

4.3 SOCIOECONOMICS

4.3.1 Introduction

This chapter describes the social and economic environment within and adjacent to the South Coast Rail project corridor and analyzes the impacts to the social and economic environment resulting from implementing each of the South Coast Rail alternatives, including the No-Build Alternative. Background information on the proposed South Coast Rail project and a description of each of the proposed alternatives are provided in Chapter 3, *Alternatives*.

Section 4.3.2 describes the social and economic environment within and adjacent to the South Coast Rail project corridors. The section serves as the baseline for estimating the potential impacts resulting from the South Coast Rail alternatives. The effects to the social and economic environment that may result from implementation of the proposed South Coast Rail alternatives are presented in Sections 4.3.3 and 4.3.4; Section 4.3.3 presents the effect for each element of the proposed alternatives while Section 4.3.4 summarizes the effects for each alternative.

4.3.1.1 Resource Definition

Social and economic characteristics encompass population characteristics and trends as well as economic characteristics and trends. Social and economic characteristics include population, income, housing, property tax revenues, business activity, employment, and unemployment.

4.3.1.2 Regulatory Context

The CEQ NEPA regulations require that an Environmental Impact Statement evaluate a proposed action's impact on the human environment, including "urban quality, historic and cultural resources, and the design of the built environment," including the reuse and conservation potential of various alternatives and mitigation measures.¹ The Corps' public interest review includes economics as a public interest factor (33 CFR § 320.4(a)).

There are no state regulations applicable to the analysis of social and economic effects of a proposed project. The Secretary of the Executive Office of EEA² issued a Certificate on the ENF on April 3, 2009. The certificate includes a number of requirements defining the scope of a forthcoming Draft EIR. However, no specific requirements for the evaluation of impacts related to the social and economic environment are included in the Certificate.³

4.3.2 Existing Conditions

The following describes the existing conditions within the social and economic environment study area, including population, housing, employment, median income, current economic development tools, and work-trip characteristic trends.

¹ Council on Environmental Quality. 2009. Code of Federal Regulations (CFR), Title 40: Protection of the Environment, Part 1502-Environmental Impact Statement, Section 16(g) Environmental Consequences (40 CFR 1502.16(g)).

² Formerly, the Executive Office of Environmental Affairs.

³ Certificate of the Secretary of Energy and Environmental Affairs on the Environmental Notification Form. South Coast Rail Project. April 3, 2009.

4.3.2.1 Methodology

Social and economic data were collected from the following sources: U.S. Census Bureau, SRPEDD, Metropolitan Area Planning Council (MAPC), Massachusetts Executive Office of Labor and Workforce Development, Central Transportation Planning Staff (CTPS), Claritas, Inc. and the South Coast Rail Economic Development and Land Use Corridor Plan.

All household income data is presented in 1999 dollars. The 1989 median household income data obtained from the 1990 Census of Housing and Population were adjusted for inflation to using the Northeast Urban Consumer Price Index (CPI) to allow for comparison between this data and the 1999 median household income data obtained from Census 2000.

The 2010 U.S. Census results were not available at the time the DEIS/DEIR was prepared. Select indicators from the 2010 Census have been incorporated in this chapter to ensure an up-to-date consideration of socioeconomic trends, while still relying on pre-2010 Census data for the majority of the detailed existing conditions evaluation. It was determined that a complete update of the socioeconomic profile of the study area was not necessary because such an update would not change the overall conclusions about socioeconomic conditions from those presented in the DEIS/DEIR. Although important events such as the 2008 economic recession have impacted the study area, the demographics of the area and the relative economic condition of the municipalities in the study area has not fundamentally changed.

4.3.2.2 Regional Overview

Table 4.3-1 identifies communities included in the regional study area for socioeconomics.⁴ This includes 17 municipalities in Bristol County and 3 municipalities in Plymouth County. The alternative railroad alignments pass through or near these 20 communities, and new station sites are within or near each. Social and economic conditions within each of these municipalities, relative to the alternative alignments and station sites, are discussed further below.

Table 4.3-1 Social and Economic Environment Study Area Communities

Acushnet	Fall River	Rehoboth
Attleboro	Freetown	Rochester
Berkley	Lakeville	Somerset
Dartmouth	Mattapoisett	Swansea
Dighton	New Bedford	Taunton
Easton	Norton	Westport
Fairhaven	Raynham	

Southeastern Massachusetts is one of the fastest growing regions within the northeastern United States, and is the fastest growing region in the Commonwealth, based on population and housing units. As communities close to Boston approached build-out and residential and real estate prices increased over the last decade, both the population and the number of Boston-oriented commuters in the South Coast region have increased. In addition, the South Coast area has experienced considerable, but variable

⁴ This discussion of South Coast regional communities reflects the DEIS/DEIR socioeconomics study and includes communities associated with alternatives no longer under consideration (i.e., the Attleboro and Rapid Bus Alternatives). Communities associated with alternatives that have been eliminated were retained in the regional study area only for purposes of consistency with the DEIS/DEIR existing conditions analysis and are not considered in the FEIS/FEIR impact analysis (which is focused on the Stoughton and Whittenton Alternatives).

commercial and industrial growth. The South Coast area is also one of the Commonwealth's more diverse regions, and includes older former mill cities, rural towns, and suburban bedroom communities.

Population and housing growth have not been equally distributed, with the historic cities of New Bedford and Fall River experiencing a decline in population for many years, nor has the regional development been matched by a growth in jobs. Known for its seacoast and estuaries, cranberry ponds, rural landscapes that contain globally rare species and environments, and cities with an important role in the nation's economic and cultural past, southeastern Massachusetts more recently has experienced struggling cities, congested highways, and sprawling development, resulting in a loss of green spaces.

Growth-related concerns within the South Coast region include:⁵

- The South Coast region had been growing faster than the Commonwealth as a whole, but this trend has changed and the region is now growing slightly slower than the Commonwealth. Between 1990 and 2006, the region experienced a 10.3 percent increase in population, exceeding the statewide increase of 6.9 percent. U.S. Census Bureau data indicate that the South Coast region population increased from 773,748 in 2000 to 796,306 in 2010, a net increase of 22,558 persons or 2.9 percent. Comparatively, the population of Massachusetts as a whole increased from 6,349,097 in 2000 to 6,547, 629 in 2010, an increase of 3.1 percent.⁶
- The region is part of a “sprawl frontier” of low-density development spreading out from Greater Boston. The communities with the most developable land have the least capacity to manage growth in terms of infrastructure, existing plans and policies, and municipal staff.
- Semi-rural communities located between I-495 and I-195 (including Rehoboth, Dighton, Berkley, and Rochester) are most vulnerable to unplanned growth because they lack infrastructure, land protection for key parcels, and often times town staff to help them plan.
- Fall River and New Bedford continued to lose population during the 1990s. Fall River's population continued to decline in the early 21st century, from 91,938 in 2000 to 88,857 in 2010, a loss of 3,081 persons at a rate of 3.4 percent over these 10 years. New Bedford's population increased in the early 21st century, from 93,768 in 2000 to 95,072 in 2010, a gain of 1,304 persons at a rate of 1.4 percent over these 10 years.⁷
- Residential development tends to first occur as low-density residential development on lots along rural road frontage.
- Although 18 percent of South Coast Rail communities' land is permanently protected, important habitat and resource areas are not yet effectively covered by protected land.
- Although job concentrations continue to be important in South Coast cities, low-density sprawl along major highways also increasingly characterizes business and job locations.

⁵ Massachusetts Executive Office of Transportation and Massachusetts Office of Housing and Economic Development. South Coast Rail Economic Development and Land Use Corridor Plan. June 2009. Prepared by Goody Clancy: Boston.

⁶ USCB “2010 Census Interactive Population Search” website, available at <http://www.census.gov/2010census/popmap/ipmtext.php?fl=25>

⁷ USCB “2010 Census Interactive Population Search” website, available at <http://www.census.gov/2010census/popmap/ipmtext.php?fl=25>

- While many communities have added zoning and other regulatory tools to promote more compact development patterns, in most cases these tools have been little used thus far—in some cases because of recent adoption but also because of market inertia and lack of local capacity to promote new approaches.
- Between 1976 and 2000, job growth in the South Coast region lagged behind Massachusetts, which in turn lagged behind the United States as a whole. Over half the manufacturing jobs in the corridor disappeared, with construction, retail, wholesale trade, and services replacing manufacturing.
- The competitive advantages of the South Coast region today are in costs of production: labor, land, energy, and to a lesser degree, taxes. Lower housing costs help reduce the cost of labor.
- The barriers to economic growth in communities in the vicinity of the South Coast Rail project are access to labor, labor skill levels, quality of broadband service, and access to any intermodal freight rail yard.
- Potential growth industries based on current strengths and overcoming barriers (especially workforce access, education, and broadband service) include: distribution, office-related industries, health care and social services, food processing, hospitality, chemical manufacturing, electronics, and construction.
- Indicators for Fall River and New Bedford show that those communities have significantly lower median household incomes, education levels, housing values and per capita local tax receipts than the South Coast region as a whole.
- The South Coast region has been characterized by ex-urban sprawl, the decline of gateway cities, and the consumption of natural areas at a rate that exceeds the population growth rate. This type of uncontrolled growth results in the loss of farms, fields, and forests and damages the character of the historic villages and cities within the region.
- The poor connectivity to the metropolitan Boston area may constrain economic activity in the urban areas of New Bedford and Fall River. These two cities currently have higher unemployment rates than the state average. In 2007, the New Bedford metropolitan area had an unemployment rate of 7.6 percent, while Fall River had an unemployment rate of 8.3 percent. The state average was 4.5 percent.⁸ By 2010, unemployment had risen to 14.5 percent in Fall River and 14.0 percent in New Bedford, compared to 8.3 percent statewide.⁹

Affected Municipalities

The following section summarizes, by municipality, general social and economic conditions within the South Coast region. Table 4.3-2 summarizes the population statistics for these communities. Table 4.3-3 summarizes housing trends. Table 4.3-4 summarizes employment statistics. Table 4.3-5 provides a summary of work trips to Boston/Cambridge from these communities. Workforce traveling to

⁸ Massachusetts Executive Office of Labor and Workforce Development website <http://www.mass.gov/eolwd>, accessed August 2008 and October 2010

⁹ Massachusetts Executive Office of Labor and Workforce Development. Labor Force and Unemployment Data http://lmi2.detma.org/lmi/lmi_lur_a.asp

Boston/Cambridge from these communities as compared to the workforce along the Fitchburg Commuter Line is summarized in Table 4.3-6. Table 4.3-7 summarizes household income. Table 4.3-8 provides employment statistics by industry. Property tax rates are summarized in Table 4.3-9.

Acushnet

Acushnet is a mostly rural and suburban town. It had an estimated population of 10,622 in 2006, which represented a 4.5 percent increase since 2000. The number of occupied housing units in Acushnet increased 10.6 percent between 1990 and 2000, corresponding to a 6.4 percent increase in population during this period. The median household income increased from approximately \$48,210 in 1989 (in 1999 dollars) to approximately \$51,500 in 1999, which corresponds to an annual growth rate of 0.66 percent, exceeding the statewide annual growth rate of 0.13 percent. The 2007 unemployment rate in Acushnet was 5.4 percent, exceeding the statewide unemployment rate of 4.5 percent. By 2009, the unemployment rate had risen to 10.2 percent, exceeding statewide unemployment of 8.4 percent. Acushnet's unemployment rate also exceeded the statewide average in 1990 and 2000. In 2005, property tax rates in Acushnet were 12.71 (expressed as dollars per \$1,000 of assessed value) for commercial and industrial property, and 10.9 for residential property.

Attleboro

Attleboro is a suburban community in the South Coast region. It had an estimated population of 43,836 in 2006. The number of occupied housing units in Attleboro increased 12.3 percent between 1990 and 2000, while population increased only 9.6 percent during this period. The median household income increased from approximately \$49,421 in 1989 (in 1999 dollars) to approximately \$50,807 in 1999, which corresponds to an annual growth rate of 0.28 percent, exceeding the statewide annual growth rate of 0.13 percent. The 2007 unemployment rate in Attleboro was 4.9 percent, slightly higher than the statewide unemployment rate of 4.5 percent. By 2009, the unemployment rate had risen to 10.8 percent, exceeding statewide unemployment of 8.4 percent. In 2005, property tax rates in Attleboro were \$16.57/\$1,000 assessed value for commercial and industrial property, and \$10.09/\$1,000 assessed value for residential property.

Berkley

Berkley is a mostly rural town, with suburban neighborhoods along its northern border. It had an estimated population of 6,476 in 2006, which represented a 12.7 percent increase since 2000. The number of occupied housing units in Berkley increased 36.3 percent between 1990 and 2000, corresponding to a 35.7 percent increase in population during this period. The median household income decreased from approximately \$58,024 in 1989 (in 1999 dollars) to approximately \$56,170 in 2000, which corresponds to an annual growth rate of -0.32 percent, which is well below the statewide annual growth rate of 0.13 percent. While the unemployment rate in Berkley in 1990 exceeded the statewide average, the 2007 unemployment rate was 4.0 percent, lower than the statewide unemployment rate of 4.5 percent. By 2009, the unemployment rate had risen to 8.2 percent, slightly below the statewide rate of 9.4 percent. In 2005, the property tax rate in Berkley was \$17.82/\$1,000 assessed value (residential, commercial, and industrial).

Dartmouth

Dartmouth is a mostly rural town with a strip of suburban neighborhoods in its northern/central region. It had an estimated population of 31,466 in 2006, which represented a 2.6 percent increase since 2000.

The number of occupied housing units in Dartmouth increased 14.9 percent between 1990 and 2000, corresponding to a 12.6 percent increase in population during this period. The median household income increased from approximately \$47,406 to approximately \$50,742 between 1989 and 1999 (both in 1999 dollars), which corresponds to an annual growth rate of 0.68 percent, exceeding the statewide annual growth rate of 0.13 percent. The 2007 unemployment rate in Dartmouth was 5.5 percent, exceeding the statewide unemployment rate of 4.5 percent. By 2009, unemployment had risen to 9.6 percent, exceeding statewide unemployment of 8.4 percent. In 2005, the property tax rate in Dartmouth was \$7.45/\$1,000 assessed value (residential, commercial, and industrial).

Dighton

Dighton is a mostly rural town. It had an estimated population of 6,652 in 2006, which represented a 7.7 percent increase since 2000. The number of occupied housing units in Dighton increased 14.2 percent between 1990 and 2000, corresponding to a 9.7 percent increase in population during this period. The median household income increased from approximately \$55,068 to \$58,600 between 1989 and 1999 (both in 1999 dollars), which corresponds to an annual growth rate of 0.62 percent, exceeding the statewide annual growth rate of 0.13 percent. The 2007 unemployment rate in Dighton was 4.5 percent, which was also the statewide unemployment rate. By 2009, unemployment had risen to 8.8 percent, slightly above the statewide unemployment rate of 8.4 percent. In 2005, the property tax rates in Dighton were \$20.8/\$1,000 assessed value for commercial and industrial property, and \$10.66/\$1,000 assessed value for residential property.

