

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 business economic characteristics and trends. Social and economic characteristics include population, incomes, housing, property tax revenues, number of businesses, employment and unemployment.

4.3.1.2 REGULATORY CONTEXT

The Council on Environmental Quality (CEQ) National Environmental Policy Act (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 Energy and Environmental Affairs (EEA)² issued a Certificate on the ENF on April 3, 2009. The certificate includes a number of requirements defining the scope of a forthcoming Draft Environmental Impact Report (EIR). However, no specific requirements for evaluation of impacts to the social and economic environment are included in the Certificate.

4.3.1.3 METHODOLOGY

Social and economic data were collected from the following sources: U.S. Bureau of Census, Southeastern Regional Planning and Economic Development District (SRPEDD), Metropolitan Area Planning Council, 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.

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.

All household income data are 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.

4.3.2 EXISTING CONDITIONS

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

4.3.2.1 REGIONAL OVERVIEW

Table 4.3-1 lists the communities that would be served or that could be impacted by the proposed project, which includes 17 municipalities in Bristol County and 3 municipalities in Plymouth County. The alternative railroad or highway alignments pass through or near these 20 communities, and new station sites are within or near each. The social and economic conditions within each of these municipalities, relative to the alternative alignments and station sites, are discussed in Section 4.3.2.1.1.

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 U.S., 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, the population and number of Boston-oriented commuters in the South Coast region have increased. In addition, the South Coast area has experienced considerable but variable commercial and industrial growth. The South Coast area is also one of the Commonwealth's more diverse regions, including 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, its cranberry ponds, its 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 the loss of green spaces, struggling cities, congested highways, and sprawling development.

Growth-related concerns within the South Coast region include:³

The South Coast region has been growing faster than the state as a whole. Between 1990 and 2006, the region experienced a 10.3 percent increase in population, exceeding the statewide increase of 6.9 percent.

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, town staff to help them plan.

Fall River and New Bedford continued to lose population during the 1990s but appear to be stabilizing so far in the 21st century.

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 networked 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.

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.

³ 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.

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 far 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.⁴ By 2009, unemployment had risen to 14.6 percent in Fall River and 14.2 percent in New Bedford, compared to 8.4 percent statewide. Sound transportation can be the difference between steady growth and economic stagnation. Roads, rails, airports, and ports provide the necessary support for national and international shipping, while affordable, convenient public transportation links local economies, housing markets, and recreational and educational opportunities.

Southeastern Regional Planning and Economic Development District (SRPEDD) projections and Metropolitan Area Planning Commission (MAPC) projections show that the demographic changes in the region support the desirability and utility of a high-capacity public transit service.

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 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 for commercial and industrial property, and 10.9 for residential property. Tax rates are expressed as dollars per \$1,000 of assessed value.

⁴ Massachusetts Executive Office of Labor and Workforce Development website <http://www.mass.gov/eolwd>, accessed August 2008 and October 2010

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 change 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 change 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 492,366.⁵ By 2006, population within this area is estimated to have grown to 508,414.⁶ 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.

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 nine percent (between 1990 and 2000)⁷ and is expected to 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.⁸

⁵ United States Census Bureau, 1990 and 2000.

⁶ 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.

⁷ Southeastern Regional Planning and Economic Development District's Community Quickstats, based on U.S. Census Bureau data from 1990 and 2000, compiled summer 2007.

⁸ 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.

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

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

* Indicates projected populations, not actual numbers.

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.

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 4.3-3.⁹ Fall River, New Bedford, and

⁹ 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 two 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.¹⁰ 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.”¹¹ 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 and 2007 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 in all three years.

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

¹⁰ 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.

¹¹ Ibid.

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

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

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.

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 4.3-6 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 4.3-4 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.

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. 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.

After adjusting for inflation, the regional average household income exhibited an annual increase of 0.14 percent, 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.

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

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

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 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.¹² An evaluation of per capita property tax

¹² 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.

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)

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.¹³

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.

¹³ 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 4.3-7 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
<i>Regional Average</i>			
<i>Income**</i>	<i>\$42,147</i>	<i>\$42,736</i>	<i>0.14%</i>

Sources: 1990 Census of Housing and Population, Census 2000

Notes: * 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

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: Southeastern Regional Planning and Economic Development District (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 Tax ²	Residential Tax	Commercial and 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

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

Property Tax Rate data, MassStats

http://massstats.detma.org/websaras/frame_it.asp?theProductName=MassStats

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.¹⁴ 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.^{15,16} The implementation of a DIF allows a city or town to designate development districts that use the increased

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.

¹⁵ Ibid.

¹⁶ Economic Opportunity Areas are determined by the Massachusetts Economic Assistance Coordinating Council (EACC).

tax revenues derived from new development to fund district-wide improvements, such as streetscape or storefront projects.¹⁷

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.¹⁸

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.”¹⁹

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 1997.²⁰ 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-195.²¹ 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 eight 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. In addition to the direct effects of the proposed project, this section also presents the indirect and cumulative socioeconomic effects associated with the South Coast Rail Alternatives.

¹⁷ 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.

¹⁸ Ibid.

¹⁹ Ibid.

²⁰ Ibid.

²¹ Ibid.

The impact analysis includes: (1) the potential impacts along railroad and highway alignments; (2) the potential impacts at the train or bus 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

As required by the National Environmental Policy Act (NEPA) Council on Environmental Quality (CEQ) guidelines²², the environmental consequences analysis includes discussion of the direct and indirect effects of a proposed action, and their significance. Direct effects are defined as those “which are caused by the action and occur at the same time and place.”²³ Indirect effects are defined as those “which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.”²⁴ CEQ differentiates direct and indirect effects from the term cumulative impact, which “... is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.”

Similarly, the Massachusetts Environmental Policy Act (MEPA) requires “a detailed description and assessment of the negative and positive potential environmental impacts of the Project and its alternatives. The EIR [Environmental Impact Report] shall assess (in quantitative terms, to the maximum extent practicable) the direct and indirect potential environmental impacts from the Project that are within the Scope. The assessment shall include both short-term and long-term impacts for all phases of the Project (e.g., acquisition, development, and operation) and cumulative impacts of the Project, any other Projects, and other work or activity in the immediate surroundings and region.”²⁵

The analysis considers both short-term or temporary and long-term or permanent impacts. The temporary impacts are the impacts that occur during the Project’s construction phase while the permanent impacts occur when the Project is operational.

The impact section addresses construction impacts, permanent impacts, and indirect and cumulative effects. The methodology for each of these three sections is discussed below.

Construction Impacts

The construction associated with the alternatives would support temporary jobs in the South Coast region in construction and related industries during the four-year construction period. Construction job

²² EPA. 2009. Code of Federal Regulations (CFR), Title 40: Protection of the Environment, Part 1502- Environmental Impact Statement, Section 1502.16 Environmental Consequences (40 CFR 1502.16).

²³ 40 CFR 1508.8(a).

²⁴ 40 CFR 1508.8(b).

²⁵ Massachusetts Environmental Policy Act Office. 2009. Code of Massachusetts Regulations (CMR), Title 301, Chapter 11: MEPA Regulations. Section 11.07: EIR Preparation and Filing, (6) Form and Content of EIR, (h) Assessment of Impacts. Commonwealth of Massachusetts, Environmental Policy Act Office: Boston.

estimates are based on the Corridor Plan²⁶, which presents total economic impacts for four study areas: (1) Taunton and communities south; (2) Northern communities; (3) Boston Cambridge; and (4) Rest of MA.

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

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 the privately-owned parcels that would be wholly acquired for the layover facilities or train or bus 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 2009 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.

Where less than 50 percent of a parcel would be acquired for the layover facilities or train or bus 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 fragmenting neighborhoods or losing 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 or highway alignments. It is also not a likely effect of reconstructing or

²⁶ 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.

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.

Each alternative would require employees for train or bus 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.

Indirect Effects and Cumulative Impacts

Indirect effects are defined as “those (effects) which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems” (40 C.F.R. § 1508.8).

"Cumulative impact" is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. (40 C.F.R. § 1508.7).

Effects and impacts as used in these regulations are synonymous. Indirect impacts include potential induced growth and related impacts outside of the area of direct impacts and property acquisitions. Such induced growth may occur due to the improved accessibility within the area influenced by the South Coast Rail project. Indirect impacts on socioeconomic conditions may include the creation of new housing and jobs and increases in residential property values near stations or railroad alignments. Both of these types of impact are discussed in more detail below.

Direct and indirect effects, whether minor or major, may, when combined with the effects of other past, present, or future actions, result in substantive impacts to socioeconomic resources. Such combined effects are referred to as cumulative effects. The purpose of a cumulative impacts analysis is to look for impacts that may be minimal and therefore neither significant nor adverse when examined within the context of the proposed action, but that may accumulate and become both significant and adverse over a large number of actions.

Indirect Effects Analysis Methodology

Job and Housing Impacts

The South Coast Rail alternatives would improve accessibility and mobility in the South Coast region, which in turn would stimulate additional economic activity in the region and lead to creation of housing and jobs. The indirect impact analyses consider reasonably foreseeable indirect impacts in terms of job and housing creation, from project initiation in 2016 through the planning period ending in 2030, from implementing the South Coast Rail project. Three scenarios are evaluated:

The No-Build Alternative is described to establish a baseline to which selected build alternatives were compared.

Scenario 1 describes the indirect effects of implementing selected build alternatives *without* smart growth measures. It includes the baseline growth and the project-induced growth.

Scenario 2 describes the indirect effects of implementing selected build alternatives *with* smart growth measures. It includes the baseline growth and the project-induced growth.

"Smart growth" as described by EPA covers a range of development and conservation strategies that help protect our natural environment and make our communities more attractive, economically stronger, and more socially diverse²⁷. EPA refers to the following ten basic Smart Growth Principles developed by the Smart Growth Network²⁸:

1. Mix land uses
2. Take advantage of compact building design
3. Create a range of housing opportunities and choices
4. Create walkable neighborhoods
5. Foster distinctive, attractive communities with a strong sense of place
6. Preserve open space, farmland, natural beauty, and critical environmental areas
7. Strengthen and direct development towards existing communities
8. Provide a variety of transportation choices
9. Make development decisions predictable, fair, and cost-effective
10. Encourage community and stakeholder collaboration in development decisions

The Smart Growth strategy proposed by MassDOT is described in detail in the Commonwealth of Massachusetts' South Coast Rail Economic Development and Land Use Corridor Plan ("Corridor Plan") and discussed in Chapters 2 and 3 of this DEIS/DEIR. The Corridor Plan is intended by the Commonwealth to serve as a framework for regional growth that is clustered, more sustainable, and better connected within the region and to metro Boston. As stated in the Corridor Plan, the region seeks a future in which it renews and expands urban centers while adding new walkable neighborhoods and preserving natural assets for future generations. According to the Corridor Plan commuter rail can catalyze this future, providing an opportunity to organize new growth around stations and direct it away from sensitive areas of ecological value. The Corridor Plan states that this can also provide better access to high-quality jobs for residents of the region, and better access for businesses to the metro-Boston labor force, business and educational clusters that will drive the 21st-century economy²⁹.

Each analysis relies on data provided in the Corridor Plan, information provided by regional planning agencies, and information developed by the Massachusetts Executive Office of Transportation and Public Works (EOT). The analysis identifies, for each alternative and each scenario, the potential changes in land use, infrastructure requirements (water, sewer, etc.), and the social and economic environment that would likely result from growth induced by the new transit system. Based on the anticipated changes in land use, the potential impacts to selected environmental resources are estimated.

Each of the two build scenarios was evaluated for three alternatives:

- Attleboro Electric Alternative
- Stoughton Electric Alternative
- Rapid Bus Alternative

²⁷ http://www.epa.gov/smartgrowth/basic_info.htm#1

²⁸ http://www.epa.gov/smartgrowth/about_sg.htm

²⁹ <http://www.southcoastrail.com/corridor.html>

The Whittenton Alternative was not evaluated separately, because its effects would be similar in magnitude and location to the Stoughton Alternative.

The projections for induced growth in jobs and households were initially developed for three regions: Suffolk County/Cambridge, SCR 10³⁰ (northern portion of the South Coast Corridor), and SCR 21. Projections were also made for the four Rhode Island communities that are expected to have commuters utilizing the potential new transit service. This is growth that would not happen without the transit investment. The projections were then allocated to the municipal level by staff from the three RPAs and the consultant team after receiving guidance from a panel of experts in land use and demographics in this region, including state and federal agency staff.

For more information about the methodology used to estimate induced jobs and households and about the methodology and assumptions to allocate induced jobs and households to municipalities, see Chapter 5, Summary of Indirect and Cumulative Effects.

Property Value Impact Analysis Methodology

Residential property values near stations and alignments may be affected. A literature review³¹ 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 or bus 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 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

³⁰ SCR 10 Communities: Attleboro, Bridgewater, Canton, Easton, Foxborough, Mansfield, North Attleboro, Norton, Sharon, and Stoughton.

³¹ Reservitz, David. 2009. Impacts of Commuter Rail Service on Residential Property Values. Reservitz Law Offices: Boston.

(low income) populations, 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)³² 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 percent to 25 percent with most studies concluding that values would increase by 6 percent to 10 percent.

Armstrong (1994)³³ 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)³⁴ 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.

Cumulative Impact Analysis Methodology

The CEQ regulations define a cumulative effect as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.” (40 CFR § 1508.7)

The purpose of a cumulative impacts analysis is to look for impacts that may be minimal and therefore neither significant nor adverse when examined within the context of the proposed action, but that may accumulate and become both significant and adverse over a large number of actions. The cumulative effects of the South Coast Rail project were analyzed for each of the alternatives, as compared to the baseline condition (the No-Build Alternative) under two scenarios:

- **Scenario 1: Without Smart Growth measures**
- **Scenario 2: With Smart Growth measures**

The temporary and spatial boundaries of the cumulative impact analysis and the data sources used for the trends and foreseeable future actions are presented in Chapter 5, Summary of Indirect Effects and Cumulative Impacts.

³² Reservitz, D. Impacts of Commuter Rail Service on Residential Property Values. Reservitz Law Offices: Brockton MA.

³³ 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.

³⁴ 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.

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 by adding more buses but using smaller capital investments than are proposed in the Build Alternatives. Under this alternative, no new rail or bus service would be provided to Southeastern Massachusetts.

The No-Build Alternative plan includes bus schedule enhancements, transportation demand management, and transportation policy enhancements for commuter bus. In addition to these enhancements, incentives would enable the private commuter bus service operators to acquire a new fleet of fuel efficient and clean emission buses. Ideally, these buses would provide rider comfort and amenities comparable to commuter rail service.

