4.2 LAND USE AND ZONING

4.2.1 INTRODUCTION

This chapter characterizes land uses, zoning and public policies in the Study Area and assesses compatibility of the alternatives with these aspects. Section 4.2.1 defines land use, zoning, and sensitive receptors to noise and vibration, and provides the regulatory context for studying this resource. Section 4.2.2 identifies the South Coast Rail project study area, summarizes regional land use conditions, describes existing conditions (relative to land use and zoning) within the study area, and identifies potential noise and vibration sensitive receptors. The discussion of land use begins with a regional overview of existing land use, followed by a discussion of existing land uses within the study corridor. After the discussion of existing land use, the analysis assesses the potential for significant adverse impacts to land use as a result of the Alternatives. Section 4.2.3 discusses the effects to land use that may result from implementing each of the proposed South Coast Rail project alternatives (including railroad or highway alignments, train or bus stations, and layover facilities). Any parcels that would be acquired for construction or reconstruction for any component of each of the alternatives are also identified in Section 4.2.3. The parcels, or portions of parcels, would be acquired by the state and by definition become publicly owned. Existing land uses would be converted to transportation/utilities uses.

The Secretary of the Executive Office of Energy and Environmental Affairs (EEA)[1] issued a Certificate on the ENF on April 3, 2009. The certificate includes a number of requirements defining the scope of the Environmental Impact Report (EIR). However, no specific requirements for evaluation of impacts to land uses or to the social and economic environment are included in the Certificate.

4.2.1.1 RESOURCE DEFINITION

Land use refers to the types of activities occurring on a parcel, as determined by aerial photograph interpretation, local zoning designation, and field observation. Common land uses in the South Coast region include residential, commercial, recreational, and undeveloped land. Zoning is a system of land-use regulation that prescribes the use to which land may be put, based upon local (municipal) jurisdiction.

4.2.1.2 REGULATORY CONTEXT

There are no state or federal regulations applicable to the evaluation of land use. The Council on Environmental Quality (CEQ) National Environmental Protection Act (NEPA) regulations do require that an Environmental Impact Statement evaluate a proposed action's impact on "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.[2] The Corps' public interest review includes land use as a public interest factor (33 C.F.R. § 320.4(a)).

Sensitive noise and vibration receptors have been identified in this section because the effects of noise or vibration are linked to land use. Noise is defined as unwanted or excessive sound. Sound becomes

[1] Formerly, the Executive Office of Environmental Affairs.

[2] 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)).*

unwanted when it interferes with normal activities such as sleep, work, or recreation. The Federal Transit Administration (FTA) established guidance for evaluating transit sound levels to predict if noise impacts would occur.[3] The land uses (or "receptors") that are considered sensitive to noise or vibration pursuant to FTA guidelines include:

- Category 1 sensitive receptors are where quiet is an essential element in the intended purpose of a land use. This includes lands set aside for serenity and quiet, such as:
  - Outdoor amphitheaters and concert pavilions
  - National Historic Landmarks with significant outdoor use
- Category 2 sensitive receptors are where people normally sleep and where nighttime sensitivity to noise is considered of utmost importance, such as:
  - Residences
  - Hospitals
  - Hotels
- Category 3 sensitive receptors are institutional land uses with primarily daytime and evening use, where it is important to avoid interference with such activities as speech, meditation, and concentration on reading material. Category 3 also includes buildings with interior spaces where quiet is important and places for meditation or study. These are:
  - Schools
  - Libraries
  - Churches
  - Medical offices
  - Conference rooms
  - Recording studios and concert halls
  - Cemeteries
  - Monuments
  - Museums
  - Certain historical sites
  - Parks and recreational facilities

4.2.1.3 METHODOLOGY

As required by the National Environmental Policy Act (NEPA) Council on Environmental Quality (CEQ)[4], 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."[5] 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."[6]

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[3] United States Department of Transportation, Federal Transit Administration, Office of Planning and Environment. 2006. *Transit Noise and Vibration Impact Assessment*. (Report FTA-VA-90-1003-06, May 2006). Prepared by Harris Miller Miller & Hanson Inc.: Burlington, Massachusetts.

[4] 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).

[5] 40 CFR 1508.8(a).

[6] 40 CFR 1508.8(b).

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."[7]

The following describe how potential direct and indirect effects of the South Coast Rail project to land uses and to the social and economic environment were evaluated.

Evaluation of Direct Effects

Potential direct effects to land uses and to the social and economic environment were evaluated by first reviewing areas where construction would be required for each of the alternative alignments outside of the existing rights-of-way. For the purposes of this evaluation, "construction" is defined as upgrading existing rail lines, reconstructing rail lines along out-of-service railroad alignments, constructing entirely new railroads, replacing existing railroad bridges and culverts, constructing new permanent or temporary railroad bridges, reconfiguring at-grade road/railroad crossings, constructing new grade-separated road/railroad crossings, constructing new dedicated bus lanes and any associated highway widening, replacing any highway interchange ramps, constructing or reconstructing train or bus stations, and constructing layover facilities.

The analysis was conducted to determine if land acquisition would be required to accommodate construction, and identify the ownership and use of parcels designated for acquisition. "Land acquisition" is defined as taking a greater than 500-square-foot portion, or a sliver great than 10 feet wide, of any parcel outside of the existing rights-of-way to accommodate permanent construction impacts, and is based on preliminary engineering plans. Final engineering plans may show an increase or decrease of the actual area of acquisition required, land use would be unlikely to change as a result of parcel acquisition below these thresholds, and social and economic effects would be negligible. Temporary construction impacts outside of the existing rights-of-way would not require land acquisition and are therefore not considered in this evaluation. Narrow slivers of parcels or temporary construction easements were not considered in the evaluation of land acquisition, given the scale and accuracy of the preliminary engineering plans. Aerial photographs and land use maps were examined in reference to preliminary engineering plans to identify encroachments onto adjacent parcels.

The parcel ownership and land usage were identified using multiple sources, including aerial photography, field visits, MassGIS (2005 data) and municipal mapping (obtained in 2008), information provided by Southeastern Regional Planning and Economic Development District (SRPEDD), and the *South Coast Rail Economic Development and Land Use Corridor Plan* (the Corridor Plan).[8] The general land use categories depicted on the maps reflect land use designations identified by the specific source(s) used or were aggregated for map legibility purposes. For example, the generalized land use category "open water" was based on the 2005 Land Use layer provided by MassGIS, and is also included

[7] 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.

[8] 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.

in the DEP wetlands layer. Zoning designations were obtained from the respective communities within the study area. Because the data used for this analysis were derived from several sources with differing definitions of land use and zoning designations, these categories have been generalized in this evaluation for a suitable comparison. Four general categories of privately owned parcel land uses and zoning designations were established: residential, commercial, industrial, and undeveloped. The "industrial" category encompasses industrial businesses as well as transportation corridors and sites such as sand and gravel mining operations, and the "undeveloped" category encompasses natural open space, parks and recreation sites, and agricultural lands, Where appropriate for the purposes of this evaluation, land use or zoning identified as transportation/utilities by one or more of the above sources is specifically noted as such rather than generalized as industrial.

MassGIS data supplemented by municipal data and field visits were used to characterize and map land uses and zoning at each proposed station site, within 0.5 mile radius of each proposed station site, and within 0.5 mile of each section of the alternative corridors that is not currently in transportation use.[9] These distances were selected as the maximum extent of resource areas that could potentially be affected by the proposed project.

Evaluation of Indirect Effects

The South Coast Rail project may result in indirect effects to land use. The analysis of indirect effects was conducted to identify any growth-inducing effects and other effects related to induced changes that may result in a change in land uses.

4.2.2 EXISTING CONDITIONS

The following describes the existing land uses and zoning in the South Coast communities along a 0.5-mile wide corridor encompassing each alternative alignment and within a 0.5-mile radius of each proposed station location. The discussion provides a regional overview of existing land use and zoning followed by a discussion of exiting land uses found in the study corridor.

4.2.2.1 REGIONAL OVERVIEW OF EXISTING CONDITIONS

Land Use Study Area

The communities that would be served or that could be impacted by the proposed South Coast Rail alternatives are listed in Table 4.2-1. The alternative railroad or highway alignments pass through or near these 27 communities, and new station sites are within or near each. Land use and zoning within each of these communities, relative to the alternative alignments and station sites, are discussed in Section 4.2.2.2.

Southeastern Massachusetts, an area which includes the South Coast region, has been the fastest growing region in the Commonwealth in terms of both population and housing units. As a result, the region has been subject to rapid land development. However, cities such as Fall River and New Bedford have seen their populations decline.

[9] Zoning is described on or near station sites and not in the vicinity of alternative alignments.

Table 4.2-1: Land Use Study Area Communities

Acushnet	Foxborough	Raynham
Attleboro	Freetown	Rehoboth
Berkley	Lakeville	Rochester
Canton	Mansfield	Sharon
Dartmouth	Mattapoisett	Somerset
Dighton	Middleborough	Stoughton
Easton	New Bedford	Swansea
Fairhaven	North Attleborough	Taunton
Fall River	Norton	Westport

Table 4.2-2 illustrates the difference in the amount of developable land of the South Coast communities.[10] Based on 2000 MassGIS data, the majority of the land within the South Coast area remains undeveloped (65 percent) and residential (19 percent). The remaining land is agricultural (nine percent), commercial/industrial (three percent), transportation/utility (two percent), and recreational (two percent).

The following sections describe the character of the typical development patterns in the South Coast communities: sparsely developed (suburban/semi-rural) and densely developed (urban).

Sparsely Developed Areas

Suburban development patterns exist in those communities closest to Boston and with good transportation connections to the Boston metropolitan area, such as Canton, Stoughton, Easton, Sharon, Foxborough, Mansfield, Attleboro, and North Attleborough. These communities are served by I-95/Route 128 and the existing Attleboro and Stoughton commuter rail lines. Semi-rural communities along I-495 – Wareham, Middleborough, Bridgewater, Raynham, Taunton, and Norton – remain predominantly rural although suburban development has been increasing. The coastal communities south of I-495 – Seekonk, Rehoboth, Dighton, Swansea, Somerset, Freetown, Westport, Dartmouth, Acushnet, Fairhaven, Mattapoisett, Rochester and Marion – are areas of seasonal residents and visitors, with residential and agricultural land uses. Residential uses within these communities are typically separated from commercial and industrial areas.