Easton

Easton is a mostly suburban town. It had an estimated population of 23,099 in 2006, which represented a 3.6 percent increase since 2000. The number of occupied housing units in Easton increased 11.6 percent between 1990 and 2000, corresponding to a 12.6 percent increase in population during this period. The median household income increased from approximately \$68,330 in 1989 (in 1999 dollars) to approximately \$69,144 in 1999, which corresponds to an annual growth rate of 0.12 percent, which is about the same as the statewide annual growth rate of 0.13 percent. The 2007 unemployment rate in Easton was 3.7 percent, lower than the statewide unemployment rate of 4.5 percent. By 2009, the unemployment rate had risen to 7.4 percent but was still lower than the statewide average of 8.4 percent. In 1990 and 2000 Easton also exhibited a lower unemployment rate than the state as a whole. In 2005, the property tax rate in Easton was \$7.45/\$1,000 assessed value (residential, commercial and industrial).

Fairhaven

Fairhaven is a mostly suburban town, with urban development at its western border and rural neighborhoods in the northeast corner. It had an estimated population of 16,340 in 2006, which represented a 1.1 percent increase since 2000. The number of occupied housing units in Fairhaven increased 4.1 percent between 1990 and 2000, despite a decrease in population of 0.2 percent during this period. After adjusting for inflation, median household income decreased from approximately \$40,605 in 1989 (in 1999 dollars) to approximately \$36,447 in 1999, which corresponds to an annual growth rate of -1.07 percent, which is well below the statewide annual growth rate of 0.13 percent. In both years, median household income was significantly below the statewide median of \$49,850 and \$50,500 (both in 1999 dollars), respectively. The 2007 unemployment rate in Fairhaven was 5.6 percent, exceeding the statewide unemployment rate of 4.5 percent. By 2009, the unemployment rate had risen to 10.4 percent, exceeding the statewide average of 8.4 percent. Fairhaven's unemployment rate also

exceeded the statewide average in 1990 and 2000. In 2005, the property tax rates in Fairhaven were \$16.66/\$1,000 assessed value for commercial and industrial property, and \$8.35/\$1,000 assessed value for residential property.

Fall River

The southern portion of Fall River is highly developed and urban, while the northern portion is rural. Fall River had an estimated population of 92,516 in 2006, which represented a 0.6 percent increase since 2000. With a population size similar to New Bedford, Fall River is one of the two largest municipalities in the South Coast region in terms of population, accounting for 18 percent of South Coast population. The number of occupied housing units in Fall River increased 4.0 percent between 1990 and 2000, despite a decrease in population of 0.8 percent during this period. The median household income decreased from approximately \$30,291 in 1989 (in 1999 dollars) to approximately \$29,014 in 1999, which corresponds to an annual growth rate of -0.43 percent, which is well below the statewide annual growth rate of 0.13 percent. In both years, median household income was significantly below the statewide median of \$49,850 and \$50,500 (both in 1999 dollars), respectively. The 2007 unemployment rate in Fall River was 8.3 percent, significantly exceeding the statewide unemployment rate of 4.5 percent. By 2009, the unemployment rate had risen to 14.6 percent, exceeding the statewide average of 8.4 percent. Fall River's unemployment rate also significantly exceeded the statewide average in 1990 and 2000. In 2005, the property tax rates in Fall River were \$19.5/\$1,000 assessed value for commercial and industrial property, and \$7.61/\$1,000 assessed value for residential property.

Freetown

Freetown is mostly rural. It had an estimated population of 9,145 in 2006, which represented a 7.9 percent increase since 2000. The number of occupied housing units in Freetown increased 7.8 percent between 1990 and 2000, despite a decrease in population of 0.6 percent during this period. The median household income increased from approximately \$61,382 in 1989 to approximately \$64,576 in 1999, which corresponds to an annual growth rate of 0.51 percent, which exceeds the statewide annual growth rate of 0.13 percent. The 2007 unemployment rate in Freetown was 4.7 percent, slightly exceeding the statewide unemployment rate of 4.5 percent. By 2009, the unemployment rate had increased to 8.8 percent, slightly exceeding the statewide average of 8.4 percent. In 2005, the property tax rates in Freetown were \$15.47/\$1,000 assessed value for commercial and industrial property, and \$9.88/\$1,000 Assessed Value for residential property.

Lakeville

Lakeville is a mixed suburban and rural community. It had an estimated population of 10,699 in 2006, which represented an 8.9 percent increase since 2000. The number of occupied housing units in Lakeville increased 26.4 percent between 1990 and 2000, corresponding with an increase in population of 26.2 percent during this period. The median household income increased from approximately \$60,524 in 1989 (in 1999 dollars) to approximately \$70,495 in 1999, which corresponds to an annual growth rate of 0.51 percent, exceeding the statewide annual growth rate of 0.13 percent. The 2007 unemployment rate in Lakeville was 4.2 percent, slightly lower than the statewide unemployment rate of 4.5 percent. By 2009, the unemployment rate had risen to 8.7 percent, slightly exceeding the statewide average of 8.4 percent. In 2005, the property tax rate in Lakeville was \$9.14/\$1,000 assessed value (residential, commercial, and industrial).

Mattapoisett

Mattapoisett is a semi-rural community. It had an estimated population of 6,519 in 2006, which represented a 4.0 percent increase since 2000. The number of occupied housing units in Mattapoisett increased 13.4 percent between 1990 and 2000, corresponding with an increase in population of 7.1 percent during this period. The median household income increased from approximately \$54,596 in 1989 (in 1999 dollars) to approximately \$58,466 in 1999, which corresponds to an annual growth rate of 0.69 percent, exceeding the statewide annual growth rate of 0.13 percent. The 2007 unemployment rate in Mattapoisett was 3.8 percent, lower than the statewide unemployment rate of 4.5 percent. By 2009, the unemployment rate had risen to 7.1 percent but was still significantly below the statewide average of 8.4 percent. In 2005, the property tax rate in Mattapoisett was \$9.42/\$1,000 assessed value (residential, commercial, and industrial).

New Bedford

New Bedford is a highly developed urban city, with some semi-rural communities in its northwestern portion. It had an estimated population of 93,957 in 2006, which represented a 0.2 percent increase since 2000. With a population size similar to Fall River, New Bedford is the largest municipality in the South Coast region in terms of population, each account for 18 percent of South Coast population. The number of occupied housing units in New Bedford decreased 1.6 percent between 1990 and 2000, corresponding to a 6.2 percent decline in population during this period. The median household income decreased from approximately \$30,554 in 1989 (in 1999 dollars) to approximately \$27,569 in 1999, which corresponds to an annual growth of -1.02 percent, well below the statewide growth rate of 0.13 percent. In both years, median household income was significantly below the statewide median of \$49,850 and \$50,500 (both in 1999 dollars), respectively. The 2007 unemployment rate in New Bedford was 7.6 percent, significantly exceeding the statewide unemployment rate of 4.5 percent. By 2009, the unemployment rate had risen to 14.2 percent, significantly exceeding the statewide average of 8.4 percent. New Bedford's unemployment rate also significantly exceeded the statewide average in 1990 and 2000. In 2005, the property tax rates in New Bedford were \$27.6/\$1,000 assessed value for commercial and industrial property, and \$11.37/\$1,000 assessed value for residential property.

Norton

Norton is a mixed suburban and rural town. It had an estimated population of 19,637 in 2006, which represented an 8.9 percent change since 2000. The number of occupied housing units in Norton increased 26.5 percent between 1990 and 2000, corresponding to a 26.4 percent increase in population during this period. The median household income decreased from approximately \$59,175 to approximately \$55,325 between 1989 and 1999 (both in 1999 dollars), which corresponds to an annual growth of -0.67 percent, well below the statewide growth rate of 0.13 percent. The 2007 unemployment rate in Norton was 4.7 percent, similar to the statewide unemployment rate of 4.5 percent. By 2009, the unemployment rate had risen to 8.9 percent, exceeding the statewide average of 8.4 percent. In 2005, the property tax rate in Norton was \$10.72/\$1,000 assessed value (residential, commercial, and industrial).

Raynham

Raynham is a mixed suburban and rural town. It had an estimated population of 13,805 in 2006, which represented a 17.6 percent change since 2000. The number of occupied housing units in Raynham increased 23.6 percent between 1990 and 2000, corresponding to a 19.0 percent increase in population

during this period. After adjusting for inflation, median household income remained stable from approximately \$60,504 in 1989 (in 1999 dollars) to approximately \$60,449 in 1999, which corresponds to an annual growth of -0.01 percent, which is less than the statewide annual growth rate of 0.13 percent. The 2007 unemployment rate in Raynham was 4.1 percent, lower than the statewide unemployment rate of 4.5 percent. By 2009, the unemployment rate had risen to 8.1 percent, slightly below the statewide average of 8.4 percent. In 2005, the property tax rates in Raynham were \$13.42/\$1,000 assessed value for commercial and industrial property, and \$10.25/\$1,000 assessed value for residential property.

Rehoboth

Rehoboth is a semi-rural town with an estimated population of 11,020 in 2006, which represented an 8.3 percent change since 2000. The number of occupied housing units in Rehoboth increased 22.8 percent between 1990 and 2000, corresponding to a 17.5 percent increase in population during this period. The median household income increased from approximately \$60,667 in 1989 to approximately \$65,373 in 1999, which corresponds to an annual growth rate of 0.75 percent, exceeding the statewide annual growth rate of 0.13 percent. The 2007 unemployment rate in Rehoboth was 4.3 percent, similar to the statewide unemployment rate of 4.5 percent. By 2009, the unemployment rate had risen to 9.6 percent, exceeding the statewide average of 8.4 percent. In 2005, the property tax rate in Rehoboth was \$8.86/\$1,000 assessed value (residential, commercial, and industrial).

Rochester

Rochester is a semi-rural town with an estimated population of 5,158 in 2006, which represented a 12.63 percent increase since 2000. The number of occupied housing units in Rochester increased 22.3 percent between 1990 and 2000, corresponding to a 16.8 percent increase in population during this period. The median household income increased from approximately \$56,664 to approximately \$63,289 between 1989 and 1999 (both in 1999 dollars), which corresponds to an annual growth rate of 0.75 percent, exceeding the statewide annual growth rate of 0.13 percent. The 2007 unemployment rate in Rochester was 4.0 percent, lower than the statewide unemployment rate of 4.5 percent. By 2009, the unemployment rate had risen to 7.7 percent, lower than the statewide average of 8.4 percent. In 2005, the property tax rate in Rochester was \$9.21/\$1,000 assessed value (residential, commercial, and industrial).

Somerset

Somerset is a mostly urban community. It had an estimated population of 18,747 in 2006, which represented a 2.8 percent change since 2000. The number of occupied housing units in Somerset increased 9.0 percent between 1990 and 2000, corresponding to a 3.3 percent increase in population during this period. The median household income increased from approximately \$49,133 in 1989 (in 1999 dollars) to approximately \$51,770 in 1999, which corresponds to an annual growth rate of 0.52 percent, exceeding the statewide annual growth rate of 0.13 percent. The 2007 unemployment rate in Somerset was 5.5 percent, exceeding the statewide unemployment rate of 4.5 percent. Somerset's unemployment rate also exceeded the statewide average in 1990 and 2000. By 2009, the unemployment rate had risen to 10.6 percent, exceeding the statewide average of 8.4 percent. In 2005, the property tax rates in Somerset were \$25.15/\$1,000 assessed value for commercial and industrial property, and \$10.73/\$1,000 assessed value for residential property.

Swansea

Swansea is a mixed rural and suburban town. It had an estimated population of 16,622 in 2006, which represented a 4.5 percent change since 2000. The number of occupied housing units in Swansea increased 12.1 percent between 1990 and 2000, corresponding to a 3.2 percent increase in population during this period. The median household income decreased from approximately \$54,124 in 1989 (in 1999 dollars) to approximately \$52,524 in 1999, which corresponds to an annual growth rate of -0.30 percent, well below the statewide annual growth rate of 0.13 percent. The 2007 unemployment rate in Swansea was 5.6 percent, exceeding the statewide unemployment rate of 4.5 percent. By 2009, the unemployment rate had risen to 11.2 percent, exceeding the statewide average of 8.4 percent. Swansea's unemployment rate also exceeded the statewide average in 1990 and 2000. In 2005, the property tax rates in Swansea were \$16.36/\$1,000 assessed value for commercial and industrial property, and \$8.09/\$1,000 assessed value for residential property.

Taunton

Taunton is a mixed urban/suburban/rural city, with a highly developed urban center. It had an estimated population of 56,732 in 2006, which represented a 1.4 percent increase since 2000. About 11 percent of the South Coast population lives in Taunton. The number of occupied housing units in Taunton increased 17.0 percent between 1990 and 2000, corresponding to a 12.3 percent increase in population during this period. The median household income decreased from approximately \$43,600 in 1989 (in 1999 dollars) to approximately \$42,932 in 1999, which corresponds to an annual growth rate of -0.30 percent, well below the statewide annual growth rate of 0.13 percent. In both years, median household income was below the statewide median of \$49,850 and \$50,500 (both in 1999 dollars), respectively. The 2007 unemployment rate in Taunton was 5.0 percent, exceeding the statewide unemployment rate of 4.5 percent. By 2009, the unemployment rate had risen to 9.8 percent, exceeding the statewide average of 8.4 percent. In 2005, the property tax rates in Taunton were \$18.1/\$1,000 assessed value for commercial and industrial property, and \$8.64/\$1,000 assessed value for residential property.

Westport

Westport is a primarily semi-rural town, with suburban development along its northern border. It had an estimated population of 15,366 in 2006, which represented an 8.3 percent increase since 2000. The number of occupied housing units in Westport increased 8.8 percent between 1990 and 2000, corresponding to a 2.4 percent increase in population during this period. The median household income increased from approximately \$50,042 to approximately \$55,436 between 1989 and 1999, which corresponds to an annual growth rate of 0.52 percent, exceeding the statewide annual growth rate of 0.13 percent. The 2007 unemployment rate in Westport was 6.1 percent, exceeding the statewide unemployment rate of 4.5 percent. By 2009, the unemployment rate had risen to 11.1 percent, exceeding the statewide average of 8.4 percent. Westport's unemployment rate also exceeded the statewide average in 1990 and 2000. In 2005, the property tax rate in Westport was \$6.14/\$1,000 assessed value (residential, commercial, and industrial).

Demographic Trends

In 1990, the total population of the social and economic environment study area was approximately 469,229. In 2000, the population within the study area was 492,366.¹⁰ By 2006, population within this

¹⁰ United States Census Bureau, 1990 and 2000.

area is estimated to have grown to 508,414.¹¹ Table 4.3-2 summarizes population trends for the communities within the social and economic environment study area. Figure 4.3-1 shows which municipalities experienced population growth between 1990 and 2006 and which experienced population decline during that same period. While Fall River and New Bedford did not experience population decline between 2000 and 2006, they lost population during the nineties.