Existing commuter bus service to Boston from New Bedford, Fall River, and Taunton is currently provided by three commuter bus carriers: DATCO provides Boston – New Bedford service; Peter Pan provides Boston – Fall River bus service; and Bloom provides Boston – Taunton service.

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 all rail alternatives. These rail lines form a rough triangular shape running south from Myricks Junction to Fall River (the Fall River Secondary) and from Weir Junction through Myricks Junction to New Bedford (the New Bedford Main Line), and are therefore referred to as the Southern Triangle (Figure 1.4-1). The following sections describe the long-term direct environmental consequences to the social and economic environment that may result from these two common components of the rail alternatives of the South Coast Rail project. The northern part of the South Coast Rail Study Area is described in subsequent sections for each alternative.

Fall River Secondary

The Fall River Secondary is currently a freight track and would be upgraded to Federal Rail Administration (FRA) Class 5³⁵ for the South Coast Rail project. The 11.8-mile long single track alignment would have three sidings. The public at-grade road/railroad crossings that would remain open would be reconfigured and/or improved to meet current safety standards. The existing freight service using the Fall River Secondary is diesel-powered; no electrical infrastructure is present. New catenary supports and wires would need to be constructed along the length of the line, and two new traction power facilities would need to be constructed for the electric alternatives. Potential direct impacts to the social and economic environment resulting from the upgraded rail lines and electrical infrastructure are described below.

This segment of the Southern Triangle would require 8.62 acres of land acquisition for the diesel alternatives and 8.99 acres for 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

³⁵ FRA. 2009. 49 CFR 213.9 Classes of Track: Operating Speed Limits. US Department of Transportation, Federal Rail Administration.

Secondary right-of-way, and for the traction power facilities for the electric alternatives, are summarized in Table 4.2-3 and shown in Figures 4.2-2a-c.

Most of the parcels that would be acquired along the right-of way are small portions of undeveloped parcels. Two residential parcels would be acquired in full at Myricks Junction in Berkley and an additional seven other developed parcels would be acquired in part. Property tax revenue losses have not been estimated for acquisitions of small portions of undeveloped parcels. Property tax revenue losses were estimated at \$4,724.88, in 2009 dollars, related to two parcels that would be acquired in full in Berkley.

No business or community facility displacements would result from the acquisitions along the Fall River Secondary.

Residential displacement would occur in Berkley, from three homes occupying two parcels at Myricks Junction (Figure 4.2-2a). Based on the average Berkley household size of 3.1 persons, nine persons would be displaced by these acquisitions.

Improving and using the existing, active Fall River Secondary for the South Coast Rail project would not fragment any neighborhood.

New Bedford Main Line

The existing New Bedford Main Line freight track would be upgraded to FRA Class 5 for the South Coast Rail project. Two to three tracks would be constructed between Weir Junction and Myricks Junction, and a single track with three sidings from Myricks Junction to New Bedford, over a total length of 18.9 miles. The existing public at-grade road/railroad crossings that would remain open would be reconfigured and/or improved to meet current safety standards. One public at-grade road/railroad crossing would be closed. The existing freight service using the New Bedford Main Line is diesel-powered; no electrical infrastructure is present. New catenary supports and wires would need to be constructed along the length of the line, and four or five traction power facilities (depending upon the alternative selected) would be constructed for the electric alternatives. Potential direct impacts to the social and economic environment resulting from constructing the upgraded rail lines and electrical infrastructure are described below.

This segment of the Southern Triangle would require 0.98 acres of land acquisition for the diesel alternatives. The electric alternatives would require additional land for traction power facilities: an additional 1.78 acres (six parcels) for the Attleboro Electric Alternative, 1.31 acres (four parcels) for the Stoughton Electric Alternative, and 0.95 acres (three parcels) for the Whittenton Electric Alternative. The number, area, public or private ownership, and general land use of parcels that would be acquired in each municipality along the right-of-way of the New Bedford Main Line, and for traction power facilities for the electric alternatives, are summarized in Table 4.2-4 and shown in Figures 4.2-1a-e.

Most of the parcels that would be acquired along the New Bedford Main Line right-of way or traction power facilities are small portions of undeveloped parcels. Property tax revenue losses have not been estimated for small partial acquisitions (i.e., less than 50 percent).

No residential, business, or community facility displacements would result from these acquisitions along the New Bedford Main Line.

Improving and using the existing, active New Bedford Main Line for the South Coast Rail project would not fragment any neighborhood.

4.3.3.4 ATTLEBORO ELECTRIC ALTERNATIVE

The Attleboro Electric Alternative would provide commuter rail service to South Station using the Northeast Corridor, proposed Attleboro Bypass, and Attleboro Secondary, as well as the aforementioned Southern Triangle components (Fall River Secondary and New Bedford Main Line). The New Bedford route would be 60.4 miles long and the Fall River route would be 57.9 miles long. Figure 1.4-3 shows the route of the Attleboro Alternative.

This alternative requires improvements to track infrastructure along the Northeast Corridor (construct a third track between the proposed Attleboro Bypass and the Readville Station in Boston, a distance of 18.7 miles); the Attleboro Bypass (a new two-track railroad on a new right-of-way between the Northeast Corridor and the Attleboro Secondary, a distance of 2.8 miles); and the Attleboro Secondary (reconstruct existing freight rail tracks from the Attleboro Bypass to Weir Junction, as a single track with one siding, a distance of 9.7 miles). Each segment is addressed separately in the following sections.

Northeast Corridor Rail Segment

The existing Northeast Corridor would be used for the Attleboro Electric Alternative from Boston's South Station to the northern end of the Attleboro Bypass. The existing double-track line supports both electric- and diesel-powered regional freight and passenger service.

A third track would be added along the Northeast Corridor from the Readville Station south to the new Attleboro Bypass (described in Section 4.3.3.3). Constructing the third track would require earthwork for the expanded railroad bed, installing new three-track catenary supports with wires along the length of the line, reconstructing three existing stations (Canton Junction, Mansfield, and Sharon), and reconstructing 22 bridges. A new bridge would be required adjacent to the historic Canton Viaduct, which is too narrow to accommodate the third track. No changes in road/railroad crossing configurations are planned. Potential direct impacts to the social and economic environment resulting from the upgraded rail lines and electrical infrastructure are described below.

There would be no traction power facilities constructed in this segment.

This segment would require 10.22 acres of private land, from 63 parcels. The number, area, public or private ownership, and general land use of parcels that would be acquired in each municipality along the Northeast Corridor right-of-way for the Attleboro Electric Alternative are summarized in Table 4.2-5 and shown in Figures 4.2-3a-e.

Most of the land that would be acquired for the Northeast Corridor right-of-way consists of small portions of either publicly or privately owned undeveloped land. Property tax revenue losses have not been estimated for acquisitions of small portions of parcels (i.e., less than 50 percent).

No residential, business, or community facility displacements would result from these acquisitions along the Northeast Corridor Line.

Constructing a third track and using the existing, active Northeast Corridor for the South Coast Rail project would not fragment any neighborhood.

Attleboro Bypass

A new double-track FRA Class 5 segment, the Attleboro Bypass, would be constructed for the Attleboro Electric Alternative to connect the existing Northeast Corridor with the existing Attleboro Secondary. Much of the Attleboro Bypass would be constructed immediately adjacent to an existing National Grid electric transmission line corridor. Constructing this segment would require building catenary supports and wires along the length of the line, and one traction power facility. Two new road/railroad crossings would be required for the Attleboro Bypass. The Richardson Avenue and Pleasant Street (Route 123) crossings, in Norton, would be at-grade crossings with lights and gates. Potential direct impacts to the social and economic environment resulting from the upgraded rail lines and electrical infrastructure are described below.

This segment would require 15.66 acres of private land, from 30 parcels. The number, area, public or private ownership, and general land use of parcels that would be acquired in each municipality for the Attleboro Bypass right-of-way and traction power facility for the Attleboro Electric Alternative are summarized in Table 4.2-6 and shown in Figures 4.2-4a-c.

Most of the land that would be acquired for the Attleboro Bypass right-of-way or traction power facility consists of small portions of either publicly or privately owned undeveloped parcels. Property tax revenue losses have not been estimated for acquisitions of small portions of parcels (i.e., less than 50 percent).

No residential, business, or community facility displacements would result from these acquisitions along the Attleboro Bypass.

The Attleboro Bypass alignment would not pass directly through any residential neighborhood, but is in close proximity to one neighborhood off of Richardson Avenue and another along Pike Avenue, both in Attleboro. The neighborhood off of Richardson Avenue is comprised of nearly 50 homes situated around a loop road system (Plain Street and Frontier Drive) and extending along Richardson Avenue. The Attleboro Bypass would pass east of this neighborhood, adjacent to an existing electrical transmission line corridor. The neighborhood is isolated from other neighborhoods to the east by the electrical transmission line corridor; the Attleboro Bypass would not fragment the neighborhood or disrupt continuity with adjoining neighborhoods.

The neighborhood along Pike Avenue consists of a series of approximately 15 homes accessed directly from Pike Avenue. The Attleboro Bypass would pass east of this neighborhood as well, also between the neighborhood and the existing electrical transmission line corridor. This neighborhood is similarly isolated from other neighborhoods to the east by the electrical transmission line corridor; the Attleboro Bypass would not fragment the neighborhood or disrupt continuity with adjoining neighborhoods.

Attleboro Secondary

The existing Attleboro Secondary freight track would be upgraded to FRA Class 5 for the Attleboro Electric Alternative. None of the existing seventeen public at-grade road/railroad crossing would be closed, although all crossings would be reconfigured and/or improved to meet current safety standards. The freight service using the Attleboro Secondary is diesel-powered; no electrical infrastructure is present. New catenary supports and wires would be constructed along the length of the line, and one new traction power facility would be constructed at a specified location. Potential direct impacts to land

uses and the social and economic environment resulting from constructing the upgraded rail lines and electrical infrastructure are described below.

This segment would require 2.81 acres of privately owned land, from 15 parcels. The number, area, public or private ownership, and general land use of parcels that would be acquired along the Attleboro Secondary right-of way and for the traction power facility for the Attleboro Electric Alternative are summarized by municipality in Table 4.2-7 and shown in Figures 4.2-4a-c.

Most of the land that would be acquired for the Attleboro Secondary right-of-way or traction power facility consists of small portions of either publicly or privately owned undeveloped parcels. Property tax revenue losses for acquisitions of small portions of parcels have not been estimated (i.e., less than 50 percent).

No residential, business, or community facility displacements would result from these acquisitions along the Attleboro Secondary.

Improving and using the existing, active Attleboro Secondary for the South Coast Rail project would not fragment any neighborhood.

4.3.3.5 ATTLEBORO DIESEL ALTERNATIVE

The Attleboro Diesel Alternative north of the Southern Triangle is comprised of same three railroad segments as the Attleboro Electric Alternative: the Northeast Corridor, the Attleboro Bypass, and the Attleboro Secondary.

Diesel-powered train service differs from electric-powered service in not requiring electrical infrastructure. This segment would require 2.67 acres (14 parcels) of privately owned land. Traction power facilities would not be necessary; the footprint of the area impacted is therefore smaller. The right-of-way subtotals in Tables 4.2-5, 4.2-6, and 4.2-7 for the Northeast Corridor, Attleboro Bypass, and Attleboro Secondary, respectively, and areas outlined in Figures 4.2-3a-e and 4.2-4a-c, show parcel acquisitions required for the Attleboro Diesel Alternative. (Cross-hatched areas within the figures identify proposed traction power facility locations, and are relevant only to the Attleboro Electric Alternative.)

Most of the land that would be acquired for the Attleboro Secondary right-of-way or traction power facility consists of small portions of either publicly or privately owned undeveloped parcels. Property tax revenue losses for acquisitions of small portions of parcels were not calculated (i.e., less than 50 percent).

No residential, business, or community facility displacements would result from these acquisitions along the Attleboro Secondary.

Like the Attleboro Electric Alternative, the Attleboro Diesel Alternative would not fragment any neighborhood.

4.3.3.6 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 alternative would use the existing Northeast

Corridor from South Station to Canton Junction (a third track would not be added in this segment, unlike for the Attleboro Alternatives). From Canton Junction, the existing, active Stoughton Line would be used to the Stoughton Station. Commuter rail service would be extended, using an out-of-service railroad bed, south through Raynham Junction to Weir Junction in Taunton, at which point this alignment joins the New Bedford Main 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 4.3.3.2.

The existing Stoughton Line commuter rail double track from Canton Junction to Stoughton Station, a distance of 3.8 miles, would be upgraded to FRA Class 5 for the Stoughton Electric Alternative. New FRA Class 5 single or double track would be placed on the out-of-service railroad bed from Stoughton Station south to Winter Street in Taunton, a distance of 15.0 miles. New FRA Class 5 single track would replace existing freight track from Winter Street to Weir Junction, a distance of 1.7 miles. All of the existing at-grade road/railroad crossings would be reconfigured and/or improved to meet current safety standards. New catenary supports and wires would be constructed along the length of the line, and three new traction power facilities would be constructed. Potential direct impacts to the social and economic environment resulting from constructing the upgraded rail lines and electrical infrastructure are described below.

This segment would require 32.53 acres (78 parcels) of privately owned land for the right-of-way, plus an additional 0.79 acres (two 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 4.2-8 and shown in Figures 4.2-5a-e.

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. More than half (45) 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 \$2,913.13, in 2009 dollars

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 4.2-5d). Based on the average Raynham household size of 2.8 persons, three persons would be displaced by this acquisition.

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.

4.3.3.7 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. Traction power facilities would not be necessary; the footprint of the area impacted is therefore smaller. The right-of-way subtotal in Table 4.2-8 in Chapter 4.2 - *Land Use* and areas outlined in Figures 4.2-5a-e show parcel acquisition required for the Stoughton Diesel Alternative. (Cross-hatched areas within the figure depict proposed traction power facility locations, and are relevant only to the Stoughton Electric Alternative.) This segment would require 32.53 acres (78 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 4.2-5d). Based on the average Raynham household size of 2.8 persons, three persons would be displaced by this acquisition.

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 that have encroached into the Stoughton Line right-of-way, and would need to be relocated.

4.3.3.8 WHITTENTON ELECTRIC ALTERNATIVE

The Whittenton Electric Alternative is a variant of the Stoughton Electric Alternative alignment described in Section 4.3.3.6. Specifically, at Raynham Junction near the southern end of the Stoughton Line, the route would divert to the southwest, following the out-of-service Whittenton Branch. A single track would be constructed along this right-of-way, for a distance of 3.5 miles. The Whittenton Branch connects with the Attleboro Secondary at Whittenton Junction in Taunton; the Attleboro Secondary continues toward the southeast to connect with the New Bedford Main Line at Weir Junction. The southernmost portion of the Stoughton Line, from Raynham Junction to Weir Junction (a distance of 5.1 miles), would not be used if this alternative is selected. This evaluation focuses on the Whittenton Branch component.

