, Chestnut Plain Road. This district consists of historic buildings such as the Town Hall and the Congregational Church, as well as many historic houses noted for their Federal and Georgian architecture. With its large trees set back from the road, Chestnut Plain Road is said to be one of the finest main streets in New England. The district is significant for a broad range of historical uses including agricultural, commercial, government/civic, institutional and residential. The second National Register Historic District is located in West Whately. This district is notable for its historical agricultural and residential uses. Buildings in this district are significant for their Greek Revival and Federal architecture.

Overall, the Massachusetts Historical Commission lists over 291 areas, buildings, objects and structures on Whately's inventory of significant historical resources. These include historic homes, mill buildings and facilities, bridges, school houses, streetscapes, burial grounds, churches, Paleo Indian archaeological sites, and many agricultural properties and structures. Some, but not all, of these listings are located in the two Historic Districts. A number of the most significant of these sites are described in greater detail below in Section 4, subsection F, Scenic Resources and Unique Environments. (*See also the Scenic Resources and Unique Environments Map at the end of Section 4.*)

C. POPULATION CHARACTERISTICS

In order to identify the open space and recreation needs of the community, it is essential to know about the people who call Whately their home. Therefore the size, age, density, income, and occupations of the population will be discussed so that informed decisions may be made regarding the type, quantity, location and level of future investments in open space and recreation areas and facilities.

C.1 Demographic Information

According to the 2000 U.S. Census, the Town of Whately had a population of 1,573 people as of April 1, 2000 (*Table 3-1*). This represented a 13.7 percent gain in population from the previous Census survey in 1990 and a 36.5 percent increase since 1970 (*Table 3-2*).

Table 3-1: Total Population from 1970, 1980, 1990 and 2000

Geography	1970 Population	1980 Population	1990 Population	2000 Population
Whately	1,145	1,341	1,375	1,573
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 – 1970 Census, 1980 Census, 1990 Census STF3A, and 2000 Census SF3

Table 3-2: Population Change from 1970 to 2000

Geography	1970-1980 Change	1980-1990 Change	1990-2000 Change	1970-2000 Change
Whately	17.1%	2.5%	13.7%	36.5%
Franklin County	8.6%	9.0%	2.1%	20.8%
Massachusetts	0.8%	4.9%	5.5%	11.6%

Source: U.S. Census Bureau – 1970 Census, 1980 Census, 1990 Census and 2000 SF3 Census

The population in Whately has grown in varying degrees each decade since 1970. From 1970 to 1980, the population in the Town of Whately grew by 196 people or over 17 percent (*Table 3- 2*). From 1980 to 1990, the Town had an increase of 34 more people, a 3 percent increase. From 1990 to 2000, the Town continued to grow at a rate of 14 percent, with an increase of 188 residents. In comparison, Whately has had a greater overall rate of population growth between 1970 and 2000 than both Franklin County and the state of Massachusetts.

According to the Franklin Regional Council of Governments’ 2000-2025 Population Projections developed as part of the 2003 Regional Transportation Plan, the Town of Whately will experience an increase in population during the twenty-five year period from 2000 to 2025. FRCOG projects the town will gain 497 residents, which would be an increase of nearly 32 percent over the current population. The county’s population is expected to increase by 21 percent during the same time period.

If we assume Whately could experience a 32 percent increase in population by the year 2025, how would this translate into demand for open space and recreational resources? Would these additional residents be young, middle-aged, or elderly and, what would be the

age distribution of the population in 2025? How could these changes in population impact demand for open space and recreational resources?

According to the U.S. Census 2000 General Demographic Characteristics shown in Table 3-3 below, the Town of Whately experienced decreases from 1990 to 2000 in the proportion of the population under 9 years of age, while the proportion of young adults from 10 to 19 years of age increased. For the age group from 20 to 24 years old, there have been consistent decreases in the proportion of these individuals in relation to the total population in each region. While the exact percentages may be slightly different, the Town of Whately and Franklin County share similar age distribution patterns. This is also in accordance with national population trends.

Table 3-3: Age Distribution in 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
Whately								
1990	1,375	13.6%	10.9%	5.5%	36.9%	20.1%	8.1%	5.0%
2000	1,563	10.3%	13.4%	4.9%	30.8%	27.1%	7.3%	6.1%
Franklin County								
1990	70,092	14.5%	12.6%	6.4%	34.2%	17.7%	8.2%	6.3%
2000	71,535	11.7%	14.1%	5.5%	28.4%	25.9%	6.7%	7.6%
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%	31.4%	22.3%	6.8%	6.8%

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

The traditional work force age groups are the 25 to 44 age range and the 45 to 64 age range. Each of these age groups is likely to have a greater interest in specific amenities and services that will influence their desire to remain in or move to the Town of Whately. The 25 to 44 year olds are more likely to be examining a community’s real estate options, and daycare and early educational systems for their children. In contrast, the age group from 45 to 64 years of age will more likely be considering educational opportunities for their older children and future retirement options. In Whately, there was a considerable decrease in the distribution of people in the 25 to 44 year age group and a dramatic increase in the distribution of 45 to 64 year olds. This increase in the older age cohort represents the aging of the “Baby Boom” generation.

The 65 to 74 year age group and the 75 year and over age group represent a relatively small portion of the total population, but these age groups may have an increasing role in the work force than in previous decades. As the Baby Boom generation reaches retirement age, job vacancies will occur. However, postponement of retirement for financial, career or other personal reasons is increasing. This age group may be apt to postpone retirement by reducing their hours or start in a new career direction, such as consulting or a shift into a new occupation. Often members of this age group can be a valuable resource of experienced, part-time workers. As will be discussed further in this chapter, there is a trend for increases in self-employed workers and home-based workers.

If the relatively large cohort of older (45-64) working-aged residents were to continue to reside in Whately, it could result in a significant population of individuals in the older age cohorts in ten to twenty years. Whether or not retiring residents continue to reside in Whately will impact the demand for elder services and recreational opportunities, such as accessible walking paths, and arts and leisure programs. Older residents with grown children may be tempted to move to an area with lower residential property taxes and more in-town services. This could create a supply of available housing in Whately, which could be filled by young families with children that would result in increased education costs and different recreational needs, such as tot lots and more active sports programs. Residents of all ages will need recreational facilities and programs that provide safe spaces for recreating as well as access to open space.