Table 4.3-2 South Coast Communities: Population Trends

Town	1990	2000	2006*	Percent Change		
				1990 to 2000	2000 to 2006	1990 to 2006
Acushnet	9,554	10,161	10,622	6.35	4.54	11.18
Attleboro	38,383	42,068	43,836	9.60	4.20	14.21
Berkley	4,237	5,749	6,476	35.69	12.65	52.84
Dartmouth	27,244	30,666	31,466	12.56	2.61	15.50
Dighton	5,631	6,175	6,652	9.66	7.72	18.13
Easton	19,807	22,299	23,099	12.58	3.59	16.62
Fairhaven	16,132	16,159	16,340	0.17	1.12	1.29
Fall River	92,703	91,938	92,516	-0.83	0.63	-0.20
Freetown	8,522	8,472	9,145	-0.59	7.94	7.31
Lakeville	7,785	9,821	10,699	26.15	8.94	37.43
Mattapoisett	5,850	6,268	6,519	7.15	4.00	11.44
New Bedford	99,922	93,768	93,957	-6.16	0.20	-5.97
Norton	14,265	18,036	19,637	26.44	8.88	37.66
Raynham	9,867	11,739	13,805	18.97	17.60	39.91
Rehoboth	8,656	10,172	11,020	17.51	8.34	27.31
Rochester	3,921	4,581	5,158	16.83	12.60	31.55
Somerset	17,655	18,234	18,747	3.28	2.81	6.19
Swansea	15,411	15,901	16,622	3.18	4.53	7.86
Taunton	49,832	55,976	56,732	12.33	1.35	13.85
Westport	13,852	14,183	15,366	2.39	8.34	10.93

Source: U.S. Census (1990, 2000); Claritas, Inc. provided by Goody Clancy (2006)

* Indicates projected populations, not actual numbers.

U.S. Census Bureau data indicate that the South Coast region population increased from 773,748 in 2000 to 796,306 in 2010, a net increase of 22,558 persons or 2.9 percent. Comparatively, the population of Massachusetts as a whole increased from 6,349,097 in 2000 to 6,547, 629 in 2010, an increase of 3.1 percent, and the population of Rhode Island increased from 1,048,319 to 1,052,567, or 0.4 percent. The population increase in the South Coast region during this period was comparable to that of Massachusetts, but substantially greater than that of Rhode Island. The population density in 2000 for the study area, based on data from MassGIS and the U.S. Bureau of Census, is shown on Figure 4.3-2.

Concurrent with population growth within the study area, the median age is increasing in these communities at a rate of approximately 9 percent (between 1990 and 2000)¹² and is expected to

¹¹ 2006 Population estimated using Claritas, Inc., provided by Goody Clancy. It is assumed that populations estimated with Claritas are not exact, but rather +/- 10 percent.

¹² Southeastern Regional Planning and Economic Development District's Community Quickstats, based on U.S. Census Bureau data from 1990 and 2000, compiled summer 2007.

continue to increase in coming years. Growth is anticipated to be greatest in semi-rural and suburban portions of the social and economic environment study area where there is less development; therefore, more land is available for growth than in the more urban communities.¹³

Housing

The increase in population within the study area has been accompanied by an increase in the number of occupied housing units. According to the U.S. Bureau of Census, the number of housing units increased by 8.7 percent in the nineties, from 174,408 in 1990 to 189,634 in 2000. As the region continues to grow and more people move into the area, the number of occupied housing units is projected to increase at an even larger rate. It is estimated that by the year 2030, occupied housing units will have increased by almost 34 percent to reach 208,767. The communities of Berkley, Rehoboth, and Rochester are projected to grow by more than 50 percent. Nine of the 20 communities are expected to see growth in excess of 30 percent. Table 4.3-3 summarizes the occupied housing unit trends and percent change from 1990 to 2000 for the 20 communities comprising the South Coast Rail social and economic environment study area.

Table 4.3-3 South Coast Communities: Occupied Housing Units

Town	1990	2000	Percent Change 1990 to 2000
Acushnet	3,428	3,793	10.6
Attleboro	14,180	16,019	13.0
Berkley	1,352	1,843	36.3
Dartmouth	9,190	10,555	14.9
Dighton	1,927	2,201	14.2
Easton	6,708	7,489	11.6
Fairhaven	6,359	6,622	4.1
Fall River	37,303	38,759	3.9
Freetown	2,722	2,932	7.7
Lakeville	2,604	3,292	26.4
Mattapoisett	2,233	2,532	13.4
New Bedford	38,788	38,178	1.6
Norton	4,641	5,872	26.5
Raynham	3,352	4,143	23.6
Rehoboth	2,870	3,523	22.8
Rochester	1,288	1,575	22.3
Somerset	6,410	6,987	9.0
Swansea	5,252	5,888	12.1
Taunton	18,849	22,045	17.0
Westport	4,952	5,386	8.8
TOTAL	174,408	189,634	8.7

Source: U.S. Census (1990, 2000)

In general, residential housing density within the study area is low. Housing density within the study area, based on U.S. Census Bureau 2000 data, is depicted on Figure 4.3-3.¹⁴ Fall River, New Bedford, and

¹³ Massachusetts Executive Office of Transportation and Massachusetts Office of Housing and Economic Development. South Coast Rail Economic Development and Land Use Corridor Plan. June 2009. Prepared by Goody Clancy: Boston.

¹⁴ Massachusetts Executive Office of Transportation and Massachusetts Office of Housing and Economic Development. South Coast Rail Economic Development and Land Use Corridor Plan. June 2009. Prepared by Goody Clancy: Boston.

Taunton have the highest housing densities in the study area, while Lakeville, Berkley, Rehoboth, Westport, and Dartmouth are among those with the lowest housing densities. In general, the social and economic environment study area consists primarily of lower-density development characteristic of semi-rural communities. The lot size requirement in many of the communities is large (up to 2 acres) and there are limited multi-family housing units, both factors contributing to lower housing densities.

Economic Indicators

This section presents trends in business establishments, employment, and wages for the study area. These trends cover 1990 to 2007 and were developed primarily from data prepared by the U.S. Census Bureau (1990 and 2000 Census data) and SRPEDD Community Quickstats for communities comprising the South Coast region.

Employment

The population and housing statistics indicate that the region has seen significant growth over the last fifteen years. Employment concentrations (2007) within the study area are presented on Figure 4.3-4. In 2007, businesses were concentrated around cities and large towns as well as along major highways and state routes.¹⁵ As observed by Goody Clancy, “Businesses line nearly the entire stretch of U.S. 44 through the middle of the [South Coast Rail] Corridor; although as shown by the lighter shades [on Figure 4.3-4] densities are low, which indicates sprawling commercial development.”¹⁶ This same pattern can be observed along Routes 79 and 24, north of Fall River, a portion of Route 140, north of New Bedford, as well as in the immediate vicinity of exits along I-95 and I-495.

The region’s growth has been accompanied by high unemployment rates. Table 4.3-4 shows historical unemployment rates for the communities in the social and economic environment study area, as well as the statewide unemployment rate. The table compares the unemployment rates for 1990, 2000 2007 and 2009 in the study area municipalities to the statewide unemployment rates in the same years.

The table indicates that in 1990 and 2000, the number of cities and towns in the region with unemployment higher than the state average was 16 and 12, respectively. In general, the inequality between the regional and statewide unemployment decreased between 1990 and 2007, but in 2007, 12 communities still had average unemployment rates higher than the state average. By 2009, a total of 15 communities had average unemployment rates higher than the state average. Unemployment rates in Fall River and New Bedford are substantially higher than the statewide average. By 2010, unemployment had risen to 14.5 percent in Fall River and 14.0 percent in New Bedford, compared to 8.3 percent statewide.¹⁷

Table 4.3-4 shows a decline in the discrepancy between local unemployment and statewide unemployment between 1990 and 2007 for all study area municipalities with the exception of Swansea and Westport. The increased number of South coast residents commuting to the Boston metropolitan area could provide a partial explanation for this decline. Table 4.3-5 shows that work trips from South Coast communities to Boston and Cambridge increased by nearly 39 percent between 1990 and 2000. The change in work trips to Boston and Cambridge from communities within the social and economic

¹⁵ Massachusetts Executive Office of Transportation and Massachusetts Office of Housing and Economic Development. South Coast Rail Economic Development and Land Use Corridor Plan. June 2009. Prepared by Goody Clancy: Boston.

¹⁶ Ibid.

¹⁷ Massachusetts Executive Office of Labor and Workforce Development. http://lmi2.detma.org/lmi/lmi_lur_a.asp. Accessed on July 8, 2013.

environment study area is shown graphically on Figure 4.3-5. Comparing 1990 to 2009 shows that six communities experienced an increase in the discrepancy between their unemployment and statewide unemployment, including Lakeville and Rehoboth, which in 1990 had unemployment rates below the statewide average.

Table 4.3-4 South Coast Communities: Unemployment Rates

	1990		2000		2007		2009	
	Rate	Compared to State	Rate	Compared to State	Rate	Compared to State	Rate	Compared to State
Statewide	6.3	100%	2.7	100%	4.5	100%	8.4	100%
Acushnet	8.1	129%	3.4	126%	5.4	120%	10.2	121%
Attleboro	7.7	122%	3.3	122%	4.9	109%	10.8	129%
Berkley	7.3	116%	2.3	85%	4	89%	8.2	98%
Dartmouth	8.2	130%	3.5	130%	5.5	122%	9.6	114%
Dighton	7	111%	2.7	100%	4.5	100%	8.8	105%
Easton	5.9	94%	2.3	85%	3.7	82%	7.4	88%
Fairhaven	8.1	129%	3.6	133%	5.6	124%	10.4	124%
Fall River	12.8	203%	5.1	189%	8.3	184%	14.6	174%
Freetown	7.2	114%	3	111%	4.7	104%	8.8	105%
Lakeville	5	79%	2.4	89%	4.2	93%	8.7	104%
Mattapoisett	5.5	87%	2.6	96%	3.8	84%	7.1	85%
New Bedford	12.5	198%	5.5	204%	7.6	169%	14.2	169%
Norton	7.1	113%	2.5	93%	4.7	104%	8.9	106%
Raynham	6.8	108%	2.2	81%	4.1	91%	8.1	96%
Rehoboth	6.1	97%	3.3	122%	4.3	96%	9.6	114%
Rochester	6.4	102%	2.5	93%	4	89%	7.7	92%
Somerset	7.8	124%	3.5	130%	5.5	122%	10.6	126%
Swansea	7.2	114%	3.8	141%	5.6	124%	11.2	133%
Taunton	8.3	132%	2.9	107%	5	111%	9.8	117%
Westport	8.2	130%	4	148%	6.1	136%	11.1	132%

Source: Massachusetts Executive Office of Labor and Workforce Development website, viewed August 2008 (viewed February 2009 for Attleboro) (these data were not seasonally adjusted).

Bold indicates above state average.

The growth in work trips to the metropolitan Boston job market, as well as the projected increase in population and housing, reflect the movement of affordable housing units further from the urban core job market. Because of the growing congestion on Route 24, it is likely that a substantial portion of commuters destined for the Boston job market would be interested in using the proposed transit service.

Each of the communities evaluated reported an increase in the number of work-related commuters traveling to Boston and Cambridge between 1990 and 2000. Six of the communities reported growth of greater than 100 percent. Lakeville reported the most growth with over 250 percent more workers commuting to Boston and Cambridge in 2000 than in 1990. This increase may, in part, be attributed to the Middleborough/Lakeville commuter rail station, which opened in 1997. Acushnet and New Bedford had the smallest increase, at less than 10 percent between 1990 and 2000.

Table 4.3-5 South Coast Communities: Work Trips to Boston/Cambridge Trends

Town of Residence	1990	2000	Percent Change
			1990-2000
Acushnet	119	126	5.9
Attleboro	996	1,451	45.7
Berkley	74	122	64.9
Dartmouth	142	363	155.6
Dighton	98	117	19.4
Easton	1,320	1,495	13.3
Fairhaven	103	155	50.5
Fall River	428	714	66.8
Freetown	88	188	113.6
Lakeville	103	383	271.8
Mattapoisett	78	101	29.5
New Bedford	723	741	2.5
Norton	754	840	11.4
Raynham	295	438	48.5
Rehoboth	81	161	98.8
Rochester	96	205	113.5
Somerset	122	200	63.9
Swansea	73	191	161.6
Taunton	1,069	1,301	21.7
Westport	90	222	146.7
TOTAL	6,852	9,514	38.8

Source: Central Transportation Planning Staff; U.S. Census Bureau, Journey to Work Data (1990, 2000)

Table 4.3-6 provides a place of employment comparison between towns in the social and economic environment study area and those along the Fitchburg Line, which is comparable in terms of distance from Boston. The table shows that in 2000, approximately four percent of all work trips originating from within the social and economic environment study area were to the Boston/Cambridge area, while along the Fitchburg Line corridor 8.5 percent of work trips were to Boston or Cambridge.

Table 4.3-6 Work Trips to Boston/Cambridge: Comparative Analysis

South Coast Area				Fitchburg Line			
Town of Residence	Boston/Cambridge Workers	Total Workers	% Working in Boston/Cambridge	Town of Residence	Boston/Cambridge Workers	Total Workers	% Working in Boston/Cambridge
Acushnet	126	5,204	2.4	Acton	1,693	8,524	19.9
Attleboro	1,451	21,540	6.7	Ayer	221	3,861	5.7
Berkley	122	3,106	3.9	Boxborough	296	2,710	10.9
Dartmouth	363	14,100	2.6	Concord	1,466	7,374	19.9
Dighton	117	3,255	3.6	Fitchburg	274	17,129	1.6
Easton	1,495	12,226	12.2	Harvard	324	2,752	11.8
Fairhaven	155	7,812	2.0	Lancaster	56	3,087	1.8
Fall River	714	38,840	1.8	Leominster	587	19,854	3.0
Freetown	188	4,800	3.9	Littleton	405	4,240	9.6
Lakeville	383	5,109	7.5	Lunenburg	128	4,953	2.6
Mattapoisett	101	3,135	3.2	Maynard	576	5,837	9.9
New Bedford	741	37,537	2.0	Shirley	174	2,791	6.2
Norton	840	8,932	9.4	Stow	341	3,112	11.0
Raynham	438	6,236	7.0	Sudbury	1,678	7,939	21.1
Rehoboth	161	5,575	2.9	Westminster	97	3,493	2.8
Rochester	205	2,455	8.4				
Somerset	200	8,921	2.2				
Swansea	191	8,213	2.3				
Taunton	1,301	27,870	4.7				
Westport	222	7,153	3.1				
TOTAL	9,514	233,019	4.1	TOTAL	8,316	97,656	8.5

Source: U.S. Census Data, Journey to Work (2000)

Median Household Income

Eight communities within the social and economic environment study area reported median household incomes below the statewide average in 1990; however, by 2000 only four municipalities were below the statewide average. Fairhaven, Fall River, New Bedford, and Taunton each reported median household incomes well below the statewide average in both 1989 and 1999 (Table 4.3-7). Even though the number of communities with median household incomes below the statewide average decreased, a total of eight South Coast communities experienced a decline (after adjusting for inflation) in median household income between 1989 and 1999 while statewide median household income showed annual modest increase (i.e., an annual growth rate of 0.14 percent). With negative annual growth rate of more than one percent (-1.07 percent in Fall River, and -1.02 percent in New Bedford), the gap between these communities and the statewide average is broadening substantially.