New track would be placed on the out-of-service Whittenton Branch railroad bed from Raynham Junction to Whittenton Junction. The existing public at-grade road/railroad crossings would be reconfigured and/or improved to current safety standards. New catenary supports and wires would be constructed along the length of the line. Potential direct impacts to land uses and the social and economic environment resulting from constructing the upgraded rail lines and electrical infrastructure are described below.

No traction power facilities would be constructed along the Whittenton Branch.

For the right-of-way and traction power facilities, the Whittenton Electric Alternative would require 10.41 acres (74 parcels) of privately owned land from the combination of the Whittenton Branch, the northern portion of the Stoughton Line, and the southeastern portion of the Attleboro Secondary. Although the former Whittenton Branch segment of the Whittenton Alternative is owned by the Commonwealth, some right-of-way acquisition would be needed to construct elements such as catenary supports and to re-establish the rail infrastructure. 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 4.2-9 and shown in Figures 4.2-6a-b.

Most of the land that would be acquired for this segment are 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.

4.3.3.9 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. The right-of-way subtotals in Tables 4.2-9a, 4.2-9b, and 4.2-9c in Chapter 4.2 - *Land Use*, show parcel acquisition required for the Whittenton Diesel Alternative. (Cross-hatched areas within Figures 4.2-6a-b identify proposed traction power facility locations, and are relevant only to 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.

4.3.3.10 RAPID BUS ALTERNATIVE

The Rapid Bus Alternative would provide rapid express bus service to South Station in Boston from Fall River and New Bedford via I-93, Route 140, and Route 24. North of I-495, buses would use a combination of new zipper bus lanes, new reversible bus lanes, two-way bus lanes, existing zipper High Occupancy Vehicle (HOV) lanes, and existing HOV lanes, along with a short section in mixed traffic. South of the I-495 interchange in Raynham, the buses would travel in the general purpose lanes with mixed traffic.

This alternative requires improvements to highway infrastructure along Route 24 (constructing third lane from Route 140 to I-495, a distance of 5.4 miles; widening Route 24 to accommodate movable barriers; constructing zipper bus lane from I-495 to Harrison Boulevard, a distance of 15.7 miles); and Route 128/I-93 (constructing reversible bus lane from Harrison Boulevard on Route 24 to Logan Express Lot, a distance of 4.2 miles; and constructing two-lane bus roadway from Logan Express Lot to existing HOV zipper lane on the Southeast Expressway, a distance of 1.6 miles). Infrastructure improvements also include constructing, reconstructing, or widening 20 bridges and reconstructing 11 highway interchanges.

This evaluation focuses on only those portions of the Rapid Bus Alternative where new construction is required, from Braintree to Taunton. Potential direct impacts to the social and economic environment resulting from constructing the bus lanes and new interchange ramps are described below.

The number, area, public or private ownership, and general land use of parcels that would be acquired along the highway alignments for the Rapid Bus Alternative are summarized in Table 4.2-10 and shown in Figures 4.2-7a-g.

All land that would be acquired for the Rapid Bus right-of-way consists of partial takings of either publicly-owned or undeveloped privately-owned parcels. Property tax revenue loss for acquisitions of small portions of undeveloped parcels was not estimated (i.e., less than 50 percent).

No residential, business, or community facility displacements would result from these acquisitions along the Rapid Bus Alternative alignments.

Constructing and using the reversible bus lanes or widening Route 24 between I-495 and Route 140 in the existing, active highway alignments for the South Coast Rail project would not fragment any neighborhood.

4.3.3.11 STATIONS

This section provides basic descriptions of each train and/or bus 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 or bus 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 2009 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 Rail Alternatives. Four of these stations are also part of the Rapid Bus Alternative.

Fall River Depot Station

The Fall River Depot Station would be a new train or bus station constructed along the Fall River Secondary to serve all rail alternatives or the Rapid Bus Alternative. 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 4.2-40.

The Fall River Depot Station would require 3.96 acres of land, comprised of 3.79 acres (eight parcels) of privately owned land and 0.17 acres (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. No residential or community facility displacements would result from these acquisitions for the Fall River Depot Station.

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-15-1	Private	Industrial	Industrial	\$6,203.70	Yes	0.82	100.0
O-15-2	Private	Industrial	Industrial	\$5,346.69	No	0.32	100.0
O-15-8	Private	Industrial	Industrial	\$7,653.62	Yes	0.38	100.0
O-15-18	Private	Industrial	Industrial	\$5,122.82	No	1.52	100.0
O-15-20	Public	Industrial	Industrial	-	No	0.17	100.0
O-22-5	Private	Commercial	Commercial	\$3,725.37	Yes	0.12	100.0
O-22-6	Private	Residential	Commercial	\$5,138.56	No	0.10	100.0
O-22-7	Private	Commercial	Commercial	\$3,592.69	Yes	0.06	52.4
O-22-11	Private	Industrial	Industrial	\$3,627.43	Yes	0.47	100.0
TOTAL				\$40,410.88		3.96	

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

All privately owned parcels would be acquired in whole or in excess of 50 percent; property tax revenue losses for the City of Fall River are estimated at \$40,410.88 per year, in 2009 dollars. Parcel number O-15-20 is owned by the City of Fall River; no property tax revenue loss would result from acquiring this parcel.

Freetown Station

The Freetown Station would be a new train or bus station constructed along the Fall River Secondary to serve all rail alternatives or the Rapid Bus Alternative. It would be located along South Main Street in Freetown.

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 4.2-41.

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	Undeveloped	Undeveloped	TBD	No	4.18	16.6

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

TBD: To be determined.

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.

King’s Highway Station

The King’s Highway Station would be a new train or bus station constructed along the New Bedford Main Line to serve all rail alternatives or the Rapid Bus Alternative. 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 4.2-43). 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 train station constructed along the New Bedford Main Line to serve all rail alternatives or the Rapid Bus Alternative. 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. Parcels that would be acquired and converted to transportation/utilities land use to construct the Whale’s Tooth Station are listed in Table 4.3-12 below and shown in Figure 4.2-51.

Table 4.3-12 Whale’s Tooth Station: Land Acquisition

Parcel Number	Ownership	Generalized Zoning	General Land Use	Property Tax Revenue Loss	Job Loss	Area (acres)	Percent Acquisition
66-101	Public	Industrial	Industrial	-	No	1.92	100.0
66-121	Private	Industrial	Industrial	TBD	No	0.38	26.6
66-133	Public	Industrial	Industrial	-	No	3.38	100.0
66-133A	Private	Industrial	Industrial	\$1,227.47	No	0.05	100.0
66-157	Public	Industrial	Industrial	-	No	0.26	100.0
TOTAL				\$1,227.47¹		5.99	

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

TBD: To be determined.

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

The Whale’s Tooth Station would require 5.99 acres of land, comprised of 0.43 acres (two parcels) of privately owned land and 5.56 acres (three parcels) of publicly owned land. No residential, business, or community facility displacements would result from these acquisitions for the Whale’s Tooth Station.

Over 50 percent of parcel number 66-133A would be acquired; property tax revenue losses for the City of New Bedford are estimated at \$1,227.47 per year, in 2009 dollars. Less than 50 percent of parcel number 66-121 would be acquired and, accordingly, property tax revenue losses were not estimated. Parcel numbers 66-101, 66-133, and 66-157 are owned by the City of New Bedford; no property tax

revenue loss would result from acquiring these parcels. MassDOT may lease, rather than acquire, these parcels from the City of New Bedford.

Battleship Cove Station

The Battleship Cove Station would be a new train station constructed along the Fall River Secondary that would serve all rail 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. The parcel that would be acquired and converted to transportation/utilities land use to construct the Battleship Cove Station is listed in Table 4.3-13 below and shown in Figure 4.2-35.

Table 4.3-13 Battleship Cove Station: Land Acquisition

Parcel Number	Ownership	Generalized Zoning	General Land Use	Property Tax Revenue Loss	Job Loss	Area (acres)	Percent Acquisition
Y-1-3	Public	Industrial	Undeveloped	-	No	0.28	34.6

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

The Battleship Cove Station would require 0.28 acres (one parcel) of publicly owned land. No residential, business, or community facility displacements would result from this acquisition for the Battleship Cove Station.

Parcel number Y-1-3 is owned by the City of Fall River; no property tax revenue loss would result from partially acquiring this parcel for the Battleship Cove Station. MassDOT may lease, rather than acquire, this site from the City of Fall River.

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 4.3-14 below and shown in Figure 4.2-50.

The Taunton Depot Station would require 12.70 acres (three 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 \$5,604.59 per year, in 2009 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.

Table 4.3-14 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	\$245.02	No	0.29	100.0
107-48	Private	Industrial	Undeveloped	\$5,359.57	No	12.26	50.9
107-57	Private	Industrial	Commercial	TBD	No	0.15	1.8
TOTAL				\$5,604.59¹		12.70	

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

TBD: To be determined.

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

Attleboro Stations

In addition to the stations common to all rail alternatives, three existing stations would need to be reconstructed along the Northeast Corridor and two new stations would be built along the Attleboro Secondary for the Attleboro Alternative.

Barrowsville Station

The Barrowsville Station would be a new train station constructed along the Attleboro Secondary that would serve the Attleboro Alternatives. It would be located at 205 South Worcester Street in Norton.

The Barrowsville Station site is an undeveloped parcel is located near a low-density residential area with surrounding undeveloped land. Parcels that would be acquired and converted to transportation/utilities land use to construct the Barrowsville Station are listed in Table 4.3-15 below and shown in Figure 4.2-34.

Table 4.3-15 Barrowsville Station: Land Acquisition

Parcel Number	Ownership	Generalized Zoning	General Land Use	Property Tax Revenue Loss	Job Loss	Area (acres)	Percent Acquisition
27-185	Private	Residential	Undeveloped	TBD	No	1.50	29.9
27-187	Private	Commercial	Commercial	TBD	No	0.15	26.9
27-190	Private	Commercial	Residential	\$2,840.96	No	0.53	100.0
27-191	Private	Residential	Undeveloped	\$398.22	No	3.90	100.0
TOTAL				\$3,239.18¹		6.08	

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

TBD: To be determined.

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

The Barrowsville Station would require 6.08 acres (four parcels) of privately-owned land. One of the parcels, (27-190) is used for residential purposes; residential displacement would result from acquiring this parcel. Based on the average Norton household size of 2.8 persons, approximately three persons would be displaced by these acquisitions. No business or community facility displacements would result from these acquisitions for the Barrowsville Station.

Both of parcels 27-190 and 27-191 would be wholly acquired; property tax revenue losses for the Town of Norton are estimated at \$3,239.18 per year, in 2009 dollars. Less than 50 percent of parcel numbers 27-185 and 27-187 would be acquired for the Barrowsville Station and, accordingly, a change in property tax revenue loss was not determined. Additional property tax revenue losses could result from the partial acquisitions.

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 rail alternatives. It is located at the intersection of Beaumont and Sherman Streets in Canton. A new platform would be added to allow access to the third track for the Attleboro Alternatives. (The station would be unchanged for the Stoughton and Whittenton Alternatives.) No land acquisition would be required for reconstructing the Canton Junction Station (Figure 4.2-37). There would be no direct effects to land uses or the social and economic environment at this location.

Downtown Taunton Station

The Downtown Taunton Station would be a new train or bus station constructed along the Attleboro Secondary that would serve the Attleboro Alternatives, the Whittenton Alternatives, or the Rapid Bus Alternative. It would be located at 22 Oak Street, near the intersection of Mason Street and Wales Street, in Taunton.

The Downtown Taunton Station site is a previously developed parcel surrounded by commercial development. The parcel that would be acquired and converted to transportation/utilities land use to construct the Downtown Taunton Station is listed in Table 4.3-16 and shown in Figure 4.2-38.

Table 4.3-16 Downtown Taunton Station: Land Acquisition

Parcel Number	Ownership	Generalized Zoning	General Land Use	Property Tax Revenue Loss	Job Loss	Area (acres)	Percent Acquisition
65-357	Public	Commercial	Undeveloped	-	No	6.32	67.6

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

The Downtown Taunton Station would require 6.32 acres (one parcel) of publicly owned land. No residential, business, or community facility displacements would result from this acquisition for the Downtown Taunton Station.

Parcel number 63-357 is owned by the Greater Attleboro Taunton Regional Transit Authority; no property tax revenue loss would result from acquiring this parcel.

Mansfield Station

The Mansfield Station is an existing train station along the Northeast Corridor that would serve the Attleboro Alternatives. It is located at 1 Crocker Street in Mansfield. This station would be reconstructed for the Attleboro Alternatives, adding a new platform to access the third track. Land uses and zoning

designations of parcels that would be acquired and converted to transportation/utilities land use to relocate the Mansfield Station are listed in Table 4.3-17 below and shown Figure 4.2-44 .

Table 4.3-17 Mansfield Station: Land Acquisition

Parcel Number	Ownership	Generalized Zoning	General Land Use	Property Tax Revenue Loss	Job Loss	Area (acres)	Percent Acquisition
18-229	Private	Other	Undeveloped	TBD	No	0.38	7.1
21-500	Public	Commercial	Undeveloped	-	No	0.20	26.2
22-305	Private	Commercial	Commercial	\$6,758.24	Yes	0.39	100.0
22-310	Private	Commercial	Residential	\$4,685.10	No	0.28	100.0
22-311	Private	Commercial	Residential	\$4,461.72	No	0.13	100.0
22-320	Private	Commercial	Commercial	TBD	Yes	0.01	30.5
22-375	Private	Commercial	Residential	\$4,386.05	No	0.15	100.0
22-401	Private	Commercial	Commercial	\$5,834.46	Yes	0.23	100.0
TOTAL				\$26,125.57¹		1.77	

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

TBD: To be determined.

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

The Mansfield Station would require 1.77 acres of land, comprised of 1.57 acres (seven parcels) of privately owned land and 0.20 acres (one parcel) of publicly owned land. Commercial buildings on three of the parcels listed above would be acquired to construct this station. Two businesses occupying these buildings, a glass store and a used automobile sales shop, would be displaced. Job losses from businesses occupying these buildings would be expected. Three residences occupy other parcels that would be acquired; these residents would be displaced. Based on the average Mansfield household size of 2.8 persons, approximately nine persons would be displaced by these acquisitions. No community facility displacements would result from these acquisitions for the Mansfield Station.

All other parcels are privately owned and would be acquired in whole.