A large amount of Whately's land is devoted to agriculture and open space, resulting in a relatively low population density of 76 persons per square mile. This figure has fluctuated along with the population trends reported above, representing an overall increase of 38 percent since 1970 when it was 55 persons per square mile.

Identifying the best location for the development of new open space and recreation resources should consider where the concentration of population will occur and which parts of the local citizenry require specific needs. As will be seen in Section D, Growth and Development Patterns, future growth depends in large part on zoning, slopes, soil and groundwater related constraints, and on which lands are protected from development. Town officials could identify key parcels that might be future parks and walking trails that are close to the current distinct neighborhoods and/or areas that could be later developed for residential uses. Officials could be looking for opportunities to conserve land in Whately that protects valuable scenic and natural resources and provides public access to trail networks and open spaces.

Whatever the generational make up of the future community, recreation and open space needs may change over time. What would Whately's response be to these potential increasing and changing needs? How can these services and facilities be created in an inexpensive manner for both the town and the residents? The answers to these questions may depend in part on the current and potential economic well being of the Town of Whately and its residents.

C.2 Economic Wealth of Residents and Community

Measures of the income levels of Whately's residents as compared to the county and state are helpful in assessing the ability of the citizenry to pay for recreational resources and programs, and for access to open space. There are three statistics from the decennial Census that reflect how well residents are fairing in the regional economy (*see Table 3-4 below*). Using these statistics, it may be noted that the residents in the Town of Whately are earning higher incomes than residents in the County and the State. One such measure is per capita income, which is determined by dividing the total amount of income earned in Town by the number of

residents, including portions of the population that might not be generating income such as children and the elderly. The Whately per capita income reported for 1999 was \$27,826, which was higher than both the County and State figures of \$20,672 and \$25,952, respectively. In fact, the Whately per capita income was third highest of the twenty-six towns of Franklin County.

Median household income is a better statistic for describing the distribution of income. Median income figures describe the middle statistic in a data set, which is unaffected by any extreme numbers (either the very wealthy or very poor) from influencing the overall figure. Median income data relates information about families as well as individuals living alone. The median household income for Whately was \$58,929 in 1999, which was much higher than the County (\$40,768) and the State (\$50,502) figures. The Whately median household income in 1999 was the third highest of the twenty-six towns in Franklin County.

Table 3-4: Per Capita Income, Median Household Income, and Percentage Below Poverty Level in 1999 for Whately compared to Franklin County and the State

Geography	Per Capita Income in 1999	Median Household Income in 1999	Individuals Below Poverty Level*
Whately	\$27,826	\$58,929	3.0%
Franklin County	\$20,672	\$40,768	9.4%
Massachusetts	\$25,952	\$50,502	9.3%

* For whom poverty status was determined.

Please note that income data was reported for the previous year of when the Census survey was taken; in this case 1999.

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

Table 3-4 includes another way to describe a community’s income and economy, the poverty rate. Poverty status is established using federal income thresholds that vary according to family size and composition. Individuals are then determined to have income levels above or below these thresholds. In Whately, 3.0 percent of residents for whom poverty status was determined (for Whately, this was 99 percent of the entire population), were living below the poverty level in 2000. This poverty rate was significantly less than in the County (9.4%) and State (9.3%).

Although Whately’s resources today consist of both its people and its natural landscapes, the status of its finances could be affected by an interdependent relationship that exists between the two. The costs of the community services provided to residents are paid for with the tax revenues generated by different kinds of property, both developed and undeveloped. Some developed uses such as housing often require more services including education and road maintenance. The costs associated with one household are rarely paid for by the revenues generated by that same property. One reason that towns encourage economic development is to have another type of property in town, other than residential, to share the tax burden. Protected open space, on the other hand, can cost towns very little in community services, provide a modest amount of tax revenues, and reduce the amount of housing that can ultimately occur in town. This relationship is explored in more detail below in subsection D, Growth and Development Patterns.

C.3 Employment Statistics

Employment statistics like labor force, unemployment rates, numbers of employees, and place of employment are used to describe the local economy. Labor force figures can reflect the ability of a community to provide workers that could be employed by incoming or existing businesses. Unemployment rates can show how well residents are fairing in the larger economy while employment figures describe the number of employees in different types of businesses. Employment can be used as a measure of productivity. The number of people employed in each business can be used to determine the types of industries that should be encouraged in town. The town may decide to encourage business development to create more jobs and as a way of increasing taxable property values, which can help pay for municipal services and facilities, including recreational parks and programming as well as protected open space.

C.3.1 Labor Force: Whately residents that are able to work

This section features employment information released by the Massachusetts Division of Employment and Training (DET). DET data are derived from statistical sources such as federal annual surveys and the unemployment insurance program. The labor force is defined as the pool of individuals who are 16 years of age and over, and are either 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. The unemployment rate describes the percentage of people in the labor force, who are presently not employed, but are actively seeking employment in a given time period. This statistic is often used as a gauge of economic prosperity or distress. Rates of unemployment may be influenced by an overabundance, or a drastic decline, in the number of employment opportunities in an area. It is important to note that the unemployment rate does not reflect the issue of “underemployment,” individuals with jobs without benefits or individuals working multiple jobs. In 2005, Whately had the low unemployment rate of 2.9 percent, which was much lower than the Franklin County unemployment rate of 4.2 percent and the state unemployment rate of 4.8 percent. The higher unemployment rates in Franklin County indicate a regional labor force that could be accessed for new or expanding Whately business ventures.