Table 4.3-7 South Coast Communities: Median Household Income

Town	1989*	1999	Annual Growth 1989-1999
Statewide	\$49,854	\$50,502	0.13
Acushnet	\$48,210	\$51,500	0.66
Attleboro	\$49,421	\$50,807	0.28
Berkley	\$58,024	\$56,174	-0.32
Dartmouth	\$47,406	\$50,742	0.68
Dighton	\$55,068	\$58,600	0.62
Easton	\$68,330	\$69,144	0.12
Fairhaven	\$40,605	\$36,447	-1.07
Fall River	\$30,291	\$29,014	-0.43
Freetown	\$61,382	\$64,576	0.51
Lakeville	\$60,524	\$70,495	1.54
Mattapoisett	\$54,596	\$58,466	0.69
New Bedford	\$30,554	\$27,569	-1.02
Norton	\$59,175	\$55,325	-0.67
Raynham	\$60,504	\$60,449	-0.01
Rehoboth	\$60,667	\$65,373	0.75
Rochester	\$56,664	\$63,289	1.11
Somerset	\$49,133	\$51,770	0.52
Swansea	\$54,124	\$52,524	-0.30
Taunton	\$43,598	\$42,932	-0.15
Westport	\$50,042	\$55,436	1.03
Regional Average Income**	\$42,147	\$42,736	0.14%

Source: 1990 Census of Housing and Population, Census 2000

* In 1999 dollars, adjusted for inflation using the Northeast Urban CPI; **Bold** indicates below state average

** Regional Average Income was calculated as the weighted average of the median household incomes in the study area municipalities.

After adjusting for inflation, the regional average household income exhibited an annual increase of 0.14 percent between 1989 and 1999, similar to the statewide increase. The regional average household income was calculated as the average of the median household incomes of the study area municipalities, weighted by the number of households in each municipality.

Household income in the South Coast region increased from an average of \$53,532 in 2000 to \$77,237 in 2010, a rise of 36.5 percent. Comparatively, average household income in Massachusetts increased from \$50,502 in 2000 to \$65,981 in 2010, a rise of 30.7 percent.¹⁸

Industry Trends

The working population within the South Coast region is employed in a variety of industries, as summarized in Table 4.3-8. Industries consistent among all (or nearly all) communities include

¹⁸ USCB "American Fact Finder, Community Facts" website, available at <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>

construction; manufacturing; wholesale trade; retail trade; professional and technical services; art, entertainment, and recreation; and accommodation and food service.

The majority of workers in the South Coast region are employed in blue collar and service jobs such as construction, manufacturing, retail trade, health care/social assistance, and accommodation and food service. A large portion of the population is also employed in educational service jobs, particularly towns with higher median incomes, such as Rochester, Lakeville, and Rehoboth. Workers in the larger South Coast cities, such as Fall River and New Bedford are concentrated in the manufacturing and health care/social assistance sector.

Per Capita Local Tax Receipts and Property Tax Rates

Communities within the social and economic environment study area generally exhibit lower land and housing values, with some of these communities also having relatively low levels of per capita property tax receipts, as compared to the Commonwealth as a whole.¹⁹ An evaluation of per capita property tax receipts and property value may be used as a means of assessing a community's economic prosperity, and particularly its ability to finance local government services. In general, the South Coast region ranks well below the statewide average of local tax receipts per capita owing to the relatively low levels of property tax receipts within several communities. Of the South Coast municipalities within the study area, Fall River and New Bedford rank low on both measures, compared to other communities within the South Coast region. Fall River, New Bedford, and Taunton have a greater balance between residential and commercial property tax receipts compared to the South Coast region as a whole, even as their receipts per capita for commercial property are well below the statewide average.²⁰

Lower property tax receipts per capita do not necessarily reflect lower tax rates, and therefore are not a measure of potential competitive advantage for attracting new households or businesses. Property tax rates within the study area vary greatly and are summarized in Table 4.3-9. New Bedford, Somerset, Dighton, Fall River, and Taunton have the highest property and commercial/industrial tax rates within the study area. However, residential tax rates within these communities vary, ranging from 7.61 in Fall River, the third lowest residential rate, to 11.37 in New Bedford, the highest residential tax rate in the region. After New Bedford, the highest residential tax rates are in Acushnet, Attleboro, Somerset, Norton, Easton, and Dighton. Tax rates are expressed as dollars per \$1,000 of assessed value.

¹⁹ Massachusetts Executive Office of Transportation and Massachusetts Office of Housing and Economic Development. South Coast Rail Economic Development and Land Use Corridor Plan. June 2009. Prepared by Goody Clancy: Boston.

²⁰ Massachusetts Executive Office of Transportation and Massachusetts Office of Housing and Economic Development. South Coast Rail Economic Development and Land Use Corridor Plan Appendix E. June 2009. Prepared by Goody Clancy: Boston.

Table 4.3-8 South Coast Communities: Percent Employment by Industry, 2006

Industry	Agriculture, Forestry, Fishing, Hunting and Mining	Construction	Manufacturing	Wholesale Trade	Retail Trade	Transportation and Warehousing	Finance and Insurance	Real Estate/ Rental/ Leasing	Professional and Technical Service*	Management of Companies and Enterprises	Administrative and Waste Service	Educational Services	Health Care/ Social Assist.	Arts, Entertainment and Recreation	Accommodation and Food Service	Other Services	Public Administration	Unclassified	Total Workers
Town																			
Acushnet	0.0	18.9	9.9	2.1	5.7	N/A	1.5	1.0	1.4	N/A	0.8	N/A	7.9	0.0	14.2	4.7	0.0	31.9	1,490
Attleboro	0.0	4.6	29.3	3.0	11.5	0.9	1.2	0.7	2.8	0.0	3.4	0.0	18.4	0.8	10.6	3.9	2.3	6.5	18,639
Berkley	0.0	14.8	6.5	0.8	13.2	N/A	N/A	N/A	4.4	N/A	7.6	N/A	N/A	N/A	N/A	3.4	N/A	49.3	643
Dartmouth	0.1	4.6	7.2	1.9	27.3	N/A	1.6	0.9	2.0	0.3	2.6	12.5	14.9	2.1	12.8	3.6	N/A	4.2	15,618
Dighton	N/A	7.3	13.9	28.6	2.8	2.0	1.6	N/A	2.3	N/A	0.8	17.8	7.6	1.1	2.2	1.5	N/A	9.3	1,845
Easton**	N/A	8.0	6.9	4.0	9.8	2.7	2.3	0.5	4.4	N/A	6.1	0.3	4.8	0.9	5.9	5.1	N/A	N/A	12,627
Fairhaven	2.8	5.4	12.2	1.8	19.8	0.5	2.8	0.2	2.4	2.8	2.3	4.7	15.6	1.4	14.3	4.8	N/A	6.2	6,404
Fall River	N/A	3.5	19.8	4.9	9.2	1.1	3.9	1.0	3.9	1.3	2.9	0.4	26.3	0.6	6.2	4.2	10.9	N/A	36,989
Freetown	0.9	9.4	10.4	2.8	4.3	N/A	0.7	0.1	1.6	N/A	11.8	N/A	1.0	0.1	5.8	2.1	N/A	49.0	3,757
Lakeville	N/A	7.2	6.0	7.3	4.7	N/A	3.2	0.9	6.8	N/A	4.7	14.2	9.5	3.7	3.6	3.3	N/A	24.9	3,170
Mattapoisett	N/A	6.7	6.8	11.7	9.1	0.9	1.7	6.3	6.6	N/A	2.1	19.1	2.9	2.0	11.7	8.0	N/A	4.3	1,828
New Bedford	2.8	3.5	21.4	4.8	7.6	2.7	2.6	1.0	4.4	N/A	3.1	7.3	20.6	0.9	6.1	5.2	N/A	6.0	37,223
Norton	N/A	4.4	9.0	20.3	7.3	1.4	1.6	0.6	2.6	N/A	5.5	16.6	11.3	2.8	6.7	3.1	N/A	6.8	6,017
Raynham	N/A	4.2	14.6	3.9	28.9	3.1	3.6	0.8	2.8	1.6	7.4	2.8	4.9	3.6	13.4	2.6	N/A	2.0	8,788
Rehoboth	1.5	16.4	5.1	4.6	8.3	2.1	1.6	0.6	2.1	N/A	7.2	10.9	11.4	6.2	9.8	5.7	N/A	6.5	1,854
Rochester	9.7	12.9	0.4	6.5	3.9	N/A	2.3	2.4	2.4	N/A	11.8	33.7	N/A	1.2	2.4	2.4	N/A	7.6	735
Somerset	0.2	3.3	10.2	0.3	21.2	N/A	3.0	0.9	8.9	N/A	1.8	0.2	13.8	1.0	14.8	4.5	N/A	15.3	4,451
Swansea	0.4	5.4	2.6	2.8	27.4	1.0	5.9	1.3	2.2	N/A	2.3	7.5	15.1	1.6	13.8	3.9	N/A	3.9	5,876
Taunton	N/A	5.5	9.3	7.1	17.1	5.7	2.2	0.6	12.1	0.9	3.3	6.1	14.5	0.5	7.0	3.3	4.0	N/A	25,653
Westport	4.0	24.1	3.5	5.3	11.2	1.9	1.9	0.9	4.1	N/A	5.9	N/A	2.9	2.0	12.0	5.5	N/A	14.5	3,378

Source: SRPEDD Community Quickstats, Summer 2007.

N/A Not Applicable, Industry not identified as an available category for the city or town.

* Professional and Technical Services include those in the utilities and information sectors.

** Employment data for Easton does not account for all workers within the municipality. Approximately 4,836, or 38.3 percent, of the workforce is unreported but is anticipated to be spread out among the various industries in similar proportions to reporting workers.

Table 4.3-9 South Coast Communities: Property Tax Rates¹, 2005²

	Personal Property		Commercial and
	Tax ²	Residential Tax	Industrial Tax
Acushnet	12.71	10.9	12.71
Attleboro ³	16.57	10.09	16.57
Berkley	7.82	7.82	7.82
Dartmouth	7.45	7.45	7.45
Dighton	20.8	10.66	20.8
Easton	10.69	10.69	10.69
Fairhaven	16.66	8.35	16.66
Fall River	19.5	7.61	19.5
Freetown	15.47	9.88	15.47
Lakeville	9.14	9.14	9.14
Mattapoisett	9.42	9.42	9.42
New Bedford	27.6	11.37	27.6
Norton	10.72	10.72	10.72
Raynham	13.42	10.25	13.42
Rehoboth	8.86	8.86	8.86
Rochester	9.21	9.21	9.21
Somerset	25.04	10.73	25.15
Swansea	16.36	8.09	16.36
Taunton	18.1	8.64	18.1
Westport	6.14	6.14	6.14

1 Tax rates are expressed as dollars per \$1,000 assessed value.

2 Property Tax Rate data, MassStats
http://massstats.detma.org/websaras/frame_it.asp?theProductName=MassStats

3 Attleboro data obtained from www.mass.gov, Massachusetts Department of Revenue tax information.

Economic Development Tools

With unemployment on the rise, economic development tools are important to maintaining stability within the social and economic environment study area communities. Where not already in place, approaches have been established, or are planned for several of the communities within the study area. Such tools often are developed within local offices such as redevelopment authorities and economic/industrial development commissions. The municipalities of Attleboro, Fall River, New Bedford, and Taunton have redevelopment authorities. Economic or industrial development commissions are operating in Dartmouth, Dighton, Freetown, New Bedford, Norton, Raynham, Rehoboth, Somerset, Swansea, and Taunton.

Tax Increment Financing (TIF) and District Improvement Financing (DIF) are methods used to promote economic development and redevelopment in communities using public/private partnerships.²¹ TIF programs provide tax exemptions of up to 100 percent of the tax increment to individual landowners and developers for projects that have been deemed to be within Economic Opportunity Areas.^{22,23} The

²¹ Massachusetts Executive Office of Transportation and Massachusetts Office of Housing and Economic Development. South Coast Rail Economic Development and Land Use Corridor Plan. June 2009. Prepared by Goody Clancy: Boston.

²² Ibid.

²³ Economic Opportunity Areas are determined by the Massachusetts Economic Assistance Coordinating Council (EACC).

implementation of a DIF allows a city or town to designate development districts that use the increased tax revenues derived from new development to fund district-wide improvements, such as streetscape or storefront projects.²⁴

Based on information from the Massachusetts Economic Assistance Coordinating Council (EACC), TIF programs apply to projects associated with Economic Opportunity Areas. Such programs provide individuals (landowners and developers) with tax exemptions of as much as 100 percent of the tax increment.²⁵

TIFs can be used to maintain existing businesses as well as to create or encourage new businesses. DIF programs differ from TIFs in that they allow cities/towns “to designate development districts that use the increased tax revenues derived from new development (the increment), to specifically fund district-wide improvements, often in the form of streetscape and storefront projects.”²⁶

Seventeen of the 20 communities within the study area offer TIF programs. Easton, Rehoboth, and Swansea do not currently offer such a program. New Bedford has offered TIF programs since 1997.²⁷ Currently 77 businesses within the city use TIF, which has resulted in 2,750 jobs for New Bedford. Additionally, a DIF has been utilized in New Bedford to facilitate the revitalization of a 130-acre area (Hicks-Logan Sawyer area) near downtown New Bedford, off I-195.²⁸ More suburban towns, such as Dartmouth and Attleboro, have also benefited from the use of TIFs, which have facilitated new jobs and new construction within each of these towns.

Summary

As a whole, the communities within the study area have a growing population and growing demand for housing, although Fall River and New Bedford, the two largest cities in the study area in terms of population have seen the least growth over the past 20 years. The analysis shows that the region’s population is projected to increase by approximately 30 percent by 2030. However, the region also has higher unemployment rates than the state average, indicating that residents lack access to employment markets. Real median household incomes increased in more than half of the South Coast communities and the number of communities with a median household income below the statewide household income decreased from eight to four. Work trips to Boston have increased by 38 percent over the period 1990-2000, but are still only approximately four percent of all work trips. This is substantially lower than the percentage of work trips to Boston of other communities with rail access, such as the Fitchburg Line at 8 percent.

4.3.3 Analysis of Impacts

This section presents the social or economic effects from implementing each of the South Coast Rail project alternatives during the construction phase and upon completion of the project. The potential long-term social and economic effects considered include loss of property tax revenue for municipalities from the acquired privately owned parcels, employment displacement, residential displacement, and fragmentation of neighborhoods or loss of continuity between neighborhoods. The indirect and

²⁴ Massachusetts Executive Office of Transportation and Massachusetts Office of Housing and Economic Development. South Coast Rail Economic Development and Land Use Corridor Plan. June 2009. Prepared by Goody Clancy: Boston.

²⁵ Ibid.

²⁶ Ibid.

²⁷ Ibid.

²⁸ Ibid.

cumulative socioeconomic effects associated with the South Coast Rail Alternatives are addressed in Chapter 5.

The impact analysis includes: (1) the potential impacts along alternative alignments; (2) the potential impacts at the station locations and; (3) the potential impacts at layover facilities. The land acquisition required for the alignments, stations and layover facilities for each element of the alternatives are presented in Chapter 4.2, *Land Use*. A summary of impacts by alternative is presented in Section 4.3.4.

4.3.3.1 Methodology

Construction Impacts Methodology

The construction associated with the alternatives would support temporary jobs in the South Coast region in construction and related industries during the estimated four-year construction period. Construction job estimates are based on the Corridor Plan,²⁹ which presents total economic impacts for four study areas: (1) Taunton and communities south; (2) Northern communities; (3) Boston and Cambridge; and (4) the rest of Massachusetts.

The economic impact assessment does not include potential negative effects related to temporary displacement of businesses and their operations or lost economic opportunities during construction activities.

Permanent Impacts Methodology

The potential long-term social and economic effects of the South Coast Rail alternatives include loss of property tax revenue for municipalities from the acquired privately owned parcels, displacement of existing businesses, residential displacement, fragmentation of neighborhoods or loss of continuity between neighborhoods and job creation related to the operation of the new service.