Five privately-owned parcels would be acquired in whole. Property tax revenue losses for the Town of Mansfield are estimated at \$26,125.57 per year, in 2009 dollars. Less than 50 percent of parcel numbers 18-229 and 22-320 would be acquired and, accordingly, property tax revenue losses associated with these acquisitions were not estimated. Additional property tax revenue losses could result from these smaller acquisitions. Parcel number 21-500 (North Common Park) is owned by the Town of Mansfield; no property tax revenue loss would result from acquiring this parcel.

Sharon Station

The Sharon Station is an existing train station along the Northeast Corridor that would serve the Attleboro Alternatives. It is located at 1 Upland Road in Sharon. This station would be reconstructed for the Attleboro Alternatives, adding a new platform to access the third track.

Land uses and zoning designations of the parcel that would be acquired and converted to transportation/utilities land use to reconstruct the Sharon Station are listed in Table 4.3-18 below and shown in Figure 4.2-47.

Table 4.3-18 Sharon Station: Land Acquisition

Parcel Number	Ownership	Generalized Zoning	General Land Use	Property Tax Revenue Loss	Job Loss	Area (acres)	Percent Acquisition
91-11	Public	Industrial	Commercial	-	No	0.83	2.8

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

The Sharon Station would require 0.82 acres (one parcel) of publicly-owned land. No residential, business, or community facility displacements would result from this acquisition for the Sharon Station.

Parcel number 91-11 is owned by the Town of Sharon; no property tax revenue loss would result from acquiring this parcel.

Stoughton and Whittenton Stations

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 rail alternatives, reconstruction of two existing stations along the Stoughton line (Canton Center and Stoughton) and construction of three new train stations (Easton Village, North Easton, and Raynham Place) would occur under both alternatives. However, the Taunton Station would only be constructed under the Stoughton Alternative while the Downtown Taunton would be built only under the Whittenton Alternative.

Canton Center Station

The Canton Center Station is an existing train station along the Stoughton Line that would serve the Stoughton and Whittenton Alternatives. It is located at 710 Washington Street in Canton. This station would be reconstructed for the Stoughton Alternatives. No land acquisition would be required for reconstructing the Canton Center Station (Figure 4.2-36). 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 rail alternatives. It is located at the intersection of Beaumont and Sherman Streets in Canton. This station would be reconstructed for the Attleboro Alternatives (a new platform would be added to allow access to the third track) but would be unchanged for the Stoughton and Whittenton Alternatives. No land acquisition would be required for reconstructing the Canton Junction Station (Figure 4.2-37). 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 the Stoughton or Whittenton 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 4.3-19 and shown in Figure 4.2-39.

Table 4.3-19 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	

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

TBD: To be determined.

The Easton Village Station would require 0.23 acres (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 the Stoughton or Whittenton 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 4.3-20 and shown in Figure 4.2-45.

Table 4.3-20 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	1.89	8.9
1U-48	Private	Commercial	Undeveloped	TBD	No	0.28	8.7
060_006	Private	Commercial	Undeveloped	\$2,941.19	No	3.87	78.2
060_012	Private	Commercial	Undeveloped	TBD	No	0.38	15.1
060_008	Private	Commercial	Undeveloped	TBD	No	1.19	32.3
060_009	Private	Commercial	Undeveloped	TBD	No	1.20	34.3
TOTAL				\$2,941.19¹		8.81	

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

TBD: To be determined.

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

The North Easton Station would require 8.81 acres (six 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 \$2,941.19 per year, in 2009 dollars. Less than 50 percent of parcel numbers 1U-1, 1U-48, 060_008, 060_009, and 060_012 would be acquired. Property tax revenue losses were not estimated.

Raynham Place Station

The Raynham Place 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 existing Raynham Park Greyhound Track.

The Raynham Place 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 the Raynham Place Station are listed in Table 4.3-21 below and shown in Figure 4.2-46.

Table 4.3-21 Raynham Place Station: Land Acquisition

Parcel Number	Ownership	Generalized Zoning	General Land Use	Property Tax Revenue Loss	Job Loss	Area (acres)	Percent Acquisition
1-15	Private	Industrial	Commercial	TBD	No	0.88	10.5
1-19-1	Private	Industrial	Commercial	\$4,705.74	Yes	11.13	77.7
TOTAL				\$4,705.74¹		12.01	

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

TBD: To be determined.

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

The Raynham Place Station would require 12.01 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 greyhound racing company mentioned above; the buildings are kennels for the facility. As a result of recent legislation, it is unlikely that this commercial use would be in operation at the time of land acquisition. No residential, business, or community facility displacements would result from these acquisitions for the Raynham Place Station.

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 \$4,705.74 per year, in 2009 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 is an existing train station along the Stoughton Line that would serve the Stoughton and Whittenton Alternatives. It is located at 45 Wyman Street in Stoughton. This station would be reconstructed for the Stoughton Alternatives, adding a new platform to access the third track.

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 4.3-22 below and shown in Figure 4.2-48.

Table 4.3-22 Stoughton Station: Land Acquisition

Parcel Number	Ownership	Generalized Zoning	General Land Use	Property Tax Revenue Loss	Job Loss	Area (acres)	Percent Acquisition
054-110	Private	Industrial	Commercial	TBD	No	0.09	4.3

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

The Stoughton Station would require 0.09 acres of privately-owned land. No residential, business, or community facility displacements would result from this acquisition for the Stoughton Station.

Less than 50 percent of parcel number 054-110 would be acquired and, accordingly, property tax revenue losses were not determined at this phase.

Taunton Station (Stoughton Alternative)

The Taunton Station would be a new train station constructed along the Stoughton Line that would serve the Stoughton Alternatives, but excluding the Whittenton Alternatives. 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 4.3-23 below and shown in Figure 4.2-49.

Table 4.3-23 Taunton Station: Land Acquisition

Parcel Number	Ownership	Generalized Zoning	General Land Use	Property Tax Revenue Loss	Job Loss	Area (acres)	Percent Acquisition
55-758	Private	Residential	Commercial	\$2,874.79	No	0.06	58.5
55-759	Private	Industrial	Undeveloped	\$3,904.58	No	2.07	100.0
55-760	Public	Industrial	Undeveloped	-	No	7.00	100.0
55-761	Private	Industrial	Undeveloped	\$1,792.23	No	0.53	100.0
Pub-ROW	Public	Industrial	Undeveloped	-	No	0.91	100.0
TOTAL				\$8,571.60		10.57	

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

The Taunton Station would require 10.57 acres of land, comprised of 2.66 acres (three parcels) of privately owned land and 7.91 acres (two parcels) of publicly owned land. No residential, business, or community facility displacements would result from these acquisitions for Taunton Station.

More than 50 percent of parcel numbers 55-758, 55-759, and 55-761 would be acquired; property tax revenue losses for the Town of Taunton are estimated at \$8,751.60 per year, in 2009 dollars. Parcel

numbers 55-760 and Pub-ROW are owned by the Town of Taunton; no property tax revenue loss would result from acquiring these parcels.

Downtown Taunton Station (Whittenton Alternative)

The Downtown Taunton Station would be a new train or bus station constructed along the Attleboro Secondary that would serve the Whittenton Alternatives, but not the Stoughton Alternatives. (The station would also serve the Attleboro Alternatives and the Rapid Bus Alternative.) It would be located at 22 Oak Street, near the intersection of Mason Street and Wales Street, in Taunton.

The Downtown Taunton Station site is a previously developed parcel surrounded by commercial development. The parcel that would be acquired and converted to transportation/utilities land use to construct the Downtown Taunton Station is listed in Table 4.3-24 and shown in Figure 4.2-38.

Table 4.3-24 Downtown Taunton Station (Whittenton Alternative): Land Acquisition

Parcel Number	Ownership	Generalized Zoning	General Land Use	Property Tax Revenue Loss	Job Loss	Area (acres)	Percent Acquisition
65-357	Public	Commercial	Undeveloped	-	No	6.32	67.6

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

The Downtown Taunton Station would require 6.32 acres (one parcel) of publicly-owned land. No residential, business, or community facility displacements would result from this acquisition for the Downtown Taunton Station.

Parcel number 63-357 is owned by the Greater Attleboro Taunton Regional Transit Authority; no property tax revenue loss would result from acquiring this parcel.

Rapid Bus Stations

In addition to the four stations that are common to all alternatives, an existing parking lot would be expanded for the Rapid Bus Alternative and one new station would be constructed.

Galleria Station

The Galleria Station is an existing parking lot that would serve the Rapid Bus Alternative. It is located at the Silver City Galleria Mall, near the intersection of Routes 140 and 24 in Taunton. The Galleria Station would be expanded to meet the expected parking needs for the Rapid Bus Alternative, but no land acquisition would be required (Figure 4.2-42). There would be no direct effects to land uses or the social and economic environment at this location.

Downtown Taunton Station

The Downtown Taunton Station would be a new train or bus station constructed along the Attleboro Secondary that would serve the Attleboro Alternatives, the Whittenton Alternatives, or the Rapid Bus Alternative. As described above and shown in Table 4.3-24, the Downtown Taunton Station would require 6.32 acres (one parcel) of publicly owned land. No residential, business, or community facility displacements or property tax revenue losses would result from this acquisition for the Downtown Taunton Station.

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 4.3-25 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.

Jobs are expected to be lost only in Fall River and Mansfield. Four small businesses may be impacted in Fall River, including Jay Vee's Flooring Discounters, Gemco Electrical Company and Cotter Electrical, Jimmy's Used Tire Service, and Auto Accent. Two small businesses, involving three parcels, would be impacted in Mansfield: Mansfield Glass and Webb Auto. 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 4.3-25, the work force in Fall River is estimated to be 36,989 and the work force in Mansfield is estimated to be 10,763.

Table 4.3-25 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
Mansfield	10,763	Mansfield	Yes
New Bedford	37,223	King's Highway	No
		Whale's Tooth	No
Norton	6,017	Barrowsville	No
Raynham	8,788	Raynham Place	No
Sharon	3,373	Sharon	No
Stoughton	14,523	Stoughton	No
Taunton	25,653	Galleria	No
		Taunton	No
		Downtown Taunton	No
		Taunton Depot	No

Sources: 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)

4.3.3.12 LAYOVER FACILITIES

One midday train layover facility is planned for the Boston area, but alternative sites have not been selected yet. One midday bus layover facility is also planned for the Boston area. Two 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. Three alternative sites have been identified in Fall River and two alternative sites in New Bedford. This section provides basic descriptions of each Southern Triangle layover facility 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.

Logan Express

The proposed Logan Express (Midday Bus) layover facility, in Braintree would be constructed on Forbes Road, along Interstate 93 (Figure 4.2-52). Buses would have direct access to the proposed facility from dedicated bus lanes to be placed within the median of I-93. The proposed site is a large, existing Park-and-Ride lot for the Logan Express service offered by Massport.

There are no required changes to the site for layover functions therefore; there will be neither land disturbance nor social or economic environment impacts.

Wamsutta

The Wamsutta site layover facility would be constructed along the New Bedford Main Line and would serve **all rail 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 parcel that would be acquired to construct a layover facility at the Wamsutta site is listed in Table 4.3-26 below and shown in Figure 4.2-53.

Table 4.3-26 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	-	No	11.02	100.0

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

The layover facility at the Wamsutta site would require 11.02 acres (one parcel) of publicly-owned undeveloped land. 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.

Church Street

The Church Street site layover facility would be constructed along the New Bedford Main Line and would serve **all rail alternatives**. It would be located in New Bedford between Church Street and Route 140, near where Route 140 crosses the New Bedford Main Line, approximately 4.5 miles from the southern terminus of the New Bedford Main Line.

The Church Street site is a previously developed parcel within an industrial area. It is currently a disposal and recycling operation. The parcels that would be acquired to construct a layover facility at the Church Street site are listed in Table 4.3-27 below and shown in Figure 4.2-54.

Table 4.3-27 Layover Facility at the Church Street Site: Land Acquisition

Parcel Number	Ownership	Generalized Zoning	General Land Use	Property Tax Revenue Loss	Job Loss	Area (acres)	Percent Acquisition
125-10	Private	Industrial	Undeveloped	\$1,234.54	No	9.18	100.0
129-41	Private	Industrial	Industrial	\$20,143.80	No	29.63	100.0
TOTAL				\$21,378.34		38.81	

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

The layover facility at the Church Street site would require 38.81 acres (two parcels) of privately owned land. Business displacement would result from these acquisitions. Industrial buildings on parcel number 129-41 would be acquired to construct the layover facility. Job losses from the disposal and recycling business would be expected. No residential or community facility displacements would result from these acquisitions for the Church Street site.

The two parcels would be wholly acquired; property tax revenue losses for the City of New Bedford are estimated at \$21,378.34 per year, in 2009 dollars.

Weaver's Cove East

The Weaver's Cove East site layover facility would be constructed along the Fall River Secondary and would serve **all rail 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 4.3-28 below and shown in Figure 4.2-55.

Table 4.3-28 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-1-19	Private	Industrial	Residential	TBD ¹	No	0.05	38.5
T-1-33	Private	Industrial	Undeveloped	\$42,129.43	No	13.80	100.0
T-1-38	Private	Industrial	Undeveloped	\$15,188.32	No	4.14	100.0
TOTAL				\$57,317.75		17.99	

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

TBD: To be determined.

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

The layover facility at the Weaver’s Cove East site would require 17.99 acres (three 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 numbers T-1-33 and T-1-38 would be wholly acquired; property tax revenue losses for the City of Fall River are estimated at \$57,371.75 per year, in 2009 dollars. Less than 50 percent of parcel number T-1-19 would be acquired and, accordingly, property tax revenue losses were not estimated.

Weaver’s Cove West

The Weaver’s Cove West site layover facility would be constructed along the Fall River Secondary and would serve all rail alternatives. It would be located in Fall River between the existing Fall River Secondary freight line and the Taunton River, approximately 2.5 miles from the southern terminus of the Fall River Secondary.

The Weaver’s Cove West site includes both developed and undeveloped land. The developed portion is highly disturbed by industrial uses associated with a petroleum products facility. The industrial site is a former Shell Oil facility, and consists of completely cleared land with several large aboveground storage tanks and a short shipping dock. The undeveloped portion is vegetated. Approximately seven acres of the Shell site, primarily the undeveloped portion, would be utilized by the proposed layover facility. Surrounding land in all directions except west and northwest is similarly undeveloped or industrial property. A narrow strip of lightly developed land (a cell phone tower site) is northwest of the site.

The petroleum products facility at Weaver’s Cove is currently under consideration for use as a liquefied natural gas (LNG) offshore berth and transfer facility by Weaver’s Cove Energy, which currently owns and occupies the site. A Second Draft Environmental Impact Report was filed with the EEA for the LNG project in April 2009, under EEA project number 13061. Use of the site for this purpose would likely preclude its use as a layover facility for the Fall River Secondary.