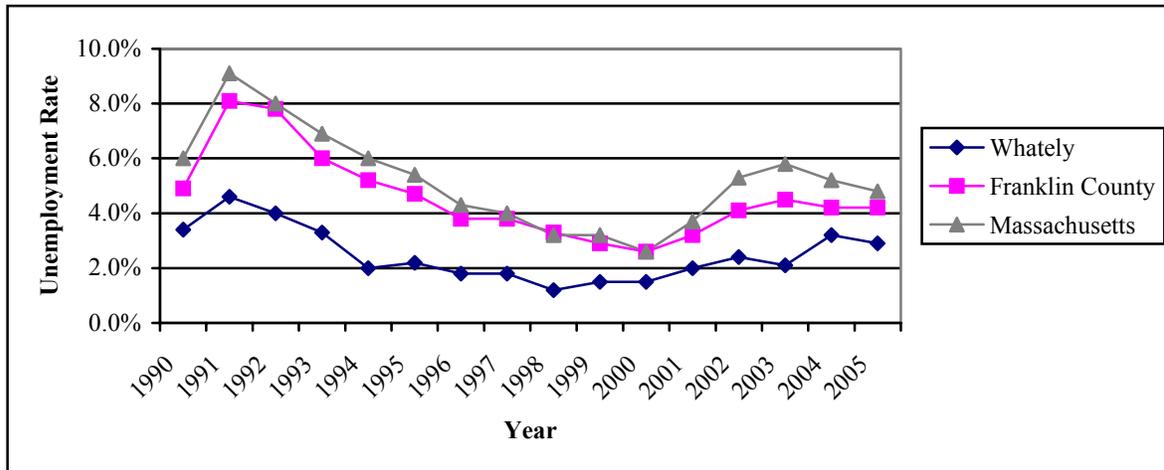
Table 3-5: Labor Force and Unemployment Data, 2005

Geography	Labor Force	Employed Persons	Unemployed Persons	Unemployment Rate
Whately	976	948	35	2.9%
Franklin County	39,827	38,162	1,665	4.2%
Massachusetts	3,364,500	3,200,000	161,500	4.8%

Source: Massachusetts Division of Employment & Training, ES-202 Data, March 2006.

From 1990 to 2005, the unemployment rate for Whately residents has consistently been lower than the unemployment rates of Franklin County and the state. However, at the same time, the unemployment rate of Whately residents has reflected trends in the greater economy, as demonstrated by the highs and lows in Figures 3-1 and 3-2.

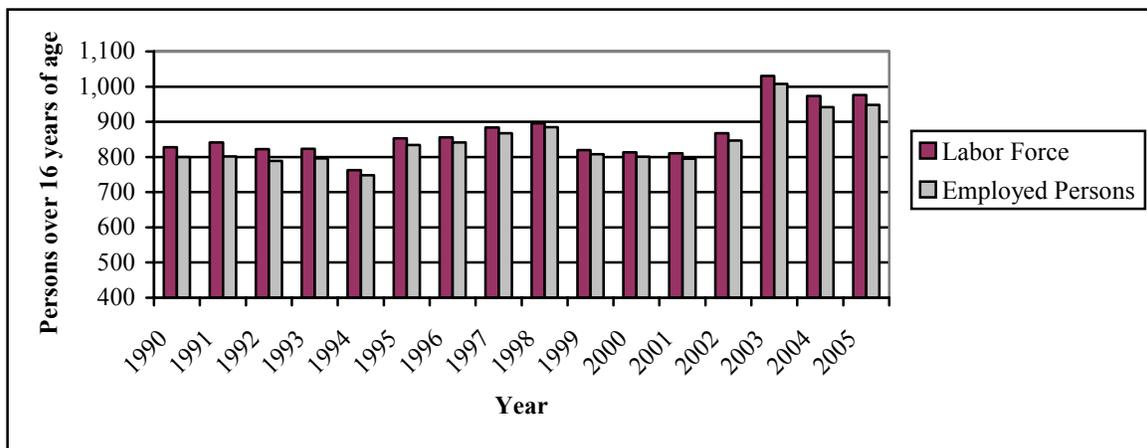
Figure 3-1: Unemployment Rates, 1990 to 2005



Source: Massachusetts Division of Employment & Training, ES-202 data, March 2006.

As Figure 3-2 demonstrates, from 1990 to 2005, the Whately labor force and employed residents grew overall. Between 2002 and 2003, the size of the labor force and the number employed increased greatly. Generally, increases in the labor force result from a combination of increases in the number of residents’ participating in the labor force and overall population growth in a community. As of 2005, Whately’s labor force was 976 with 948 people employed.

Figure 3-2: Labor Force and Employed Persons in Whately, 1990 to 2005



Note: Y-axis scale starts at 400 persons.

Source: Massachusetts Division of Employment & Training, ES-202 data; March 2006.

C.3.2 Industry Sectors and Employment

An important element of the employment profile is the type of work done by residents. This section reviews employment trends by industry sectors and occupations as well as the type of employer (such as a private or government employers, or self-employed workers) of Whately residents. The Census Bureau has identified 13 distinct employment sectors that represent different economic industries, such as manufacturing or retail trade. Occupation data relates to the type of employment of Whately residents, regardless of where they may be employed.

The Massachusetts DET also collects data on occupation by sector in each town for all persons employed in town, regardless of where they live. However, so much of this data for Whately is suppressed for confidentiality reasons that the data cannot be relied upon to give a meaningful picture of employment in town.

According to 2000 Census data, the majority of Whately workers were private wage and salary workers. However, the percentage of such workers in Whately was lower than in the county and state. The percentage of Whately residents who worked for a governmental entity or were self-employed was greater than the county and state averages. While it is not uncommon for rural areas to have higher proportions of workers in these two classes of workers, Whately’s percentage of self-employed workers is very high. An important note with respect to government workers is that this category of worker includes employees at the University of Massachusetts in Amherst.

Table 3-6: Class of Worker for Whately Residents, 2000

Geography	Total Employed *	Private Wage and Salary Workers	Government Workers	Self-employed Workers**	Unpaid Family Workers ***
Whately	934	65.6%	20.0%	14.3%	0.0%
Franklin County	37,577	70.5%	19.3%	9.8%	0.3%
Massachusetts	3,161,087	80.0%	13.5%	6.4%	0.2%

*Employed civilian population 16 years of age and over.

** Self-employed workers are in their own, non-incorporated business.

*** Unpaid family workers are individuals who work 15 or more hours without pay in a business or on a farm operated by a relative.