The land acquisition required for the alignments, stations and layover facilities for each element of the alternatives are presented in Chapter 4.2, *Land Use*, which identifies parcel ownership and land usage for each parcel. The right-of-way acquisitions would generally be small portions of numerous undeveloped parcels. Property tax revenue losses associated with the right-of-way acquisitions of small portions of undeveloped parcels were not estimated and it was assumed that there would not be any job displacement or residential displacement associated with these small acquisitions. Exceptions are discussed in the relevant sections.

For privately-owned parcels that would be wholly acquired for the layover facilities or train stations, or where more than 50 percent of the parcel would be acquired, it is assumed that a proportional value of property tax revenue would be lost. Estimates of annual property tax revenue loss (in 2013 dollars) from parcels were made based upon each municipality's property tax formula. Estimates of the loss of property tax revenues for local municipalities, property tax revenue data were obtained based on a review of online resources of the affected municipalities. A screening analysis was performed to identify which parcels have a potential for job displacement based on the presence of privately-owned industrial or commercial buildings. It was assumed that all jobs at risk for displacement would be lost. Residential displacement was estimated by multiplying the number of units that would potentially be displaced by the average household size in the affected municipality.

²⁹ Massachusetts Executive Office of Transportation and Public Works and Massachusetts Office of Housing and Economic Development. South Coast Rail Economic Development and Land Use Corridor Plan. June 2009. Prepared by Goody Clancy: Boston.

Where less than 50 percent of a parcel would be acquired for the layover facilities or train stations, it was assumed that the scale and precision of the preliminary engineering plans limit the accuracy of the acquisition projections. Changes in property tax revenue loss resulting from any remaining minimal acquisitions will be determined in final design of the selected alternative.

The potential social effects of the railroad alignments include neighborhood fragmentation or loss of continuity between neighborhoods. This potential impact was evaluated by reviewing locations where constructing new railroad corridors or reconstructing unused railroads are proposed, in particular focusing on where these alignments pass through residential areas. A qualitative rating of fragmentation effects was made on a relative basis for each alignment, ranging from none to moderate, depending upon the number of road crossings, degree of neighborhood maturity, and housing density along the alignments. Neighborhood fragmentation is not considered a likely effect of improving and using existing, active railroad alignments. It is also not a likely effect of reconstructing or constructing and using non-linear facilities such as stations or layover facilities. More information on the social effects is presented in Chapter 4.5, *Visual and Aesthetic Resources*, where changes in the visual environment that would adversely affect communities are identified.

All Build Alternatives would require employees for train operations, rail or highway maintenance, station and layover facility operations, and administration. Some of these roles may be assigned to existing MBTA staff; others would require new hires or contracts with private firms. The number of new jobs that would be created for these tasks was not estimated.

Property Value Impact Analysis Methodology

Residential property values near stations and alignments³⁰ may be affected. A literature review³⁰ of the effects of commuter rail service on property values concluded that residential property values in areas with access to commuter rail increased anywhere from 5 to 25 percent, with most increases between 6 and 10 percent. The literature review findings are presented in more detail below. Presumably, greater increases would be realized closer to the stations, with less of an effect with increasing distance from the station. This indirect effect is considered for the train stations, as these facilities would be access points to the transit system. Each station site was reviewed for nearby properties (within a 0.5-mile radius) zoned for residential use to qualitatively determine if residential property values would be likely to increase. No changes in residential real estate values are expected near existing stations. The potential increases in residential property values are not quantified. A screening analysis indicates the possibility of an increase in residential property values near each station with a “yes” or “no.”

As described in Chapter 4.4, *Environmental Justice*, some station sites are within or near low-income neighborhoods. Increases in property values in these neighborhoods could make homes and businesses too expensive to afford. However, TOD may offset this effect if development plans require affordable housing.

Similarly, residential real estate values in proximity to railroad alignments may decrease in value. Based on an analysis of noise-sensitive receptors (i.e., residents) along the alignments, residential properties that would be affected by construction activities or train operations would likely experience a decrease in real estate value. Residential properties that would be moderately or severely impacted by noise are identified in Chapter 4.6, *Noise*. As with the residential value increases near station sites, residential

³⁰ Reservitz, David. 2009. Impacts of Commuter Rail Service on Residential Property Values. Reservitz Law Offices: Boston.

value decreases along railroad alignments presumably would be greatest close to the alignments with less of an effect with increasing distance from the railroad.

In summary, residential property values near stations may increase as a result of the improved access to transit, with further increases possible in areas where transit-oriented development (TOD) is possible. Conversely, residential property values along the alternative alignments may decrease as a result of increased noise from train operations. Property value increases may have an adverse impact on certain populations (low income), if homes and businesses become too expensive to afford. This effect may be offset if TOD includes an affordable housing component.

Property Value Impact Literature Review Summary

Reservitz (2009)³¹ reviewed several studies on commuter rail impacts to property values, and found that commuter rail access near residential property values has a positive impact anywhere from 5 to 25 percent with most studies concluding that values would increase by 6 to 10 percent.

Armstrong (1994)³² found that “there is an increase in single-family residential property values of approximately 6.7 percent by virtue of being located within a community having a commuter rail station.”

Chen et al. (1997)³³ found that the positive effect on real estate values near station sites (due to increased access to transit services) was partially offset by a negative effect along the rail lines (due to increased nuisance impacts, principally noise and vibration). Chen et al did not quantify either the positive or negative changes in real estate values, but concluded that the “positive effect dominates the negative effect, which implies a declining price gradient as one moves away from [light rail transit] stations for several hundred meters.” Armstrong (1994) found that there could be as much as a 20 percent decrease in residential property value for residences within 400 feet of MBTA’s Fitchburg line.

4.3.3.2 No Build (Enhanced Bus) Alternative

The No Build Alternative (Enhanced Bus) would improve transit service to Boston from New Bedford, Fall River, and Taunton and would not include any capital improvements. Under this alternative, no new rail or bus service would be provided to Southeastern Massachusetts.

No new construction or land acquisition would be required for the No Build Alternative. There would be no impacts to property tax revenues or jobs. This alternative would not directly affect the social and economic environment.

4.3.3.3 Southern Triangle (Common to all Rail Alternatives)

Portions of the rail lines within the southern part of the South Coast Rail study area are common to the Stoughton and Whittenton Alternatives. The Southern Triangle would require 7.3 acres of private land acquisition for the diesel alternatives and 8.6 acres for the electric alternatives. Twenty-five privately-owned parcels would be acquired in full or part to support the right-of-way under all Rail Alternatives.

³¹ Reservitz, D. Impacts of Commuter Rail Service on Residential Property Values. Reservitz Law Offices: Brockton MA.

³² Armstrong, R.J. Jr. 1994. Impacts of Commuter Rail Service as Reflected in Single-Family Residential Property Values. In Transportation Research Record No. 1466, pp 88-98. Transportation Research Board of the National Academies.

³³ Chen, H., A. Rufolo, and K.J. Dueker. 1997. Measuring the Impact of Light Rail Systems on Single Family Home Values: A Hedonic Approach with GIS Application. Discussion Paper 97-3. Center for Urban Studies, College of Urban and Public Affairs, Portland State University: Portland OR.

An additional three parcels totaling 1.3 acres would be necessary to support traction power facilities under the electric alternatives. The number, area, public or private ownership, and general land use of parcels that would be acquired in each municipality along the Fall River Secondary and New Bedford Mainline right-of-ways, and for the traction power facilities for the electric alternatives, are summarized in Table 4.2-2 and shown in Figures 4.2-1a-d and 4.2-2a-c in Chapter 4.2, *Land Use*.

Thirteen undeveloped parcels totaling approximately 2.3 acres would be affected to support the Southern Triangle right-of-way or traction power facility sites. No business or community facility displacements would result from acquisition necessary to support the Rail Alternatives in the Southern Triangle. Six industrial parcels totaling 0.6 acre would be affected to support the right-of-way; no industrial parcels would be acquired for traction power facilities.

Three residential displacements would occur on two parcels at Myricks Junction in Berkley (Figure 4.2-2a). Based on the average Berkley household size of 3.1 persons, nine persons would be displaced by these acquisitions. Full acquisition of the two residential parcels in Berkley would result in the estimated property tax loss of approximately of \$4,724.88 (\$2009). Six partial acquisitions on residential parcels in Fall River and Freetown, and one additional partial acquisition in Berkley would be necessary to support the Southern Triangle right-of-way. Because of the size and anticipated impact on these parcels, property tax revenue loss has not been calculated for these parcels.

Improving and using the existing, active Fall River Secondary and New Bedford Main Line for the South Coast Rail project would not result in neighborhood fragmentation.

4.3.3.4 Stoughton Electric Alternative

The Stoughton Electric Alternative north of the Southern Triangle would be comprised of a portion of the Northeast Corridor and the entire Stoughton Line. This evaluation focuses on the existing and extended Stoughton Line segment; no construction would be required in the Northeast Corridor segment for this alternative, and the Southern Triangle segments were addressed in Section 4.3.3.3.

Along the Stoughton Line segment, the Stoughton Electric Alternative would require a total of 44.7 acres (87 parcels) of privately owned land: 43.6 acres (80 parcels) for the right-of-way, plus an additional 1.1 acres (seven parcels) for traction power facilities. The number, area, public or private ownership, and general land use of parcels that would be acquired in each municipality along the Stoughton Line right-of-way and for the traction power facilities for the Stoughton Electric Alternative, are summarized in Table 4.2-3 and shown in Figures 4.2-3a-e in Chapter 4.2, *Land Use*.

Most of the land that would be acquired for the Stoughton Line right-of-way or traction power facilities consists of small portions of either publicly or privately owned parcels. Many of the affected parcels are undeveloped parcels; other land uses include industrial, commercial and residential. Eight of the privately owned parcels that would be acquired for the Stoughton Line right-of-way would be acquired in full.

Property tax revenue losses for acquisitions of small portions of undeveloped parcels were not estimated. Two parcels in Raynham, near Raynham Junction and along the proposed right-of-way, would be acquired in full. Property tax losses from acquiring these two parcels would be \$7,030, in 2013 dollars.

Residential displacement would occur in Raynham, from one home occupying one parcel south of Raynham Junction (Figure 4.2-3d). Based on the average Raynham household size of 2.8 persons, three persons would be displaced by this acquisition. No business or community facility displacements would result from these acquisitions along the Stoughton Line.

Improving and using the existing, active Stoughton Line for the South Coast Rail project would minimally fragment neighborhoods. The active portion of the Stoughton Line terminates at the Stoughton Station; the railroad south of this point ceased operations in the late 1950s. Track has been removed from much of the railroad bed between the Stoughton Station and Weir Junction. Informal and unauthorized residential and recreational use of the railroad bed in several communities has established neighborhood continuity where none may have existed during the active phase of the railroad.

In Stoughton, the alignment parallels Washington Street south of the Stoughton Station, adjacent to or passing through medium density commercial, industrial, and residential areas. The alignment does not bisect any residential areas in this segment and thus no neighborhood fragmentation would result from reconstruction and use of the Stoughton Line.

Entering Easton, the alignment passes through the densely developed downtown area, adjacent to or passing through commercial, industrial, and residential areas. An existing pedestrian-only crossing, at Williams Street near downtown Easton, will be closed, disrupting continuity in this community. In this same area, the adjacent neighborhoods were constructed near the active railroad line but have since encroached into the railroad right-of-way. Yards have been expanded into the right-of-way, and pedestrians have used the right-of-way as an informal path. Re-establishing rail service in this segment may fragment neighborhood relationships that have become informally established during the inactive railroad phase.

South of Easton village, the Stoughton Line corridor passes through low- to moderate-density residential development. Neighborhoods along this segment appear to lack cross-railroad continuity; it is unlikely that reconstructing and using the Stoughton Line in this segment would fragment any neighborhood. Near the southern Easton town boundary (approaching the Hockomock Swamp), the Stoughton Line passes between the Easton Country Club and the Pine Oaks Golf Course, in a narrow corridor separating these two private recreational facilities. The Stoughton Line would not fragment these independent, but similar, entities. Immediately prior to entering the Hockomock Swamp, the Stoughton Line passes the Southeastern Regional Vocational Tech School. Sports fields here have encroached into the Stoughton Line right-of-way, and would need to be relocated. This facility relocation would disrupt sports field use but not fragment the neighborhood.

In Raynham and Taunton, the Stoughton Line again is adjacent to or passes through commercial, industrial, and residential development. The alignment crosses most residential neighborhoods perpendicular to main thoroughfares. Although temporary delays in traffic patterns may occur at road/railroad crossings, it is unlikely that the presence of the railroad in this segment would fragment the neighborhoods or disrupt continuity. An exception would be the Route 138 (Broadway) crossing in Raynham. This crossing would be constructed as grade-separated, avoiding traffic delays during operations.

4.3.3.5 Stoughton Diesel Alternative

The Stoughton Diesel Alternative is identical to the Stoughton Electric Alternative with the exception of the locomotive power source. Diesel-powered train service differs from electric-powered service in not

requiring electrical infrastructure, and thus requiring a smaller footprint. The footprint of the impacted area would be smaller because traction power facilities would not be necessary. Right-of-way parcel acquisitions required for the Stoughton Line portion of the Stoughton Diesel Alternative are presented in Table 4.2-3 and shown in Figures 4.2-3a-e. This segment would require 43.6 acres (80 parcels) of privately owned land.

As with the Stoughton Electric Alternative, no business or community facility displacements would result from these acquisitions along the Stoughton Line. Residential displacement would occur in Raynham, from one home occupying one parcel south of Raynham Junction (Figure 4.2-3d). Based on the average Raynham household size of 2.8 persons, three persons would be displaced by this acquisition. Two parcels in Taunton located south of and adjacent to Thrasher Street, each occupied by a residence, would be acquired in full, resulting in residential displacement.

As discussed above for the Stoughton Electric Alternative, the Stoughton Diesel Alternative may fragment neighborhood relationships that have become informally established during the inactive railroad phase near Easton. Sports fields near the Hockomock Swamp have encroached into the Stoughton Line right-of-way, and would need to be relocated.

4.3.3.6 Whittenton Electric Alternative

The Whittenton Electric Alternative would result in many of the same impacts along the Stoughton Line as the Stoughton Alternatives, except that the southernmost portion of the Stoughton Line (from Raynham Junction to Weir Junction) would not be used. Therefore, residential displacements south of Raynham Junction under the Stoughton Alternatives would be avoided.

Land acquisition requirements along the portion of the Attleboro Secondary of the Whittenton Alternative, as noted in the DEIS/DEIR, have been eliminated (other than those related to the Dana Street Station described separately in Section 4.3.3.8).

For the right-of-way and traction power facilities, the Whittenton Electric Alternative would require 54.4 acres (83 parcels) of privately owned land from the combination of the Whittenton Branch, and the northern portion of the Stoughton Line: 53.3 acres (76 parcels) for the right-of-way and 1.1 acres (7 parcels) for the traction power facilities. Although the former Whittenton Branch segment of the Whittenton Alternative is owned by the Commonwealth, minor acquisitions would be required along the right-of-way to accommodate ancillary structures. The number, area, public or private ownership, and general land use of parcels that would be acquired for the Whittenton Electric Alternative are summarized by municipality in Table 4.2-4 and shown in Figures 4.2-4a-b.

Most of the land that would be acquired for this segment is small portions of undeveloped parcels. Property tax revenue losses for acquisitions of small portions of land were not estimated (i.e., less than 50 percent).