Lower-density, single-family residential developments dominate these suburban and semi-rural communities. The majority of residential land use exists along local road networks. Multi-family residential use is generally not common in these areas. However, some proposed station sites close to town centers or villages (such as in Easton and Taunton) are in areas that have somewhat higher-density housing, such as two- and three-family properties and small lots.

Commercial and industrial land uses within the region generally follow a sprawling pattern. Although commercial and industrial land uses are in city and town centers, many are also found in non-urban

[10] For purposes of this analysis, developable land is defined as large parcels of land that could be developed into new subdivisions or new commercial/industrial properties or could be placed into permanent or limited open space protection.

Table 4.2-2: Land Use Study Area Communities: Developable Areas

Town	Percent Developable	Town	Percent Developable
Acushnet	62.4	Mattapoisett	56.9
Attleboro	38.0	Middleborough	47.7
Berkley	N/A	New Bedford	22.4
Bridgewater	47.6	North	36.4
Canton	23.3	Norton	55.4
Dartmouth	50.0	Raynham	49.8
Dighton	72.2	Rehoboth	69.0
Easton	40.8	Rochester	88.7
Fairhaven	42.9	Sharon	N/A
Fall River	33.1	Somerset	22.3
Foxborough	28.9	Stoughton	18.0
Freetown	51.5	Swansea	50.2
Lakeville	34.4	Taunton	31.5
Mansfield	21.5	Westport	55.4

Source: MassGIS (2000)
N/A = Not Available

settings along major interstate and state highways, and at interstate exits and interchanges. Many of the largest identified commercial and industrial land use areas are found in non-urban settings away from city and town centers.

Densely Developed Areas

The largest cities in the region are New Bedford and Fall River, both former industrial centers, each with a population just under 100,000. Higher-density, multi-family land uses are present in these cities.

New Bedford has a long history of maritime activity, first rising to prominence in the late eighteenth century as one of the most important cities in the whaling industry. This role lasted through the nineteenth century until the decline of whale populations and the rise of petroleum products caused the industry to collapse. New Bedford remained an important textile manufacturing city into the early twentieth century, until those factories declined and relocated to regions with cheaper labor. Though diminished, manufacturing remains an important economic activity. Maritime commerce is still extremely important, as New Bedford is one of the hubs of the New England fishing industry, consistently rating as one of the busiest fishing ports in the country.

Fall River, built on a large bluff above the Taunton River, climbed to importance during the middle nineteenth century due to the availability of water power on the Quequechan River where it descends the bluff. At its height, Fall River's textile industry was second in the country only to that of Manchester, New Hampshire. Like New Bedford, Fall River suffered greatly with the decline of manufacturing in New England.

In terms of population, the third largest community in the region is Taunton, north of Fall River at the head of the Taunton River estuary. Taunton was historically known as a major city in the silversmith and shipbuilding industries. Manufacturing and electronics remain important industries.

Undeveloped Areas

The region also encompasses large expanses of forested land, as well as agricultural and recreational areas. The recreation and park areas, protected public open space and Areas of Critical Environmental Concern (ACECs) are described in Chapter 4.10 - *Protected Open Space and Areas of Critical Environmental Concern*, and the agricultural lands are described in Chapter 4.11 - *Farmland Soils*.

Regional and Municipal Land Use Plans

SRPEDD, the regional planning agency serving 27 cities and towns in Southeastern Massachusetts, has taken an active role in conducting studies and analyses for some of the affected communities. In conjunction with the South Coast Rail project and the Southeastern Massachusetts Commuter Rail Task Force, SRPEDD has been working with the cities and towns of the region to identify those areas that are priorities for development and priorities for land protection efforts. . SRPEDD is working with municipal officials and citizens to locate and designate Priority Development Areas (PDAs) and Priority Protection Areas (PPAs) within each community. Mapping is complete for all 27 communities. SRPEDD has prepared final PDA/PPA reports for several municipalities; these have gone through a community review process and are on SRPEDD's website.[11] The remaining reports are in progress.

4.2.2.2 EXISTING CONDITIONS WITHIN THE STUDY CORRIDOR

Southern Triangle (Common to All Rail Alternatives)

The land uses along the New Bedford Main Line (Figures 4.2-1a-e) are primarily low-density residential and undeveloped in Berkley, and forested and undeveloped land with some low-density residential through Lakeville, Freetown, and northern New Bedford. In southern New Bedford, which is urban in character, the land uses are widely mixed and dense, including high-density residential, commercial, industrial, and some institutional uses. A portion of the New Bedford Main Line runs through Taunton, including the downtown area, adjacent to residential, recreational, commercial, and industrial uses. Additional land uses that occur less frequently along the alignment include mixed use, commercial, agriculture, and municipal- or state-owned land. The most developed area along the New Bedford Main Line is in New Bedford, followed by Taunton and Berkley.

The land uses along the Fall River Secondary (Figures 4.2-2a-c) are predominantly forested, undeveloped, and low-density residential with some industrial parcels through Freetown, and moderate-density residential, undeveloped and recreational through northern Fall River. Once the Fall River Secondary enters downtown Fall River, the land uses are more mixed, including higher-density residential, industrial, and commercial properties. This is the most developed area along the Fall River Secondary. Portions of the corridor through Fall River abut the Taunton River waterfront.

[11] Southeastern Regional Planning and Economic Development District (SRPEDD) website. http://www.srpedd.org/PPA-PDA.asp, Accessed on August 31, 2009.

Attleboro Alternatives

The Attleboro Alternative would use the Northeast Corridor from South Station to just north of Attleboro. A new track segment, the Attleboro Bypass, would be constructed to connect the Northeast Corridor to the Attleboro Secondary. This alternative would use the existing Attleboro Secondary to connect with the Southern Triangle at Cotley Junction. Two additional stations (Barrowsville and Downtown Taunton) would be constructed.

Northeast Corridor

The land uses along the Northeast Corridor (Figures 4.2-3a-e) vary throughout its length. South of Readville Junction, the corridor is surrounded by undeveloped and forested land in Canton, Dedham, Westwood, and Norwood. After crossing I-93, the corridor passes a large industrial/commercial parcel in Westwood (the proposed Westwood Station project). South of I-95, in Canton, land is more developed; the predominant land uses adjoining the corridor here are industrial, medium-density residential, forested and undeveloped, with a concentration of transportation and commercial uses around the existing Canton Junction Station. The land in Sharon and Foxborough is less developed, consisting primarily of low- and medium-density residential, undeveloped land, and forest. Mansfield, north of I-495, is more urban in nature and the corridor is flanked by large industrial areas, medium-density residential, transportation, and commercial land uses. South of I-495, residential, forested, and agriculture are the predominant land uses.

Attleboro Bypass

The land uses along the Attleboro Bypass (Figure 4.2-4a) are primarily utility corridors and forested open space, as the proposed alignment runs adjacent to an electrical transmission line. Other land uses within 0.5 mile of the corridor include undeveloped and low-density residential.

Attleboro Secondary

The land uses along the Attleboro Secondary (Figures 4.2-4a-c) are rural in nature in Norton and in Taunton north of Whittenton Junction. These land uses are predominantly forested open space, undeveloped, and low-density residential, with a few industrial, recreational and agricultural parcels. Through downtown Taunton, the land use is significantly more densely settled and includes industrial, medium-density residential, commercial, and institutional uses.

Stoughton Alternative

Land use adjacent to the Stoughton Line (Figures 4.2-5a-e) is predominantly moderate-density residential through Canton, Stoughton, and Easton. The alignment passes through a large industrial area at the Canton/Stoughton boundary and the commercial center of Stoughton. Additional land uses along the Stoughton Line in these towns include agricultural, municipal-owned, and forested land (particularly in southern Stoughton and northern Easton). Easton is largely low-density residential and undeveloped land, although high-density urban development is present in downtown Easton. The railroad also passes adjacent to a large recreational parcel (golf courses) and the Southeastern Regional Vocational Technical School. In southern Easton, the alignment crosses through a large undeveloped area in the Hockomock Swamp. In Raynham, the Stoughton Line passes through a greater mix of uses, such as commercial, institutional, low-density residential, and recreational (the Raynham Greyhound Park), as well as an additional undeveloped area, Pine Swamp. The land uses adjacent to the Stoughton Line through

Taunton are primarily moderate- to high-density residential, supplemented by a mix of forest, commercial, industrial, and institutional uses.

Whittenton Alternative

Land uses within 0.5 mile of the Whittenton Alternative are predominantly moderate-density residential supplemented by institutional and mining (a gravel pit), undeveloped, and forested land (Figure 4.2-6a-b). As the Whittenton Branch alignment and associated Attleboro Secondary segment pass through downtown Taunton, the nearby land uses are a mix of dense commercial, institutional, and industrial parcels.

Rapid Bus Alternative

General land uses along Route 24 include low- and moderate-density residential, forested and agricultural, open space, commercial, and industrial uses (Figures 4.2-7a-g).

Land uses along I-93 south of the Route 3 intersection include large commercial (retail) properties through Braintree and forested land through Quincy. Land uses along Route 24 between I-93 and Avon are large industrial, retail, or office buildings interspersed with forest and low-density residential uses.

Land uses along Route 24 from Avon south to I-495 vary. The northern portion of this segment, through Brockton, includes moderate-density residential, industrial, commercial, and institutional land uses. Farther south in West Bridgewater and Bridgewater, land uses typically include forest, agriculture, or other open space (undeveloped), with some industrial parcels. Land uses in Raynham are predominantly forest, undeveloped and low-density residential. In Raynham, the Rapid Bus Alternative alignment splits in two directions to access New Bedford (via Route 140 and Route 18) and Fall River (via Route 24 and Route 79).

Land uses along Route 140 south of the Route 24 interchange are primarily forest. South along Route 18 in New Bedford land uses include residential, commercial, and industrial development (primarily waterfront) to the east and the densely settled, mix of uses characteristic of downtown New Bedford to the west.

Land uses along Route 24 south of I-495 are generally forest. South of the Route 24 and Route 79 split in Fall River, land uses are more varied and include commercial and industrial properties.

Stations

Southern Triangle Stations (Common to All Rail Alternatives)

The Southern Triangle includes two rail alignments south of Cotley Junction and the five Southern Triangle stations are therefore common to all rail alternatives.