The parcels that would be acquired to construct a layover facility at the Weaver’s Cove West site are listed in Table 4.3-29 below and shown in Figure 4.2-56.

Table 4.3-29 Layover Facility at the Weaver’s Cove West Site: Land Acquisition

Parcel Number	Ownership	Generalized Zoning	General Land Use	Property Tax Revenue Loss	Job Loss	Area (acres)	Percent Acquisition
T-2-1	Private	Industrial	Industrial	\$228,291.70	Yes	48.74	100
T-15-2	Private	Industrial	Undeveloped	\$7,828.10	No	9.17	100
TOTAL				\$236,119.79		57.91	

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

TBD: To be determined.

The layover facility would require the acquisition of approximately 57.91 acres (two parcels) of privately owned land, both zoned for industrial uses. Business displacement would result from these acquisitions. Industrial buildings on the site would be acquired to construct the layover facility, and job losses from the LNG business would be expected. No residential or community facility displacements would result from these acquisitions for the Weaver’s Cove West site.

Both parcels would be wholly acquired; property tax revenue losses for the City of Fall River are estimated at \$236,119.79 per year, in 2009 dollars.

ISP

The ISP site layover facility would be constructed along the Fall River Secondary and would serve **all rail alternatives**. It would be located in Freetown and Fall River, west of Main Street between the existing Fall River Secondary and Main Street, approximately 6 miles from the southern terminus of the Fall River Secondary.

The ISP site is an undeveloped parcel surrounded by open space or other undeveloped land. The parcels that would be acquired to construct a layover facility at the ISP site are listed in Table 4.3-30 and shown in Figure 4.2-57.

Table 4.3-30 Layover Facility at the ISP Site: Land Acquisition

Parcel Number	Ownership	Generalized Zoning	General Land Use	Property Tax Revenue Loss	Job Loss	Area (acres)	Percent Acquisition
234-2 (Freetown)	Private	Residential	Undeveloped	\$362.78	No	11.03	100.0
235-9 (Freetown)	Private	Residential	Undeveloped	TBD	No	15.04	22.0
X-8-12 (Fall River)	Private	Residential	Undeveloped	\$2,714.45	No	0.61	100.0
X-4-1 (Fall River)	Private	Industrial	Undeveloped	\$10,189.67	No	10.53	100.0
X-4-22 (Fall River)	Private	Industrial	Undeveloped	\$16,688.96	No	6.36	100.0
TOTAL				\$29,955.86¹		43.57	

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

TBD: To be determined.

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

The layover facility at the ISP site would require 43.57 acres (five parcels) of privately owned land. No residential, business, or community facility displacements would result from these acquisitions for the ISP site.

Four of the parcels would be wholly acquired; property tax revenue losses for the Town of Freetown are estimated at \$362.78 per year, and for the City of Fall River are estimated at \$29,593.08 per year, in 2009 dollars. Less than 50 percent of parcel number 235-9 would be acquired and, accordingly, property tax revenue loss cannot be determined at this phase. Additional property tax revenue losses for the Town of Freetown could result from the partial acquisition.

Summary of Effects Associated with Layover Facility

Tax effects of the layover site alternatives are listed in Table 4.3-31. Depending on the alternative selected, tax losses in New Bedford would range from zero to \$21,378, while tax losses in Fall River would range from \$29,956 to \$236,120.

Table 4.3-31 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
Logan Express Site	-	No	NA	NA
Wamsutta Site	-	No	NA	NA
Church Street Site	\$21,378.34	Yes	NA	NA
Weaver's Cove East Site	\$57,317.75	No	NA	NA
Weaver's Cove West Site	\$236,119.79	Yes	NA	NA
ISP Site	\$29,955.86	No	NA	NA

NA: Not applicable

4.3.4 IMPACTS BY ALTERNATIVE

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. Each Alternative consists of three components: (1) Temporary, Construction Impacts; (2) Long-term, Operations Impact; and (3) Indirect and Cumulative Effects. The subsection on long-term operations impacts is a summary of Section 4.3.3 where impacts were presented by element. In this section impacts are grouped by alternative, and the expected direct impacts to the social and economic environment are summarized. 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 ATTLEBORO ELECTRIC ALTERNATIVE

Construction Impacts

The construction associated with the proposed project will support temporary jobs in the South Coast region in construction and related industries during the 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 MA.

The economic benefit derived from construction expenditures would be the greatest for the Attleboro Electric Alternative³⁶. 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 -7,800 person-year jobs, and \$314-\$360 million in household income.

Potential negative effects during the construction period include temporary displacement of businesses and their operations or lost economic opportunities during construction activities. The construction of

³⁶ EOT. 2008. South Coast Rail Environmental Notification Form. Commonwealth of Massachusetts, Executive Office of Transportation and Public Works. Prepared by Vanasse Hangen Brustlin, Inc.: Boston.

the Attleboro Bypass segment may temporarily disrupt automobile traffic between residents of adjacent rural and low-density neighborhoods.

Long-Term Impacts

The potential long-term social and economic effects of the South Coast Rail project 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.

By Element

The Attleboro Electric Alternative (Figure 1.4-3) would be comprised of the elements listed in Table 4.3-32, which also summarize the potential impacts to land uses and the social and economic environment, respectively, that may result from implementing this alternative.

Table 4.3-32 Attleboro 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	TBD	None	-	-	No
Attleboro Bypass	TBD	Minimal	-	-	No
Attleboro Secondary	TBD	None	-	-	No
Fall River Secondary	\$4,724.88	None	3	-	No
New Bedford Main	TBD	None	-	-	No
Stations					
Canton Junction	-	NA	-	-	No
Sharon	-	NA	-	-	No
Mansfield	\$26,125.57	NA	3	2	Yes
Barrowsville	\$3,239.18	NA	1	-	No
Downtown Taunton	-	NA	-	-	No
Taunton Depot	\$5,604.59	NA	-	-	No
Freetown	TBD	NA	-	-	No
Fall River Depot	\$40,410.88	NA	-	4	Yes
Battleship Cove	-	NA	-	-	No
King's Highway	-	NA	-	-	No
Whale's Tooth	\$1,227.47	NA	-	-	No
TOTAL/SUMMARY¹	\$81,332.57²	Minimal	6	6	Yes

TBD: To be determined.

NA: Not applicable

1 Excludes layover facilities because sites have not been selected

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

Based on preliminary engineering plans (but excluding layover facilities until site selection), property tax revenue losses as a result of the Attleboro Electric Alternative are estimated at \$81,332.57 per year, in 2009 dollars. Additional property tax revenue losses may result from small and/or partial acquisitions that are not estimated.

Six residences would be displaced by the Attleboro Electric Alternative for the Fall River Secondary and Mansfield Station. Based on average household size in the affected communities, 21 persons would be relocated. Six businesses would also be displaced by the Attleboro Electric Alternative, for the Fall River Depot Station and the Mansfield Station. Job losses are expected from business displacements resulting from acquisition of privately-owned commercial buildings. Additional business displacements and job losses may occur at layover facilities (as described in Section 4.3.3.11), but cannot be characterized until layover facility sites are selected.

Minimal neighborhood fragmentation would be expected from this alternative, solely along the Attleboro Bypass segment where the new alignment may temporarily disrupt automobile traffic between residents of adjacent rural and low-density neighborhoods

By Municipality

Table 4.3-33 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 parcel acquisitions in excess of 50 percent for the Attleboro Electric Alternative. Most acquisitions associated with rights-of-way and traction power facilities have been excluded from this evaluation, as they cannot be accurately determined at this phase. Acquisitions for layover facilities have also been excluded, until specific sites have been selected.

Table 4.3-33 Attleboro 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
Berkley	Fall River Secondary	5.94	\$4,724.88	No
Canton	Canton Junction	-	-	No
Fall River	Battleship Cove	-	-	No
	Fall River Depot	3.79	\$40,410.88	Yes
Freetown	Freetown	4.18	TBD	No
Mansfield	Mansfield	1.57	\$26,125.57	Yes
New Bedford	King’s Highway	-	-	No
	Whale’s Tooth	0.43	\$1,227.47	No
Norton	Barrowsville	6.08	\$3,239.18	No
Sharon	Sharon	-	-	No
Taunton	Downtown Taunton	-	-	No
	Taunton Depot	12.70	\$5,604.59	No

TBD: To be determined.

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

Based on preliminary engineering plans (but excluding layover facilities until site selection), privately owned land that would be acquired for the Attleboro Electric Alternative would result in property tax revenue losses in Berkley, Fall River, Mansfield, New Bedford, and Taunton. Job losses would be expected in Mansfield and Fall River. Additional property tax revenue losses may result from small and/or partial acquisitions were not determined.

Indirect and Cumulative Effects

All South Coast Rail alternatives, including the Attleboro Alternative, will improve accessibility and mobility in the South Coast region, which in turn will stimulate additional economic activity in the region. The induced job and household growth by municipality is presented for two scenarios: without (Scenario 1) and with (Scenario 2) smart growth measures. A broader discussion of indirect and cumulative effects and smart growth scenarios for pertinent resources is provided in Chapter 5.

Scenario 1 – Baseline Growth + Induced Growth

Scenario 1 considers the induced growth from the Attleboro Alternative and the baseline growth. It assumes that no additional smart growth measures are implemented other than those measures already incorporated into municipal zoning or state planning. The Attleboro Alternative is expected to result in a total induced growth of 2,057 households, a 2.8 percent increase over the No-Build Alternative regional growth of 74,371 households. Induced growth would be largest in Taunton (152), Tiverton RI (136), Fall River and New Bedford (123 each), and Attleboro (122). Induced growth would be low in the northern communities, particularly in those not directly served by this alternative (Bridgewater, Foxborough). Some relatively undeveloped rural communities would also see higher growth in households, such as Berkley (103), Dighton (96), Freetown (97) and Westport (101). The Attleboro Alternatives are predicted to increase regional jobs by 2,600.

Scenario 2– Baseline Growth + Induced Growth + Smart Growth Measures

Scenario 2 considers the induced growth from the Attleboro Alternative and the baseline growth. It assumes that smart growth measures are implemented in each municipality within the study area, and that station area development occurs as envisioned in the Corridor Plan. As described in Chapter 5, Summary of Indirect Effects and Cumulative Impacts, the anticipated growth from both the No-Build Alternative and the induced growth from each Build alternative has been re-distributed in accordance with the Priority Development Areas (PDAs) and Priority Preservation Areas (PPAs) defined in the Corridor Plan.

The total induced growth for the Attleboro Alternative under Scenario 2 would be the same as in Scenario 1. The Attleboro Alternative is expected to result in a total induced growth of 2,057 households, a 2.8 percent increase over the No-Build Alternative regional growth of 74,371 households. The Smart Growth scenario assumes that the geographic distribution of the regional growth (induced and baseline) would be weighted towards PDAs. Induced growth would be largest in Fall River, Foxborough, New Bedford, and Taunton. The Smart Growth scenario was designed to shift growth (induced and baseline) out of rural communities such as Acushnet, Berkley, Lakeville, Rehoboth, Wareham and Westport, as well as more developed communities (Mansfield).

The Attleboro Alternative would include transit-oriented development at six stations (Downtown Taunton, Fall River Depot, Freetown, King's Highway, Downtown Taunton, Taunton Depot, and Whale's Tooth).

Implementation of Smart Growth measures, as proposed by MassDOT, is subject to local decision making and may thus vary among communities targeted for Smart Growth under Scenario 2. For analysis purposes, it was assumed that under Scenario 2 conservatively established smart growth goals would be achieved by the Build Year and development would be distributed accordingly. Actual development with the implementation of Smart Growth measures may vary from this both on local and

regional, aggregated basis. The impact analysis assumed a full implementation and realization of development according to the Smart Growth Plan, so that its impacts could be assessed relative to those without Smart Growth measures (Scenario 1).

The cumulative impacts are discussed as part of the summary of impacts below.

4.3.4.2 ATTLEBORO DIESEL ALTERNATIVE

Construction Impacts

The construction associated with the proposed project will support temporary jobs in the South Coast region in construction and related industries during the 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 MA.

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 -7,800 person-year jobs, and \$314-\$360 million in household income.

Potential negative effects during the construction period include temporary displacement of businesses and their operations or lost economic opportunities during construction activities. The construction of the Attleboro Bypass segment may temporarily disrupt automobile traffic between residents of adjacent rural and low-density neighborhoods.

Operations Impacts

The potential long-term social and economic effects of the South Coast Rail project 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 Attleboro Diesel Alternative would be comprised of the same elements as the Attleboro Electric Alternative (Figure 1.4-3) but would not need electrical infrastructure. The area needed for the Attleboro Diesel Alternative is, therefore, somewhat smaller than for the Attleboro Electric Alternative. The other effects to the social and economic environment that would result from the Attleboro Diesel Alternative are identical to those that would result from the Attleboro Electric Alternative, as provided in Tables 4.3-32 and 4.3-33.

Indirect and Cumulative

The indirect and cumulative effects of for the Attleboro Diesel Alternative would be same as for the Attleboro Electric Alternative.

4.3.4.3 STOUGHTON ELECTRIC ALTERNATIVE

Construction Impacts

The construction associated with the proposed project will support temporary jobs in the South Coast region in construction and related industries during the 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 MA.

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 -7,800 person-year jobs, and \$314-\$360 million in household income.

The Route 138 (Broadway) crossing in Raynham would be constructed as grade-separated, avoiding traffic delays during operations. Similar effects could occur in other construction locations, such as Main Street in Easton, which would involve reconstruction of an existing bridge. Delays would likely occur during construction activities and access to businesses could be temporarily affected.

Operations Impacts

The potential long-term social and economic effects of the South Coast Rail project 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.

By Element

The Stoughton Electric Alternative (Figure 1.4-4) would be comprised of the elements listed in Table 4.3-34, 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 \$71,098.54 per year, in 2009 dollars; additional property tax revenue losses may result from small and/or partial acquisitions that are not determined.

Three residences would be displaced by the Stoughton Electric Alternative for the Fall River Secondary right-of-way. Based on average household size in the affected communities, nine persons would be relocated. Four businesses would also be displaced by the Stoughton Electric Alternative, for the Fall River Depot Station. Job losses are expected from business displacements resulting from acquisition of privately owned commercial buildings, but are not quantifiable at this time. Additional business displacements and job losses may occur at layover facilities (as described in Section 4.3.3.11), but cannot be characterized until layover facility sites are selected.