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

The employment profile for Whately is indicative of the employment opportunities available in the community and in the region. As indicated by 2000 Census data, the largest sector of employment for Whately residents is educational, health & social services, with 27.9 percent of all workers (*Table 3-7 on the following page*). This is understandable given that there are educational institutions located nearby, such as the University of Massachusetts in Amherst, Smith College in Northampton, and private and public secondary schools in Deerfield. The towns of Northampton, Amherst, and Deerfield are also some of the top employment destinations for Whately residents.

The second largest employment sector of Whately residents is manufacturing. Whately has a few small manufacturing sector businesses as well as the primary manufacturing facility for the Yankee Candle Company. The Yankee Candle Company is the largest employer in Franklin County with manufacturing, retail, and office headquarters facilities located in Whately and Deerfield. Whately residents are also in convenient commuting distance to the several manufacturing employment centers, including Deerfield and Greenfield.

Due to easy access to I-91, the primary north-south transportation corridor for western Massachusetts, Whately residents are able to commute easily to several major employment centers. Ease of commuting, combined with the high quality of life experienced in Whately, are just two factors that may contribute to the high proportion of professionals and management services workers living in Whately. There are a higher percentage of residents working in this sector than compared to the county.

Table 3-7: Employment of Whately Residents by Sector, 2000

Employment Sector	Whately	Franklin County	Massachusetts
Educational, health & social services	27.9%	30.4%	23.7%
Manufacturing	12.3%	15.0%	12.8%
Professional, scientific, management, administrative, & waste management services	9.7%	6.4%	11.6%
Construction	9.6%	6.0%	5.5%
Retail trade	9.3%	11.0%	11.2%
Public administration	8.2%	4.4%	4.3%
Arts, entertainment, recreation, accommodation & food services	5.2%	6.5%	6.8%
Finance, insurance, real estate and rental & leasing	4.3%	4.1%	8.2%
Agriculture, forestry, fishing and hunting, & mining	4.2%	1.8%	0.4%
Other services (except public administration)	3.2%	4.8%	4.4%
Wholesale trade	2.9%	2.8%	3.3%
Information	1.6%	2.6%	3.7%
Transportation & warehousing, and utilities	1.4%	4.2%	4.2%
Total Employed*	934	37,577	3,161,087

*Employed civilian population 16 years of age and over.

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

Industries with higher percentages of Whately residents working in select sectors than those found in the county and the state include construction, public administration and agriculture. The higher percentage of construction workers may be related to the fact that there are several contractor businesses located in Whately. Businesses that rely on transporting people and goods to provide services are well served by Whately’s access to Routes 5/10 and I-91. The higher proportion of residents working in public administration may be due to the number of residents working at various non-profit or governmental organizations in the Pioneer Valley area. The higher proportion of residents working in the agricultural businesses is a reflection of the farms and agriculture- and forestry-related businesses that successfully remain in operation in Whately.

Another perspective of the employment profile is the occupation of residents. The employee’s occupation describes the type of work they do, and not the industry that their work serves (for example, the plant manager at a factory has the occupation of management but is employed in the manufacturing sector). The occupational employment profile for Whately indicates a high percentage of management, professional & related workers, which is not typical of small, rural communities (*Table 3-8 below*). This trend could be related to Whately residents’ high education levels. Whately residents also tend to higher income levels relative to the county and state. Whately has a relatively high percentage of workers in construction, extraction & maintenance jobs and farming, fishing & forestry jobs.

Table 3-8: Employment by Occupation of Whately Residents, 2000

Geography	Total Employed *	Management, Professional, & Related	Sales & Office	Service	Construction, Extraction, & Maintenance	Production, Transport & Material Moving	Farming, Fishing & Forestry
Whately	934	43.1%	20.4%	14.6%	11.5%	8.2%	2.1%
Franklin County	37,577	35.3%	23.2%	15.5%	9.8%	15.6%	0.7%
Massachusetts	3,161,087	41.1%	25.9%	14.1%	7.5%	11.3%	0.2%

*Employed Civilian Population 16 years of age and over.

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

As of 2001, 95 percent of all private-sector businesses in the county had less than 50 employees. It is estimated that only two employers in Whately have greater than 50 employees, the Yankee Candle Company and Deerfield Urethane, though specific employment figures are unavailable. The Yankee Candle Company's manufacturing facility on Christian Lane was purchased after Merillat Industries closed in 1994. The manufacturing facility is one part of the multi-campus business, which includes the flagship store and corporate office headquarters in Deerfield. In total, Yankee Candle Company employs more than 3,500 people in over 245 retail stores as well as in its headquarters' offices and manufacturing facilities. The flagship store has been identified as the second largest tourist attraction in Massachusetts, after the Freedom Trail in Boston.

The other major employer in Whately is Deerfield Urethane, located in the Whately Industrial Park. According to company literature, Deerfield Urethane is a world leader in the manufacturing of thermoplastic polyurethane blown film and flat die sheet. Their products are used for a variety of applications including automotive, healthcare, packaging, and security.

Other large employers in Whately include Whately Elementary School and the Whately Inn. In addition, some of the farms may have a large number of employees during peak harvest times. However, most businesses in Whately employ less than 20 people.

Commuting pattern data of the regional labor force are used to garner an understanding of where Whately residents work and where residents from neighboring communities are employed. According to the U.S. Census Bureau, the top employment destinations for Whately residents are Whately and Northampton, each with over 17 percent of total workers. Amherst and Deerfield are also major work destinations for Whately residents at 12.7 and 10.3 percent, respectively. Five percent of Whately workers work at home, while 27 percent of workers commute between 10 and 19 minutes to work and 30 percent commute between 20 and 29 minutes.

D. GROWTH AND DEVELOPMENT PATTERNS

Growth and development in a community can often reflect its history and values. From the first years after Whately was permanently settled by Europeans, residents were involved in agricultural pursuits as well as the manufacture of bricks and pottery, reflecting the natural resources available to them. As mills took advantage of water power in the Mill River and other waterways, activities broadened to include industries like woolen and furniture manufacturing. Trails that began as Native American travel ways between encampments and hunting grounds were adopted by colonists and later improved to their present paved state. Farms spread throughout the Town along floodplains of the Connecticut and Mill Rivers to take advantage of the prime soils there.