King's Highway Station Site

The King's Highway Station site, in northern New Bedford along the New Bedford Main Line on King's Highway east of Route 140, would serve all of the rail alternatives and the Rapid Bus alternative (Figure 4.2-8). The station would occupy part of an approximately 55-acre site that is now a shopping plaza. The traditional strip-style shopping center contains various commercial businesses, including McDonald's,

Ocean State Job Lot, Rent-A-Center, H&R Block, Family Dollar, Fashion Bug, Fashion Nails, Blockbuster Video, and others. A parking area occupies approximately half of the site. Adjacent uses include two smaller shopping centers and associated parking; one west and south, and one north across King's Highway.

East of the rail alignment, beyond the industrial and commercial uses, is a large residential neighborhood. This moderate-density residential neighborhood contains mostly single-family properties and some two- and three-family properties. Portions of this neighborhood within 0.25 mile of the station site are potential sensitive noise receptors. The housing stock in the neighborhood varies in condition from poor to good. West of Route 140 there is another residential neighborhood as well as the New Bedford Regional Airport, additional commercial and industrial uses, and a cemetery.

Zoning at the King's Highway Station site is general industrial (Figure 4.2-9). Zoning near this site is high-density single-family residential and low-density multi-family (R5), mixed use, and general and light industrial.

Whale's Tooth Station Site

The Whale's Tooth Station, at the Whale's Tooth parking lot in New Bedford along the New Bedford Main Line, would serve all of the rail alternatives and the Rapid Bus Alternative (Figure 4.2-10). This 14-acre site on the New Bedford waterfront was identified as the preferred site in the 2002 Final EIR. The City of New Bedford has constructed a parking lot on the site in anticipation of the rail project. This site is approximately 0.5 mile north of the proposed State Pier Station site. The site is within 0.25 mile of the waterfront and in proximity to downtown New Bedford and the Hicks-Logan redevelopment area.

The Whale's Tooth Station site is currently a municipal parcel, and adjacent parcels are mainly large-scale, maritime-related, industrial uses and undeveloped land to the east, industrial to the south, and commercial and moderate- to high-density residential uses to the west. Within the 0.5-mile radius of the Whales' Tooth Station site, Route 18 serves as a significant barrier between the industrial uses along the mixed-use neighborhood west of Route 18. North of the site, the former Wamsutta Mill building is in the process of being converted into residential units (this land use is not depicted in Figure 4.2-10, which is based on 2005 data). Wamsutta Mills is the first conversion to residential use to occur east of Route 18 within 0.5 mile of the Whale's Tooth Station site.

Zoning at the Whale's Tooth Station is general industrial (Figure 4.2-9). Zoning near this site is high-density single-family residential and low-density multi-family (R5), mixed use, and general and light industrial.

Freetown Station Site

The Freetown Station site, on South Main Street along the Fall River Secondary, would serve all of the rail alternatives and the Rapid Bus Alternative (Figure 4.2-11). The approximately 18-acre site currently includes both undeveloped and industrial land uses. The developed portion is occupied by a self-storage business. The surrounding land is mainly forested, with some residential and industrial uses. South Main Street is a small road but accommodates significant traffic due to the industrial uses in the area.

Generally, the 0.25-mile radius around the Freetown Station site contains few residential properties. Low-density residential uses are immediately across South Main Street and to the north, which would be sensitive noise or vibration receptors. The low-density residential neighborhood becomes more

prominent 0.5 mile north of the site. Between one and two miles south of the site, at the exit from Route 24, there is a large residential population in apartment and condominium properties.

The Freetown Station site is in proximity to two industrial parks—the proposed Fall River Executive Park and the Riverfront Park—that are projected to provide thousands of jobs.[12] There are industrial parcels north and south of the site, including the Stop & Shop Distribution Center.

Zoning at the Freetown Station site is mixed use (Figure 4.2-12). Zoning near this site is light industrial and mixed use.

Fall River Depot Site

The Fall River Depot Station, one mile north of downtown Fall River along the Fall River Secondary at Route 79 and Davol Street, would serve all of the rail alternatives and the Rapid Bus Alternative (Figure 4.2-13). The proposed station would be on a site bounded by Pearce Street to the north, the existing railroad line to the east, Braylies Street to the south, and North Davol Street to the west. A portion of the site was last in industrial use but is now vacant; other portions include commercial uses. A historic train station, now demolished, was on the site. The northern portion of the site was a foundry, and the Old Colony Depot was occupied by a steel company. The proposed Battleship Cove Station site is approximately one mile south of the Fall River Depot Station site.

The adjacent parcels are all commercial; some are vacant. Within the 0.5-mile radius of the Fall River Depot Station site is a dense residential neighborhood to the east, an older shopping plaza to the north, and a redeveloping waterfront across Route 79 to the west. Residential properties immediately east of the railroad line appear to be new or recently upgraded, reflecting ongoing improvements to this neighborhood.

The developing waterfront along Route 79 consists of a mix of uses, including industrial, residential, commercial, municipal, and recreational/open space. The Fall River Depot Station site is somewhat isolated from the waterfront. Connectivity between the site and the waterfront is currently limited to an underpass at President Avenue (one block north of the site).

Zoning at the Fall River Depot Station site is general industrial (Figure 4.2-14). Zoning near this site includes high-density, single-family residential and low- to moderate-density multi-family (R5 and MM), general business, and general and light industrial.

Battleship Cove Station Site

The Battleship Cove Station, an approximately 2.2-acre site along the Fall River Secondary on the Fall River waterfront at the Ponta Delgada Plaza, would serve all of the rail alternatives (Figure 4.2-15). The site is a triangular-shaped parcel adjacent to the monument, currently owned by the City of Fall River, between the existing railroad and Water Street. The Fall River Depot Station site (described above) is approximately one mile north of the Battleship Cove Station site.

The immediately adjacent parcels are mostly industrial, including a Federal Express Distribution Center and a converted mill building. Commercial and institutional land uses are beyond the industrial uses to

[12] Massachusetts Executive Office of Transportation and Public Works and Massachusetts Bay Transit Authority, *Station Siting Report EOT's Final Recommendations*, October 10, 2008.

the north and southwest. Other uses in the vicinity include a dense residential neighborhood to the east and municipal land to the south. The residential neighborhood contains scattered mixed-use and commercial properties, as well as a few institutions and religious uses.

The Battleship Cove Station site is on the waterfront, close to downtown Fall River, near the Fall River Heritage Park and other tourist attractions such as the Heritage State Park, the Old Colony and Fall River Rail Museum, and the Marine Museum. The waterfront area is characterized by old manufacturing buildings and vacant land that the City would like to redevelop.

Zoning at the Battleship Cove Station site is general industrial (Figure 4.2-14). Zoning near this site includes high-density, single-family residential and low- to moderate-density multi-family (R5 and MM), general business, and general and light industrial.

Taunton Depot Station Site

The Taunton Depot Station (formerly, East Taunton (North)) site is at the rear of Target Plaza off of Route 140 (Figure 4.2-16). The site is currently undeveloped, with half the site cleared and half forested. The 14-acre site is primarily surrounded by forest and undeveloped parcels to the north, west, and south. Target Plaza, east of the site, is a big-box retail site that contains a Target, Home Depot, and other stores. Beyond the railroad alignment to the west is a low-density residential neighborhood.

In addition to undeveloped land, the 0.5-mile radius surrounding this site predominantly consists of residential, agricultural, and commercial (primarily Target Plaza) uses. Residential uses along Route 140 are moderate-density, such as small apartment buildings and townhomes. Single-family residential uses are west of the site.

Zoning at the Taunton Depot Station site is moderate-density, single-family residential (Figure 4.2-17). Zoning near this site is predominantly moderate-density, single-family residential with some general industrial.

Attleboro Alternative Stations

The Attleboro Alternative includes two proposed stations, Barrowsville and Downtown Taunton (formerly, Taunton Depot), in addition to the Southern Triangle stations described above.

Barrowsville Station Site

The Barrowsville Station site, on South Worcester Street in Norton, would serve the Attleboro Alternative (Figure 4.2-18). This approximately 7-acre site is near the former train station. Currently, the proposed site is undeveloped and surrounded by forest. Adjacent parcels at the frontage of South Worcester Street are residential to the north and commercial to the south. The parcel immediately east of the site contains a commercial building and parking lot. Undeveloped land exists east of the site, across South Worcester Street.

In addition to the land uses adjacent to the site, residential, forested, and undeveloped land are the predominant uses within a 0.5-mile radius. Less prevalent uses include industrial, commercial, recreation, and agricultural. South Worcester Street, Dean Street, and other nearby streets are characterized by single-family homes set close together.

Zoning at the Barrowsville Station site is low-density residential (Figure 4.2-19). Zoning near this site is low-density residential, general business, and general industrial.

Downtown Taunton Station Site

The Downtown Taunton Station would be at the Greater Attleboro Taunton Regional Transit Authority (GATRA) site south of Oak Street in downtown Taunton (Figure 4.2-20). This site is in the center of Taunton and is adjacent to the GATRA maintenance facility and Bloom Bus station.

Adjacent parcels are commercial to the north and east, institutional to the west, and municipal and residential north and south. Land uses within 0.5 mile around the Downtown Taunton Station site are primarily residential and commercial, with some institutional, religious, and state-owned parcels. Densely settled downtown Taunton is east of the railroad right-of-way, within 0.5 mile of the site.

The City of Taunton recently adopted a Transit Development District zoning overlay at the Downtown Taunton Station site; the zoning at this site is mixed-use (Figure 4.2-21). Zoning near this site is predominantly moderate-density, single-family residential (R3/R4) with some general business, office park and conservation/recreation.

Stoughton Alternative Station Sites

In addition to the Southern Triangle, the Stoughton Alternative would provide commuter rail service from South Station through Stoughton to Canton Junction and Weir Junction, with an option to serve the Whittenton section of Taunton. The three options each have five stations in addition to the Southern Triangle stations described above. This section discusses the land use and zoning at or near the proposed station sites for the Stoughton Alternative, except for the Downtown Taunton Station, which was described above.

North Easton Station Site

The proposed location for the North Easton Station is off Route 138 near the Easton-Stoughton municipal border (Figure 4.2-22). The site is largely hidden from Route 138, behind an approximately 10-acre retail plaza that is anchored by the Roche Brothers Supermarket. The North Easton Station site is currently undeveloped. New medical buildings have recently been constructed nearby and two additional buildings are planned. In addition to the commercial and offices uses at the shopping plaza, the site is surrounded by forest and undeveloped land.