No residential, business, or community facility displacements would result from these small acquisitions.

The Whittenton Branch passes through a range of agricultural, industrial, commercial, and residential areas between Raynham Junction and Whittenton Junction. In Raynham and Taunton, the Whittenton Branch is adjacent to or passes through commercial, industrial, and residential development. The alignment crosses most residential neighborhoods perpendicular to main thoroughfares, or parallels the outer boundary of the neighborhoods. Although temporary delays in traffic patterns may occur at

road/railroad crossings, it is unlikely that the presence of the railroad in this segment would fragment the neighborhoods or disrupt continuity. Access to an aggregate facility adjacent to the Whittenton Branch would be relocated permanently. Current use of the right-of-way as an informal path would cease.

4.3.3.7 Whittenton Diesel Alternative

The Whittenton Diesel Alternative is identical to the Whittenton Electric Alternative with the exception of the locomotive power source. Diesel-powered train service differs from electric-powered service in not requiring electrical infrastructure, and thus requires a smaller footprint. In the Southern Triangle and along the Stoughton Line (north of Raynham Junction only), the land acquisition impacts of the Whittenton Diesel Alternative would be the same as described for the Stoughton Diesel Alternative. Along the Whittenton Branch, impacts of the Whittenton Diesel Alternative are anticipated to be a similar negligible amount as with the Whittenton Electric Alternative.

As with the Whittenton Electric Alternative, most of the land that would be acquired for this segment consists of small portions of undeveloped parcels. Property tax revenue losses for small acquisitions were not estimated (i.e., less than 50 percent). No residential, business, or community facility displacements would result from these small acquisitions. Neighborhood fragmentation impacts are also the same as for the Whittenton Electric Alternative.

4.3.3.8 Stations

This section provides basic descriptions of each station and a list of the parcels to be acquired, in whole or in part, to construct or reconstruct these stations for the South Coast Rail project. For the privately owned parcels that would be wholly acquired for the train stations, or where more than 50 percent of the parcel would be acquired, it is assumed that a proportional value of property tax revenue would be lost. Estimates of annual (in 2013 dollars) property tax revenue loss from parcels were made based upon each municipality's property tax formula. A screening analysis was performed to identify which parcels have a potential for job displacement based on the presence of privately-owned industrial or commercial buildings. It was assumed that all jobs at risk for displacement would be lost. Residential displacement was estimated by multiplying the number of units that would potentially be displaced by the average household size in the affected municipality. This evaluation does not consider neighborhood fragmentation, as the stations would not be linear facilities dividing communities.

Southern Triangle (Common to all Rail Alternatives)

The Southern Triangle would include six stations which are all common to all Build Alternatives.

Fall River Depot Station

The Fall River Depot Station would be a new station constructed along the Fall River Secondary to serve all Build Alternatives. It would be located near the intersection of North Davol Street and Pearce Street in Fall River.

The Fall River Depot Station site is a previously developed parcel including and surrounded by commercial and industrial development. Parcels that would be acquired and converted to transportation/utilities land use to construct the Fall River Depot Station are listed in Table 4.3-10 and shown in Figure 4.2-28.

The Fall River Depot Station would require 5.11 acres of land, comprised of 4.94 acres (16 parcels) of privately owned land and 0.17 acre (one parcel) of publicly owned land. Business displacements would result from these acquisitions. Commercial or industrial buildings on five of the parcels listed above would be acquired to construct this station. Businesses present include a flooring store, electrical company, tire service shop, and automobile detail service. Job losses from businesses occupying these buildings would be expected. Land acquisition for the Fall River Depot Station would not displace any community facilities, but would result in residential displacement (Parcel O-22-0006). Based on the Fall River average household size of 2.3 persons, approximately 2 residents would be displaced.

All privately owned parcels would be acquired in whole or in excess of 50 percent;³⁴ property tax revenue losses for the City of Fall River are estimated at \$70,777 per year, in 2013 dollars. Parcel number O-15-0020 is owned by the City of Fall River; no property tax revenue loss would result from acquiring this parcel.

Table 4.3-10 Fall River Depot Station: Land Acquisition

Parcel Number	Ownership	Generalized Zoning	General Land Use	Property Tax Revenue Loss	Job Loss	Area (acres)	Percent Acquisition
O-15-0001	Private	Industrial	Industrial	\$7,836	Yes	0.80	100
O-15-0002	Private	Industrial	Industrial	\$8,151	No	0.32	100
O-15-0008	Private	Industrial	Industrial	\$11,830	Yes	0.19	100
O-15-0009	Private	Commercial	Industrial	NA ¹	Yes	0.07	100
O-15-0010	Private	Industrial	Commercial	NA ¹	Yes	0.12	100
O-15-0018	Private	Industrial	Industrial	\$7,434	No	1.52	100
O-15-0020	Public	Industrial	Industrial	NA	No	0.17	100
O-15-0031	Private	Industrial	Undeveloped	\$338	No	0.03	100
O-15-0032	Private	Industrial	Industrial	\$3,200	No	0.35	100
O-15-0034	Private	Industrial	Industrial	\$410	No	0.04	100
O-22-0005	Private	Commercial	Commercial	\$5,803	Yes	0.12	100
O-22-0006	Private	Residential	Residential	\$7,248	No	0.10	100
O-22-0007	Private	Residential	Commercial	\$9,336	Yes	0.12	100
O-22-0008	Private	Commercial	Commercial	\$1,625	Yes	0.53	100
O-22-0011	Private	Commercial	Industrial	\$4,516	Yes	0.47	100
O-22-0016	Private	Commercial	Commercial	\$3,050	No	0.12	100
O-22-0017	Private	Commercial	Commercial	NA ²	Yes	0.04	100
TOTAL				\$70,777		5.11	

Source: MassGIS 2002, 2005; municipal data 2009, aerial mapping, and online research (various).

1 Parcels O-15-0009 and O-15-0010 are included with Parcel O-15-0008 in Fall River assessor records.

2 Parcel O-22-0017 is included with Parcel O-22-0005 in Fall River assessor records.

Freetown Station

The Freetown Station would be a new station constructed along the Fall River Secondary to serve all Build Alternatives. It would be located along South Main Street in Freetown.

³⁴ Whenever more than 50 percent of a parcel is acquired, it is assumed that the entire parcel is acquired, resulting in a 100% loss of tax revenue

The Freetown Station site is an undeveloped parcel surrounded by low density residential development and undeveloped land. The parcel that would be acquired and converted to transportation/utilities land use to construct the Freetown Station is listed in Table 4.3-11 below and shown in Figure 4.2-29.

The Freetown Station would require acquisition of 4.18 acres (one parcel) of privately-owned land. No residential, business, or community facility displacements would result from this acquisition for the Freetown Station.

Less than 50 percent of parcel number 233-19 would be acquired for the Freetown Station and, accordingly, property tax revenue losses were not determined.

Table 4.3-11 Freetown Station: Land Acquisition

Parcel Number	Ownership	Generalized Zoning	General Land Use	Property Tax Revenue Loss	Job Loss	Area (acres)	Percent Acquisition
233-19	Private	Commercial	Undeveloped	TBD	No	4.18	15

Source: MassGIS 2002, 2005; municipal data 2009, aerial mapping, and online research (various).
 TBD To be determined.

King’s Highway Station

The King’s Highway Station would be a new station constructed along the New Bedford Main Line to serve all Build Alternatives. It would be located near the intersection of King’s Highway and Tarkiln Hill Road in New Bedford.

The King’s Highway Station site is a previously developed parcel surrounded by industrial development. This station would share a parking lot with adjacent businesses; no land acquisition would be required (Figure 4.2-30). There would be no direct effects to land uses or the social and economic environment at this location.

Whale’s Tooth Station

The Whale’s Tooth Station would be a new station constructed along the New Bedford Main Line to serve all Build Alternatives. It would be located near the intersection of Acushnet Avenue and Hillman Street, near the southern terminus of the New Bedford Main Line.

The Whale’s Tooth Station site is a previously developed parcel surrounded by industrial development. The City of New Bedford recently constructed a parking lot at this site in anticipation of the proposed South Coast Rail project. Development of this station would not require land acquisition. There would be no direct effects to land uses or the social and economic environment at this location.

Battleship Cove Station

The Battleship Cove Station would be a new station constructed along the Fall River Secondary that would serve all Build Alternatives. It would be located on Water Street in Fall River, near the southern terminus of the Fall River Secondary.

The Battleship Cove Station site is a previously developed parcel that is within the Ponta Delgada Plaza.

Construction of this station would not require land acquisition; would not result in any business, residential or community facility displacements; and would not result in direct impacts to land use or the social or economic and economic environment.

Taunton Depot Station

The Taunton Depot Station would be a new train station constructed along the New Bedford Main Line that would serve all rail alternatives. It would be located at 872 County Street in Taunton, behind the existing Target plaza.

The Taunton Depot Station site is an undeveloped parcel adjacent to commercial development and undeveloped lands. Parcels that would be acquired and converted to transportation/utilities land use to construct the Taunton Depot Station are listed in Table 4.3-12 below and shown in Figure 4.2-35.

Table 4.3-12 Taunton Depot Station: Land Acquisition

Parcel Number	Ownership	Generalized Zoning	General Land Use	Property Tax Revenue Loss	Job Loss	Area (acres)	Percent Acquisition
107-47	Private	Residential	Commercial	\$106	No	0.56	100.0
107-48	Private	Industrial	Undeveloped	TBD	No	10.97	40
TOTAL				\$106		11.53	

Source: MassGIS 2002, 2005; municipal data 2009, aerial mapping, and online research (various).
TBD To be determined.

The Taunton Depot Station would require 11.53 acres (two parcels) of privately-owned land. No residential, business, or community facility displacements would result from these acquisitions for the Taunton Depot Station.

Parcel number 107-47 would be wholly acquired and more than 50 percent of parcel number 107-48 would be acquired; property tax revenue losses for the Town of Taunton are estimated at \$106 per year, in 2013 dollars. Less than 50 percent of parcel number 107-57 would be acquired for the Taunton Depot Station and, accordingly, property tax revenue losses were not determined. Additional property tax revenue losses could result from this acquisition.

Stoughton and Whittenton Alternatives

The same stations would be reconstructed or newly constructed under the Stoughton and Whittenton Alternatives, with the exception of one. More specifically, in addition to the stations common to all Build Alternatives, reconstruction of one existing station along the Stoughton Line (Canton Center) and construction of four new train stations (Stoughton, Easton Village, North Easton and Raynham Park) would occur under the Stoughton Alternatives and the Whittenton Alternatives. The Taunton Station would only be constructed under the Stoughton Alternatives while the Dana Street Station would be built only under the Whittenton Alternatives.

Canton Center Station

The Canton Center Station is an existing train station along the Stoughton Line that would be reconstructed and would serve all Build Alternatives. It is located at 710 Washington Street in Canton. No land acquisition would be required for reconstructing the Canton Center Station (Figure 4.2-25). There would be no direct effects to land uses or the social and economic environment at this location.

Canton Junction Station

The Canton Junction Station is an existing train station at the junction of the Stoughton Line with the Northeast Corridor; it would serve all Build Alternatives. It is located at the intersection of Beaumont and Sherman Streets in Canton. No construction or land acquisition would be required at the Canton Junction Station (Figure 4.2-26). There would be no direct effects to land uses or the social and economic environment at this location.

Easton Village Station

The Easton Village Station would be a new train station constructed along the Stoughton Line that would serve all Build Alternatives. The Easton Village Station site is on Sullivan Avenue at the transition point to Mechanic Street (near the intersection with Pond Street) in Easton.

The Easton Village Station site is an undeveloped parcel surrounded by industrial and residential development. The land is currently used as a parking lot. Parcels that would be acquired and converted to transportation/utilities land use to construct the Easton Village Station are listed in Table 4.3-13 and shown in Figure 4.2-27.

Table 4.3-13 Easton Village Station: Land Acquisition

Parcel Number	Ownership	Generalized Zoning	General Land Use	Property Tax Revenue Loss	Job Loss	Area (acres)	Percent Acquisition
16U-129	Private	Industrial	Commercial	TBD	No	0.11	13.5
16U-129C	Private	Industrial	Commercial	TBD	No	0.12	1.4
TOTAL				TBD		0.23	

Source: MassGIS 2002, 2005; municipal data 2009, aerial mapping, and online research (various).
 TBD To be determined.

The Easton Village Station would require 0.23 acre (two parcels) of privately-owned land. No residential, business, or community facility displacements would result from these acquisitions for the Easton Village Station. Less than 50 percent of parcel numbers 16U-129 and 16U-129C would be acquired for the Easton Village Station and, accordingly, property tax revenue losses were not determined.

North Easton Station

The North Easton Station would be a new train station constructed along the Stoughton Line that would serve all Build Alternatives. It would be located at 21 Washington Street in Stoughton, behind the Roche Brothers Plaza.

The North Easton Station site is an undeveloped parcel surrounded by commercial development. Parcels that would be acquired and converted to transportation/utilities land use to construct the North Easton Station are listed in Table 4.3-14 and shown in Figure 4.2-45.

The North Easton Station would require 10.24 acres (five parcels) of privately-owned land. No residential, business, or community facility displacements would result from these acquisitions for the North Easton Station.

More than 50 percent of parcel number 060-006 would be acquired; property tax revenue losses for the Town of Easton are estimated at \$6,893 per year, in 2013 dollars. Less than 50 percent of parcel

numbers 1U-1, 1U-48, 060-008 and 060-009 would be acquired. Property tax revenue losses were not estimated for these minor acquisitions.

Table 4.3-14 North Easton Station: Land Acquisition

Parcel Number	Ownership	Generalized Zoning	General Land Use	Property Tax Revenue Loss	Job Loss	Area (acres)	Percent Acquisition
1U-1	Private	Residential	Undeveloped	TBD	No	1.65	8
1U-48	Private	Commercial	Undeveloped	TBD	No	1.00	27
060-006	Private	Commercial	Undeveloped	\$6,893	No	6.31	100
060-008	Private	Commercial	Commercial	TBD	No	0.59	15
060-009	Private	Commercial	Commercial	TBD	No	0.69	20
TOTAL				\$6,893		10.24	

Source: MassGIS 2002, 2005; municipal data 2009, aerial mapping, and online research (various).
TBD To be determined.

Raynham Park Station

The Raynham Park Station would be a new train station constructed along the Stoughton Line that would serve the Stoughton or Whittenton Alternatives. It would be located at 1958 Broadway in Raynham, at the former Raynham Park Greyhound Track, currently the Raynham Park Simulcast Center.

The Raynham Park Station site is a developed parcel surrounded by recreational development and undeveloped land. Parcels that would be acquired and converted to transportation/utilities land use to construct this station are listed in Table 4.3-15 below and shown in Figure 4.2-32.

Table 4.3-15 Raynham Park Station: Land Acquisition

Parcel Number	Ownership	Generalized Zoning	General Land Use	Property Tax Revenue Loss	Job Loss	Area (acres)	Percent Acquisition
1-15	Private		Commercial	TBD	No	3.09	34
1-19-1	Private		Commercial	\$7,030	Yes	8.81	59
TOTAL				\$7,030		11.90	

Source: MassGIS 2002, 2005; municipal data 2009, aerial mapping, and online research (various).
TBD To be determined.