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. Over time, some neighborhoods on either side of the

Table 4.3-34 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	\$2,913.13	Moderate	1	-	No
Fall River Secondary	\$4,724.88	None	3	-	No
New Bedford Main	TBD	None	-	-	No
Stations					
Canton Junction	-	NA	-	-	No
Canton Center	-	NA	-	-	No
Stoughton	TBD	NA	-	-	No
North Easton	\$2,941.19	NA	-	-	No
Easton Village	TBD	NA	-	-	No
Raynham Place	\$4,705.24	NA	-	-	No
Taunton	\$8,571.16	NA	-	-	No
Taunton Depot	\$5,604.59	NA	-	-	No
Freetown	TBD	NA	-	-	No
Fall River Depot	\$40,410.88	NA	-	4	Yes
Battleship Cove	-	NA	-	-	No
King’s Highway	-	NA	-	-	No
Whale’s Tooth	\$1,227.47	NA	-	-	No
TOTAL/SUMMARY¹	\$71,098.54²	Moderate	4	4	Yes

TBD: To be determined.

NA: Not applicable.

1: Excludes layover facilities because sites have not been selected.

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

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, prevents 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 4.3-35 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 Stoughton Electric Alternative. Most acquisitions associated with rights-of-way and traction power facilities are not estimated. Acquisitions for layover facilities have also been excluded, until site selection.

Based on preliminary engineering plans (but excluding layover facilities until site selection), privately owned land that would be acquired for the Stoughton Electric Alternative would result in property tax

**Table 4.3-35 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
Berkley	Fall River Secondary	5.94	\$4,724.88	No
Canton	Canton Center	-	-	No
	Canton Junction	-	-	No
Easton	North Easton	8.81	\$2,941.19	No
	Easton Village	0.23	TBD	No
Fall River	Battleship Cove	-	-	No
	Fall River Depot	3.79	\$40,410.88	Yes
Freetown	Freetown	4.18	TBD	No
New Bedford	King's Highway	-	-	No
	Whale's Tooth	0.43	\$1,227.47	No
Raynham	Raynham Place	12.01	\$4,705.24	No
	Stoughton Line	10.44	\$2,913.13	No
Stoughton	Stoughton	0.09	TBD	No
Taunton	Taunton	2.66	\$8,571.16	No
	Taunton Depot	12.70	\$5,604.59	No

TBD: To be determined.

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

revenue losses in Berkley, Easton, Fall River, New Bedford, Raynham, and Taunton. Job losses would be expected in Fall River. Additional property tax revenue losses may result from small and/or partial acquisitions that were not estimated.

Indirect and Cumulative

South Coast Rail alternatives will improve accessibility and mobility in the South Coast region, which in turn will stimulate additional economic activity in the region. The induced job and household growth by municipality is presented for two scenarios: without (Scenario 1) and with (Scenario 2) smart growth measures.

Scenario 1 - Baseline Growth + Induced Growth

Scenario 1 considers the induced growth from the Stoughton alternative and the baseline growth. It assumes that no additional smart growth measures are implemented other than those measures already incorporated into municipal zoning or state planning. The Stoughton Alternative is expected to result in a total induced growth of 1,972 households, a 2.7 percent increase over the No-Build Alternative regional growth of 74,371 households. New induced growth would be largest in Taunton (137), Tiverton RI (119), Easton (111), and Fall River and New Bedford (109 each). Induced growth would be low in the northern communities, particularly in those not directly served by this alternative (Bridgewater, Foxborough, Sharon). Some relatively undeveloped rural communities would also see higher growth in households, such as Berkley (90), Dighton (83), Freetown (84) and Westport (88). The Stoughton Alternatives are predicted to increase regional jobs by 2,535.

Scenario 2 - Baseline Growth + Induced Growth + Smart Growth Measures

Scenario 2 considers the induced growth from the Stoughton alternative and the baseline growth. It assumes that smart growth measures are implemented in each municipality within the study area, and that station area development occurs as envisioned in the Corridor Plan. As described in Chapter 5, Summary of Indirect Effects and Cumulative Impacts, the anticipated growth from both the No-Build Alternative and the induced growth from each Build alternative has been re-distributed in accordance with the Proposed Development Areas (PDAs) and Proposed Preservation Areas (PPAs) defined in the Corridor Plan.

The total induced growth for the Stoughton Alternative under Scenario 2 would be the same as in Scenario 1. The Stoughton Alternative is expected to result in a total induced growth of 1,972 households, a 2.7 percent increase over the No-Build Alternative regional growth of 74,371 households. The distribution of the growth (induced and baseline) would shift to be concentrated in the PDAs. New growth would be largest in Fall River, Foxborough, New Bedford, and Taunton. The Smart Growth scenario would shift growth (induced and baseline) out of rural communities such as Acushnet, Berkley, Lakeville, Rehoboth, Wareham and Westport, as well as more developed communities (Mansfield).

The Stoughton Alternative would include transit-oriented development at ten stations (Easton Village, Fall River Depot, Freetown, King's Highway, North Easton, Raynham Place, Stoughton, Taunton, Taunton Depot, and Whale's Tooth).

Residential real estate values are expected to rise at properties near all station sites except Freetown and Raynham Place.

The cumulative impacts are discussed as part of the summary of impacts below.

4.3.4.4 STOUGHTON DIESEL ALTERNATIVE**Construction Impacts**

The construction associated with the proposed project will support temporary jobs in the South Coast region in construction and related industries during the 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 MA.

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 -7,800 person-year jobs, and \$314-\$360 million in household income.

Operations Impacts

The potential long-term social and economic effects of the South Coast Rail project 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 Stoughton Diesel Alternative would be comprised of the same elements as the Stoughton Electric Alternative (shown in Figure 1.4-4) as listed above, but would not need electrical infrastructure. The area needed for the Stoughton Diesel Alternative is therefore somewhat smaller than for the Stoughton Electric Alternative. The other effects to the social and economic environment that would result from the Stoughton Diesel Alternative are identical to those that would result from the Stoughton Electric Alternative, as provided in Tables 4.3-34 and 4.3-35.

Indirect and Cumulative

The indirect and cumulative effects of for the Stoughton Diesel Alternative would be same as for the Stoughton Electric Alternative.

The cumulative impacts are discussed as part of the summary of impacts below.

4.3.4.5 WHITTENTON ELECTRIC ALTERNATIVE

Construction Impacts

The construction associated with the proposed project will support temporary jobs in the South Coast region in construction and related industries during the 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 MA.

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 -7,800 person-year jobs, and \$314-\$360 million in household income.

Operations Impacts

The potential long-term social and economic effects of the South Coast Rail project 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.

By Element

The Whittenton Electric Alternative (Figure 1.4-5) would be comprised of the elements listed in Table 4.3-36, 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 \$59,614.25 per year, in 2009 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

Table 4.3-36 Whittenton 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	-	-	-	-	-
Stoughton Line	TBD	Moderate	-	-	No
Whittenton Branch	TBD	Minimal	-	-	No
Attleboro Secondary	TBD	None	-	-	No
Fall River Secondary	\$4,724.88	None	3	-	No
New Bedford Main Line	TBD	None	-	-	No
Stations					
Canton Junction	-	NA	-	-	No
Canton Center	-	NA	-	-	No
Stoughton	TBD	NA	-	-	No
North Easton	\$2,941.19	NA	-	-	No
Easton Village	TBD	NA	-	-	No
Raynham Place	\$4,705.24	NA	-	-	No
Downtown Taunton	-	NA	-	-	No
Taunton Depot	\$5,604.59	NA	-	-	No
Freetown	TBD	NA	-	-	No
Fall River Depot	\$40,410.88	NA	-	4	Yes
Battleship Cove	-	NA	-	-	No
King’s Highway	-	NA	-	-	No
Whale’s Tooth	\$1,227.47	NA	-	-	No
TOTAL/SUMMARY¹	\$59,614.25²	Moderate	3	4	Yes

TBD: To be determined.

NA: Not applicable.

1: Excludes layover facilities because sites have not been selected.

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

persons would be relocated. Four businesses would also be displaced by the Whittenton Electric Alternative, for the Fall River Depot Station. Job losses are expected from business displacements resulting from acquisition of privately owned commercial buildings, but are not quantifiable at this time. Additional business displacements and job losses may occur at layover facilities (as described in Section 4.3.3.11), but cannot be characterized until layover facility sites are selected.

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. 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 4.3-37 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

Table 4.3-37 Whittenton 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
Berkley	Fall River Secondary	5.94	\$4,724.88	No
Canton	Canton Center	-	-	No
	Canton Junction	-	-	No
Easton	North Easton	8.81	\$2,941.19	No
	Easton Village	0.23	TBD	No
Fall River	Battleship Cove	-	-	No
	Fall River Depot	3.79	\$40,410.88	Yes
Freetown	Freetown	4.18	TBD	No
New Bedford	King's Highway	-	-	No
	Whale's Tooth	0.43	\$1,227.47	No
Raynham	Raynham Place	12.01	\$4,705.24	No
Stoughton	Stoughton	0.09	TBD	No
Taunton	Downtown Taunton	-	-	No
	Taunton Depot	12.70	\$5,604.59	No

TBD: To be determined.

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

parcel acquisitions in excess of 50 percent for the Whittenton Electric Alternative. Most acquisitions associated with rights-of-way and traction power facilities have been excluded from this evaluation, as they cannot be accurately determined at this phase. Acquisitions for layover facilities have also been excluded, until site selection.

Based on preliminary engineering plans (but excluding layover facilities until site selection), privately owned land that would be acquired for the Whittenton Electric Alternative would result in property tax revenue losses in Berkley, Easton, Fall River, New Bedford, Raynham, and Taunton. Job losses would be expected in Fall River. Additional property tax revenue losses may result from small and/or partial acquisitions that were not estimated.

Indirect and Cumulative

South Coast Rail alternatives will improve accessibility and mobility in the South Coast region, which in turn will stimulate additional economic activity in the region. The induced job and household growth by municipality for the Whittenton Electric Alternative is assumed to be similar to the induced growth presented for the Stoughton alternative above.

Residential real estate values are expected to rise at properties near all station sites, except Freetown.

The cumulative impacts are discussed as part of the summary of impacts below.

4.3.4.6 WHITTENTON DIESEL ALTERNATIVE

Construction Impacts

The construction associated with the proposed project will support temporary jobs in the South Coast region in construction and related industries during the 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 MA.

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 -7,800 person-year jobs, and \$314-\$360 million in household income.

Operations Impacts

The potential long-term social and economic effects of the South Coast Rail project 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 Whittenton Diesel Alternative would be comprised of the same elements as the Whittenton Electric Alternative (Figure 1.4-5) 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 4.3-36 and 4.3-37.

Indirect and Cumulative

The indirect and cumulative effects of for the Whittenton Diesel Alternative would be same as for the Whittenton Electric Alternative.

4.3.4.7 RAPID BUS ALTERNATIVE

Construction Impacts

The construction associated with the proposed project will support temporary jobs in the South Coast region in construction and related industries during the 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 MA.

Based upon the preliminary estimates of construction costs included in the Corridor Plan, the Rapid Bus alternative construction impacts would amount to about \$280 million to \$360 million in business

output, 1,360 to 1,560 jobs, and \$63 to \$72 million in household income. These impacts amount to 20 to 30 percent of the impacts of the rail alternatives.

Operations Impacts

The potential long-term social and economic effects of the South Coast Rail project 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.

By Element

The Rapid Bus Alternative (Figure 1.4-6) would be comprised of the elements listed in Table 4.3-37, which also summarize the direct effects to land uses and the social and economic environment, respectively, potentially resulting from implementing this alternative.

As shown in Table 4.3-38, property tax revenue losses as a result of the Rapid Bus Alternative are estimated at \$41,638.35 per year, in 2009 dollars; additional property tax revenue losses may result from small and/or partial acquisitions were not estimated. [Property tax revenue losses may need to be estimated depending on methodology selected to estimate property taxes on parcels that would be acquired for more than 50 percent (i.e., proportional or total).]

Table 4.3-38 Rapid Bus Alternative: Summary of Potential Effects to the Social and Economic Environment

Element/Component	Property Tax Revenue Loss	Neighborhood Fragmentation	Residential		
			Displacements (homes)	Business Displacements	Job Loss
Highway Alignments					
Reversible Bus Lanes	TBD	None	-	-	None
Stations					
Downtown Taunton	-	NA	-	-	No
Galleria	-	NA	-	-	No
Freetown	TBD	NA	-	-	No
Fall River Depot	\$40,410.88	NA	-	4	Yes
King’s Highway	-	NA	-	-	No
Whale’s Tooth	\$1,227.47	NA	-	-	No
TOTAL/SUMMARY¹	\$41,638.35²	None	0	4	Yes

TBD: To be determined.

NA: Not applicable

1: Excludes layover facilities because sites have not been selected.

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

Job losses are expected from business displacements resulting from acquisition of privately owned commercial buildings at the Fall River Depot Station site.

No residential displacement is expected to result from implementation of this alternative.

No neighborhood fragmentation is expected to result from implementation of this alternative.

By Municipality

Table 4.3-39 summarizes the private property acquisitions for stations, annual property tax revenue losses, and job losses for each affected municipality that would result from parcel acquisitions in excess of 50 percent for the Rapid Bus Alternative.

Table 4.3-39 Property Tax Revenue and Job Losses for Affected Municipalities from the Rapid Bus Alternative

Municipality	Station	Private Property Acquisition Area (acres)	Property Tax Revenue Loss ¹	Job Loss
Fall River	Fall River Depot	3.96	\$40,410.88	Yes
Freetown	Freetown	4.18	TBD	No
New Bedford	King’s Highway	-	-	No
	Whale’s Tooth	0.43	\$1,227.47	No
Taunton	Galleria	-	-	No
	Downtown Taunton	-	-	No

TBD: To be determined.

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

Based upon preliminary engineering plans (but excluding layover facilities until site selection and parcels of which less than 50 percent would be acquired), privately owned land that would be acquired for the Rapid Bus Alternative would result in property tax revenue losses in Fall River and New Bedford. Additional property tax revenue losses may result from small and/or partial acquisitions that were not estimated.

Job losses would be expected in Fall River due to business displacements resulting from acquisition of privately owned commercial buildings at the Fall River Depot Station site.

Indirect and Cumulative Impacts

The South Coast Rail Rapid Bus alternative will improve accessibility and mobility in the South Coast region, which in turn will stimulate additional economic activity in the region.

Scenario 1- Baseline Growth + Induced Growth

Scenario 1 considers the induced growth from the Rapid Bus alternative and the baseline growth. It assumes that no additional smart growth measures are implemented other than those measures already incorporated into municipal zoning or state planning. The Rapid Bus Alternative is expected to result in a total induced growth of 1,310 households, a 1.8 percent increase over the No-Build Alternative regional growth of 74,371 households. New induced growth would be largest in Taunton (108), Tiverton RI (97), Fall River (87) and New Bedford (88). Induced growth would be low in the all other communities. Some relatively undeveloped rural communities would also see higher growth in households, such as Berkley (73), Dighton (68), Freetown (69) and Westport (72). The Rapid Bus Alternative is predicted to increase regional jobs by 1,678.

