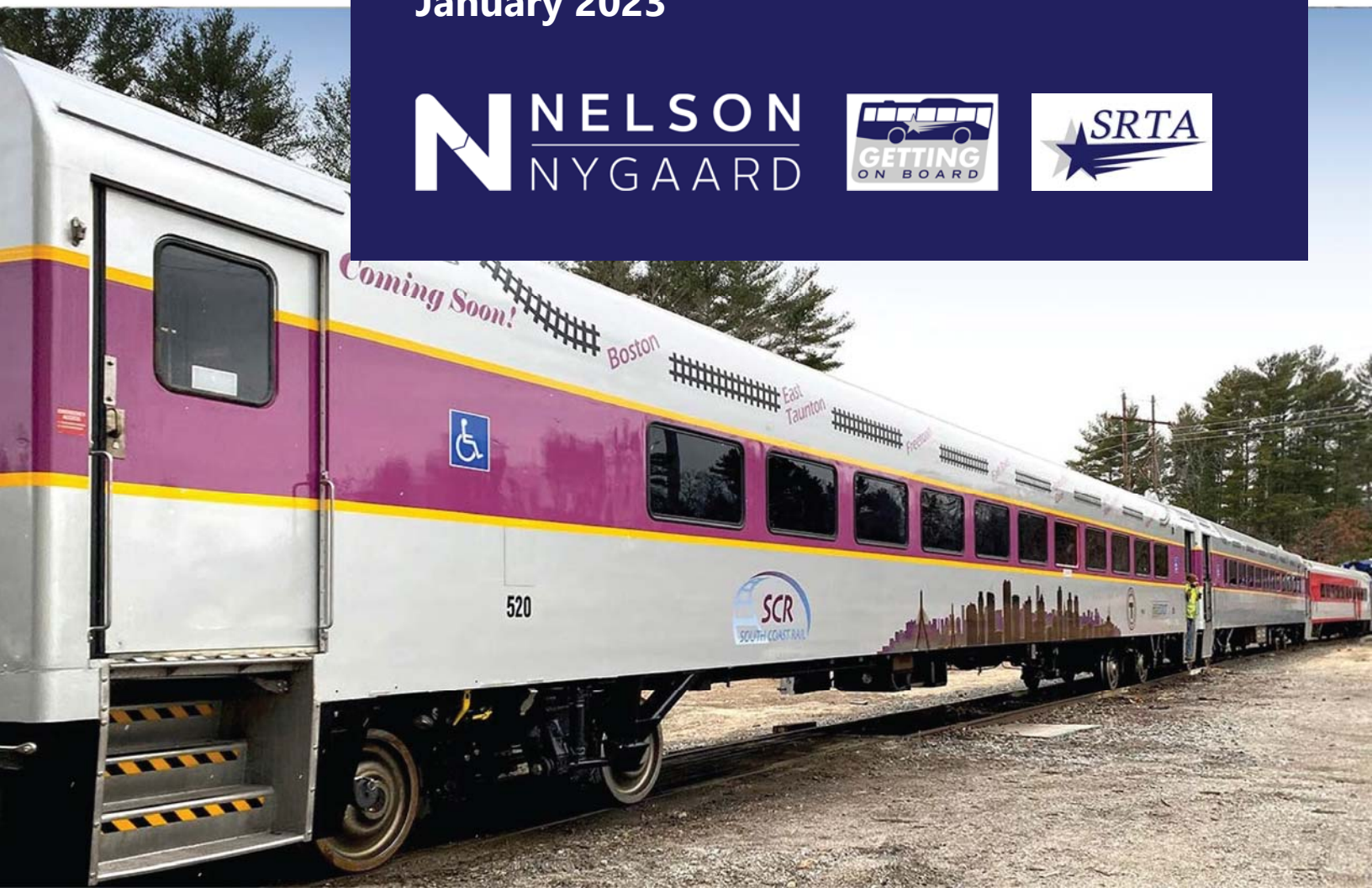




Southeastern Regional Transit Authority South Coast Rail Service Plan

January 2023



South Coast Rail Service Plan | Final Report

Southeastern Regional Transit Authority

Cover image sources, top to bottom: "SRTA route 9x bus at the Fall River bus terminal, October 2020" by Pi.1415926535, CC BY-SA 4.0; "MBTA 520 with South Coast Rail wrap" by MBTA, <https://www.mass.gov/files/styles/social_media/public/2020-04/SCR_train.jpg?h=8cc014fe&itok=zPnofwSP>.

South Coast Rail Service Plan | Final Report

Southeastern Regional Transit Authority

Table of Contents

	Page
1 Executive Summary	1-1
Study Overview	1-1
Key Findings	1-3
2 Market Analysis.....	2-1
Market Analysis.....	2-2
Key Findings	2-9
3 Scenario Development	3-1
4 Outreach Summary.....	4-1
Public Engagement.....	4-2
5 Scenario Resource Estimation	5-1
Summary.....	5-1
Methods.....	5-2
Scenario Costs	5-3
6 Title VI Analysis.....	6-1
Summary.....	6-1
Title VI Requirements.....	6-1
Results	6-2

Appendix A: Public Meeting Flyers

Appendix B: Public Meeting Boards After Meeting

Appendix C: Fall River Public Meeting Comments

Appendix D: New Bedford Public Meeting Comments

Appendix E: Survey Open Responses

1 EXECUTIVE SUMMARY

STUDY OVERVIEW

South Coast Rail (SCR) is the Massachusetts Bay Transportation Authority (MBTA) Commuter Rail extension to Fall River and New Bedford. The extension, which is planned to open in 2023, will connect the South Coast region of Massachusetts to Boston via rail transit. The Southeastern Regional Transit Authority (SRTA), which provides bus service in the South Coast, conducted this South Coast Rail Service Plan (SCRSP) to identify different ways to connect SRTA service-area residents with planned SCR stations via local bus service. This plan includes a market analysis, an outreach summary, cost estimates, and Title VI analyses for three potential scenarios of SRTA service connecting to SCR. These three scenarios were shared with the public for feedback and then underwent cost estimation and Title VI analysis. The three scenarios are:

- **Scenario 1: Tripper Service and Expanded Operating Hours on Select Routes**—Existing routes offer special trips (called ‘trippers’) to meet SCR trains, and service spans on select routes are expanded to ensure people can get to and from early and late SCR trains via a transfer at SRTA bus terminals.
- **Scenario 2: New Connector Routes**—Three new bus routes that connect high-density neighborhoods with SCR stations.
- **Scenario 3: New Microtransit Zones**—Three new microtransit zones that connect high-density neighborhoods with SCR stations.