Historically, residents built homes in the center of Town along Chestnut Plain Road and in West Whately. The Town has always had large areas dominated by forests and significant percentages of the land area dedicated to agricultural uses. Over time, the Town has lost cropland and forestland to development of new homes. Most of this development in recent

decades has been individual houses scattered across Whately on lots with frontage on local roads.

The following sections inventory the current patterns and trends in land use in Whately. The effects of these patterns on Whately's natural and cultural resources are reviewed. This is followed by an assessment of the potential for future development based on current land use patterns and zoning, known as a build-out analysis. A build-out analysis estimates the maximum amount of development which could be realized in the future assuming current zoning and available undeveloped land. It can also be used to estimate the number of new homes, miles of new roads needed, gallons of additional drinking water supply required, and the number of tons of municipal waste generated. Following this, the costs of community services for residential, industrial development and farm and forestland in Whately are analyzed.

D.1 Patterns and Trends

Whately originated as compact, linear village centers surrounded by rich agricultural lands and forests. With 20 percent of its land area actively devoted to agricultural use today, Whately can still be considered an agricultural community despite significant loss of farmland to residential development in recent years.

The acreages of selected natural resources and agricultural land uses in Whately are listed in Table 3-9 on the following page. This data was taken from the 1971, 1985, and 1999 MacConnell land use data layers that were produced by the Department of Forestry and Wildlife at the University of Massachusetts at Amherst using aerial photographs taken in those years. The most obvious characteristic in the town is the dominance of forestland. Overall, forestland represents 66 percent of the total land area in Whately. In addition, farmlands (croplands and pasture) comprise 20 percent of land use. This high percentage of agricultural land use is made possible by the deposits left by glacial Lake Hitchcock and centuries of flood silts left in the Connecticut River floodplain. Surface water and nonforested wetlands together comprise 374 acres or nearly 3 percent of the Town's total land area. These resources include the Connecticut and Mill Rivers, West Brook, the Northampton Reservoir, the Whately Glen, associated brooks and wetlands, beaver ponds, and the manmade ponds constructed along Interstate 91. The final resource category of open land, comprised of abandoned fields and orchards, represents another 2 percent of the total land area in Town.

A comparison of the types of land uses in Whately and the changes in their acreages between 1971 and 1999 demonstrates which resources are most susceptible to development pressures (*see Table 3-10 on the following page*). During this 28-year period, Whately lost 224 acres of cropland and 212 acres of forestland. During the same time period, 232 acres of land were converted to residential parcels of a half-acre or larger. This residential development occurred primarily along Long Plain Road, Westbrook Road, Masterson Road, Laurel Mountain Road, Chestnut Plain Road, Conway Road, Webber Road, and North Street. Large lot residential development has been the dominant pattern for land conversion in Whately and it appears that this trend is likely to continue.

Table 3-9: Natural Resources and Agricultural Land Acreage in Whately in 1999

Resource	Acres	Percentage of Total Area
Forest (with forested wetlands)	8,723	66.0%
Cropland	2,520	19.0%
Surface Water	321	2.0%
Open Land (abandoned fields & orchards)	273	2.0%
Pasture	167	1.0%
Non-forested Wetlands	53	0.4%
Total Land Area in Whately	13,227	

Source: MacConnell Massachusetts GIS Land Use Coverage, 1999.

Table 3-10: Change in the Acreage for Different Land Uses in Whately, 1971-1999

Land Use	1971 Acreage	1999 Acreage	Change in Acreage 1971-1999
Forestland*	8,935	8,723	-212
Cropland	2,744	2,520	-224
Pasture	248	167	-81
Non-Forested Wetland	53	53	0
Mining (Gravel, etc.)	22	16	-6
Open Land (abandoned fields, orchards)	181	273	+92
Participation Rec.	13	20	+7
Residential 1/4 –1/2 acre	60	76	+16
Residential > 1/2 acre	419	651	+232
Commercial	5	24	+19
Industrial	12	73	+61
Urban Open Land	23	42	+19
Transportation	179	172	-7
Waste Disposal	0	11	+11
Surface Water	319	321	+2
Orchard, Nursery	14	85	+71
Total Area	13,227	13,227	

*Forestland in this data set includes forested wetlands.

Source: MacConnell Massachusetts GIS Land Use Coverage, 1999.

Although the hills and flat river valley floodplains of Whately’s landscape are mostly permanent, their uses are not. For example, the floodplains of Whately have historically been prized for their prime soils and thus farming has been a dominant activity there. However, as residential development consumes more and more farmland, the use of those prime soils changes.

The land use tradeoffs between 1971 and 1997 were primarily a loss of forest and farmland and a gain in residential development. The loss in natural resources may go beyond simply the loss in acreage. As farm and forest land acres are converted to residential and commercial uses the landscape becomes fragmented. Fragmentation of the landscape can negatively impact the quality of wildlife habitat, watershed protection, recreation opportunities, farm viability, forest management opportunities, and ultimately, the municipal services budget. Many rural towns in western Massachusetts have much of their landscape covered in forest vegetation. Unlike more urbanized towns, this forestland is not intersected by roads or

residential development. As development spreads across the landscape, wildlife habitat may become segmented so that animals that require large amounts of interior forest habitat are forced to search for it in still more remote areas. Fragmenting large blocks of contiguous forestland also jeopardizes the water quality and quantity in many first and second order streams, which are the most extensive and sensitive components of a watershed's stream network. The value of recreational opportunities associated with hiking, snowmobiling, and mountain biking often depends on whether there exists a network of fields and forests that are somewhat removed from residential areas.

Whately residents also need to be aware of the indirect value of open farmland and managed forests. The more fragmented farmland becomes, the more expensive it becomes to farm, because of additional time and fuel costs. In the same way, fragmentation of the landscape affects the viability of forest management operations. When a large forest block is fragmented by a subdivision, the resulting parcels associated with single family homes are often too small to manage individually for forestry purposes. Finally, the most inefficient method of providing municipal services such as police, fire, sewer, water, waste disposal, and plowing is associated with a fragmented landscape where residential development is spread sparsely across field and forest.