The Raynham Park Station would require 11.90 acres (two parcels) of privately owned land. Commercial buildings on parcel number 1-19-1 would be acquired to construct this station. The business present on this parcel is the Raynham Park Simulcast Center (an off-track betting facility). A proposal for developing a slots parlor casino on the Simulcast Center property exists at the time of the preparation of the FEIS/FEIR, but the outcome of this proposal is uncertain as there is a competitive process to determine the location of the new casino.³⁵ This assessment assumes that the land acquisition would result in the displacement of one business and job loss. No residential or community facility displacements would result from these acquisitions.

³⁵ <http://www.bostonglobe.com/metro/2013/06/11/raynham-park-strikes-deal-with-town-over-slot-machine-parlor/1QLjMn7wbBFwoq505pvoel/story.html>.

More than 50 percent of parcel number 1-19-1 would be acquired; property tax revenue losses for the Town of Raynham are estimated at \$7,030 per year, in 2013 dollars. Less than 50 percent of parcel number 1-15 would be acquired and, accordingly, property tax revenue losses were not determined.

Stoughton Station

The Stoughton Station would be a new train station along the Stoughton Line that would serve all Build Alternatives. In order to accommodate a second track, the existing Stoughton Station would be shifted from its location between Porter and Wyman Streets to a new location south of the Wyman Street at-grade crossing. Land uses and zoning designations of the parcel that would be acquired and converted to transportation/utilities land use to reconstruct the Stoughton Station are listed in Table 4.3-16 below and shown in Figure 4.2-33.

Table 4.3-16 Stoughton Station: Land Acquisition

Parcel Number	Ownership	Generalized Zoning	General Land Use	Property Tax Revenue Loss	Job Loss	Area (acres)	Percent Acquisition
053-101	Private	Industrial	Industrial	\$7,923	Yes	1.05	100
053-102	Private	Industrial	Commercial	\$8,782	Yes	4.42	100
054-110	Private	Commercial	Commercial	TBD	No	0.04	2
054-401	Private	Commercial	Commercial	TBD	No	0.01	10
054-406	Private	Industrial	Industrial	\$4,436	Yes	1.90	100
054-407	Private	Industrial	Undeveloped	\$1,352	No	0.02	100
TOTAL				\$22,493		7.44	

Source: MassGIS 2002, 2005; municipal data 2009, aerial mapping, and online research (various)
TBD To be determined.

The relocated Stoughton Station would require acquisition of 7.44 acres (six parcels) of privately owned land. Four parcels would be obtained in entirety; 10 percent or less of two other parcels would be acquired. The estimated annual property tax revenue losses for the Town of Stoughton would be \$24,493.

Although no residential or community facility displacements would result from these acquisitions, business displacements would occur and job losses may result. Parcels 053-101 and 053-102 are owned by individuals associated with the Alpha Chemical Company that has a manufacturing facility on Morton Street adjacent to the northern boundary of the station site. Available data indicate that these two parcels are used as warehouses and office (conference) space. Parcel 054-406 is owned by the Murphy Coal Company, a business with offices nearby on Washington Street. Available data indicate that the parcel contains a fuel storage and materials handling yard, parking lot, and vehicle repair garage.

The proposed relocation of the Stoughton Station would open up 2.5 acres of land for potential redevelopment. MBTA owns this property and it would be released for sale and redevelopment. This land, currently occupied by tracks and parking areas, is on the east side of the proposed tracks.

Taunton Station (Stoughton Alternatives)

The Taunton Station would be a new train station constructed along the Stoughton Line that would serve the Stoughton Alternatives only. It would be located near the intersection of East Arlington Street and William Hooke Lane in Taunton.

The Taunton Station site is a previously developed parcel surrounded by commercial development. Parcels that would be acquired and converted to transportation/utilities land use to construct the Taunton Station are listed in Table 4.3-17 below and shown in Figure 4.2-34.

Table 4.3-17 Taunton Station: Land Acquisition

Parcel Number	Ownership	Generalized Zoning	General Land Use	Property Tax Revenue Loss	Job Loss	Area (acres)	Percent Acquisition
55-759	Private	Residential	Commercial	\$2,059	No	1.53	100
55-760	Private	Industrial	Undeveloped	\$6,422	No	7.44	100
55-761	Private	Industrial	Undeveloped	\$2,107	No	0.51	100
55-762	Private	Industrial	Undeveloped	\$749	No	0.50	100
55-763	Private	Industrial	Undeveloped	\$2,242	No	0.25	100
55-764	Private	Industrial	Undeveloped	\$1,407	No	0.64	100
Pub ROW	Public	Transportation	Transportation	NA	No	0.95	100
TOTAL				\$14,986		11.82	

Source: MassGIS 2002, 2005; municipal data 2009, aerial mapping, and online research (various).
 NA Not applicable.

The Taunton Station would require 11.82 acres of land, comprised of 10.87 acres (six parcels) of privately owned land and 0.95 acre (one parcel) of publicly owned land. No residential, business, or community facility displacements would result from these acquisitions for Taunton Station.

More than 50 percent of all of the privately owned parcels would be acquired; property tax revenue losses for the Town of Taunton are estimated at \$14,986 per year, in 2013 dollars. The public parcel is owned by the Town of Taunton; no property tax revenue loss would result from this acquisition.

Dana Street Station (Whittenton Alternatives)

The Dana Street Station would be a new station constructed along the Attleboro Secondary that would serve the Whittenton Alternatives only. It would be located just south of the Danforth Street grade crossing, within walking distance of downtown Taunton. This area is densely developed with land uses including commercial, industrial, and residential properties.

The Dana Street Station site in Taunton is currently a vacant lot. The parcels that would be acquired and converted to transportation/utilities land use to construct this station are listed in Table 4.3-18 and shown in Figure 4.2-40.

The Dana Street Station in would require acquisition of 4.09 acres encompassing nine parcels of privately owned land. These parcels are vacant or appear to have an industrial use, but most are zoned as residential properties. More than 50 percent of parcel numbers 54-558, 54-449, 54-450, 54-451, 54-452, 54-453, 54-454 and 54-455 would be acquired; property tax revenue losses for the Town of Taunton are estimated at \$6,112 per year, in 2013 dollars. Less than 50 percent of parcel number 54-171 would be acquired; property tax revenue losses were not determined. No residential, business, or community facility displacements would result from this acquisition for the Dana Street Station.

Table 4.3-18 Dana Street Station: Land Acquisition

Parcel Number	Ownership	Generalized Zoning	General Land Use	Property Tax Revenue Loss	Job Loss	Area (acres)	Percent Acquisition
54-171	Private	Industrial	Industrial	TBD	No	0.56	49
54-448	Private	Residential	Industrial	\$1,183	No	0.44	100
54-449	Private	Residential	Industrial	\$1,190	No	0.45	100
54-450	Private	Residential	Industrial	\$1,203	No	0.47	100
54-451	Private	Residential	Industrial	\$1,210	No	0.48	100
54-452	Private	Residential	Industrial	\$1,223	No	0.50	100
54-453	Private	Residential	Industrial	\$37	No	0.49	100
54-454	Private	Residential	Industrial	\$33	No	0.35	100
54-455	Private	Residential	Industrial	\$33	No	0.35	100
TOTAL				\$6,112		4.09	

Source: MassGIS 2002, 2005; municipal data 2009, aerial mapping, and online research (various).

TBD To be determined.

Summary of Effects Associated with Stations

Constructing some of the stations would require removing commercial or industrial buildings, potentially resulting in a loss of jobs. Table 4.3-20 lists the communities where South Coast Rail stations would be sited, the workforce in each community, and whether or not job losses are expected from station construction.

Job loss and business displacement would be limited to Fall River, Raynham and Stoughton. Nine parcels in Fall River, one parcel in Raynham and three parcels in Stoughton would be affected by job displacement and associated job loss. The actual numbers of jobs that would be lost from each of these businesses is not known, but it is expected to be negligible in comparison to the number of workers present in these communities. As shown in Table 4.3-19, the work force in Fall River is estimated to be 36,989, while the Raynham and Stoughton work forces are estimated to be 8,788 and 14,523, respectively.

Table 4.3-19 Workforce in Communities with Stations

Municipality	Workforce	Station	Job Loss
Canton	21,372	Canton Center	No
		Canton Junction	No
Easton	12,627	North Easton	No
		Easton Village	No
Fall River	36,989	Battleship Cove	No
		Fall River Depot	Yes
Freetown	3,757	Freetown	No
New Bedford	37,223	King's Highway	No
		Whale's Tooth	No
Raynham	8,788	Raynham Park	Yes
Stoughton	14,523	Stoughton	Yes
Taunton	25,653	Taunton	No
		Dana Street	No
		Taunton Depot	No

Source: Metropolitan Area Planning Council (MAPC) *MAPC Projections 013106* (2010 employment projections for Canton, Sharon, and Stoughton) South Coast Regional Planning and Economic Development District (SRPEDD) *Community Quickstats* (summer 2007 employment estimates for all other communities)

4.3.3.9 Layover Facilities

Two overnight layover facilities are planned for the Southern Triangle: one each at or near the end of the Fall River Secondary and the New Bedford Main Line. The Wamsutta site was selected as the preferred layover facility for the New Bedford Main Line and Weaver's Cove East site was selected for the Fall River Secondary. This section provides basic descriptions of each layover facility site and a list of the parcels to be acquired, in whole or in part, to construct these facilities for the South Coast Rail project. This evaluation does not consider neighborhood fragmentation, as the layover facilities would not be linear facilities dividing communities.

Wamsutta

The Wamsutta site layover facility would be constructed along the New Bedford Main Line and would serve all Build Alternatives. It would be located in New Bedford near the intersection of Wamsutta Street and Herman Melville Boulevard, near the southern terminus of the New Bedford Main Line, just north of the Whale's Tooth Station.

The Wamsutta site layover facility alternative location is a previously developed site, currently used as a rail yard for CSX, within an industrial area. The layover facility at the Wamsutta site would require acquisition of 5.90 acres (one parcel) of publicly owned land. The parcel that would be acquired to construct this layover facility is listed in Table 4.3-20 and shown in Figure 4.2-37.

Table 4.3-20 Layover Facility at the Wamsutta Site: Land Acquisition

Parcel Number	Ownership	Generalized Zoning	General Land Use	Property Tax Revenue Loss	Job Loss	Area (acres)	Percent Acquisition
72-275	Public	Industrial	Undeveloped	N/A	No	5.90	54

Source: MassGIS 2002, 2005; municipal data 2009, aerial mapping, and online research (various).

No residential, business, or community facility displacements would result from this acquisition for the Wamsutta site.

Parcel number 72-275 is owned by Housing 70 Corporation (the City of New Bedford); no property tax revenue loss would result from acquiring this parcel.

Weaver’s Cove East

The Weaver’s Cove East site layover facility would be constructed along the Fall River Secondary and would serve all Build Alternatives. It would be located in Fall River west of Main Street between the existing Fall River Secondary and Main Street, approximately 2.5 miles from the southern terminus of the Fall River Secondary.

Currently vacant land, a portion of the Weaver’s Cove East site was previously developed. Approximately one-half of the site is cleared of vegetation or includes remnant building foundations; the remainder of the site is vegetated. Surrounding land to the north, east, and south is residential; industrial land use is present to the southwest. Undeveloped land is immediately west of the site, adjoining the Taunton River. The parcels that would be acquired to construct a layover facility at the Weaver’s Cove East site are listed in Table 4.3-21 below and shown in Figure 4.2-38.

Table 4.3-21 Layover Facility at the Weaver’s Cove East Site: Land Acquisition

Parcel Number	Ownership	Generalized Zoning	General Land Use	Property Tax Revenue Loss	Job Loss	Area (acres)	Percent Acquisition
T-15-33 ¹	Private	Industrial	Undeveloped	\$16,900	No	13.80	90.0
T-1-38	Private	Industrial	Undeveloped	\$46,311	No	4.63	100.0
TOTAL				\$63,211		18.43	

Source: MassGIS 2002, 2005; municipal data 2009, aerial mapping, and online research (various).

Note: Additional property tax revenue losses may result from small and/or partial acquisitions that cannot be determined at this phase.

1 Parcel T-15-33 incorporates Parcel T-15-1 in the City of Fall River Assessor’s records. Figure 4.2-38 depicts both parcels.

The layover facility at the Weaver’s Cove East site would require 18.43acres (two parcels) of privately owned land. No residential, business, or community facility displacements would result from these acquisitions for the Weaver’s Cove East site.

Parcel number T-1-38 would be wholly acquired and parcel number T-15-38 would be nearly wholly acquired; property tax revenue losses for the City of Fall River are estimated at \$63,211 per year, in 2013 dollars.

Summary of Effects Associated with Layover Facility

Tax effects of the layover site alternatives are listed in Table 4.3-22. The Wamsutta Layover facility would result in no tax losses in New Bedford, while tax losses in Fall River resulting from the Weaver’s Cove Layover Facility would be \$63,211.

Table 4.3-22 Summary of Layover Facility Potential Effects to the Social and Economic Environment

Candidate Layover Facility Site	Property Tax Revenue Loss	Job Loss	Neighborhood Fragmentation	Residential Property Value Increase
Wamsutta Site	N/A	No	NA	NA
Weaver’s Cove East Site	\$63,211	No	NA	NA
NA	Not applicable			

4.3.3.10 Temporary Construction Impacts

The construction associated with the proposed project would support temporary jobs in the South Coast region in construction and related industries during the estimated four-year construction period. Construction job estimates are based on the Corridor Plan, which presents total economic impacts for four study areas: (1) Taunton and communities south; (2) Northern communities; (3) Boston Cambridge; and (4) rest of Massachusetts.

Based upon the preliminary estimates of construction costs, the Corridor Plan suggests that “the total direct, indirect and induced economic effects within the Commonwealth of Massachusetts of the rail alternatives would include about \$1.4 billion to \$1.8 billion in business output, which would in turn generate 6,800 to 7,800 person-year jobs, and \$314 to \$360 million in household income.”

Delays would likely occur during construction activities and access to businesses could be temporarily affected. Coordination to keep local governments and business owners apprised of construction plans would serve to minimize temporary construction disruptions to business access.

4.3.4 Summary

This section summarizes the effects to the social and economic environment potentially resulting from implementing each of the South Coast Rail project alternatives, based upon preliminary engineering plans. The summaries of parcel acquisition and potentially resulting property tax revenue loss and job loss focus on privately owned parcels, as acquisition of publicly owned parcels would not impact these aspects of the social and economic environment.

4.3.4.1 Stoughton Electric Alternative

By Element

The Stoughton Electric Alternative would be comprised of the elements listed in Table 4.3-23, which also summarize the potential impacts to land uses and the social and economic environment, respectively, that may result from implementing this alternative.

Property tax revenue losses as a result of the Stoughton Electric Alternative are estimated at \$197,251 per year, in 2013 dollars; additional property tax revenue losses may result from small and/or partial acquisitions.

Four residences would be displaced. Based on average household size in the affected communities, nine persons would be relocated. Six businesses would be displaced by the Stoughton Electric Alternative. Job losses are expected from business displacements resulting from acquisition of privately owned commercial buildings.

Based on a review of residential and commercial property availability,³⁶ communities that would be impacted by residential displacements or business displacements have sufficient real estate capacity to absorb these displacements. Affected property owners would be provided compensation/relocation assistance in accordance with federal and state requirements.