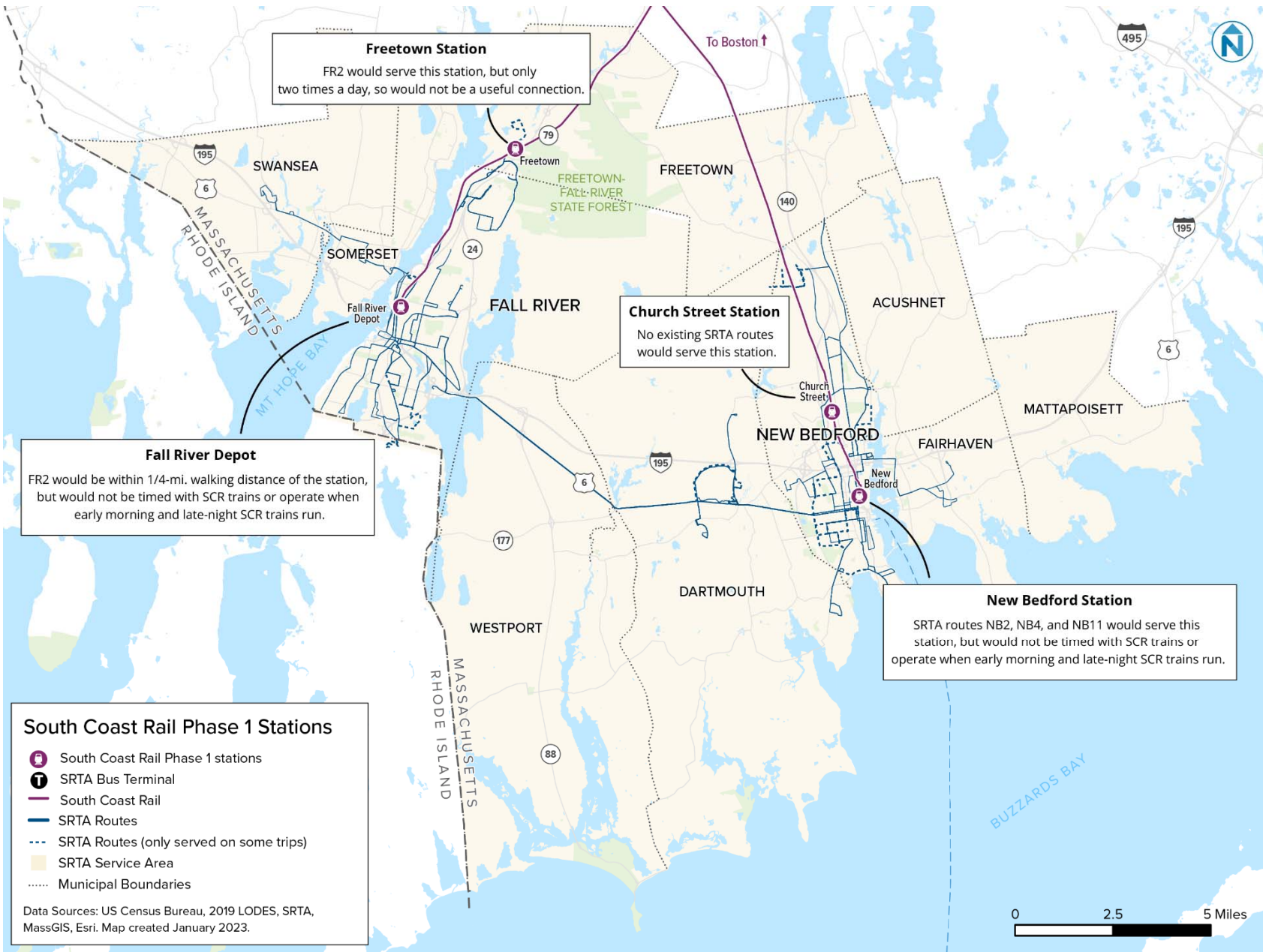
Existing Service to South Coast Rail

In its current state, the existing SRTA bus network will not provide a reliable, high-quality connection to SCR. The existing network provides service to some SCR stations, at some times of day (Figure 1-1). The existing SRTA system would allow some SRTA service-area residents access to Boston for work starting at 9:00 a.m., but very few—if any—residents could use the SRTA system to get to Boston for jobs in industries that start at 7:00 a.m. or earlier, such as construction and hospitality.

South Coast Rail Service Plan | Final Report

Southeastern Regional Transit Authority

Figure 1-1 Map of Existing SRTA and Future SCR Service



KEY FINDINGS

The cost to provide a high-quality local transit service that meets all SCR arrivals and departures will be considerable. This plan estimates a minimum annual operating cost of \$3,120,000, along with purchase of seven new transit buses. This minimum cost would represent an approximately 15% increase in SRTA’s operating budget. Providing a lower-quality local transit connection to SCR in all scenarios is possible at a lower cost, but a lower level of service would mean that not all SCR arrivals and departures would be met by a SRTA bus, that wait times for transit would be higher, and/or that fewer people would have a transit connection to SCR.

The three SCRSP scenarios provide very different levels of service and have very different capital and operating cost requirements. Key findings from this report regarding costing¹ and Title VI analysis are:

Cost Estimates

The operating cost of each scenario is closely tied to the amount of service provided; scenarios that provide more service cost more to operate. To implement any of the three scenarios, SRTA would need an additional \$3 to \$10 million per year, or at least a 10% increase in the agency’s annual operating budget (Figure 1-2).

Figure 1-2 Estimated Annual Operating Cost by Scenario and Mode

Mode	Scenario 1	Scenario 2	Scenario 3
Fixed-Route	\$9,140,000	\$2,520,000	-
Demand-Response	\$600,000	\$600,000	\$6,380,000
<i>Total</i>	<i>\$9,740,000</i>	<i>\$3,120,000</i>	<i>\$6,380,000</i>

¹ All costing for this report was completed using 2022 dollars. Tables generally round estimates to the nearest \$10,000.

South Coast Rail Service Plan | Final Report

Southeastern Regional Transit Authority

Each scenario would also require additional vehicles, which would be a one-time cost, until the vehicles need to be replaced. Scenario 1 has the greatest additional capital cost, and Scenario 3 the lowest, as Scenario 3 would use smaller, less costly vehicles, and scenarios 1 and 2 would use heavy-duty transit buses.

Figure 1-3 Estimated Annual One-Time Capital Cost by Scenario and Mode

Mode	Scenario 1	Scenario 2	Scenario 3
Fixed-Route	\$14,000,000	\$7,000,000	-
Microtransit	-	-	\$1,085,000
<i>Total</i>	<i>\$14,000,000</i>	<i>\$7,000,000</i>	<i>\$1,085,000</i>

Note: Costs for vehicles are the total cost and do not consider grant funding, which can reduce the effective cost to SRTA (e.g., the federal government will often pay up to 80% of the cost of a new vehicle).

Title VI Analysis

None of the three scenarios are estimated to have a disparate impact or disproportionate burden. Each of these scenarios would produce an overall increase in the percent of people served that are racial/ethnic minorities or low-income people (Figure 1-4).

Figure 1-4 Percent Change in Percent of Population Served that is Minority or Low Income, by Scenario

Scenario	Minority	Low-Income
Scenario 1	+3%	+1%
Scenario 2	+18%	+15%
Scenario 3	+13%	+11%

South Coast Rail Service Plan | Final Report

Southeastern Regional Transit Authority

To help decisionmakers better compare the three scenarios, Figure 1-5 includes a 10-year cumulative cost for the scenarios, along with important benefits and drawbacks.

Figure 1-5 Scenario Comparison Table

	Scenario 1	Scenario 2	Scenario 3
10-Year Cumulative Cost	\$111,400,000	\$38,200,000	\$65,900,000
Benefits	Provides highest level of transit service to and from SCR stations. Provides immense benefit to non-SCR riders by increasing span of service and frequency on 10 SRTA routes.	Provides reliable connection to SCR stations with high-capacity vehicles. Benefits non-SCR riders by introducing three new bus routes to the SRTA system.	Provides flexible connections to SCR stations, reaching large numbers of potential riders. Includes Sunday service.
Drawbacks	Extremely high cost. Requires considerable fleet expansion. Does not include Sunday service.	Overall number of people connected to SCR station via a one-seat ride is lower than other scenarios. Does not include Sunday service.	Limited benefit to non-SCR riders. Smaller vehicles and on-demand service means ridership is largely unknown; costs could fluctuate. Relatively high cost.
ADA Paratransit Considerations	Requires expansion of demand-response service as complementary ADA paratransit.	Requires expansion of demand-response service as complementary ADA paratransit.	Does not require expanded demand-response service to meet complementary ADA paratransit requirements.

Note: Costs are rounded to nearest hundred thousand and are based on assumed 12-year replacement cycle of heavy-duty transit buses and seven-year replacement cycle of demand-response/microtransit vehicles.

2 MARKET ANALYSIS

Purpose of This Market Analysis

The market analysis was the first step in developing scenarios for SRTA service to SCR stations. The purpose of this market analysis is to identify where potential SCR riders live in the SRTA service area. The findings from the market analysis helped the study team develop fixed-route and microtransit scenarios for serving SCR stations.

Study Area

The market analysis primary study area is the entire SRTA service area of Acushnet, Dartmouth, Fairhaven, Fall River, Freetown, Mattapoisett, New Bedford, Somerset, Swansea, and Westport.

MARKET ANALYSIS

Methods

This market analysis was primarily conducted using geographic data to identify potential SCR riders. The market analysis used data from several resources, the most important of which are:

- **SCR average weekday ridership estimates**, by station, from the Massachusetts Department of Transportation (MassDOT).²

Figure 2-1 MassDOT SCR Weekday Ridership Estimates

Service Subarea	Station Name	Estimated Potential SCR Riders
Fall River	Freetown	50
	Fall River Depot	380
	<i>Fall River Subtotal</i>	<i>410</i>
New Bedford	Church Street	240
	New Bedford	440
	<i>New Bedford Subtotal</i>	<i>680</i>
Grand Total		1,090

- **Commuter flows** from the 2019 U.S. Census Bureau’s Longitudinal Employer-Household Dynamics Origin-Destination Employment Statistics (LODES).

These datasets were used to estimate the home locations of SRTA service area residents that are assumed to ride a future SCR service. The three primary steps used to develop these assumptions are:

1. Use LODES data from table JT00, using field S000 to identify the census block group home location of people that live in the SRTA service area and work within a half-mile network distance of SCR stations from Bridgewater to JFK/UMASS, and within one-mile network distance of South Station. This method includes people that travel by all modes and/or telecommute; these people are called ‘study commuters’. If a census block group partially overlapped with a station walkshed, the census block group was included in the analysis.

² Ridership estimates are revised estimates for opening year 2023, provided by SCR staff via e-mail on July 20, 2022. Estimates were produced by Central Transportation Planning Staff.

South Coast Rail Service Plan | Final Report

Southeastern Regional Transit Authority

1. Use MassDOT SCR ridership estimates to transform the count of 'study commuters' in each census block group into a number of 'potential SCR riders'. This was done by multiplying each block group's count of 'study commuters' by the ratio of estimated SCR rides to area study commuters (e.g., if MassDOT ridership estimates assume 75 people will board SCR in Fall River on an average weekday, but there are 100 'study commuters' in the Fall River area, all block group counts of 'study commuters' were multiplied by 75% to produce an estimate of 'potential SCR riders').
 - a. This step divided the SRTA service area into two subareas: Fall River and New Bedford. The SRTA service area was divided into two subareas by drawing a rough boundary halfway between the New Bedford and Fall River areas.
2. The resulting number of 'potential SCR riders' was then mapped by block group using dot density.