Residential, forested, and institutional uses are within a 0.5-mile radius of the North Easton Station site. South of the site is a sparsely-settled suburban residential area interspersed with commercial uses. The area north of the site along Route 138 is characterized by a mix of apartments and automobile-oriented commercial uses.

The residential uses near the North Easton Station site are moderate- to low-density characterized by single-family homes south of the site and small apartment buildings west and north of the site. Many of the homes in this area appear new and were most likely built within the last 30 years.

Zoning at the North Easton Station site is general business (Figure 4.2-23). Zoning near this site is almost entirely low-density single-family residential with some general business zoned land in both Stoughton and Easton.

Easton Village Station Site

The Easton Village Station site is south of the historic H.H. Richardson train station (Figure 4.2-24). This site is within Easton Village (downtown Easton). Adjacent land uses are commercial, institutional, and industrial. Specifically, these land uses include a restored mill complex that currently contains offices,[13] the former train station (now owned by the Easton Historical Society), and a municipal park adjacent to Shovel Shop Pond to the east. Sensitive noise receptors would include the historic train station, the Ames Free Library of Easton, and the residences within 0.25 mile of the site.

Within a 0.5-mile radius of the Easton Village Station site is predominantly moderate-density residential development typical of a New England town center. These residences are closely set and generally greater than 50 years old. Other uses in the vicinity include commercial, municipal, and institutional properties, as well as a state-owned property and places of worship/religious institutions. Other properties include a town-owned parking lot, an H.H. Richardson-designed library, and a vacant mill building.

South of the Easton Village Station site, Main Street is characterized by an approximately two-block strip of small, two-, and three-story commercial properties. Many former single-family homes along Main Street have been converted to commercial uses and contain low-intensity professional services such as a doctor's office or realtor. Some of these properties are residential with a home office.

Zoning at the Easton Village Station site is general industrial (Figure 4.2-23). Zoning near this site is almost entirely low-density single-family residential, with small areas of light industrial and general business.

Raynham Place Station Site

The Raynham Place Station (formerly, Raynham Park Station) is at the current site of the Raynham-Taunton Greyhound Park in Raynham (Figure 4.2-25). The station would be on a portion of this 80-acre site. Although noted as recreational in Figure 4.2-25 due to the race track on the larger site, the specific station site is currently a paved roadway and parking lot, and portions of an industrial operation.

The land uses adjacent to the Raynham Place Station site are a mix of forest, recreation, industry, and commercial (the greyhound race track and associated uses). The greyhound park property occupies much of the land in the 0.5-mile radius around the site. North of the site, Route 138 is primarily forested. South of the site, Route 138 has low-density residential uses and an agricultural parcel. Multi-family residential properties are more than one mile to the north.

Zoning at the Raynham Station site is general industrial (Figure 4.2-26). Zoning near this site is almost entirely general industrial, with some general business and low-density, single-family residential.

Taunton Station (Dean Street) Site

The Taunton Station is at the Dean Street site (Figure 4.2-27). The site is approximately eight acres and is near Route 44 just north of the historic train station. Downtown Taunton is approximately 0.75 to 1 mile from the site. The site is bounded by Arlington Street, Belmont Street, and the existing railroad and is

[13] This parcel is noted as institutional on Figure 4.2-16 due to the ownership.

primarily vacant. Currently, parcels comprising the site are owned by the City and by private entities. The City-owned parcel was a former rubber plant that burned. The City of Taunton has invested in remediating this Brownfield site in anticipation of a future train station. The two private parcels are:

- A former granite storage facility that partially burned in March 2008. One building and a garage remain on this parcel.
- An undeveloped lot used for storage for a nearby auto-body use on Arlington Street. This parcel is currently vacant and contains debris.

Adjacent parcels are forest to the north and east, residential to the west, and commercial to the south. Industrial, institutional (nursing home), and recreational/municipal (ball fields) properties interspersed with forest are east of the railroad right-of-way, and accessed from Longmeadow Road or Dean Street.

Moderate-density residential is the predominant land use within 0.5 mile of the Taunton Station site, particularly north and west. A few commercial, industrial, and religious use, and undeveloped parcels are scattered throughout the vicinity. The Taunton River runs south of the site under Route 44. South of the river is a large area containing forest and agricultural land. The residential neighborhoods north and west of the site, the nursing home, and the recreational fields east of the site would be sensitive noise and vibration receptors.

The City of Taunton recently adopted a Transit Development District zoning overlay at this station site; the zoning at the Taunton Station site is mixed-use (Figure 4.2-21). Zoning near this site is almost entirely moderate-density, single-family residential with an area of general industrial, and an area of limited business.

Rapid Bus Alternative Stations

The Rapid Bus Alternative would provide rapid bus service to Boston using a dedicated, primarily reversible bus lane to be built along Routes 24 from Route 140 to I-93 and along I-93/128 to the High Occupancy Vehicle (HOV) zipper lane to South Station. The Rapid Bus Alternative has seven stations, including five of the Southern Triangle stations described above (Battleship Cove Station is excluded) as well as the Downtown Taunton previously described. This section discusses the land use and zoning at or near the additional proposed station sites for the Rapid Bus Alternative.

Galleria Station Site

The Galleria Station is at the Silver City Galleria Mall Overflow Parking Lot (Figure 4.2-28). The approximately 9-acre site is currently a paved parking area, adjacent to the larger commercial parcel and just south of the interchange of Route 24 and Route 140 in Taunton. The site is bound on three sides by Route 24, the off-ramp, and Route 140 and by undeveloped land to the south.

Land within a 0.5-mile radius is predominantly transportation corridors and forested. Other uses include commercial (the mall) to the south, recreational northwest across Route 24 (miniature golf and driving range), state-owned north (Massachusetts Highway Department buildings), and industrial parcels east and northwest. A few residences are within 0.5 mile of the Galleria Station site, west and northeast.

Zoning at the Galleria Station site is general industrial (Figure 4.2-17). Zoning near this site is almost entirely general industrial, with some moderate-density, single-family residential at the edge of the 0.5-mile radius.

Layover Facilities

A midday bus layover facility in the Boston area would be needed for the Rapid Bus Alternative. One site for the bus layover facility is under consideration, at an existing Park and Ride location in Braintree. One mid-day train layover facility is planned for the Boston area, but alternative sites have not been selected yet. Two train 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 Lines. Three alternative sites have been identified for the Fall River Secondary, and two alternative sites have been identified for the New Bedford Main Line. This section provides basic descriptions of each layover facility site and an indication of its location in reference to existing land uses.

Layover facility plans are conceptual at this point, consisting only of general layouts and footprints. Tracks at the train layover facilities would diverge from the respective through lines (Fall River Secondary, or New Bedford Main Line) and consist of a series of short parallel spurs upon which trains would be parked for overnight layovers and light maintenance work. Parking areas for employees would be included within the facilities, and hooded lights would minimize light pollution. Small site structures are planned for storage and personnel change rooms. The facilities would be fenced and lighted for security. Engineering plans will be completed for these facilities once the preferred sites have been selected.

Logan Express Bus Layover Facility Site

The proposed Logan Express (Mid-Day Bus) layover facility, in Braintree, Massachusetts, would be constructed on Forbes Road, along Interstate 93 (Figure 4.2-29). 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.
The site is currently a large parking lot with approximately 6.73 acres of impervious surface. It is within a developed area, adjacent to a number of parking lots and commercial facilities and far removed from areas where bus traffic and emissions would create potential environmental impacts such school zones, residences, parks, and other sensitive land uses. The layover functions would be compatible with the existing Logan Express service because they are essentially the same; bus and vehicle parking.

Weaver's Cove East Layover Facility Site

The proposed Weaver's Cove East site layover facility (Figure 4.2-30) would be constructed along the east side of 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 industrial site to the southwest is a former Shell Oil facility, and consists of completely cleared land with several large aboveground storage tanks and a short shipping dock.

Weaver's Cove West Layover Facility Site

The proposed Weaver's Cove West site layover facility (Figure 4.2-30) would be constructed along the west side of the Fall River Secondary Line. The facility would be between the existing Fall River Secondary and the Taunton River, approximately 2.5 miles from the southern terminus of the Fall River Secondary.

The site is zoned as General Industrial by the City of Fall River. The 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. Use of the site for this purpose would likely be precluded by the presence of a layover facility for the Fall River Secondary. 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.

ISP Layover Facility Site

The proposed ISP site layover facility (Figure 4.2-31) would be constructed along the Fall River Secondary and would serve all rail alternatives. It would be located in Freetown west of Main Street between the existing Fall River Secondary and the Taunton River, approximately six 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; an industrial facility is nearby to the northeast. A residential development is located less than 0.25-mile south this site. The Taunton River is immediately west of the site.

Wamsutta Layover Facility Site

The proposed Wamsutta site layover facility (Figure 4.2-32) 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 is a previously developed site, currently used as a rail yard for CSX, within an industrial area. The site is visible from adjacent roads and buildings. Adjoining properties are transportation corridors or industrial in nature. Industrial sites are located north, east, and south of this location, and Route 18 to the west. No commercial or residential properties, or open spaces, are located in close proximity to this site.

Church Street Layover Facility Site

The proposed Church Street site layover facility (Figure 4.2-33) 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 junk yard, with several buildings and stockpiles of materials distributed across the cleared area. Adjoining properties include transportation corridors, industrial land use, undeveloped land, and open space. Nearby properties include residential development to the east and Acushnet Cedar Swamp State Reservation to the west, across Route 140.

Sensitive Receptor Locations for Noise and Vibration

This section identifies locations or areas that would be sensitive to increases in noise or vibration as a result of the South Coast Rail project. Table 4.2-3 provides a list of existing sites or areas identified as potential sensitive receptors for noise and vibration exposure related to the South Coast Rail alternatives. Sensitive receptor sites identified below are within 0.25 mile of an alternative alignment or station site. Layover facilities are adjacent to the alignments and sensitive receptors identified for the alignments are therefore inclusive of the layover facilities. Land Use Categories are defined in Section 4.2.1.2. The majority of the sensitive receptors listed below are residential neighborhoods, schools, and parks or recreation areas. There are two hospitals (the Greater New Bedford Community Health Center near the New Bedford Main Line and the Taunton State Hospital near the Attleboro Secondary) and one nursing home (adjacent to the Taunton Station site) within 0.25 mile of the alternatives or station sites. For more information on noise and vibration impacts, refer to Sections 4.6, and 4.7, respectively.