Scenario 2- Baseline Growth + Induced Growth + Smart Growth Measures

Scenario 2 considers the induced growth from the Rapid Bus alternative and the baseline growth. It assumes that smart growth measures are implemented in each municipality within the study area, and that station area development occurs as envisioned in the Corridor Plan. As described in Chapter 5, Summary of Indirect Effects and Cumulative Impacts, the anticipated growth from both the No-Build Alternative and the induced growth from each Build alternative have been re-distributed in accordance with the Proposed Development Areas (PDAs) and Proposed Preservation Areas (PPAs) defined in the Corridor Plan.

The total induced growth for the Rapid Bus Alternative under Scenario 2 would be the same as in Scenario 1. As shown in Table 3-1, the Rapid Bus Alternative is expected to result in a total induced growth of 1,310 households, a 1.8 percent increase over the No-Build Alternative regional growth of 74,371 households. The distribution of the growth (induced and baseline) would shift to be concentrated in the PDAs. New growth would be largest in Fall River, Foxborough, New Bedford, and Taunton. The Smart Growth scenario would shift growth (induced and baseline) out of rural communities such as Acushnet, Berkley, Lakeville, Rehoboth, Wareham and Westport, as well as more developed communities (Mansfield).

Residential real estate values are expected to rise at properties near all station sites, except Galleria and Freetown.

The cumulative impacts are discussed as part of the summary of impacts below.

4.3.4.8 SUMMARY OF IMPACTS

Direct and Indirect Impacts

Table 4.3-40 provides a comparative summary of the direct and indirect impacts to the social and economic environment potentially resulting from the alternatives, excluding the layover facility sites. There is no difference between the electric and diesel options for each rail alternative.

Table 4.3-40 Summary of Potential Effects to the Social and Economic Environment from All Alternatives

Alternative	Property Tax Revenue Loss ¹	Job Loss	Neighborhood Fragmentation	Residential Displacements (homes)	Business Displacements	Induced Jobs ³	Induced Households ³	Residential Property Value Change ²
Attleboro Alternatives	\$81,333	Yes	Minimal	6	6	2,599	2,057	Yes
Stoughton Alternatives	\$71,986	Yes	Moderate	4	4	2,533	1,972	Yes
Whittenton Alternatives	\$59,614	Yes	Moderate	3	4	- ⁴	- ⁴	Yes
Rapid Bus	\$41,638	Yes	NA	0	4	1,678	1,310	Yes

- 1: Additional property tax revenue losses may result from small and/or partial acquisitions that cannot be determined at this phase.
- 2: Anticipated to increase in the vicinity of new stations and decrease in areas with moderate to severe noise impacts (railroad alignments and layover facilities).
- 3: Increase from No-Build Alternative; the total number of induced jobs and households is the same for Scenario 1 and 2.
- 4: Induced jobs and households for the Whittenton Alternatives were not estimated but are assumed to be similar to impacts of the Stoughton Alternatives.

The variations in property tax revenue losses do not correlate with the variations in private property acquisitions for each alternative. The Stoughton Alternatives, with the greatest amount of private property acquisition, would result in an intermediate loss of property tax revenue. The Attleboro Alternatives, with an intermediate amount of private property acquisition among the rail alternatives, would result in the highest loss of property tax revenue. The Whittenton Alternatives, with only slightly less private property acquisition than the Attleboro Alternatives, would result in the least amount of property tax revenue among the rail alternatives. The Rapid Bus Alternative, with considerably less private property acquisition, also would result in the least amount of property tax revenue loss, but at a rate disproportionate to this alternative's total private property acquisition requirement.

The largest component of the property tax revenue loss calculation is the \$40,410.88 estimate of loss for the Fall River Depot Station, an order of magnitude greater than for any other single element except for the \$26,125.57 estimate of loss for the Mansfield Station. Since this Fall River Depot Station is common to all alternatives, this value dominates the total property tax revenue loss calculation for all alternatives. Conversely, the Mansfield Station is unique to the Attleboro Alternatives, and the combination of these two values substantively raises the property tax revenue impact that would result from the Attleboro Alternatives as compared to others.

All alternatives would result in job losses due to business displacements resulting from acquisition of private property with commercial lots for the station sites. It is not possible to project numbers of actual jobs lost at this phase of analysis, but only a few commercial buildings would be acquired and related job loss is assumed to be relatively minor. All rail alternatives would result in residential displacements from acquisition of privately owned parcels with occupied residences. The Rapid Bus Alternative would not result in residential displacements. No alternative would result in community facility displacements.

Based on a review of residential and commercial property availability,³⁷ communities that would be impacted by residential displacements (Raynham and Mansfield) or business displacements (Mansfield and Fall River) have sufficient real estate capacity to absorb these displacements. Approximately 30 similar residential properties are currently for sale in Raynham, and 350 in Mansfield. The commercial property vacancy rate in Mansfield ranges between 13 and 18 percent. Commercial property vacancy rates in Fall River were not readily available; for comparison, the rate in nearby New Bedford is approximately 24 percent.

Impacts to land uses and the social and economic environment from the layover facilities were excluded from this summary because sites have not been selected. Depending upon the selected layover facility site(s), land acquisition, property tax revenue loss, and residential or business displacements vary considerably by alternative.

There are moderate differences in neighborhood fragmentation effects between the rail alternatives. Where active rail service is currently provided (Fall River Secondary, New Bedford Main Line, Attleboro

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.

Secondary, active portion of Stoughton Line, and Northeast Corridor), no neighborhoods would be fragmented by the construction, reconstruction, or operation of the commuter rail service. Where rail lines are out-of-service (inactive portion of Stoughton Line and Whittenton Branch) or have never previously existed (Attleboro Bypass), varying degrees of neighborhood fragmentation may result. Along the inactive portion of the Stoughton Line, some residential and commercial activity encroachment into the right-of-way has occurred, and over time some neighborhoods on either side of the alignment have developed continuity across the inactive railroad bed as residents have used the alignment for pedestrian transit. This appears to have been less common along the out-of-service Whittenton Branch, where residential neighborhoods tend to be located on one side of the alignment or the other. Accordingly, there would be less of a neighborhood fragmentation effect along the Whittenton Branch. The new Attleboro Bypass alignment would parallel an electrical transmission line corridor and pass near some low-density or rural neighborhoods. This alignment would not bisect any neighborhoods, but may temporarily disrupt traffic along rural roads connecting the neighborhoods when trains are using the at-grade crossings. Each rail alternative contains at least one segment with some neighborhood fragmentation effect. Although not quantifiable, a qualitative ranking of the rail alternatives, from the greatest to the least effect, and the key factors would be:

- Attleboro Alternatives (new railroad construction for the Attleboro Bypass)
- Whittenton Alternatives (railroad reconstruction between Stoughton Station and Raynham Junction, and between Raynham Junction and Weir Junction)
- Stoughton Alternatives (railroad reconstruction between Stoughton Station and Weir Junction).
- The Rapid Bus Alternative is not expected to have any neighborhood fragmentation effect.

Each Build alternative is anticipated to induce additional growth within the South Coast region as a result of improved transit access. However, the induced growth from each is relatively small in comparison to the No-Build Alternative, which is projected to increase the number of households by 74,371 by 2030. The Attleboro Alternative is anticipated to add 2.8 percent to this total, the largest induced growth of the three alternatives. The Stoughton Alternative would have the second-largest growth, with a 2.7 percent increase. The Rapid Bus would have the lowest induced growth, at 1.8 percent of the baseline No-Build Alternative.

By Municipality

Table 4.3-41 compares 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 parcel acquisitions in excess of 50 percent for each alternative. Acquisitions associated with rights-of-way and traction power facilities have been excluded from this evaluation, as they cannot be accurately determined at this phase. The layover facilities have also been excluded from this evaluation, because sites have not yet been selected. Private property acquisitions and resulting property tax revenue losses are likely to be somewhat larger than presented in Table 4.3-41. As described in Section 4.3.1.3.3, residential property real estate values would likely increase near the station sites but decrease along the railroad alignments. Property tax revenues for each municipality would likely change as a result of these increases or decreases. It is not possible to accurately calculate the net value of these changes for each community at this phase of the project. More accurate projections may be made once the preferred alternative is selected and final design completed. The data presented in Table 4.3-40 provides for a relative, rather than absolute, comparison between the alternatives.

Also included in Table 4.3-41 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 0.01 percent, although Fall River and Mansfield would experience up to 0.06 percent loss of property tax revenue.

Table 4.3-41 Comparison of Social and Economic Effects to Municipalities, by Alternative

Municipality	Attleboro Alternatives	Stoughton Alternatives	Whittenton Alternatives	Rapid Bus Alternative
Berkley				
Private Property Acquisition (acres)	5.94	5.94	5.94	-
Property Tax Revenue Loss	\$4,724.88	\$4,724.88	\$4,724.88	-
<i>Total Berkley Tax Levy, 2009: \$7,263,524</i>				
Percent Loss	<0.01	<0.01	<0.01	
Direct Job Loss	No	No	No	-
Canton				
Private Property Acquisition (acres)	None	None	None	-
Property Tax Revenue Loss	None	None	None	-
<i>Total Canton Tax Levy, 2009: \$50,759,822</i>				
Percent Loss	0	0	0	
Direct Job Loss	No	No	No	-
Easton				
Private Property Acquisition (acres)	-	9.04	9.04	-
Property Tax Revenue Loss	-	\$2,941.19	\$2,941.19	-
<i>Total Easton Tax Levy, 2009: \$39,433,261</i>				
Percent Loss	-	< 0.01	< 0.01	
Direct Job Loss	-	No	No	-
Fall River				
Private Property Acquisition (acres)	3.79	3.79	3.79	3.96
Property Tax Revenue Loss	\$40,410.88	\$40,410.88	\$40,410.88	\$40,410.88
<i>Total Fall River Tax Levy, 2009: \$64,257,886</i>				
Percent Loss	0.06	0.06	0.06	0.06
Direct Job Loss	Yes	Yes	Yes	Yes
Freetown				
Private Property Acquisition (acres)	4.18	4.18	4.18	6.30
Property Tax Revenue Loss	TBD	TBD	TBD	TBD
<i>Total Freetown Tax Levy, 2009: \$13,809,232</i>				
Percent Loss	TBD	TBD	TBD	TBD
Direct Job Loss	No	No	No	No
Mansfield				
Private Property Acquisition (acres)	1.57	-	-	-
Property Tax Revenue Loss	\$26,125.57	-	-	-
<i>Total Mansfield Tax Levy, 2009: \$43,015,926</i>				
Percent Loss	0.06			
Direct Job Loss	Yes	-	-	-
New Bedford				
Private Property Acquisition (acres)	0.43	0.43	0.43	0.05
Property Tax Revenue Loss	\$1,227.47	\$1,227.47	\$1,227.47	\$1,227.47
<i>Total New Bedford Tax Levy, 2009: \$88,797,309</i>				

Percent Loss	< 0.01	< 0.01	< 0.01	< 0.01
Direct Job Loss	No	No	No	No
Norton				
Private Property Acquisition (acres)	6.08	-	-	-

Table 4.3-41 (continued)

Municipality	Attleboro Alternatives	Stoughton Alternatives	Whittenton Alternatives	Rapid Bus Alternative
Property Tax Revenue Loss	\$3,239.18	-	-	-
<i>Total Norton Tax Levy, 2009: \$24,500,599</i>				
Percent Loss	0.01			
Direct Job Loss	No	-	-	-
Raynham				
Private Property Acquisition (acres)	-	22.45	12.01	-
Property Tax Revenue Loss	-	\$7,618.37	\$4,705.24	-
<i>Total Raynham Tax Levy, 2009: \$24,264,578</i>				
Percent Loss		0.03	0.02	
Direct Job Loss	-	No	No	-
Sharon				
Private Property Acquisition (acres)	None	-	-	-
Property Tax Revenue Loss	None	-	-	-
<i>Total Sharon Tax Levy, 2009: \$49,091,464</i>				
Percent Loss	0			
Direct Job Loss	No	-	-	-
Stoughton				
Private Property Acquisition (acres)	-	0.09	None	-
Property Tax Revenue Loss	-	TBD	None	-
<i>Total Stoughton Tax Levy, 2009: \$44,788,089</i>				
Percent Loss		TBD	0	
Direct Job Loss	-	No	No	-
Taunton				
Private Property Acquisition (acres)	12.70	15.36	12.70	None
Property Tax Revenue Loss	\$5,604.59	\$14,175.75	\$5,604.59	None
<i>Total Taunton Tax Levy, 2009: \$63,756,063</i>				
Percent Loss	< 0.01	0.02	< 0.01	0
Direct Job Loss	No	No	No	No

Source: Tax levy data from Massachusetts Department of Revenue website, per municipality: www.mass.gov/Ador. Accessed on 10 September 2009.

The impacts to the social and economic environment that would result from the South Coast Rail project alternatives vary considerably. Some municipalities would realize no effect to property tax revenues or jobs from parcel acquisition, while other communities would be substantively impacted. The communities’ social and economic environment that would be most affected are Fall River and Mansfield. Fall River would be affected by any of the alternatives most substantively by the acquisition requirements for the Fall River Depot Station. Mansfield’s social and economic environment would be affected only by the Attleboro Alternatives due to the acquisition requirements for the Mansfield Station. The communities’ social and economic environment that would be least affected by all alternatives are Freetown and New Bedford. The social and economic environment in Taunton would also be affected by all alternatives, but the impacts vary substantively among the alternatives.

Cumulative Effects

The economy is not directly regulated by federal, state, or local agencies. However, evaluation of project impacts to economic conditions is typically a component of NEPA and MEPA analyses for federal and state agencies, respectively. Since governments are typically funded, in part, by taxes, tracking tax revenue streams often provides a good measure of the economy. Relevant parameters include population and households, jobs and business output, and tax collections.

Local, state, and federal agencies monitor (measure) various economic metrics. Changes in the population of and number of households in each community are good “leading indicator” metrics often used to predict economic changes. As described in the Corridor Plan, the “South Coast rail alternatives will improve accessibility and mobility in the South Coast region, and these improvements are expected to stimulate additional business sales, jobs, household income, and state and local taxes beyond that forecast in the absence of such improvements.”³⁸ This evaluation of the cumulative effects to the economy that would result from the South Coast Rail project is based on projected impacts to households and population, economic activity and jobs, and tax revenues. These subjects are described individually in the following subsections, with a subsequent compilation for the cumulative effects evaluation.