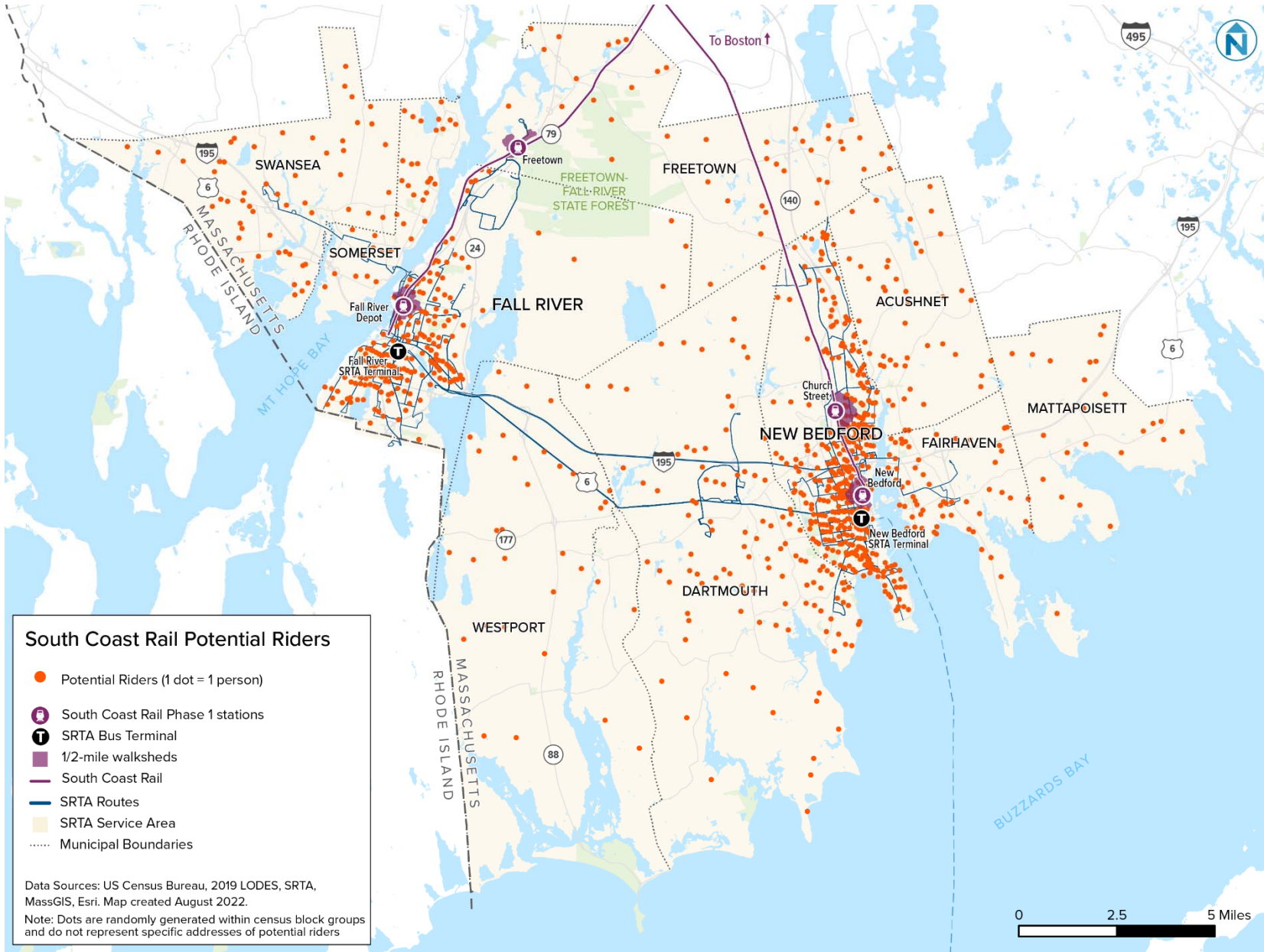
Results

Figure through Figure show the density of potential SCR riders in the SRTA service area using dot density maps, where one dot equals one potential rider. In general, potential SCR riders are concentrated in Fall River and New Bedford, near the future Fall River Depot and New Bedford stations. More detail on the estimated market for Fall River and New Bedford area SCR service is provided below.

South Coast Rail Service Plan | Final Report

Southeastern Regional Transit Authority

Figure 2-2 Map of Potential SCR Rider Density in SRTA Service Area



South Coast Rail Service Plan | Final Report

Southeastern Regional Transit Authority

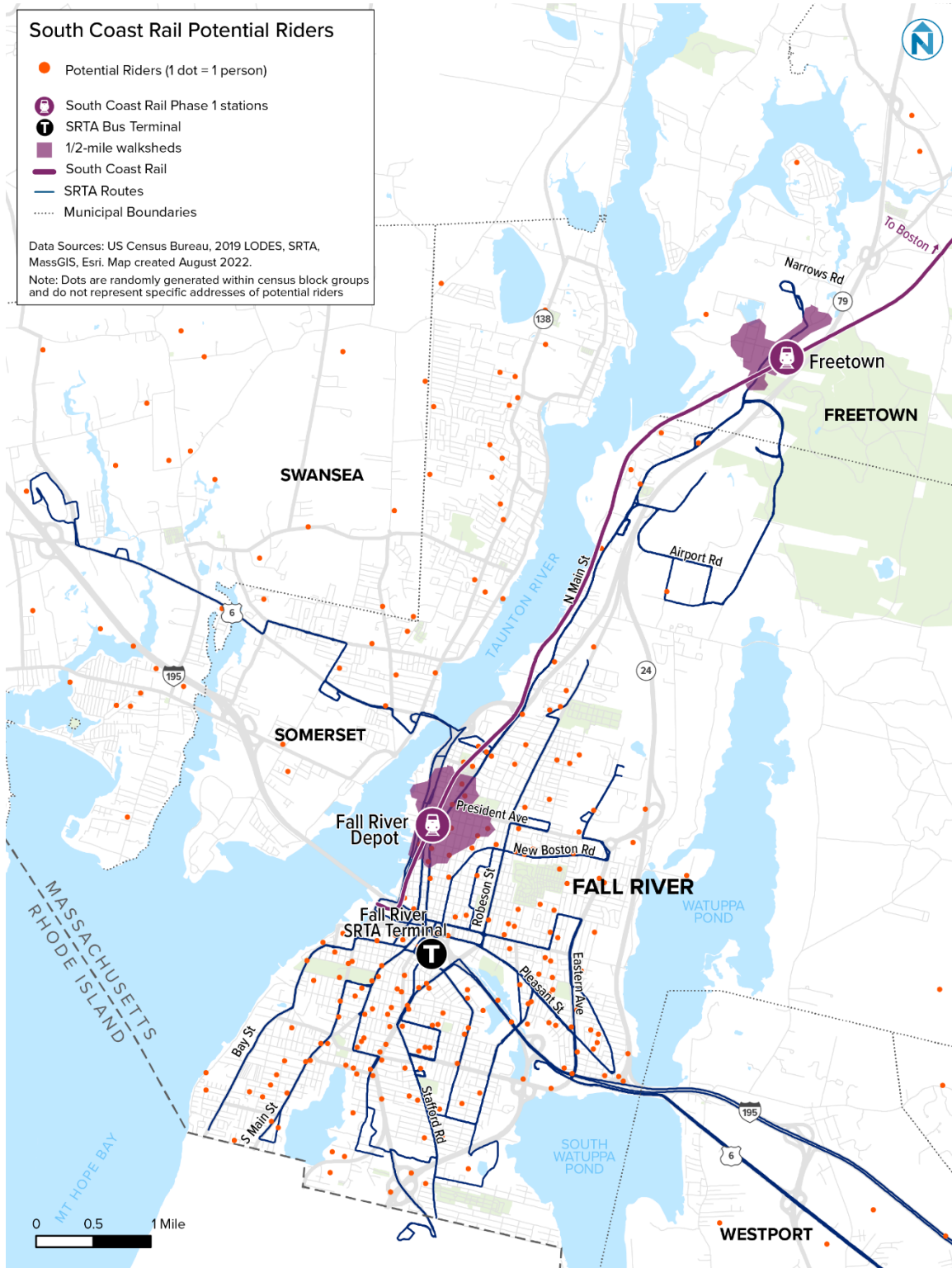
In the Fall River service area (Figure), potential SCR rider density is relatively evenly distributed throughout the core of Fall River. Slightly higher concentrations of potential riders live in the South End and areas east of downtown, while a medium concentration of riders exists in neighborhoods surrounding the future Fall River Depot Station. Neighborhoods in the South End are primarily served by SRTA routes FR1, FR3, FR5, and FR9. These four routes currently provide 30-minute service to and from the SRTA Fall River Terminal, but riders would have to transfer to routes FR2 or FR14 to reach Fall River SCR stations.

Outside the Fall River core, there are generally low concentrations of potential SCR riders. Swansea and Somerset have slightly more potential riders than other non-Fall River places, with northern part of Somerset showing slightly higher concentrations. This part of Somerset is not currently served by SRTA fixed-route bus service.

South Coast Rail Service Plan | Final Report

Southeastern Regional Transit Authority

Figure 2-3 Map of Potential SCR Rider Density in Fall River Area



South Coast Rail Service Plan | Final Report

Southeastern Regional Transit Authority

In the New Bedford area (Figure), SCR potential rider density is relatively highest in New Bedford, especially near the downtown core. Neighborhoods with high concentrations of potential riders are primarily served by SRTA routes NB1, NB2, NB3, and NB8. These four routes provide 20- to 40-minute service to SRTA's New Bedford Terminal, and routes NB2, NB4, NB8, NB11, and the North End Shuttle could potentially serve the future SCR stations.