4.2.3 ANALYSIS OF IMPACTS

4.2.3.1 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, and 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: DATTCO[14] provides Boston – New Bedford service; Peter Pan provides Boston – Fall River bus service; and Bloom provides Boston – Taunton service.

[14] http://www.dattco.com/bus_company.php

Table 4.2-3
Sensitive Receptors for Noise and Vibration within 0.25 Mile of Alignments or Station Sites

Alternative	Municipality	Sensitive Receptor	Land Use Category[1]
New Bedford Main Line	Lakeville	Residential neighborhoods	2
New Bedford Main Line	Freetown	Residential neighborhoods	2
New Bedford Main Line	New Bedford	Residential neighborhoods	2
New Bedford Main Line	New Bedford	Little People's College	3
		St. Anthony Elementary School	
		Hayden/McFadden School	
		Hicks Logan Play Area	
		Clansky/Common Park	
		Child and Family Services	
		Our Lady of Purgatory	
		Greater New Bedford Community Health Center, Inc.	
		Wings Court	
		New Bedford Free Public Library	
Fall River Secondary	Freetown	Residential neighborhoods	2
Fall River Secondary	Fall River	Residential neighborhoods	2
Fall River Secondary	Fall River	Freetown-Fall River State Forest	3
		Fall River Alternative School	
		St. Michael School	
		Cemetery (North Main Street)	
		Carroll and Morton Schools	
		North Park	
		Westall School	
		Fall River Law Library	
		Evangelical Christian Fellowship	
		Santo Christo	
		Fall River Public Library	
		Fall River Heritage State Park	
		Heritage Park	
		Bicentennial Park	
Attleboro Alternative-Northeast Corridor	Canton	Residential neighborhoods	2
Attleboro Alternative-Northeast Corridor	Sharon	Residential neighborhoods	2
Attleboro Alternative - Northeast Corridor	Sharon	Cemetery (Canton Street)	3
		Chabad Day School	
		Deborah Sampson Park (East Foxboro Street)	
		Islamic Academy of New England	
Attleboro Alternative - Northeast Corridor	Foxborough	Residential neighborhoods	2

1 Land Use Categories are defined in Section 4.2.1.2

Table 4.2-3 (continued)
Sensitive Receptors for Noise and Vibration within 0.25 Mile of Alignments or Station Sites

Alternative	Municipality	Sensitive Receptor	Land Use Category[1]
Attleboro Alternative - Northeast Corridor	Sharon	Cemetery (Canton Street) Chabad Day School Deborah Sampson Park (East Foxboro Street) Islamic Academy of New England	3
Attleboro Alternative - Northeast Corridor	Foxborough	Residential neighborhoods	2
Attleboro Alternative - Northeast Corridor	Foxborough	Mabelle M Burrell School Fields	3
Attleboro Alternative - Northeast Corridor	Mansfield	Park (Crocker Street) Roland Green School	3
Attleboro Alternative - Northeast Corridor	Mansfield	Residential neighborhoods	2
Attleboro Alternative - Attleboro Bypass	Norton	Residential homes	2
Attleboro Alternative - Attleboro Bypass	Attleboro	Residential homes	2
Attleboro Alternative - Attleboro Secondary	Mansfield	Residential neighborhoods	2
Attleboro Alternative - Attleboro Secondary	Taunton	Salamon School Spanish Church of God Pride Inc. St. Thomas Episcopal Church Caleb Barnum School Memorial Methodist Church	3
Attleboro Alternative - Attleboro Secondary	Taunton	Taunton State Hospital Residential neighborhoods	2
Stoughton Alternative – Stoughton Line	Canton	Residential neighborhoods	2
Stoughton Alternative – Stoughton Line	Canton	St. John the Evangelist School Canton Public Library Bolivar Swimming Area Cabot Devoll Fields	3
Stoughton Alternative – Stoughton Line	Stoughton	Residential neighborhoods	2
Stoughton Alternative – Stoughton Line	Stoughton	Stoughton Schools Complex Immaculate Conception Church Lipsky Field Elm Street Field Stoughton Public Library Cemetery (Washington Street)	3
Stoughton Alternative – Stoughton Line	Easton	Residential neighborhoods	2

1 Categories are defined in Section 4.2.1.2

Table 4.2-3 (continued)
Sensitive Receptors for Noise and Vibration within 0.25 Mile of Alignments or Station Sites

Alternative	Municipality	Sensitive Receptor	Land Use Category[1]
Stoughton Alternative – Stoughton Line	Easton	Ricker Field	3
		Ames Free Library of Easton	
		Immaculate Conception Church	
		Unity Unitarian Universalist	
		Frothingham Park	
		Covenant Congregational Church	
		Southeastern Regional Vocational Technical School and James J. Adams Library	
Stoughton Alternative – Stoughton Line	Raynham	Residential neighborhoods	2
Stoughton Alternative – Stoughton Line	Raynham	Northbrook Academy	3
Stoughton Alternative – Stoughton Line	Taunton	Residential neighborhoods	2
Stoughton Alternative – Stoughton Line	Taunton	Cemetery (Thrasher Street)	3
		Summer Street School	
		Taunton Catholic Middle School	
		Memorial Methodist Church	
Whittenton Alternative	Taunton	Residential neighborhoods	2
		Nursing home (off Dean Street)	
Whittenton Alternative	Taunton	Third Street Playground	3
		St. Jacques Church	
		Union Congregational Church	

1 Categories are defined in Section 4.2.1.2

Land use along the highway alignments is generally designated as transportation/utilities. These alignments would not change and no new construction or land acquisition would be required for the No-Build Alternative. This alternative would not directly affect any land uses.

4.2.3.2 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 direct environmental consequences to land uses that may result from new construction for 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 5[15] 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 land uses resulting from constructing the upgraded rail lines and electrical infrastructure are described below.

Two new stations would be constructed in Fall River (Battleship Cove and Fall River Depot) and one new station would be constructed in Freetown (Freetown). One new layover facility would be constructed in Fall River, at the Weaver's Cove East site, the Weaver's Cove West site, or the ISP site. Potential direct impacts to land uses resulting from constructing the new stations and layover facilities along the Fall River Secondary are considered below in the Acquisition and Neighborhood Fragmentation sections.

Property Acquisition

The number, area, public or private ownership, and general land use of parcels that would be acquired in each municipality along the Fall River Secondary right-of-way, and for the traction power facilities for the electric alternatives, are summarized in Table 4.2-4 and shown in Figures 4.2-2a-c.

Table 4.2-4: Fall River Secondary Land Acquisition

Municipality	Public Ownership Area in Acres (number of parcels)	Private Ownership Land Use Area in acres (number of parcels)				
		Residential	Commercial	Industrial	Undeveloped	*Subtotal*
Right-of-Way (All Rail Alternatives)						
Berkley	**0.02 (1)**	**3.99 (3)**	**-**	**-**	**2.63 (3)**	***6.62 (4)***
Fall River	**-**	**0.06 (2)**	**-**	**0.05 (2)**	**0.33 (5)**	***0.45 (9)***
Freetown	**0.41 (3)**	**0.14 (2)**	**-**	**0.32 (1)**	**1.10 (15)**	***1.55 (19)***
TOTAL (All Diesel Alternatives)	*0.43 (4)*	*4.19 (7)*	*-*	*0.37 (3)*	*4.06 (23)*	*8.62 (33)*
Traction Power Facilities (All Electric Alternatives)						
Fall River	**-**	**-**	**0.17 (1)**	**-**	**-**	***0.17 (1)***
Freetown	**-**	**-**	**-**	**-**	**0.20 (1)**	***0.20 (1)***
TOTAL (Right-of-Way and Traction Power Facilities, All Electric Alternatives)	*0.43 (4)*	*4.19 (7)*	*0.17 (1)*	*0.37 (3)*	*4.26 (24)*	*8.99 (36)*

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

[15] FRA. 2009. 49 CFR 213.9 Classes of Track: Operating Speed Limits. U.S. Department of Transportation, Federal Railroad Administration.

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 most affected private land along the right-of-way would be residential and undeveloped properties, totaling 4.19 and 4.06 acres, respectively (4.19 and 4.26 acres for the electric alternatives), with minimal impacts to industrial and commercial land. No commercial land uses would be affected by the right-of-way, but one commercial and one undeveloped parcel would be acquired for traction power facility sites for the electric alternatives. The most land would be acquired in Freetown, and the least in Fall River. Public land would be acquired in Berkley and Freetown for the right-of-way.

Most of the land that would be acquired for the Fall River Secondary right-of-way or traction power facilities consists of small portions of either publicly or privately owned parcels. No business or community facility displacements would result from these acquisitions along the Fall River Secondary. Residential displacement would occur in Berkley, from three homes occupying two parcels at Myricks Junction (Figures 4.2-2a). Based on the average Berkley household size of 3.1 persons, nine persons would be displaced by these acquisitions.

The above-mentioned two parcels in Berkley, at Myricks Junction, would be acquired in full. These two parcels are zoned for residential use (but land use is identified as "undeveloped" for one).

Neighborhood Fragmentation

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

Two new train stations would be constructed in New Bedford (Whale's Tooth and King's Highway) and one new train station would be constructed in Taunton (Taunton Depot). One new layover facility would be constructed in New Bedford, at either the Wamsutta site or the Church Street site. Potential direct impacts to land uses resulting from constructing and using the new stations and layover facilities along the New Bedford Main Line are considered below.

Property Acquisition

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 4.2-5 and shown in Figures 4.2-1a-e. This table is subdivided to reflect the different traction power facility locations for the electric alternatives.