Table 4.3-23 Stoughton Electric Alternative: Summary of Potential Effects to the Social and Economic Environment

Element/Component	Property Tax Revenue Loss	Neighborhood Fragmentation	Residential Displacement (homes)	Business Displacement	Job Loss
Railroad Alignments					
Northeast Corridor	-	None	-	-	No
Stoughton Line	\$7,030	Moderate	1	-	No
Fall River Secondary	\$4,725	None	3	-	No
New Bedford Main	TBD	None	-	-	No
Stations					
Canton Junction	-	NA	-	-	No
Canton Center	-	NA	-	-	No
Stoughton	\$22,493	NA	-	2	Yes
North Easton	\$6,893	NA	-	-	No
Easton Village	TBD	NA	-	-	No
Raynham Park	\$7,030	NA	-	-	No
Taunton	\$14,986	NA	-	-	No
Taunton Depot	\$106	NA	-	-	No
Freetown	TBD	NA	-	-	No
Fall River Depot	\$70,777	NA	-	4	Yes
Battleship Cove	-	NA	-	-	No
King's Highway	-	NA	-	-	No
Whale's Tooth	-	NA	-	-	No
Layover Facilities					
Wamsutta	-	NA	-	-	No
Weaver's Cove East	\$63,211	NA	-	-	No
TOTAL/SUMMARY	\$197,251	Moderate	4	6	Yes
TBD	To be determined.				
NA	Not applicable.				
Note:	Additional property tax revenue losses may result from small and/or partial acquisitions				

Moderate neighborhood fragmentation is expected to result from implementation of this alternative. Along the inactive portion of the Stoughton Line, some residential and commercial activity encroachment into the right-of-way has occurred in Stoughton, Easton, Taunton, and Raynham. The railroad has been out of service for some 50 years between Stoughton Station and Raynham Junction, and nearly 100 years between Raynham Junction and Longmeadow Street in Taunton. Over time, some

³⁶ Online research of residential real estate property availability conducted by reviewing current listings of similar homes (based on zoning of affected properties) in the affected communities at www.realtor.com. Commercial real estate vacancy rates conducted by telephone inquiries to chambers of commerce in the affected communities.

neighborhoods on either side of the alignment have developed continuity across the inactive railroad bed as residents have used the alignment for pedestrian transit to neighbors or commercial districts within walking distance. Re-establishing rail service would include safety fencing along the railroad right-of-way through high-density residential and commercial districts, preventing such informal use of the railroad bed as a path. Additionally, motorists, pedestrians, and bicyclists would be temporarily delayed at at-grade railroad crossings when trains pass, potentially disrupting car-based transit between neighborhoods.

By Municipality

Table 4.3-24 summarizes the private property acquisitions for rights-of-way, stations and layover facilities, as well as annual property tax revenue losses and job losses for each affected municipality that would result from the parcel acquisitions in excess of 50 percent for the Stoughton Electric Alternative. Most acquisitions associated with rights-of-way and traction power facilities are not estimated.

**Table 4.3-24 Stoughton Electric Alternative:
Property Tax Revenue and Job Losses for Affected Municipalities**

Municipality	Component	Private Property Acquisition Area (acres)	Property Tax Revenue Loss ¹	Job Loss
Canton	Canton Center	-	-	No
Easton	North Easton	10.24	\$6,893	No
Fall River	Battleship Cove	-	-	No
	Fall River Depot	5.11	\$70,777	Yes
	Weaver’s Cove East	18.43	\$63,211	No
Freetown	Freetown	4.18	TBD	No
New Bedford	Whale’s Tooth	-	-	No
	Wamsutta	5.90	-	No
Raynham	Raynham Park	11.90	\$7,030	Yes
Stoughton	Stoughton	7.44	\$22,493	Yes
Taunton	Taunton	11.82	\$14,986	No
	Taunton Depot	11.53	\$106	No

TBD To be determined.

Note: Additional property tax revenue losses may result from small and/or partial acquisitions.

4.3.4.2 Stoughton Diesel Alternative

The Stoughton Diesel Alternative would be comprised of the same elements as the Stoughton Electric Alternative as listed above, but would not need electrical infrastructure. The property acquisitions needed for the Stoughton Diesel Alternative are therefore 1.1 acres smaller than for the Stoughton Electric Alternative. The other effects to the social and economic environment that would result from the Stoughton Diesel Alternative (such as property acquisitions for stations, layover facilities, right-of-way, property tax revenue loss, residential and business displacements) are identical to those that would result from the Stoughton Electric Alternative, as provided in Tables 4.3-23 and 4.3-24.

4.3.4.3 Whittenton Electric Alternative

By Element

The Whittenton Electric Alternative (Figure 1.4-3) would be comprised of the elements listed in Table 4.3-25, which also summarize the land acquisition requirements and potential impacts to the social and economic environment, respectively, that may result from implementing this alternative.

Property tax revenue losses as a result of the Whittenton Electric Alternative are estimated at \$181,351 per year, in 2013 dollars; additional property tax revenue losses may result from small and/or partial acquisitions that were not estimated.

Three residences would be displaced by the Whittenton Electric Alternative, for the Fall River Secondary right-of-way acquisition at Myricks Junction. Based on average household size in the Berkley, nine persons would be relocated. Four businesses would also be displaced by the Whittenton Electric Alternative for the Fall River Depot Station, and two potential business displacements would result from development of the new Stoughton Station. Job losses are expected from business displacements resulting from acquisition of privately owned commercial buildings, but are not quantifiable at this time.

Based on a review of residential and commercial property availability,³⁷ communities that would be impacted by residential displacements or business displacements have sufficient real estate capacity to absorb these displacements. Affected property owners would be provided compensation/relocation assistance in accordance with federal and state requirements.

Moderate neighborhood fragmentation is expected to result from implementation of this alternative. Neighborhood fragmentation within the Stoughton Line portion would be as described in the Operations Impacts section. The inactive Whittenton Branch has been out of service for some 50 years. However, neighborhoods on either side of the alignment do not appear to have developed substantive continuity across the inactive railroad bed, partially due to the industrial nature of parcels on either side of the corridor, and partially because portions of the corridor in residential areas are located in a cut section with steep-sided banks, wherein disposal of yard waste and other refuse (rather than pathways to promote neighborhood continuity) has been the primary use of the embankment. Motorists, pedestrians, and bicyclists would be temporarily delayed at at-grade railroad crossings when trains pass, but this effect is not expected to impact continuity among neighborhoods along the Whittenton Branch.

By Municipality

Table 4.3-26 summarizes the private property acquisitions for rights-of-way and stations, annual property tax revenue losses, and job losses for each affected municipality that would result from the parcel acquisitions in excess of 50 percent for the Whittenton Electric Alternative.

³⁷ Online research of residential real estate property availability conducted by reviewing current listings of similar homes (based on zoning of affected properties) in the affected communities at www.realtor.com. Commercial real estate vacancy rates conducted by telephone inquiries to chambers of commerce in the affected communities.

Table 4.3-25 Whittenton Electric Alternative: Summary of Potential Effects to the Social and Economic Environment

Element/Component	Property Tax Revenue Loss	Neighborhood Fragmentation	Residential	Business Displacement	Job Loss
			Displacement (homes)		
Railroad Alignments					
Northeast Corridor	-	-	-	-	-
Stoughton Line	TBD	Moderate	-	-	No
Whittenton Branch	TBD	Minimal	-	-	No
Attleboro Secondary	TBD	None	-	-	No
Fall River Secondary	\$4,729	None	3	-	No
New Bedford Main Line	TBD	None	-	-	No
Stations					
Canton Junction	-	NA	-	-	No
Canton Center	-	NA	-	-	No
Stoughton	\$22,493	NA	-	2	Yes
North Easton	\$6,893	NA	-	-	No
Easton Village	-	NA	-	-	No
Raynham Park	\$7,030	NA	-	-	No
Dana Street	\$6,112	NA	-	-	No
Taunton Depot	\$106	NA	-	-	No
Freetown	TBD	NA	-	-	No
Fall River Depot	\$70,777	NA	-	4	Yes
Battleship Cove	-	NA	-	-	No
King's Highway	-	NA	-	-	No
Whale's Tooth	-	NA	-	-	No
Layover Facilities					
Wamsutta	-	NA	-	-	No
Weaver's Cove East	\$63,211	NA	-	-	No
TOTAL/SUMMARY	\$181,351	Moderate	3	6	Yes

TBD To be determined.

NA Not applicable.

Note: Additional property tax revenue losses may result from small and/or partial acquisitions.

Table 4.3-26 Whittenton Electric Alternative: Property Tax Revenue and Job Losses for Affected Municipalities

Municipality	Component	Private Property Acquisition Area (acres)	Property Tax Revenue Loss	Job Loss
Canton	Canton Center	-	-	No
Easton	North Easton	10.24	\$6,893	No
Fall River	Battleship Cove	-	-	No
	Fall River Depot	5.11	\$70,777	Yes
	Weaver’s Cove East	18.43	\$63,211	No
Freetown	Freetown	4.18	TBD	No
New Bedford	Whale’s Tooth	-	-	No
	Wamsutta	5.90	-	No
Raynham	Raynham Park	11.90	\$7,030	Yes
Stoughton	Stoughton	7.44	\$22,493	Yes
Taunton	Dana Street	4.09	\$6,112	No
	Taunton Depot	11.53	\$106	No

TBD To be determined.

Note: Additional property tax revenue losses may result from small and/or partial acquisitions.

4.3.4.4 Whittenton Diesel Alternative

The Whittenton Diesel Alternative would be comprised of the same elements as the Whittenton Electric Alternative as listed above but would not need electrical infrastructure. The area needed for the Whittenton Diesel Alternative is therefore somewhat smaller than for the Whittenton Electric Alternative. The other effects to the social and economic environment that would result from the Whittenton Diesel Alternative are identical to those that would result from the Whittenton Electric Alternative, as provided in Tables 4.3-25 and 4.3-26.

4.3.4.5 Summary Comparison

Table 4.3-27 provides a summary comparison of socioeconomic impacts by community. Also included in Table 4.3-27 are estimated fiscal year 2009 tax levies for each municipality, to allow for comparison of the estimated property value loss to the total tax revenues. For most communities, the anticipated property tax revenue loss is on the order of 0.02 percent, although Fall River would experience up to 0.2 percent loss of property tax revenue. The size of the property tax revenue losses are not expected to put substantial upward pressure on local tax rates and these impacts would be at least partially offset by additional tax revenue associated with economic development/redevelopment in the vicinity of the proposed stations as outlined in the Corridor Plan, as discussed further below.

Table 4.3-27 Comparison of Social and Economic Effects to Municipalities, by Alternative

Municipality	Stoughton Alternatives	Whittenton Alternatives
Canton		
Private Property Acquisition (acres)	-	-
Property Tax Revenue Loss	-	-
<i>Total Canton Tax Levy, 2009: \$50,759, 822</i>		
Percent Loss	0	0
Direct Job Loss	No	No
Easton		
Private Property Acquisition (acres)	10.24	10.24
Property Tax Revenue Loss	\$6,893	\$6,893
<i>Total Easton Tax Levy, 2009: \$39,433,261</i>		
Percent Loss	0.02	0.02
Direct Job Loss	No	No
Fall River		
Private Property Acquisition (acres)	23.54	23.54
Property Tax Revenue Loss	\$133,988	\$133,988
<i>Total Fall River Tax Levy, 2009: \$64,257,886</i>		
Percent Loss	0.2	0.2
Direct Job Loss	Yes	Yes
Freetown		
Private Property Acquisition (acres)	4.18	4.18
Property Tax Revenue Loss	TBD	TBD
<i>Total Freetown Tax Levy, 2009: \$13,809,232</i>		
Percent Loss	TBD	TBD
Direct Job Loss	No	No
New Bedford		
Private Property Acquisition (acres)	5.90	5.90
Property Tax Revenue Loss	-	-
<i>Total New Bedford Tax Levy, 2009: \$88,797,309</i>		
Percent Loss	-	-
Direct Job Loss	No	No
Raynham		
Private Property Acquisition (acres)	11.90	11.90
Property Tax Revenue Loss	\$7,030	\$7,030
<i>Total Raynham Tax Levy, 2009: \$24,264,578</i>		
Percent Loss	0.02	0.02
Direct Job Loss	No	No
Stoughton		
Private Property Acquisition (acres)	7.44	7.44
Property Tax Revenue Loss	\$22,493	\$22,493
<i>Total Stoughton Tax Levy, 2009:</i>		

Municipality	Stoughton Alternatives	Whittenton Alternatives
<i>\$44,788,089</i>		
Percent Loss	0.05	0.05
Direct Job Loss	No	No
Taunton		
Private Property Acquisition (acres)	23.35	15.91
Property Tax Revenue Loss	\$15,092	\$21,098
<i>Total Taunton Tax Levy, 2009: \$63,756,063</i>		
Percent Loss	0.02	0.03
Direct Job Loss	No	No

Tax Revenue Impacts

The Corridor Plan graphically presents per-capita property tax receipts for selected South Coast communities in 2006.³⁸ These data indicate that tax receipts for communities that currently do not have train service (such as Fall River, New Bedford, and Taunton) are lower than for communities that currently do have train service (such as Attleboro, Foxborough, and Sharon). The effects of the current (2009) economic downturn on tax revenues at the municipal level are unknown at this time, nor is it possible to predict tax revenues at the municipal or state levels in 2030 with any precision.

The direct property tax revenue losses for affected communities would be insignificant as compared to the total property tax receipts for each town. Property acquisitions (converting privately owned parcels to publicly owned, thereby eliminating the property tax generated) would be minimal, and few business or residential displacements would result from any of the alternatives.

Indirectly, property values are expected to increase near station sites due to increased access to transit but decrease along the rail alternative alignments due to increased noise levels from train operations. It is assumed that residential property values would increase by 5 to 25 percent for residences within 1 mile of new station sites and decrease by up to 20 percent within about 400 feet of the alignments or layover facilities. It is not possible to predict with any precision the property tax revenue changes that may result for each community.

The Corridor Plan indicates that, under Scenario 1, the South Coast Rail project would indirectly generate between \$16 million and \$18 million in net new state taxes and \$8.5 million to \$9.5 million in net new local business property taxes each year by 2030 as compared to the No Build Alternative.³⁹ The estimated overall growth (forecast regional growth plus growth attracted to station sites and new induced growth) near rail stations would result in \$62 million to \$77 million in local property taxes.⁴⁰

Implementing the Smart Growth initiatives in Scenario 2 is expected to change the location of economic impacts such as property tax revenue sources in each affected community, but is not expected to

³⁸ EOT. 2009. *South Coast Rail Economic Development and Land Use Corridor Plan*. Commonwealth of Massachusetts, Executive Office of Transportation and Public Works, and Executive Office of Housing and Economic Development. Prepared by Goody Clancy: Boston. See Appendix E: Baseline Report: Economic Development and Land Use Conditions in the South Coast Region Today, Chapter IV Economic Development Baseline, Figure 36: Per Capita Property Tax Receipts (All) 2006.

³⁹ EOT. 2009. *South Coast Rail Economic Development and Land Use Corridor Plan*. Commonwealth of Massachusetts, Executive Office of Transportation and Public Works, and Executive Office of Housing and Economic Development. Prepared by Goody Clancy: Boston. See Chapter 5, Potential Economic Effects of South Coast Rail.

⁴⁰ Ibid. See in Table 5-2, Estimated Growth Near SCR Commuter Rail Stations by 2030.

change the overall (regional) impacts as compared to Scenario 1. See Chapter 5 for further information on indirect effects, and Scenario 1 and 2.