Outside of New Bedford, there are moderate concentrations of potential SCR riders in west Fairhaven and east Dartmouth. The current SRTA fixed route serving Dartmouth, NB3, does not provide direct service to SCR stations; potential SCR riders using this route would need to transfer to route NB2 or NB11 to travel to New Bedford Station and NB4 to travel to Church Street station via SRTA New Bedford Terminal. Routes NB4 and the North End shuttle provide relatively close service to Church Street at Ashley Boulevard and Tarkiln Hill Road. Both route alignments are within a ½-mile to one mile from Church Street Station but would need to be re-aligned to directly service the SCR station.

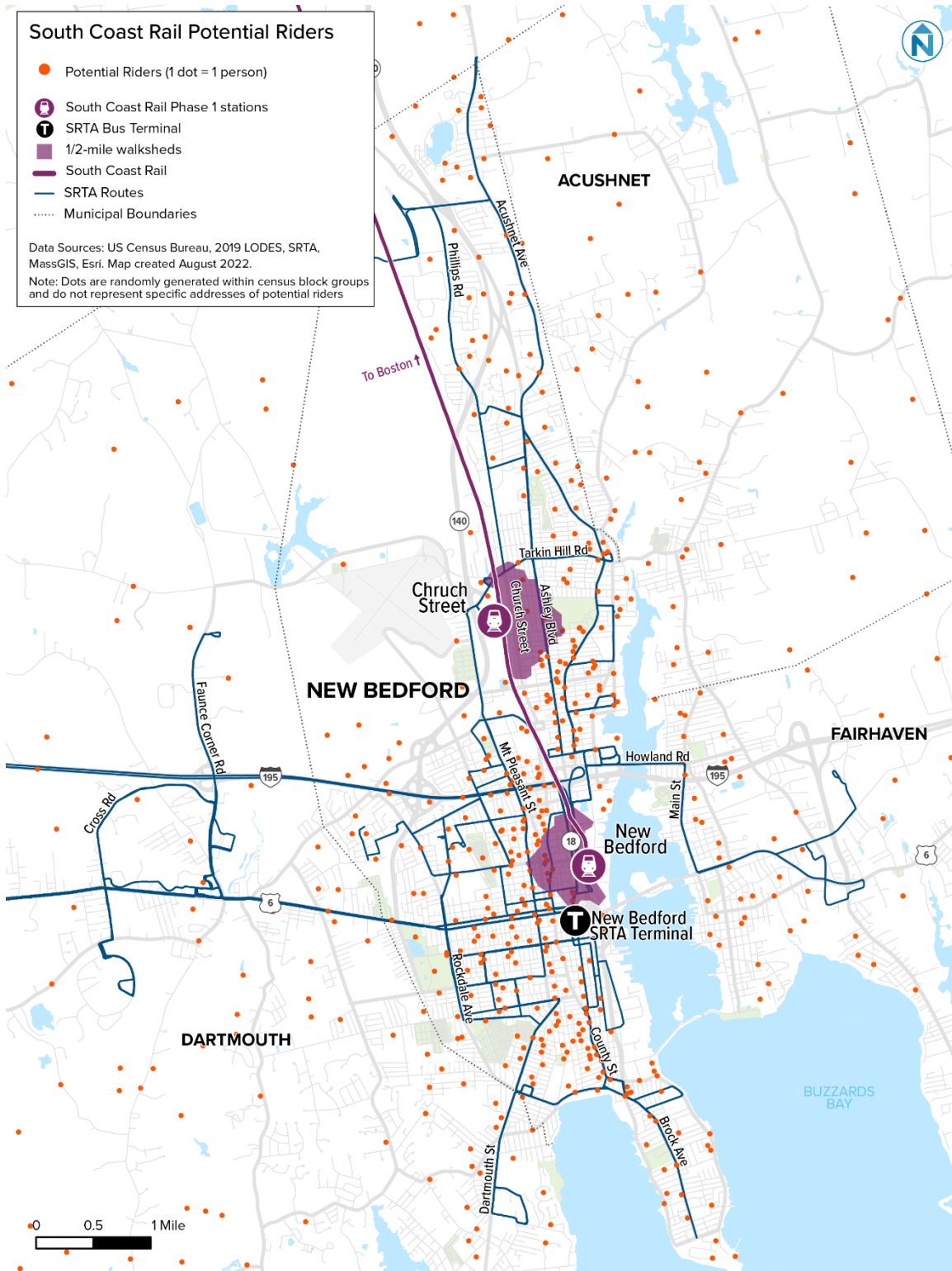
In Fairhaven, potential SCR riders are concentrated along Route NB11; this route provides direct access to both the SRTA New Bedford Terminal and the planned SCR New Bedford Station.

Although there are some potential SCR riders located elsewhere, such as in Acushnet, these are not major concentrations of riders and they are not currently served by SRTA's fixed-route bus network.

South Coast Rail Service Plan | Final Report

Southeastern Regional Transit Authority

Figure 2-4 Map of Potential SCR Rider Density in New Bedford Area



South Coast Rail Service Plan | Final Report

Southeastern Regional Transit Authority

Although excluded from the transit market analysis described above, it may be important for SRTA to understand the number of potential SCR riders living within a ½-mile of each planned SCR station. This information is included in Figure , where ½-mile distance is the network distance, or distance from each station on the street network, not as the crow flies. A half-mile is generally considered the 'walkshed' for commuter rail-type service.

Figure 2-5 Table of Potential SCR Riders Living within 1/2 Mile of Planned SCR Stations

Service Subarea	Station Name	Potential SCR Riders Living within ½ Mile of Station
Fall River	Freetown	0
	Fall River Depot	11
	<i>Fall River Subtotal</i>	<i>11</i>
New Bedford	Church Street	8
	New Bedford	17
	<i>New Bedford Subtotal</i>	<i>25</i>
	Grand Total	36

KEY FINDINGS

In both the New Bedford and Fall River areas, there are high concentrations of potential SCR riders living near existing SRTA fixed routes in the downtown cores. In Fall River, most existing bus routes do not connect areas where there are high concentrations of potential riders to SCR stations with a one-seat ride; transfers at the SRTA Fall River Terminal would be required.

In New Bedford, some existing SRTA fixed routes do serve both concentrations of potential SCR riders and future SCR stations, such as routes NB1/NB2 (routes NB1 and NB2 are interlined) and Route NB4.

In both service areas and under SRTA's existing fixed-route service, most potential riders would need to transfer at a SRTA terminal to a route that serves a SCR station.

3 SCENARIO DEVELOPMENT

Purpose of Scenario Development

This service plan developed three scenarios for SRTA service to SCR stations. The scenarios show three different ways of providing local transit connections to and from SCR stations. By developing scenarios, the study team was able to compare costs, benefits, and drawbacks for each scenario, giving decisionmakers information to decide how SRTA will (or will not) serve future SCR stations.

The scenarios described in this chapter were developed using key guiding principles:

- Each scenario must provide a SRTA transit connection to each SCR arriving and departing train on Mondays through Saturdays.
- The services in each scenario should be designed to primarily serve the highest concentrations of potential SCR riders.
- Service provided to SCR stations should not degrade the quality of service for existing SRTA riders.
- When possible, SCR services should be useful to non-SCR riders.

Scenario Descriptions

The three SCRSP scenarios below were developed based on agency and consultant staff input and public feedback. The three scenarios are summarized in the bullet points below, and in more detail in the chapter that follows.

- **Scenario 1: Tripper Service and Expanded Operating Hours on Select Routes**—Existing routes offer special trips to meet SCR trains, and service spans on select routes are expanded to ensure people can get to and from early and late SCR trains via a transfer at SRTA bus terminals.
- **Scenario 2: New Connector Routes**—Three new bus routes that connect high-density neighborhoods with SCR stations.
- **Scenario 3: New Microtransit Zones**—Three new microtransit zones that connect high-density neighborhoods with SCR stations.

Scenario 1: Tripper Service and Expanded Operating Hours on Select Routes

Scenario 1 provides SRTA service to SCR stations on Mondays through Saturdays, using special tripper service on existing routes, along with expanded operating hours on select routes, to allow passengers a transfer to SCR-serving routes at a SRTA terminal. Scenario 1 includes tripper service instead of deviations on existing routes for two primary reasons:

Trippers

A 'tripper' is a special trip that is inserted into a route's regular schedule, often to serve a specific purpose, such as accommodating large volumes of high school students at the end of the school day, or shift times at a factory.

- Trippers increase service levels on existing routes and do not degrade the quality of service for non-SCR riders (i.e., people using the routes but not traveling to or from a SCR station) by deviating existing trips.
- Trippers ensure buses will arrive before SCR trains depart and after SCR trains arrive, giving passengers short wait times between transfers.

Scenario 1 also extends the operating hours of routes serving SCR stations so they operate before the first train to Boston departs in the morning, and after the last train from Boston arrives in the evening. Scenario 1 also expands the operating hours of several other routes, which allows passengers to use those routes to transfer to SCR station-serving routes at a SRTA terminal. The expanded operating hours are:

- Fall River weekdays: 3:30 a.m. to 10:45 p.m.
- Fall River Saturdays: 6:00 a.m. to 1:30 a.m.
- New Bedford weekdays: 3:30 a.m. to 1:30 a.m.
- New Bedford Saturdays: 3:30 a.m. to 11:00 p.m.