Table 4.2-5: New Bedford Main Line Land Acquisition

Municipality	Public Ownership Area in Acres (number of parcels)	Private Ownership Land Use Area in acres (number of parcels)				
		Residential	Commercial	Industrial	Undeveloped	*Subtotal*
Right-of-Way (All Rail Alternatives)						
Freetown	**-**	**-**	**-**	**-**	**0.06 (1)**	***0.06 (1)***
Lakeville	**-**	**-**	**-**	**-**	**0.02 (1)**	***0.02 (1)***
Taunton	**-**	**-**	**-**	**-**	**0.18 (4)**	***0.18 (4)***
New Bedford	**-**	**-**	**0.72 (1)**	**-**	**-**	***0.72 (1)***
TOTAL (Right-of-Way, All Diesel Alternatives)	-	-	*0.72 (1)*	-	*0.26 (6)*	*0.98 (7)*
Traction Power Facilities (Attleboro Electric Alternative)						
Taunton	**-**	**0.22 (1)**	**-**	**-**	**0.61 (2)**	***0.83 (3)***
Berkley	**0.21 (1)**	**-**	**-**	**-**	**-**	**-**
Freetown	**-**	**-**	**-**	**-**	**0.11 (1)**	***0.11 (1)***
New Bedford	**-**	**-**	**-**	**0.18 (1)**	**0.66 (1)**	***0.84 (2)***
TOTAL (Right-of-Way and Traction Power Facilities, Attleboro Electric Alternative)	0.21 (1)	0.22 (1)	0.72 (1)	0.18 (1)	1.64 (10)	*2.76 (13)*
Traction Power Facilities (Stoughton Electric Alternative)						
Taunton	**-**	**-**	**-**	**-**	**0.36 (1)**	***0.36 (1)***
Berkley	**0.38 (1)**	**-**	**-**	**-**	**-**	**-**
Freetown	**-**	**-**	**-**	**-**	**0.11 (1)**	***0.11 (1)***
New Bedford	**-**	**-**	**-**	**0.18 (1)**	**0.66 (1)**	***0.84 (2)***
TOTAL (Right-of-Way and Traction Power Facilities, Stoughton Electric Alternative)	0.38 (1)	-	0.72 (1)	0.18 (1)	1.39 (9)	*2.29 (11)*
Traction Power Facilities (Whittenton Electric Alternative)						
Berkley	**0.38 (1)**	**-**	**-**	**-**	**-**	**-**
Freetown	**-**	**-**		**-**	**0.11 (1)**	***0.11 (1)***
New Bedford	**-**	**-**	**-**	**0.18 (1)**	**0.66 (1)**	***0.84 (2)***
TOTAL (Right-of-Way and Traction Power Facilities, Whittenton Electric Alternative)	0.38 (1)	-	0.72 (1)	0.18 (1)	1.03 (8)	*1.93 (10)*

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

This segment of the Southern Triangle would require 0.98 acres of land acquisition for the diesel alternatives, of which 0.72 acres would be a single commercial property in New Bedford. 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 most land would be acquired in New Bedford, and the least in Lakeville. The traction power facility sites for the electric alternatives would require acquisition of industrial and undeveloped parcels (as well as one publicly owned parcel for the Attleboro Electric Alternative), and the most land would be acquired in New Bedford. No residential, business, or community facility displacements would result from these acquisitions along the New Bedford Main Line.

All of the land that would be acquired for the New Bedford Main Line right-of-way or traction power facilities consists of small portions of either publicly or privately owned parcels.

Neighborhood Fragmentation

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

4.2.3.3 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 1.4-1 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

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 (as described above in Section 4.2.3.3). 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. No layover facilities are planned within this segment. Potential direct impacts to land uses resulting from constructing the upgraded rail lines and electrical infrastructure as

well as potential direct impacts to land uses resulting from reconstructing and using the existing stations along the Northeast Corridor are described below.

Property Acquisition

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 4.2-6 and shown in Figures 4.2-3a-e. There would be no traction power facilities constructed in this segment.

Table 4.2-6: Attleboro Electric: Northeast Corridor Land Acquisition

Municipality	Public Ownership Area in Acres (number of parcels)	Private Ownership Land Use Area in acres (number of parcels)				
		Residential	Commercial	Industrial	Undeveloped	*Subtotal*
Right-of-Way (All Attleboro Alternatives)						
Canton	**0.25 (2)**	**-**	**-**	**-**	**2.83 (6)**	***2.83 (6)***
Foxborough	**0.06 (1)**	**-**	**-**	**-**	**1.82 (10)**	***1.86 (10)***
Mansfield	**1.78 (8)**	**0.55 (5)**	**0.02 (2)**	**0.21 (2)**	**1.98 (15)**	***2.76 (24)***
Sharon	**1.91 (11)**	**0.09 (2)**	**-**	**0.06 (1)**	**2.62 (20)**	***2.77 (23)***
TOTAL (Right-of-Way, All Attleboro Alternatives)	*4.00 (22)*	*0.64 (7)*	*0.02 (2)*	*0.31 (3)*	*9.25 (51)*	*10.22 (63)*

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

This segment would require 10.22 acres of private land, from 63 parcels. The majority of the affected private land along the Northeast Corridor right-of-way would be undeveloped property, totaling 9.25 acres, with some impacts to residential or industrial land and little impact to commercial land. Nearly equivalent areas of private land would be acquired in Canton, Mansfield, and Sharon, with somewhat less land acquired in Foxborough. A small to moderate area of public land would be acquired in each municipality, totaling 4.00 acres from 22 parcels. All of the land that would be acquired for the Northeast Corridor right-of-way consists of small portions of either publicly or privately owned parcels.

Neighborhood Fragmentation

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 land uses resulting from constructing the upgraded rail lines and electrical infrastructure are described below.

No new stations or layover facilities are planned within this segment.

Property Acquisition

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 4.2-7 and shown in Figures 4.2-4a-c.

Table 4.2-7: Attleboro Electric: Attleboro Bypass Land Acquisition

Municipality	Public Ownership Area in Acres (number of parcels)	Private Ownership Land Use Area in acres (number of parcels)				
		Residential	Commercial	Industrial	Undeveloped	*Subtotal*
Right-of-Way (All Attleboro Alternatives)						
Mansfield	**3.38 (1)**	**-**	**-**	**-**	**-**	**-**
Attleboro	**-**	**1.34 (3)**	**-**	**1.09 (2)**	**12.17 (22)**	***14.60 (27)***
Norton	**-**	**-**	**-**		**0.64 (1)**	***0.64 (1)***
TOTAL (Right-of-Way, Attleboro Diesel Alternative)	*3.38 (1)*	*1.34 (3)*	*-*	*1.09 (2)*	*12.81 (23)*	*15.24 (28)*
Traction Power Facility (Attleboro Electric Alternative)						
Attleboro	**-**	**0.04 (1)**	**-**	**-**	**0.38 (1)**	***0.42 (2)***
TOTAL (Right-of-Way and Traction Power Facility, Attleboro Electric Alternative)	3.38 (1)	1.38 (4)	-	1.09 (2)	13.19 (24)	*15.66 (30)*

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

This segment would require 15.66 acres of private land, from 30 parcels. The majority of the affected private land along the Attleboro Bypass right-of-way would be undeveloped property, totaling 12.81 acres, with some impacts to residential or industrial land. There would be no impacts to commercial land. The most area of private land would be acquired in Attleboro, with considerably less land acquired in Norton. No private land would be acquired for the right-of-way in Mansfield. A small area of residential and undeveloped land would be acquired for a traction power facility in Attleboro. No residential, business, or community facility displacements would result from these acquisitions along the Attleboro Bypass.

All 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 parcels.

Neighborhood Fragmentation

The Attleboro Bypass is a new railroad alignment connecting the Northeast Corridor with the Attleboro Secondary. The alignment does 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 resulting from constructing the upgraded rail lines and electrical infrastructure are described below.

Two new train stations would be constructed along this alignment in Norton and Taunton (Barrowsville and Downtown Taunton, respectively). No new layover facilities would be constructed along this segment. Potential direct impacts to land uses resulting from constructing and using the new stations along the Attleboro Secondary are considered below.

Property Acquisition

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 4.2-8 and shown in Figures 4.2-4a-c.

This segment would require 2.81 acres of privately owned land, from 15 parcels. The majority of the affected private land along the Attleboro Secondary right-of-way would be undeveloped property, totaling 2.36 acres, with some impacts to commercial or industrial land. There would be no impacts to residential land. The most area of private land would be acquired in Taunton, with considerably less land acquired in Norton. A small area of public land would be acquired in Norton. A small area of

Table 4.2-8: Attleboro Electric: Attleboro Secondary Land Acquisition

Municipality	Public Ownership Area in Acres (number of parcels)	Private Ownership Land Use Area in acres (number of parcels)				
		Residential	Commercial	Industrial	Undeveloped	*Subtotal*
Right-of-Way (All Attleboro Alternatives)						
Norton	**0.02 (1)**	**-**	**-**	**0.30 (2)**	**0.26 (5)**	***0.56 (7)***
Taunton		**0.01 (1)**	**-**	**-**	**2.10 (6)**	***2.11 (7)***
TOTAL (Right-of-Way, Attleboro Diesel Alternative)	***0.02 (1)***	***0.01 (1)***	**-**	***0.30 (2)***	***2.36 (11)***	***2.67 (14)***
Traction Power Facility (Attleboro Electric Alternative)						
Taunton	**-**	**-**	**-**	**-**	**0.14 (1)**	***0.14 (1)***
TOTAL (Right-of-Way and Traction Power Facility, Attleboro Electric Alternative)	0.02 (1)	0.01 (1)	-	0.30 (2)	2.50 (12)	*2.81 (15)*

undeveloped land would be acquired for a traction power facility in Taunton. No residential, business, or community facility displacements would result from these acquisitions along the Attleboro Secondary. All 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 parcels.

Neighborhood Fragmentation

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

4.2.3.4 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. Traction power facilities would not be necessary; the footprint of the area impacted is therefore smaller. The right-of-way subtotals in Tables 4.2-6, 4.2-7, and 4.2-8 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.)

As listed in Table 4.2-8 this segment would require 2.67 acres (14 parcels) of privately owned land. As with the Attleboro Electric Alternative, the majority of the affected private land along the Attleboro Secondary right-of-way for the Attleboro Diesel Alternative would be undeveloped property, totaling 2.36 acres. There would be some impacts to commercial or industrial land. There would be no impacts to residential land. The most area of private land would be acquired in Taunton, with considerably less land acquired in Norton. A small area of public land would be acquired in Norton. All other aspects of the Attleboro Diesel Alternative relevant to land uses are the same as for the Attleboro Electric Alternative described above.