With the exception of unemployment rates, which are presented for 2009 in section 4.3.2, it should be noted that the data presented in this section are typically from the period of 2006 through 2008, the most current available for many metrics. This time period does not include the 2009 economic downturn, and the economic and population projections therefore do not reflect these near-term changed circumstances. Given the cyclical nature of economic trends, however, the long-term operation of the project is evaluated in the context of long term macro-economic conditions.

It should be noted that the Smart Growth initiatives in Scenario 2 is designed to change the *location* of economic effects, but is not expected to change the overall (regional) impacts as compared to Scenario 1.

Household Size and Population

Household growth in the South Coast region by 2030 is anticipated to total 74,371 under the No-Build Alternative. Assuming an average household size of 2.5 persons,³⁹ the population of the South Coast region would increase by approximately 185,928 persons by 2030. Based on a current regional population of approximately 740,000⁴⁰ the South Coast region population would be approximately 908,000 in 2030 under the No-Build Alternative. The induced growth from each alternative would add more households and population:

- Attleboro Alternatives: 2,057 households and 5,143 persons;
- Stoughton Alternatives: 1,972 households and 4,930 persons; and
- Rapid Bus Alternative: 1,310 households and 3,275 persons.

In each case, the incremental increase in population provided by the South Coast Rail alternatives would be less than 0.5 percent of the South Coast regional population. Regional population 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 Chapter 5: Potential Economic Effects of South Coast Rail, and in particular Table 5-1: Economic Effects in 2030 of South Coast Rail (SCR) Rail Alternatives (\$2007).

³⁹ Ibid. See in particular Chapter 5: Potential Economic Effects of South Coast Rail.

⁴⁰ Ibid.

change from implementing Smart Growth initiatives, although population growth is likely to be concentrated in the PDAs rather than widely dispersed through the communities.

Jobs and Economic Activity

Extensive economic data characterizing the current economy are provided in the Corridor Plan.⁴¹ Bristol County includes some three-quarters of the population of and is almost entirely encompassed by the South Coast Rail project area (smaller portions of Plymouth and Norfolk counties are also within the project area). According to the Corridor Plan, the employment base in the state of Massachusetts grew by 53 percent in the 30-year time period from 1976 to 2006, while the Bristol County employment base grew by only 43 percent.⁴² On average, the Bristol County job market increased by 1.4 percent per year over that 30-year period. Seventy percent job growth was seen in Norfolk County and 109 percent in Plymouth County. Dividing the 30-year period into 5-year increments, the highest rates of growth (statewide and in each county except Norfolk) were observed in the 1981 to 1986 period, followed by negative growth (job loss) in the 1986 to 1991 period.⁴³ With few periodic exceptions, Bristol County experienced the least job growth (and greatest job loss) of the three South Coast counties over the 30 years.

In the most recent period, total economic output in the South Coast Rail project area was over \$50 billion in 2006, up 18 percent (3.6 percent per year) from the 2001 output of \$43 billion.⁴⁴ Grouping the broad range of industry into four general types, agricultural output increased 42.7 percent (to \$398 million), manufacturing 22.6 percent (to \$12 billion), and services and trades 18.6 percent (to \$34 billion), but other production (mining, construction, and utilities) lost 0.6 percent (to \$4 billion).

Although economic output gained on average, the South Coast region lost jobs during this same 5-year time period: the 377,671 jobs in 2001 decreased to 374,832 in 2006.⁴⁵ The loss of 2,839 jobs equates to a 7.6 percent per year rate. The greatest number of job losses was realized in the manufacturing sector, down from 51,833 to 40,633. This represents a nearly 22 percent loss, but compares with state (23 percent) and national (21 percent) losses in the manufacturing sector in the same period. However, the Corridor Plan estimates that 380,000 jobs are currently present in the South Coast region.⁴⁶

A number of the reasonably foreseeable future activities, as well as some more speculative projects, would add to economic activity and the job base in the South Coast region:

The Weaver's Cove Energy LNG project in Fall River, if realized, could add up to 350 jobs during construction and 30 to 35 permanent jobs during operation.⁴⁷

The proposed industrial, business, or commercial parks in Fall River and Freetown would increase business activity and add 11,000 jobs in these two communities⁴⁸ once the parks are occupied.

⁴¹ Ibid.

⁴² Ibid. See in particular Appendix E: Baseline Report: Economic Development and Land Use Conditions in the South Coast Region Today, Chapter IV Economic Development Baseline.

⁴³ Ibid. See Appendix E: Baseline Report: Economic Development and Land Use Conditions in the South Coast Region Today, Chapter IV Economic Development Baseline, Figure 40: Employment Changes, 1976-2006.

⁴⁴ Ibid. See Appendix E: Baseline Report: Economic Development and Land Use Conditions in the South Coast Region Today, Chapter IV Economic Development Baseline, Table 25: Trends 2001-2006.

⁴⁵ Ibid. See Appendix E: Baseline Report: Economic Development and Land Use Conditions in the South Coast Region Today, Chapter IV Economic Development Baseline, Table 22: Employment Changes by Sector, 2001-2006.

⁴⁶ Ibid. See Chapter 5, Potential Economic Effects of the South Coast Rail.

⁴⁷ Weaver's Cove Energy. 2009. Community Benefits. Weaver's Cove Energy website: <http://www.weaverscove.com/proposal-community.html>. Accessed on 13 October 2009.

Numerous other ongoing or anticipated developments throughout the South Coast, as outlined in the Corridor Plan,⁴⁹ are projected to increase business activity and add jobs in the region, including plans for a Mashpee Wampanoag Casino in Fall River.⁵⁰

Many of these projects fall within the Southern Triangle portion of the South Coast Rail project area, and the effects would not differentiate between the cumulative effects of the rail alternatives.

The historical and current data suggest that overall economic growth will continue in the South Coast region at a rate similar to the state as a whole, but growth (or loss) will vary substantively between individual industries and communities, and during different time periods as a result of overall economy or specific industry business cycles. In general, economic activity is greatest in the northernmost communities (those close to the Boston metropolitan) and communities already serviced by rail (such as the Northeast Corridor). Using the two geographic divisions described in the indirect effects analysis, the EDR Group predicts \$52 billion in business activity in SCR-10 and \$27 billion in SCR-21, for a total business output of \$99 billion in 2030 under the No-Build Alternative.⁵¹ As shown in Table 3-2, job growth in the South Coast region is expected to total 81,615 under the No-Build Alternative. The EDR Group predicts 374,832 jobs in SCR-10 and 215,745 jobs in SCR-21, for a total of 590,577 jobs in 2030 under the No-Build Alternative.

The South Coast Rail project would impact the economy during both the construction phase and during the operational period. The construction phase is planned for 2012 to 2016. Based upon the preliminary estimates of construction costs, the Corridor Plan states that “expenditures for labor and materials would generate construction period benefits of about 7,000 to 8,000 jobs, \$1.4 to \$1.8 billion in business output, and about \$315 to \$360 million in household income.”⁵² The Corridor Plan does not assign these impacts to individual communities or distinguish between the separate alternatives. The economic benefit derived from construction expenditures would be the greatest for the Attleboro Electric Alternative and the least for the Rapid Bus Alternative.

Economic benefits during operations would be longer term. By 2030, the South Coast Rail project rail alternatives are expected to contribute between \$268 and \$295 million in net new business output annually within the South Coast region, with an additional \$180 million to \$192 million for the rest of the state.⁵³ The Rapid Bus Alternative would contribute some \$187 million to the South Coast region and an additional \$109 million to the rest of the state. Compared to the total business output in the South Coast in 2030 under the No-Build Alternative of approximately \$99 billion, the South Coast Rail project’s contribution would be approximately 0.20 to 0.30 percent of this total.

Some job losses are anticipated as a result of business displacements for construction of the South Coast Rail alternatives, specifically for the Fall River Depot Station (applicable to all alternatives) and the

⁴⁸ Pateakos, Jay. 2009. Grants for Executive Park to be unveiled. Herald News (April 3, 2009) website: <http://www.heraldnews.com/homepage/x180623384/Grants-for-Executive-Park-to-be-unveiled>. Accessed 13 October 2009.

⁴⁹ 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 in particular Appendix E: Baseline Report: Economic Development and Land Use Conditions in the South Coast Region Today, Chapter IV Economic Development Baseline. See in particular Chapter 6: Elements of the Corridor Plan.

⁵⁰ http://www.mashpeewampanoagtribe.com/Casino_pr.pdf

⁵¹ EDR Group. 2009. Basic Economic Variables. Data provided to Vanasse Hangen Brustlin, Inc. via e-mail on 16 October 2009. Economic Data Research Group: Boston.

⁵² Ibid. Pg.9.

⁵³ 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. Pg. 9.

Mansfield Station (applicable only to the Attleboro Alternatives). Four businesses would be displaced in Fall River and two businesses in Mansfield. Specific numbers of jobs that would be lost are not known at this phase of the project. The affected businesses are small and the maximum number of job losses would likewise be small. It is possible that the displaced businesses would relocate and no jobs would be lost.

Regional job growth by 2030 attributable to the South Coast Rail project under the Business as Usual scenario would be:

- **Attleboro Alternatives: 2,599 jobs;**
- **Stoughton Alternatives: 2,533 jobs; and**
- **Rapid Bus Alternative: 1,678 jobs.**

An additional 1,200 to 1,260 jobs are estimated to result from the project but occur elsewhere in the state. As noted above, approximately 590,000 jobs would be expected by 2030 as the No-Build Alternative. In each case (and as noted in the Corridor Plan), the incremental increase in job growth permanently provided by the South Coast Rail alternatives under Scenario 1 would be approximately 0.4 percent of the South Coast regional job market.

As with the regional population discussed above, regional economic activity and the job market are not expected to change from implementing Smart Growth initiatives. Locally, commercial businesses may choose sites close to stations or, if Smart Growth policies are enacted in some communities but not others, may choose a community with implemented Smart Growth initiatives (in particular TOD) over another community without these measures. It is not possible to project such fine-scale changes within Scenario 2.

Tax Revenue

The Corridor Plan graphically presents per-capita property tax receipts for selected South Coast communities in 2006.⁵⁴ 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 one mile of new station sites and decrease by up to 20 percent within about 400 feet of the alignments or

⁵⁴ 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.

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 rail alternatives 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.⁵⁵ The expected changes for the rail alternatives are not attributed separately. The Rapid Bus Alternative would generate approximately 60 percent of these values. 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.⁵⁶

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 change the overall (regional) impacts as compared to Scenario 1.

Summary

Combining the historic trends in the economy, recent or reasonably foreseeable future actions, and the varying effects on the economy that would result from each of the alternatives, the cumulative effects of the South Coast Rail project to the economy in 2030 for each alternative under the two scenarios are listed in Table 4.3-42.

Table 4.3-42 Comparison of Cumulative Effects to the Economy in 2030

Historical Trend affecting the Economy	Trends and Current or Future Actions affecting the Economy	Alternative	Population	Jobs	Economic Activity	Tax Receipts	
						Municipal	State
		No-Build	908,000	590,000	\$99B	NA	NA
		SCENARIO 1					
Recent growth in economic activity but slower growth in job market; geographic differences north-to-south	Global economic downturn; planned commercial and industrial developments in Southern Triangle 380,000 current jobs with 1.4 % per year growth	Attleboro	+ 5,143	+ 2,599	+\$487M	+\$8.5-9.5M	+\$16-18M
		Stoughton	+ 4,930	+ 2,533	+\$479M	+\$8.5-9.5M	+\$16-18M
		Rapid Bus	+ 3,275	+1,678	+\$296M	+\$5.1-5.7M	+\$8.6-10.8M
		SCENARIO 2					
		Attleboro	+ 5,143	+ 2,599	+\$487M	+\$8.5-9.5M	+\$16-18M
		Stoughton	+ 4,930	+ 2,533	+\$479M	+\$8.5-9.5M	+\$16-18M
		Rapid Bus	+ 3,275	+1,678	+\$296M	+\$5.1-5.7M	+\$8.6-10.8M

All alternatives would measurably benefit the economy in the South Coast region, with actual benefits at the community level distributed according to the alternative’s alignment. In all cases, the incremental addition of the project’s economic benefit to the regional economy would be insubstantial; the cumulative effect of any of the alternatives would be a minimal change to any of the economic parameters. There is not a substantive cumulative difference between the rail alternatives. The Rapid Bus Alternative would have less of an economic impact than any of the rail alternatives. There would be no regional difference in the project’s cumulative effect on the economy between the two scenarios. Economic benefits at the local level from Scenario 2 would be similar to those within the Scenario 1, but

⁵⁵ 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.

⁵⁶ Ibid. See in Table 5-2, Estimated Growth Near SCR Commuter Rail Stations by 2030.

more concentrated within the communities. Economic growth would likely occur within the PDAs rather than the PPAs.

Local effects would vary considerably, especially in communities with stations. However, the cumulative impact even at the local level would be minimal. As a single example, household growth in Norton would be 110 for the Attleboro Alternative or 58 for the Stoughton Alternative. This is a considerable difference between the alternatives but minimal in either case compared to the 3,359 new households expected in Norton under the No-Build Alternative. Similarly, household growth in Easton would be 19 for the Attleboro Alternative or 111 for the Stoughton Alternative, compared to 5,541 for the No-Build Alternative.

From a regional perspective, the differences between the alternatives are minimal and do not differentiate between them. Only population and job numbers would vary measurably between the alternatives. Because ridership numbers vary somewhat between the rail alternatives, growth around the common stations in the Southern Triangle (Whale's Tooth, King's Station, Battleship Cove [except Rapid Bus], Fall River Depot, Freetown, and Taunton Depot) would vary somewhat. North of the Southern Triangle, more economic benefits would accrue to the communities with stations:

- Attleboro Alternative- Downtown Taunton, Barrowsville, and Mansfield;
- Stoughton Alternative- Taunton, Raynham Place, Easton Village, North Easton, Stoughton, and Canton Center; and
- Rapid Bus Alternative- Downtown Taunton and Galleria.

Ridership numbers for the Rapid Bus Alternative are substantially lower than the rail alternatives.⁵⁷ Combined with historical information about minimal induced growth from bus service, the contribution to the economy from the Rapid Bus Alternative would be lower (about 60 percent of the rail alternatives) at the local, regional, and state levels.

In summary, the economic trends described above in combination with the impacts from all alternatives of the South Coast Rail project would:

Within Scenario 1, beneficially contribute to economic growth in the South Coast region, with a wide range of local impacts, or

Within Scenario 2, also beneficially contribute to economic growth in the South Coast region, with a wide range of local impacts concentrated in PDAs.

There would not be substantive differences between the alternatives in the cumulative effects to the economy on a regional basis. Local effects may vary by alternative, especially for Scenario 2.

⁵⁷ 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 2, South Coast Rail Alternatives.