Microtransit service is also assumed to operate during expanded operating hours, meeting SRTA's complementary ADA paratransit requirements.

The sections below describe Scenario 1 in each city served by SRTA, and according to each route.

Fall River

In Fall River, routes FR2 North Main and FR14 Swansea would have trippers serving SCR stations. Route FR2 would serve the Fall River Depot and Freetown stations via N Main Street and Route FR14 would serve Fall River Depot Station via Davol Street (Figure 3-1).

FR2 NORTH MAIN

Route FR2 will serve Freetown Station for each train arrival and departure by adding trippers that turn around at Freetown Station. FR2 is not timed to meet trains at Fall River Depot, although Fall River Depot Station could be reached from FR2 stops on N Main Street at Pearce Street. Improved pedestrian infrastructure would be needed to facilitate a universally accessible connection between N Main Street and Fall River Depot Station.

FR14 SWANSEA

Route FR14 would be re-aligned to use Davol Street instead of MA-79 in the northbound direction. Route FR14 would have no southbound alignment changes, but the bus would stop at Davol Street at President Avenue in the southbound direction. Trippers would be added to ensure FR14 inbound trips meet each SCR departure, and Route FR14 outbound trips would meet each SCR arrival at Fall River Depot Station. The route would stop at the Slades Ferry Avenue Park-and-Ride in both directions.

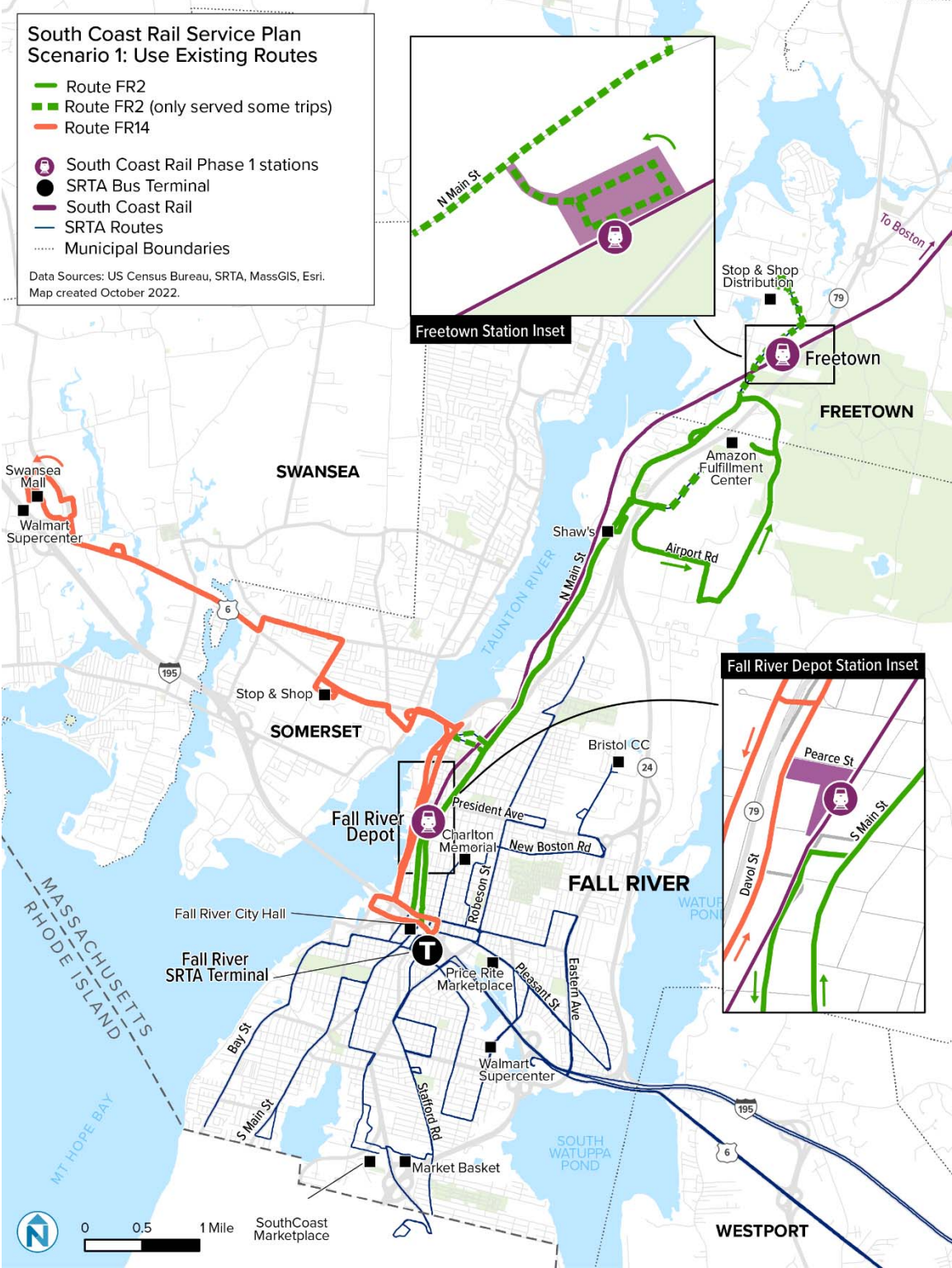
EXPANDED SERVICE FOR SELECT ROUTES

Routes FR1, FR2, FR5, FR8, and FR14 would operate beginning at 3:30 a.m. and until 10:45 p.m. on weekdays. These routes would operate beginning at 6:00 a.m. and until 1:30 a.m. on Saturdays. This would allow riders to transfer at the SRTA terminal to and from routes serving SCR stations.

South Coast Rail Service Plan | Final Report

Southeastern Regional Transit Authority

Figure 3-1 Map of Scenario 1 Tripper Service in Fall River



New Bedford

In New Bedford, routes NB4 Ashley Blvd, NB8 Mt Pleasant, and NB21 North End Shuttle would operate trippers that deviate from the typical route alignment to serve the SCR stations directly. Routes NB2 Lund's Corner and NB11 Fairhaven would operate trippers under existing alignments (Figure 3-2).

NB2 LUND'S CORNER

Route NB2 would have no change to its current alignment. Trippers would be added to the schedule so outbound NB2 trips would meet each SCR departure at New Bedford Station, and inbound NB2 trips would meet each SCR arrival at New Bedford Station. A new pedestrian bridge will be built to improve access to the station via Purchase Street.

NB4 ASHLEY BLVD

Trippers would be added to Route NB4 to serve both New Bedford Station (via a deviation on Acushnet Avenue) and Church Street Station, so NB4 outbound trips would meet each SCR departure and inbound trips would meet each SCR arrival at Church Street Station. These trippers would be 'short trips' that operate northbound on Ashley Boulevard to Church Street Station via Tarkiln Hill Road. For these trippers, the route would not serve areas beyond Tarkiln Hill Road.

NB8 MT PLEASANT

Trippers would be added to Route NB8 so outbound NB8 trips meet each SCR departure at Church Street Station and inbound NB8 trips meet each SCR arrival at Church Street Station. These trippers will continue to serve Fieldstone Marketplace.

NB11 FAIRHAVEN

Route NB11 would have no change to its current alignment. Trippers would be added to Route NB11 and bus-stop improvements are recommended for the southbound stop on Purchase Street at New Bedford Station. Trippers would be added so that inbound NB11 trips meet each SCR departure, and outbound NB11 trips meet each SCR arrival.

NB21 NORTH END SHUTTLE

Trippers would be added to the NB21 North End Shuttle so buses meet all SCR arrivals and departures at Church Street Station. NB21 would operate southbound serving Church Street Station, before laying over at Fieldstone Marketplace.