4.2.3.5 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 above.

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 land uses resulting from constructing the upgraded rail lines and electrical infrastructure are described below.

Two existing train stations (Canton Center and Stoughton) along the active portion of the Stoughton Line would be reconstructed. Four new train stations (North Easton, Easton Village, Raynham Place, and Taunton) would be constructed. No new layover facilities would be constructed along this segment. Potential direct impacts to land uses from reconstructing the existing and developing the new stations along the Stoughton Line are considered below.

Property Acquisition

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 4.2-9 and shown in Figures 4.2-5a-e.

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 majority of the affected private land along the Stoughton Line right-of-way would be undeveloped property, totaling 20.21 acres, with some impacts to industrial and residential land and little impacts to commercial land. The most area of private land would be acquired in Raynham, with considerably less land acquired in Taunton and little land acquired in Stoughton, Canton, or Easton. Moderate areas of undeveloped land would be acquired for traction power facilities in Canton and Easton, and for the Frontage Road in Stoughton. Some public land would be acquired for the right-of- way and traction power facilities in each municipality except Raynham, where a utility corridor owned by Taunton Municipal Power & Light occupies the former Stoughton track right-of-way. No business or community facility displacements would result from these acquisitions along the Stoughton Line. Residential displacement would occur in Raynham, from one

Table 4.2-9: Stoughton Electric: Stoughton Line Land Acquisition

Municipality	Public Ownership Area in Acres (number of parcels)	Private Ownership Land Use Area in acres (number of parcels)				
		Residential	Commercial	Industrial	Undeveloped	*Subtotal*
Right-of-Way (All Stoughton Alternatives)						
Canton	**0.01 (1)**	**-**	**0.01 (1)**	**0.01 (2)**	**0.38 (6)**	***0.40 (9)***
Easton	**0.04 (1)**	**-**	**-**	**-**	**0.11 (2)**	***0.11 (2)***
Raynham	**1.03 (3)**	**0.23 (2)**	**0.05 (1)**	**0.55 (2)**	**14.25 (14)**	***15.08 (19)***
Stoughton	**0.56 (1)**	**0.07 (2)**	**0.27 (5)**	**0.26 (2)**	**2.76 (15)**	***3.36 (24)***
Taunton	**0.03 (1)**	**0.61 (2)**	**-**	**10.26 (16)**	**2.71 (6)**	***13.58 (24)***
TOTAL (Stoughton Diesel Alternative)	*1.67 (7)*	*0.91 (6)*	*0.33 (7)*	*11.08 (22)*	*20.21 (43)*	*32.53 (78)*
Traction Power Facilities (Stoughton Electric Alternative)						
Canton	**-**	**-**	**-**	**-**	**0.49 (1)**	***0.49 (1)***
Easton	**0.90 (1)**	**-**	**-**	**-**	**0.30 (1)**	***0.30 (1)***
TOTAL (Right-of-Way and Traction Power Facilities, Stoughton Electric Alternative)	*2.57 (8)*	*0.91 (6)*	*0.33 (7)*	*11.08 (22)*	*21.00 (45)*	*33.32 (80)*

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

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.

Two parcels in Raynham, near Raynham Junction, would be acquired in full. These two parcels are zoned for residential use (but land use is identified as "forest" and "residential"). The residential displacement noted above would be from one of these parcels.

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. Eight of the privately owned parcels that would be acquired for the Stoughton Line right-of-way would be acquired in full.

Neighborhood Fragmentation

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 the railroad bed between Easton Village and Longmeadow Street in Taunton, but is still present between Stoughton Station and Easton Village. 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 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.

Neighborhoods along the South of Easton village 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 is the Route 138 (Broadway) crossing in Raynham. This crossing would be grade-separated, avoiding traffic delays during operations. Delays would likely occur during construction activities and access to businesses could be temporarily affected.

4.2.3.6 STOUGHTON DIESEL ALTERNATIVE

The Stoughton Diesel Alternative is identical to the Stoughton Electric Alternative with the exception of the locomotive power source. As described above for the Attleboro Diesel Alternative, diesel-powered train service differs from electric-powered service in not requiring electrical infrastructure. Traction power facilities would not be necessary, and the footprint of the area impacted is therefore smaller. The right-of-way subtotal in Table 4.2-9 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 (48 parcels) of privately owned land (see Table 4.2-9). As with the Stoughton Electric Alternative, the majority of the affected private land along the Stoughton Line right-of-way for the Stoughton Diesel Alternative would be undeveloped property, totaling 20.21 acres. There would be some impacts to industrial and little impact to residential or commercial land. The most area of private land would be acquired in Stoughton, with considerably less land acquired in Raynham

and little land acquired in Canton or Easton. All other aspects of the Stoughton Diesel Alternative relevant to land uses are the same as for the Stoughton Electric Alternative described above.

4.2.3.7 WHITTENTON ELECTRIC ALTERNATIVE

The Whittenton Electric Alternative is a variant of the Stoughton Electric Alternative alignment. 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 be not be used if this alternative is selected. This evaluation focuses on the Whittenton Branch component; other components of this alternative are described above in Sections 4.2.3.3 and 4.2.3.5.

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 resulting from constructing the upgraded rail lines and electrical infrastructure are described below.

No traction power facilities would be constructed along the Whittenton Branch; a traction power facility required for this alternative would be constructed within the Attleboro Secondary segment. No new stations would be constructed within the Whittenton Branch portion, and no new layover facilities would be constructed along this segment.

Property Acquisition

The number, area, public or private ownership, and general land use of parcels that would be acquired for the Whittenton Electric Alternative are shown in Table 4.2-10 and Figures 4.2-6a-b. Table 4.2-10 summarizes the parcels by municipality to be acquired along the segments of the Stoughton Line, Whittenton Branch, and Attleboro Secondary that would be used for the Whittenton Electric Alternative.

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. No residential, business, or community facility displacements would result from these small acquisitions. Although the Whittenton Branch is owned by the Commonwealth, minor acquisitions would be needed along the right-of-way to accommodate ancillary facilities, including traction power facilities. The majority of the affected private land along the Whittenton Branch right-of-way would be undeveloped property, totaling 0.48 acres (seven parcels), with some impacts to residential or industrial land and no impacts to commercial land. The most area of private land would be acquired in Taunton, with considerably less land acquired in Raynham.

Within the portion of the Stoughton Line that would be used by the Whittenton Electric Alternative, the most private land acquired would be 6.70 acres (33 parcels) of undeveloped land. Public land would be acquired in each municipality except Raynham. Moderate areas of undeveloped land would be acquired for traction power facilities in Canton and Easton. Within the portion of the Attleboro Secondary that

Table 4.2-10: Whittenton Electric: Whittenton Branch, Stoughton Line, and Attleboro Secondary Land Acquisition

Municipality	Public Ownership Area in Acres (number of parcels)	Private Ownership Land Use Area in acres (number of parcels)				
		Residential	Commercial	Industrial	Undeveloped	*Subtotal*
WHITTENTON BRANCH						
Right-of-Way (All Whittenton Alternatives)						
Raynham	**-**	**-**	**-**	**0.02 (1)**	**-**	***0.02 (1)***
Taunton	**0.53 (4)**	**0.07 (1)**	**-**	**0.22 (2)**	**0.48 (7)**	***0.77 (10)***
TOTAL (Whittenton Branch Right-of-Way, Whittenton Diesel Alternative)	0.53 (4)	0.07 (1)	-	0.24 (3)	0.48 (7)	*0.79 (11)*
STOUGHTON LINE						
Right-of-Way (All Whittenton Alternatives)						
Canton	**0.01 (1)**	**-**	**0.01 (1)**	**0.01 (2)**	**0.38 (6)**	***0.40 (9)***
Easton	**0.04 (1)**	**-**	**-**	**-**	**0.11 (2)**	***0.11 (2)***
Stoughton	**0.56 (4)**	**0.08 (2)**	**0.36 (5)**	**0.19 (2)**	**3.60 (15)**	***4.23 (24)***
Raynham	**-**	**-**	**-**	**0.53 (1)**	**1.82 (8)**	***2.35 (9)***
TOTAL (Stoughton Line Right-of-Way, Whittenton Diesel Alternative)	*0.61 (6)*	*0.08 (2)*	*0.37 (6)*	*0.73 (5)*	*5.91 (31)*	*7.09 (44)*
Traction Power Facilities (Whittenton Electric Alternative)						
Canton	**-**	**-**	**-**	**-**	**0.49 (1)**	***0.49 (1)***
Easton	**0.90 (1)**	**-**	**-**	**-**	**0.30 (1)**	***0.30 (1)***
TOTAL (Stoughton Line Right-of-Way and Traction Power Facilities, Whittenton Electric Alternative)	*1.51 (7)*	*0.08 (2)*	*0.37 (6)*	*0.73 (5)*	*6.70 (33)*	*7.88 (46)*
ATTLEBORO SECONDARY						
Right-of-Way (All Whittenton Alternatives)						
Taunton	**-**	**-**	**-**	**-**	**1.74 (17)**	***1.74 (17)***
TOTAL (Attleboro Secondary Right-of-Way, Whittenton Diesel Alternative)	-	-	-	-	*1.74 (17)*	*1.74 (17)*
Traction Power Facility						
Taunton	**0.30 (1)**	**-**	**-**	**-**	**-**	**-**
TOTAL (Attleboro Secondary Right-of-Way and Traction Power Facility, Whittenton Electric Alternative)	*0.30 (1)*	-	-	-	*1.74 (17)*	*1.74 (17)*

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

would be used by the Whittenton Electric Alternative, 1.74 acres (17 parcels) of undeveloped land would be acquired in Taunton for the right-of-way, and 0.30 acres (one parcel) of public land for the traction power facility.

All property that would be acquired for the Whittenton Branch or relevant segments of the Stoughton Line and Attleboro Secondary right-of-way, or the traction power facilities along the Stoughton Line and Attleboro Secondary, consists of small portions of either publicly or privately owned parcels.

Neighborhood Fragmentation

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 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.

4.2.3.8 WHITTENTON DIESEL ALTERNATIVE

The Whittenton Diesel Alternative is identical to the Whittenton Electric Alternative with the exception of the locomotive power source. As described above for the Attleboro Diesel Alternative and the Stoughton Diesel Alternative, 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 Table 4.2-10 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.)