Prior to the twentieth century, the people of Whately lived in a set of village centers and in farmhouses surrounded by large cultivated fields and logged-over forestland. In recent decades, the beginning of sprawl is starting to materialize in the form of approval-not-required (ANR) development along existing roads. The impacts of sprawl include reducing forests and active farmland, changing the character of the community from rural to suburban, and eroding the quality of the natural resources upon which the residents depend, especially the quality of the water in Whately's streams, rivers, and aquifers.

Clearly, the conversion of forest and agricultural land to building sites for single-family homes is the dominant land use change in Whately and in Western Massachusetts. Future development patterns in Whately may depend on national and regional employment and population trends but also on local conditions that impact development and land use, such as infrastructure and land use controls.

D.2 Infrastructure

D.2.1 Transportation Systems

There are two perspectives when considering a community's transportation infrastructure: the level of ease and safety of moving people and goods *to and from* the community and the level of ease and safety of moving people and goods *within* the community. In terms of the greater transportation network, Whately is conveniently accessed from the primary north-south transportation corridors in western Massachusetts, I-91 and Routes 5/10. As Whately is bordered by the Connecticut River to the east and the hills to the west, the primary east-west transportation routes are local roads. An additional consideration is the overall shift in commuter patterns, such as commuters' willingness to drive longer distances to work. As of 2002, it was estimated that 37 of the road miles in Whately were paved while another 13 miles were unpaved.

There are no pedestrian or bicycle transportation facilities in Whately. Fixed-route transit service is available from the Franklin Regional Transit Authority's "Valley Route" which connects Northampton and Greenfield, stopping at major employers and other destinations along Routes 5/10 at times convenient for commuters. In addition, the Franklin Regional Transit Authority also provides demand-response transportation services to Whately seniors and residents with disabilities.

D.2.2 Water Supply and Wastewater Treatment Systems

Whately residents get their drinking water from private wells and springs or from public water supplies. The public water distribution systems in Whately and private wells pump water from underground. Usually a public distribution system that utilizes groundwater accesses a large volume of water from an aquifer located in either large sand and gravel deposits or bedrock fractures. Underground aquifer levels are maintained by groundwater flow from aquifer recharge areas. When rain falls in the area's hills, some of it ends up in the small streams that course down to the Mill or Connecticut Rivers, but much of it enters the groundwater. Protecting groundwater and aquifers from contamination by hazardous materials, sewage, salts, pesticides, and other pollutants is critical to maintaining the quality of both public and private drinking water sources.

There are two community water supplies that serve residents and businesses in Whately. All other areas of Town are served by private wells or springs. The private Whately Water District has two deep bedrock wells located off Haydenville Road that are pumped together to serve approximately 100 people, including 41 households and some commercial businesses. In 2001, the Whately Water District pumped approximately 3 million gallons of water for an average daily withdrawal of 8,000 gallons.

The second community drinking water supply source is operated by the Whately Water Department. The Whately Water Department has two wells located in the Mill River watershed that are screened in the same confined aquifer. Located between Chestnut Plain Road and Interstate 91, the wells are approximately 0.3 miles north of the Hatfield town line. The two wells are located approximately 40 feet from each other and are screened at depths of about 200 feet in a confined sand and gravel aquifer, known locally as the lower aquifer. According to MA DEP, this aquifer has a high vulnerability to contamination from agricultural, commercial and residential activities on the ground surface.

According to the Franklin County Regional Water Supply Study (June 2003), in 2001 the Whately Water Department's two wells served 750 residents, commercial businesses, industries, agricultural operations, and other users. Residential use represents 54 percent of the total water use; industrial/agricultural uses represent 21 percent of the total; and commercial use is 7 percent (another 18 percent is categorized as "other use"). In 2001, these groups used approximately 28.6 million gallons, which is equal to an average daily withdrawal of 78,400 gallons. (The total average daily water demand for the peak month of August in 2001 was 109,452 gallons per day.) The approved daily volumes for Wells #1 and #2 are equal to 144,000 and 216,000 gallons, respectively, for a total of 360,000 gallons per day. When the Whately Water Department begins to withdraw volumes in excess of 100,000 gallons per day on average, it will be required to seek a permit. Based on these figures, it

appears that the Whately Water Department may currently have the capacity to support additional water demand of up to 250,548 gallons per day, compared to current peak use.

The Town does not have a public sewer system. Residential and commercial uses are entirely served by private septic systems. The lack of large-scale municipal sewer system may be considered by some businesses as a disadvantage for expanding their operations or moving their company to Whately. South Deerfield has a public sewer system which abuts Whately to the north, but there is no access to it.

D.3 Long-term Development Patterns

D.3.1 Land Use Controls

The Town of Whately has four primary zoning districts: Agriculture/Residential, Commercial, Industrial, and Commercial/Industrial (*see Zoning Map at the end of this section*). In addition, the town has a Flood Hazard Overlay District. The only residential uses allowed in the Commercial/Industrial and Industrial districts are lodging houses, boarding houses, tourist homes, and bed-and-breakfast establishments. These uses are allowed in these districts by special permit.

The Agriculture/Residential and Commercial districts allow single-family detached dwellings by right. They also allow the following other residential uses by special permit:

- Two-family detached dwellings.
- Multi-family structures of up to four dwelling units, with one unit required to be owner-occupied.
- The conversion of single-family dwellings to two or three-family dwellings.
- The conversion of two-family dwellings to three-family dwellings.
- Tourist homes and bed-and-breakfast establishments, with no more than three bedrooms rooms available for rent in an owner-occupied residence.
- Congregate elderly housing structures of up to four dwelling units.
- Open space/cluster developments of single-family dwellings. These developments allow reduced building lot sizes or road frontage in exchange for land in the development being permanently protected as farmland or open space.
- Lodging houses or boarding houses that are not part of another residential dwelling.
(Source: Whately Zoning Bylaws, as amended in 2002)

All residential development in Whately must adhere to the Town zoning requirements regarding lot size, lot coverage, setbacks, parking, as well as Board of Health restrictions. Residential development allowed only by special permit may also need to meet additional requirements as specified in the Town's Zoning Bylaws, such as site plan review and

environmental performance standards. In areas in Whately that are served by the public water system, the minimum lot size for single-family homes is 40,000 square feet (0.92 acres) and the minimum road frontage is 175 feet. In areas without public water, a single-family home lot must have a minimum area of 60,000 square feet (1.38 acres) and road frontage of at least 200 feet. A two-family or multi-family dwelling is required to have a minimum additional 20,000 feet of lot area and 75 feet of frontage for each additional unit.