South Coast Rail Service Plan | Final Report

Southeastern Regional Transit Authority

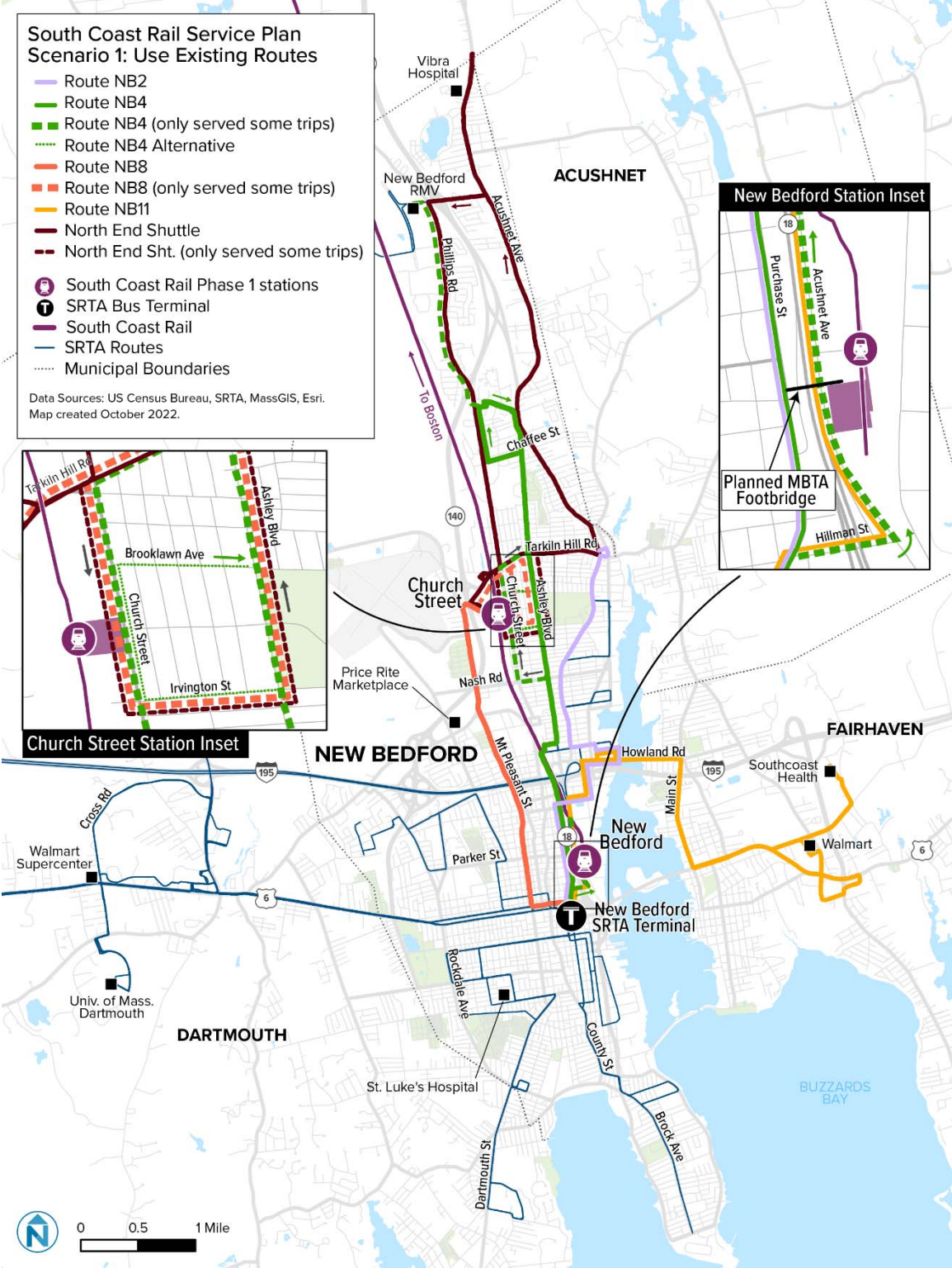
EXPANDED SERVICE FOR SELECT ROUTES

Routes NB1, NB2, NB3, NB4, and NB9 would operate beginning at 3:30 a.m. and until 1:30 a.m. the next day on weekdays. These routes would operate from 3:30 a.m. to 11:00 p.m. on Saturdays. This would allow riders to transfer at the SRTA terminal to and from routes serving SCR stations.

South Coast Rail Service Plan | Final Report

Southeastern Regional Transit Authority

Figure 3-2 Map of Scenario 1 Tripper Service in New Bedford



Scenario 2: South Coast Rail Connector Routes

Scenario 2 would provide fixed-route service between SCR stations and high-demand areas using dedicated fixed routes called 'South Coast Rail Connector' routes. SCR Connector routes would operate on a relatively direct alignment and serve places with high demand for travel to SCR station areas to the north; these areas were identified based on this plan's market analysis. In Scenario 2, only the SCR Connector routes would operate outside of SRTA's existing span of service, to meet SCR trains in the early morning and late night. Scenario 2 SCR Connector routes would meet every SCR train on Mondays through Saturdays.

Microtransit service is also assumed to operate during expanded operating hours, meeting SRTA's complementary ADA paratransit requirements.

Fall River

Scenario 2 would include one SCR Connector route in Fall River, connecting riders with every SCR arrival and departure at Fall River Depot Station. The route would operate from the Kennedy Park area via Brayton Avenue, Eastern Avenue, and Robeson Street (Figure 3-3). The Fall River SCR Connector would operate from approximately 4:00 a.m. to 10:30 p.m. on weekdays and 6:15 a.m. to 1:15 a.m. on Saturdays. This route would also function as a crosstown route, and would be useful for many non-SCR riders.

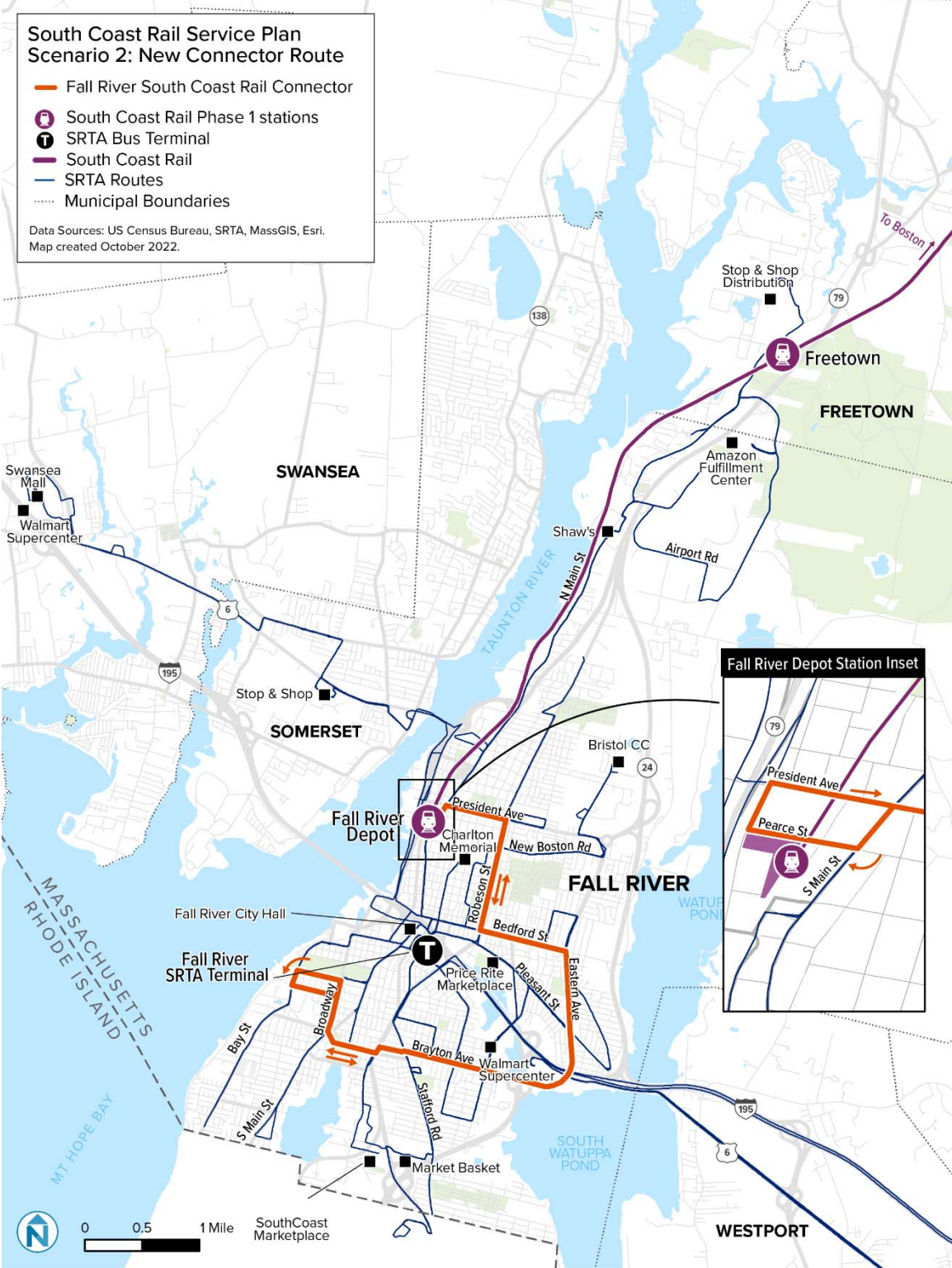
New Bedford

Scenario 2 would include two SCR Connector routes in New Bedford, connecting riders to New Bedford Station: a North New Bedford and South New Bedford SCR Connector (Figure 3-4). The North New Bedford SCR Connector would operate in the North End via Acushnet Avenue and Mt. Pleasant Street, from approximately 3:45 a.m. to 12:45 a.m. on weekdays and 3:45 a.m. to 10:45 p.m. on Saturdays. The South New Bedford SCR Connector would operate in the South End via Rockdale Avenue and County Street, from approximately 4:00 a.m. to 12:30 a.m. on weekdays and 4:00 a.m. to 10:30 p.m. on Saturdays. These routes would also be useful to non-SCR riders.