The Whittenton Diesel Alternative would require 9.62 acres (72 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 Whittenton Branch is owned by the Commonwealth, minor acquisitions would be needed along the right-of-way to accommodate ancillary facilities. The Whittenton Diesel Alternative would not require power traction facilities and therefore would not require acquisition to accommodate such facilities. As with the Whittenton Electric Alternative, the majority of the affected private land along the Whittenton Branch right-of-way for the Whittenton Diesel Alternative would be undeveloped property, totaling 0.48 acres. There would be some impacts to residential or industrial land and no impacts to commercial land. The most area of private land would be acquired in Taunton, with considerably less land acquired in Raynham. All other aspects of the Whittenton Diesel Alternative relevant to land uses are the same as for the Whittenton Electric Alternative.

4.2.3.9 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 and Routes 140 and 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; 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 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 land uses resulting from constructing the bus lanes and new interchange ramps are described below.

Six bus stations are proposed for the Rapid Bus Alternative (King's Highway, Whale's Tooth, Fall River Depot, Freetown, Galleria, and Downtown Taunton). One mid-day layover facility site has been identified (Logan Express, in Boston). Overnight layover facility sites are currently being studied and will be separately analyzed for this alternative. Potential direct impacts to land uses from the bus stations and mid-day layover facility are considered below in Sections 4.2.3.10 and 4.2.3.11, respectively.

Property Acquisition

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 4.2-11 and shown in Figures 4.2-41a-g.

Table 4.2-11: Rapid Bus: Highway Alignment Land Acquisition

Municipality	Public Ownership Area in Acres (number of parcels)	Private Ownership Land Use Area in acres (number of parcels)				
		Residential	Commercial	Industrial	Undeveloped	*Subtotal*
Highway Alignments						
Bridgewater	**0.19 (1)**	**-**	**-**	**-**	**-**	**-**
Raynham	**4.33 (1)**	**-**	**-**	**-**	**0.42 (4)**	***0.42 (4)***
TOTAL	4.52 (2)	-	-	-	0.42 (4)	0.42 (4)

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

All of the affected private land along the highway alignment rights-of-way would be undeveloped property, totaling 0.42 acres in Raynham. There would be no impacts to residential, commercial, or industrial land. Approximately 4.33 acres of public land would be acquired for the interchange reconfiguration in Raynham and a small area in Bridgewater. No residential, business, or community facility displacements would result from these acquisitions along the Rapid Bus Alternative alignments.

All of the land in Bridgewater and Raynham that would be acquired for the Rapid Bus right-of-way consists of partial takings of either publicly or privately owned parcels. Property tax revenue losses for small acquisitions cannot be calculated at this phase.

Neighborhood Fragmentation

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.

4.2.3.10 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. This evaluation does not consider neighborhood fragmentation, as the stations would not be linear facilities dividing communities.

Barrowsville

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 4.2-12 and shown in Figure 4.2-34.

Table 4.2-12: 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				**$3,239.18[1]**		**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 that cannot be determined at this phase.

The Barrowsville Station would require 6.08 acres (four parcels) of privately owned land. One of the parcels, (27-190) is apparently 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.

Less than 50 percent of parcel numbers 27-185 and 27-187 would be acquired for the Barrowsville Station. Both of parcels 27-190 and 27-191 would be wholly acquired.

Battleship Cove

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 4.2-13 and shown in Figure 4.2-35.

Table 4.2-13: 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. MassDOT may lease, rather than acquire, this site from the City of Fall River.

Canton Center

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 at this location.

Canton Junction

The Canton Junction Station is an existing train station at the junction of the Stoughton Line and 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 at this location.

Downtown Taunton

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 4.2-14 and shown in Figure 4.2-38.

Table 4.2-14: 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, parcel number 63-357) 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.

Easton Village

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 4.2-15 and shown in Figure 4.2-39.

Table 4.2-15: 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.

Fall River Depot

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 4.2-16 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. No residential or community facility displacements would result from these acquisitions for the Fall River Depot Station.

Parcel number O-15-20 is owned by the City of Fall River; all other parcels are privately owned and would be acquired in whole or in excess of 50 percent.

Table 4.2-16: 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).

Freetown

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 a previously developed 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 4.2-17 and shown in Figure 4.2-41.

Table 4.2-17: 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, parcel 233-19) 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.

Galleria

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 at this location.

King's Highway

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 at this location.

Mansfield

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 4.2-18 and shown in Figure 4.2-44.

Table 4.2-18: 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				$26,125.57[1]		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. 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.

Parcel number 21-500 (North Common Park) is owned by the Town of Mansfield. Less than 50 percent of parcel numbers 18-229 and 22-320 would be acquired. All other parcels are privately owned and would be acquired in whole.

North Easton

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 4.2-19 and shown in Figure 4.2-45.

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.

Table 4.2-19: 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				$2,941.19[1]		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.

Less than 50 percent of parcel numbers 1U-1, 1U-48, 060_008, 060_009, and 060_012 would be acquired. More than 50 percent of parcel number 060_006 would be acquired.

Raynham Place

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 4.2-20 and shown in Figure 4.2-46.

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.

Table 4.2-20: 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				$4,705.74[1]		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.

Less than 50 percent of parcel number 1-15 would be acquired. More than 50 percent of parcel number 1-19-1 would be acquired.

Sharon

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 4.2-21 and shown in Figure 4.2-47.

Table 4.2-21: 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, parcel 91-11) 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.

Stoughton

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 4.2-22 and shown in Figure 4.2-48.

Table 4.2-22: 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.

Taunton

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 4.2-23 and shown in Figure 4.2-49.

Table 4.2-23: 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.

Parcel numbers 55-760 and Pub-ROW are owned by the City of Taunton. More than 50 percent of parcel numbers 55-758, 55-759, and 55-761 would be acquired.

Taunton Depot

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 4.2-24 and shown in Figure 4.2-50.

Table 4.2-24: 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				**$5,604.59**[1]		**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 that cannot be determined at this phase.

The Taunton Depot Station would require 12.70 acre (three parcels) of privately owned land. No residential, business, or community facility displacements would result from these acquisitions for the Taunton Depot Station.

Less than 50 percent of parcel number 107-57 would be acquired for the Taunton Depot. Parcel number 107-47 would be wholly acquired and more than 50 percent of parcel number 107-48 would be acquired.

Whale's Tooth

The Whale's Tooth Station would be a new train station constructed along the New Bedford Main Line constructed 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 4.2-25 and shown in Figure 4.2-51.

Table 4.2-25: 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	Transportation	-	No	1.92	100.0
66-121	Private	Industrial	Transportation	TBD	No	0.38	26.6
66-133	Public	Industrial	Transportation	-	No	3.38	100.0
66-133A	Private	Industrial	Transportation	$1,227.47	No	0.05	100.0
66-157	Public	Industrial	Transportation	-	No	0.26	100.0
TOTAL				$1,227.47[1]		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 that cannot be determined at this phase.

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.

Parcel numbers 66-101, 66-133, and 66-157are owned by the City of New Bedford. MassDOT may lease, rather than acquire, these parcels from the City of New Bedford. Less than 50 percent of parcel number 66-121 would be acquired. Over 50 percent of parcel number 66-133A would be acquired.

4.2.3.11 LAYOVER FACILITIES

One mid-day train layover facility is planned for the Boston area as part of a separate planning process, independent from the South Coast Rail project. Alternative sites have not been selected yet as part of that process. One mid-day 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 (Mid-Day 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 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 4.2-26 and shown in Figure 4.2-53.

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

Table 4.2-26: 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).

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 4.2-27 and shown in Figure 4.2-54.

Table 4.2-27: 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.

The two parcels would be wholly acquired.

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 4.2-28 and shown in Figure 4.2-55.

Table 4.2-28 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.

Less than 50 percent of parcel number T-1-19 would be acquired. Parcel numbers T-1-33 and T-1-38 would be wholly acquired.

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. The Federal Energy Regulatory Commission informed Weaver's Cove Energy in October 2010 that the company must comply with new vapor-gas exclusion zone requirements before moving forward with construction of the planned liquefied natural gas terminal. 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 4.2-29 and shown in Figure 4.2-56.

Table 4.2-29: 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. No residential or community facility displacements would result from these acquisitions for the Weaver's Cove West site. Both parcels would be wholly acquired.

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 4.2-30 and shown in Figure 4.2-57.

Table 4.2-30: 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				**$29,955.86[1]**		**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. Less than 50 percent of parcel number 235-9 would be acquired.

Summary of Layover Facility Effects

Table 4.2-31 summarizes the land acquisition for the potential layover facility sites evaluated. Depending on the combination of sites selected (one on each line), land acquisition could range from 29.01 acres (Wamsutta and Weaver's Cove East sites) to 96.72 acres (Church Street and the Weaver's Cove West sites).

Table 4.2-31: Summary of Layover Facility Land Acquisition

Candidate Layover Facility Site	Public Ownership Area in acres (number of parcels)	Private Ownership Land Use Area in acres (number of parcels)				
		Residential	Commercial	Industrial	Undeveloped	*Subtotal*
Logan Express Site	-	-	-	-	-	-
Wamsutta Site	11.02 (1)	-	-	-	-	-
Church Street Site	-	-	-	16.07 (1)	22.74 (3)	*38.81 (4)*
Weaver's Cove East Site	-	0.05 (1)	-	-	17.94 (3)	*17.99 (4)*
Weaver's Cove West Site	-	-	-	48.74	9.17	*57.91 (2)*
ISP Site	-	-	-	-	43.57 (5)	*43.57 (5)*

TBD: To be determined.

Tax effects of the layover site alternatives are listed in Table 4.2-32. 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 4.2-32: 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

4.2.3.12 SUMMARY

The Build Alternatives would all require property acquisitions outside existing rights-of-way to accommodate the new stations and rail infrastructure or bus lanes. The Stoughton Alternatives would require the largest area of land acquisition (103 to 107 acres), compared to 88 to 91 acres under the Attleboro Alternatives and 75 to 79 acres under the Whittenton Alternatives. The electric versions of

each of the rail alternatives require slightly larger amounts of land acquisition than the diesel versions because of the need for traction power substations with the electric alternatives. The Rapid Bus Alternative would require substantially less land acquisition than the rail Alternatives (26 acres). Property acquisitions and compensation of affected property owners would be conducted in accordance with federal and state requirements.