In addition, the development of new homes must be consistent with Whately's Growth Control Bylaw, adopted in 1991. The Growth Control Bylaw (Zoning Bylaws, Article VIII) was established in order to promote orderly development in the Town of Whately, and to "phase growth so that it will not unduly strain the community's ability to provide basic public facilities and services [and] to provide the Town, its boards, and agencies, information, time, and capacity to incorporate such growth into a master plan for the community . . . and to preserve and enhance existing community character and the value of property."

Under the Growth Control Bylaw, "no more than 10 individual building permits for new dwellings shall be issued in any one calendar year." The Bylaw allows for exemptions from the cap for desirable types of development such as open space/cluster developments and affordable housing. Up to 10 additional building permits for 10 dwelling units may be issued each year for these exemptions.

Whately's land use controls direct commercial and industrial development to appropriate areas of town, protect some critical water resources, and provide options to minimize the negative effects of development on the character of the town. Nonetheless, since such a large percentage of the town is located in the Agriculture/Residential district, this is where further development will occur. This district includes most of the farmland and forestland that defines Whately's rural/agricultural character. Without a concerted effort to protect in perpetuity more of these critical resources, this land will ultimately be consumed by development and the open land in Whately will be restricted to only that which is currently protected. The following section presents a stark picture of the long-term impacts on the Town of the maximum development potential under current land use controls and levels of protection.

D.3.2 Build-out Analysis

To illustrate some of the long-term effects of current zoning on development, results of a build-out study are included here. The following build-out analysis methodology was developed by the Metropolitan Area Planning Council (MAPC) and adapted by MassGIS and the Executive Office of Environmental Affairs (EOEA) Statewide Build-out Analysis program. This build-out program examines the potential for redevelopment of commercial, industrial, and residential areas if all potentially developable land were built on to the maximum extent allowed by current zoning laws. Housing units and commercial and industrial square footage estimated to occur at build-out are used to calculate the total additional community facilities required, from drinking water and municipal waste disposal to school enrollment figures. The build-out analysis does not predict how fast or slow growth will occur, only what the end result will be. The time frame for build-out to be reached is probably many decades, but now is the time to implement better zoning if the result of current zoning is not what is desired.

The purpose of a build-out analysis is to determine potentially developable land areas for residential, commercial, and industrial development. The process, completed in 2001, started with identifying existing development based on 1999 MacConnell Land Use data and new subdivisions built since that time. Developed areas were subtracted from the town's total acreage and the remaining area was classified as undeveloped. Undeveloped areas were then screened for environmental constraints such as steep slopes in excess of 25 percent. Wetland areas identified by the National Wetlands Inventory, Rivers Protection Act buffer areas and Zone I Recharge areas to public water supplies were subtracted. In addition, protected open space was removed from consideration, but only those areas that were protected in perpetuity, such as land owned by the state's Division of Conservation and Recreation (DCR) and farmland in the Agricultural Preservation Restriction (APR) Program. Some areas that many residents would expect to be protected, such as land owned by municipal water districts to protect public water supplies, were not considered to be off-limits to development unless a conservation restriction or some other legal mechanism was in place to permanently protect the land as open space. Slopes between fifteen and twenty-five percent were considered a partial constraint, since certain types of land use typically do not occur on relatively steep slopes. For purposes of this build-out analysis, it was assumed that slopes of fifteen and twenty-five percent would prevent commercial and industrial development and residential development on small lots. However, it was also assumed that large lot residential development could occur on slopes between fifteen and twenty-five percent given greater flexibility to grade and site structures. The areas that remained after the screening process are considered potentially developable.

Potentially developable areas were analyzed and a "build factor" was calculated based on the requirements of each zoning district in terms of minimum lot size, frontage, setbacks, parking required and maximum lot coverage permitted. Once calculated, the build factor was used to convert potentially developable acreage into either house lots or commercial or industrial square footage. Once the number of house lots was calculated, it was then translated via averages into estimated population growth, miles of new roads and additional water consumption and solid waste generation. Commercial and industrial square footage was similarly calculated and its associated demand for water was estimated.

The build-out analysis in Whately illustrates that the impacts of this design on the natural systems and on the community's facilities and infrastructure are staggering. Table 3-10 on the following page presents the results of the potential build-out analysis for commercial/industrial and residential development using the build factors and multipliers. In 2001, the total amount of drinking water used per day by customers of both wells in the Whately Water Dept. system was 78,400 gallons. At build-out there will be a demand for an additional 1,432,360 gallons per day from new residential, commercial, and industrial development. The total future demand for drinking water at build-out of more than 1.5 million gallons per day will clearly exceed existing capacity and will require new groundwater sources. The costs for establishing new groundwater sources can run between one and three million dollars. Excessive drinking water withdrawals in the future could also greatly impact water levels of wetlands and streams.

At maximum build-out, Whately will have lost its rural character. Consider that, in 1999, MassGIS Land Use coverage data for Whately indicated that roughly 10 percent of the Town's total land area was developed. The current population density is equal to 76 people per square mile. After the build-out, the population density will be nearly 900 people per square mile.

Most of this development would take place in the Agriculture/Residential district, which contains most of the town’s land area. Imagine Whately with that many people and with vastly reduced areas of undeveloped open space in the form of farms and forests. Currently, roughly 90 percent of the total landscape is undeveloped and at build-out only 37 percent would remain undeveloped. This percentage represents the amount of land that is currently protected in perpetuity and land that is considered undevelopable because of the Rivers Protection Act, wetlands, or excessive slopes, etc.