South Coast Rail Service Plan | Final Report

Southeastern Regional Transit Authority

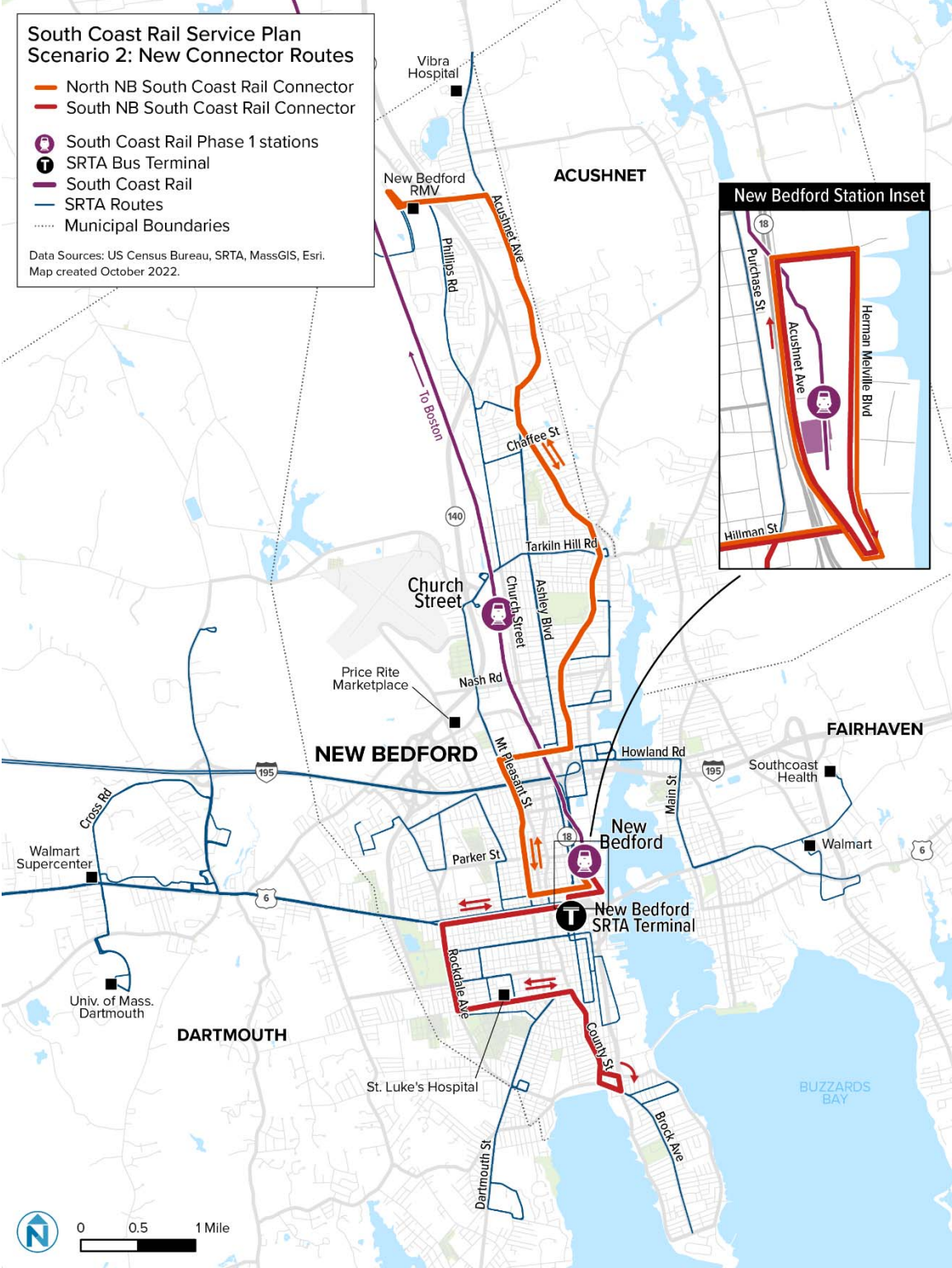
Figure 3-3 Map of Scenario 2 South Coast Rail Connector Route in Fall River



South Coast Rail Service Plan | Final Report

Southeastern Regional Transit Authority

Figure 3-4 Map of Scenario 2 South Coast Rail Connector Route in New Bedford



Scenario 3: New Microtransit Zones

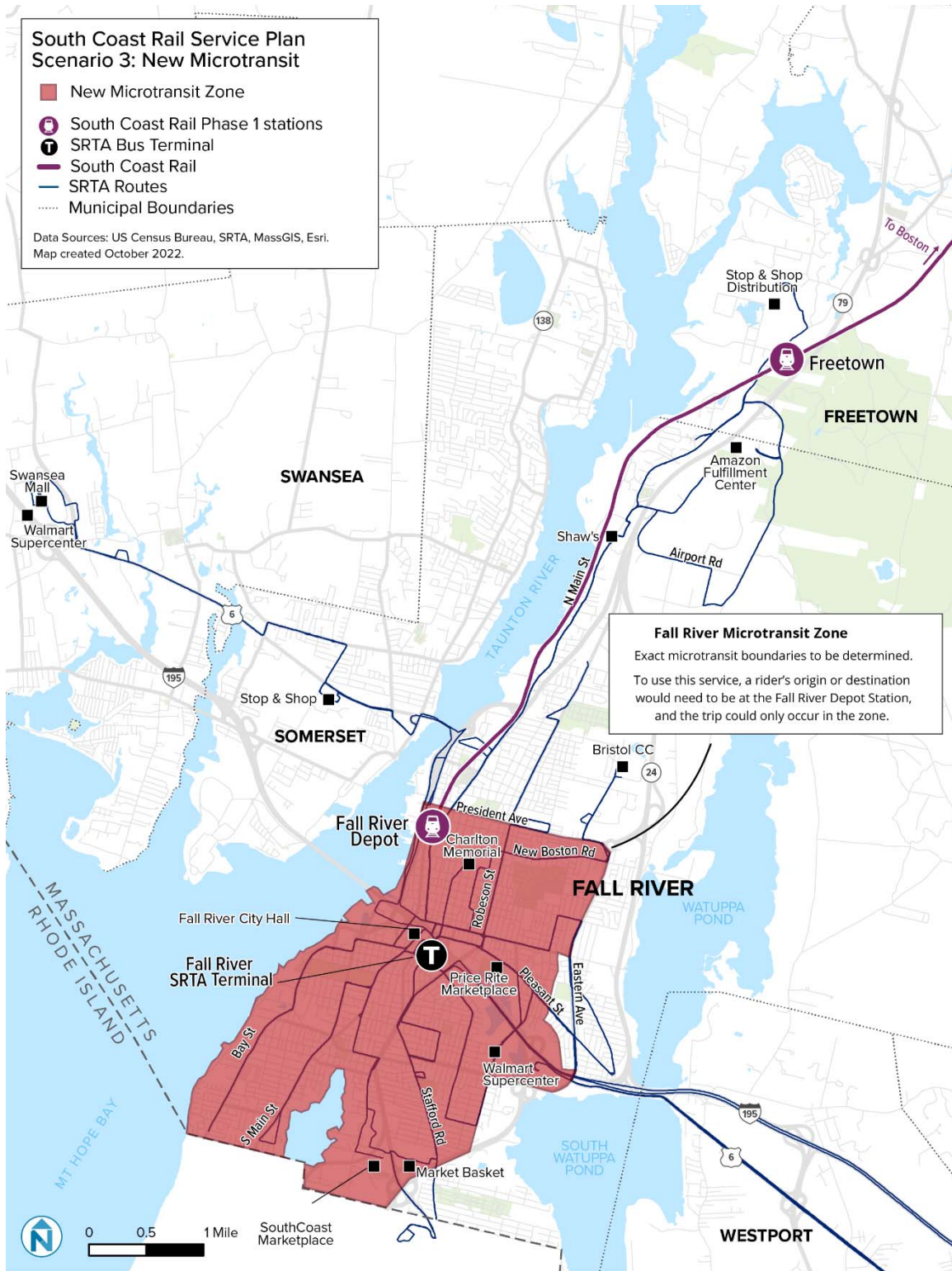
Scenario 3 would provide three new microtransit zones connecting SCR stations with areas where there are many potential future SCR riders. For riders to use these microtransit services, their origin or destination would need to be a SCR station and the trip will need to occur entirely within the zone shown in Figure 3-5 or Figure 3-6. This service would be available seven days a week and would operate for an hour before the first SCR train departs and an hour after the last SCR train arrives.

In Fall River, three vehicles would serve one zone that is primarily located in the South End and parts of the North End. In New Bedford, two zones would be served by two vehicles each. One of the two New Bedford zones would be in the North End (serving areas between I-195 and Chaffee Street) and the other would be in the South End (serving areas between Parker Street and Rodney Street).