Table 3-10: Summary of Whately Build-out Analysis Results

Potentially Developable Land (acres)*	8,336
Total Residential Lots	5,916
Total Residential Units	6,270
Commercial/Industrial Buildable Floor Area (sq. ft.)	2,131,182
Residential Water Use (gallons/day)**	1,272,521
Commercial/Industrial Water Use (gallons/day)**	159,839
Non-Recycled Solid Waste (tons/year)***	6,190
Total Population at Buildout	18,273
New Residents****	16,967
New Students*****	3,208
New Residential Subdivision Roads (miles)	108

*All mapped wetland areas removed from Potentially Developable Acreage.

** Estimate from the Department of Housing & Community Development's Growth Impact Handbook

***Statewide average.

****1990 Census; Population/Housing Units.

*****MISER; 1997 School Children/Population.

Although it is not possible to determine exactly when build-out might occur, this may not even be necessary. Long before the last acre was developed in Whately, residents could experience drinking water shortages. In addition, with over 3,208 new school children at build-out many new elementary schools would be needed. New subdivisions could result in the need for 108 new miles of roads. An additional 6,190 tons of municipal waste would have to be managed. Finally, fire and police services would have to expand to protect the increased population.

The results of the build-out forecast a future state for the Town of Whately where traffic congestion exists on the roadways. Land use is dominated by residential development, not forests and farmland. At build-out there will be an estimated 6,270 more homes than there are today. There will be nearly 17,000 more people and over 3,200 more school-aged children. These impacts, although only estimated, would clearly transform Whately into a suburban community which would very likely have higher tax rates and diminished environmental quality. The rural character and agricultural landscapes would be largely gone.

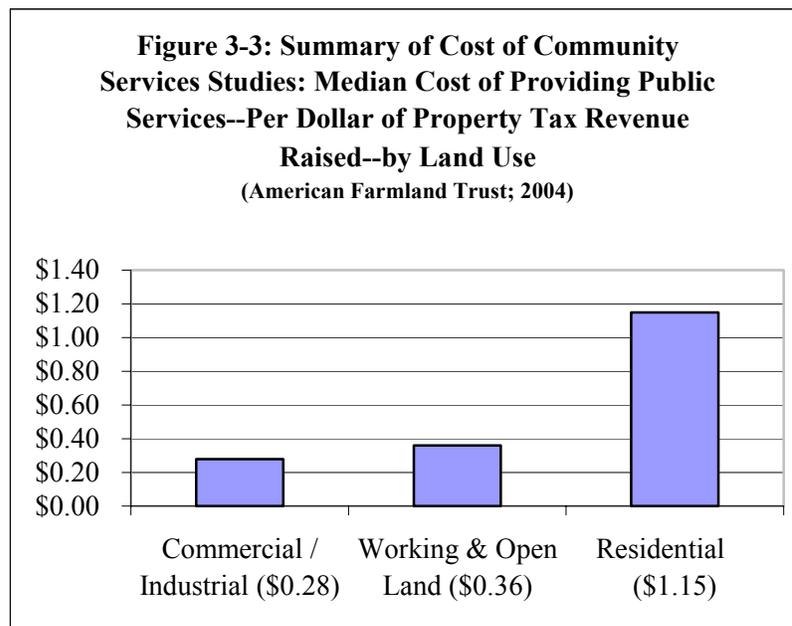
D.3.3 Cost of Community Services

The economic impacts of the projected level of population growth and development would be felt well before maximum build-out was reached. Would the additional commercial and industrial property help to pay for the costs of supporting the increasing demand for municipal services like education as well as for the loss of the local farms? The challenge for Whately and many small rural towns is to identify a model for growth that protects vital natural resources (like forests, aquifers, and farmland) while also promoting a stable property tax rate.

In designing the model it is important to understand the measurable fiscal impacts of different land uses. For instance, open space (i.e., farm and forestland), residential, and commercial/industrial development each contribute differently in the amount of property tax revenues generated and they often require different levels and types of municipal services.

Over the past twenty years, the American Farmland Trust (AFT) and other organizations have conducted Cost of Community Services (COCS) analyses for many towns across the country. A COCS analysis is a process by which the relationship of tax revenues to municipal costs is explored for a particular point in time. The results of these studies show that residential uses require more in services than they provide in tax revenues and that these communities, at the time of the study, were balancing their budgets with the tax revenues generated by other land uses like open space and commercial and industrial property.

Figure 3-3 demonstrates the summary findings of 102 COCS studies. For every dollar of property tax revenues received from open space, the amount of money expended by the town to support working and open land, such as farm and forestland, was under forty (40) cents. Open space can therefore help to produce fiscal stability over time.



Source: American Farmland Trust; 2004.

The second component of a balanced land use plan concerns the development of other tax-generating land uses beyond open space. The COCS studies showed that for every dollar of taxes generated by commercial and industrial uses, the cost to towns for these uses resulted in a positive net gain. Patterns of commercial and industrial uses vary considerably between towns but all communities need to consider the impact of commercial and industrial development on the overall quality of life for residents.

For the Town of Whately, it is important to note that the Commercial, Industrial and Personal property component of the tax base is quite healthy in comparison to other communities. According to municipal officials, Whately's Commercial, Industrial and Personal property tax

revenues are 22 percent of its tax base. This is a greater diversification of the tax base in comparison to other Massachusetts municipalities. Often municipalities that have such a high mix of property class revenues also have a split tax rate. In Whately, a split tax rate would negatively impact agricultural businesses by taxing farmland as a commercial activity and, thus, at a higher rate.

The best types of commercial and industrial development to encourage in Whately might have some of the following characteristics: locally owned and operated; in the manufacturing sector; home-based businesses; using a large amount of taxable personal property; being a “green industry” that does not use or generate hazardous materials; businesses that add value to the region’s agricultural and forest products; and, businesses that employ local residents. It is also important to consider that successful commercial and industrial development often generates increased demand for housing, traffic congestion and some types of pollution. Therefore, the type, size, and location of industrial and commercial development require thorough research and planning.

For Whately, an approach that encompasses both appropriate business development with conservation of natural resources will best satisfy the desires of residents to maintain their community character while off-setting the tax burden. By continuing to pursue growth management strategies that include active land conservation and zoning measures that balance development with the protection of natural resources, Whately will be better positioned to sustain and enhance the community’s agricultural and rural village character and help to maintain a high quality of life for its residents.