South Coast Rail Service Plan | Final Report

Southeastern Regional Transit Authority

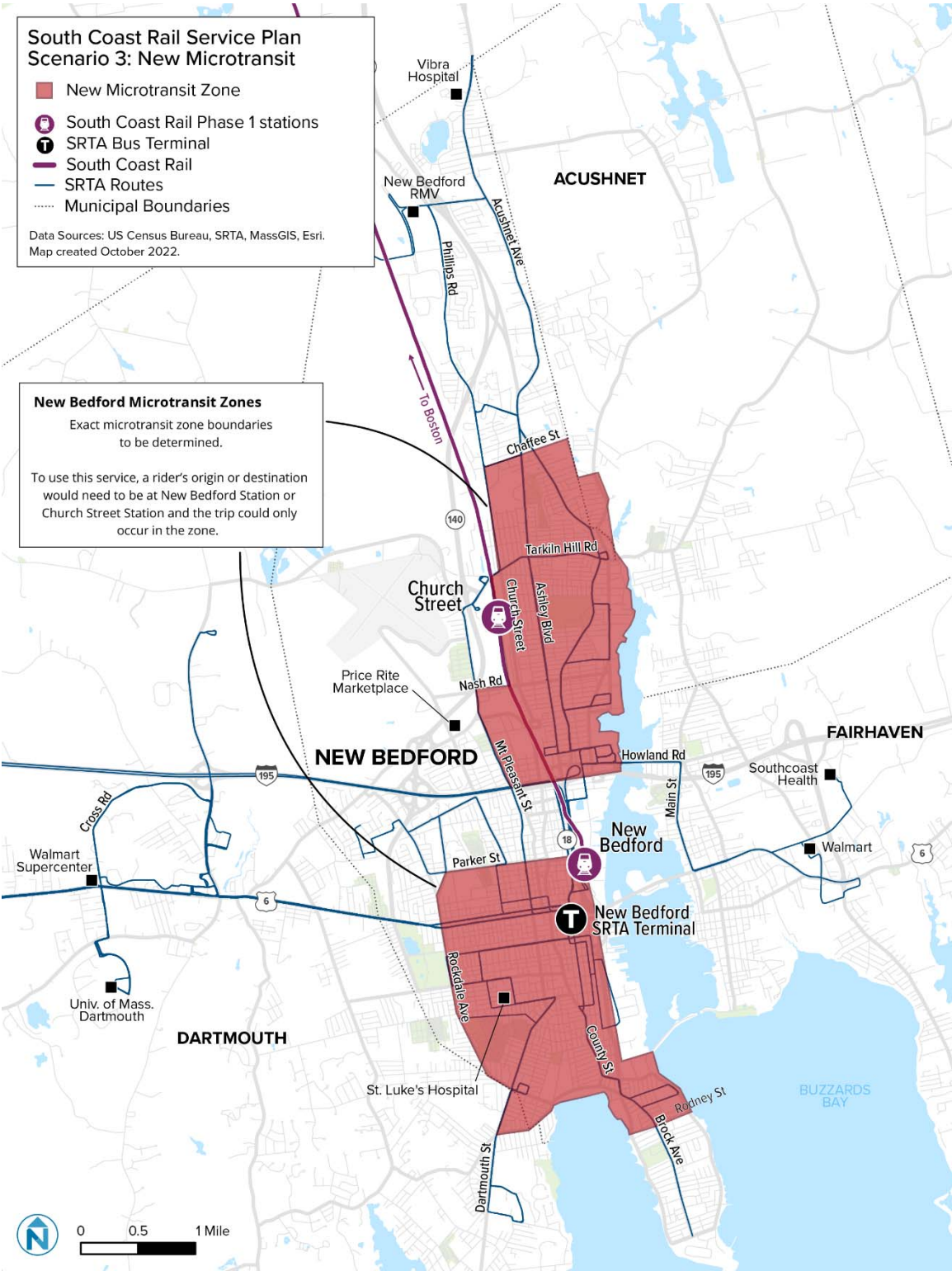
Figure 3-5 Map of Scenario 3 Microtransit Zone in Fall River



South Coast Rail Service Plan | Final Report

Southeastern Regional Transit Authority

Figure 3-6 Map of Scenario 3 Microtransit Zones in New Bedford



4 OUTREACH SUMMARY

Public engagement conducted as part of the SCRSP occurred in October 2022, with a separate focus on Fall River and New Bedford. The purpose of this engagement was to present the three scenarios and receive feedback from the public on which type of SCR service they liked or did not like, and why. Key findings from engagement are:

Fall River Engagement:

- Support for using the existing system to connect to SCR stations, especially by operating the whole system earlier in the morning and later at night.
- Desire for connections to park-and-ride lots so suburban travelers can park for free and ride a SRTA bus to and from SCR.
- Support for direct shuttle service from the Fall River bus terminal to Fall River Depot station.
- Some concern that Somerset and Swansea residents will not have access to SCR via SRTA bus service.

New Bedford Engagement:

- Concerns that future rider volumes may overwhelm a microtransit system.
- Concerns regarding lack of coverage across New Bedford by proposed microtransit system and new connector routes.
- Support for additional service earlier in the morning and later at night.
- Concerns regarding routing SRTA buses on Brooklawn Avenue.
- Highlights on the importance of SCR station access for people with disabilities that ride SRTA.
- Desire for additional parking at New Bedford station.

PUBLIC ENGAGEMENT

The SCRSP used two primary public engagement tools: public meetings and an online survey. This engagement occurred in October and November of 2022. The online survey was launched prior to and remained open after the public meetings. These engagements and their outcomes are described in detail below.

Public Meetings

The SCRSP team held two public meetings to gather input on SRTA's SCR service scenarios: one in Fall River and one in New Bedford. These meetings were held in public meeting rooms during the week of October 24.

Four boards were presented at each public meeting. One board included a project overview and a QR code to the online survey. The other three boards included an activity in which participants could place a red or green dot indicating if they liked or disliked a scenario.

Flyers advertising the public meetings were posted one week ahead of time in SRTA's terminals and on fixed-route buses. These flyers were translated into Haitian Creole, Spanish, and Portuguese. The meetings were also advertised on SRTA's social media accounts and website, and were shared via e-mail by SCR staff.

Fall River Public Meeting

The Fall River public meeting for the SCRSP was held at the Fall River Government Center in Downtown Fall River, on Monday, October 24th at 5:00 p.m. The meeting was held in an open forum setting allowing attendees to review public meeting boards, participate in the meeting board activity, and provide direct feedback on scenarios to the consultant team and SRTA staff. Approximately ten community members attended and a Spanish-speaking SRTA staff member was present.


Feedback

The boards presented at the meeting are in Figure and photographs of the boards after dots were placed are in Appendix B. Dot placement indicated that most community members preferred Scenario 3, a new microtransit zone in Fall River that would connect riders to Fall River Depot Station.

South Coast Rail Service Plan | Final Report

Southeastern Regional Transit Authority

Figure 4-1 Fall River Public Meeting Boards



WHAT IS THE SOUTH COAST RAIL SERVICE PLAN?

South Coast Rail is coming to Fall River and we want to know how SRTA should help you get to and from South Coast Rail stations.

What is South Coast Rail?
South Coast Rail will add MBTA Commuter Rail service between Boston and Taunton, Fall River, and New Bedford. Phase 1 construction is under way and will restore service to the region by the end of 2023.

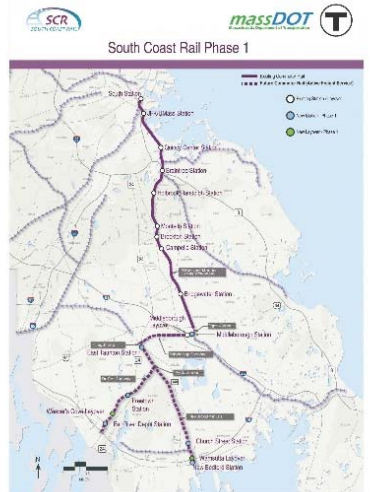
About the SRTA South Coast Rail Service Plan
This public meeting shares information on three different ideas for serving future South Coast Rail stations, and asks for your feedback on what you like and don't like about each idea. These ideas are not final decisions.

Scenario One - Deviations and special trips on existing SRTA routes

Scenario Two - New connector routes that go directly to and from stations

Scenario Three - New demand-response service

How Can You Provide Input?
Click to start this meeting or take the survey by scanning the QR code or going to this webpage: survey.monkey.com/r/SRTASCR1



South Coast Rail Phase 1

Fall River SCENARIO 1

DEVIATIONS AND SPECIAL TRIPS ON EXISTING SRTA ROUTES

In this scenario, existing SRTA routes would deviate off their regular route to serve South Coast Rail stations only when a train is arriving or departing.

What routes would go to South Coast Rail Stations?

Fall River Depot Station
Route FR2 would serve this station but would not change its current route, so people transferring between South Coast Rail and Route FR2 would walk about 1,000 feet to and from stops on N Main Street at Pearce Street.

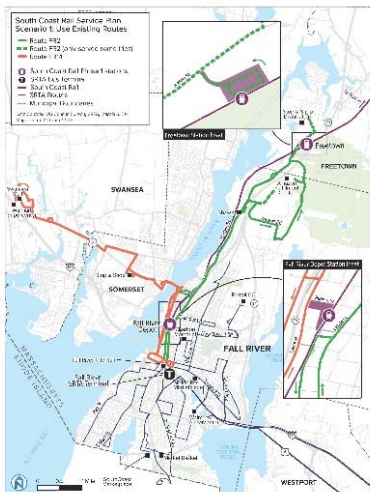
All outbound Route FR14 trips would use Davol Street instead of Route 79/ Western Fall River Expressway, stopping at the station. Inbound FR14 would not change its route, so people transferring between South Coast Rail and inbound Route FR14 would walk about 1/4 mile or so from stops on Davol Street at President Avenue.

Freetown Station
Route FR2 would drive into the Freetown Station parking lot to connect with South Coast Rail arrivals and departures.

When would these routes run?
Routes serving South Coast Rail stations would run from 4:00 AM to 10:30 PM. Some other SRTA routes would begin operating at approximately 4:15 AM or later, at approximately 10:00 PM. Riders could transfer at the SRTA Fall River Terminal to buses connected with the first train to or last train from Freetown.

What do you think of Scenario 1?

I Like This Idea
I Don't Like This Idea



South Coast Rail Service Plan Scenario 1: Use Existing Routes

Fall River SCENARIO 2

NEW CONNECTOR ROUTE THAT GOES DIRECTLY TO AND FROM FALL RIVER DEPOT STATION

In this scenario, there would be a new bus route in Fall River that connects select neighborhoods to Fall River Depot Station.

What routes would go to South Coast Rail Stations?

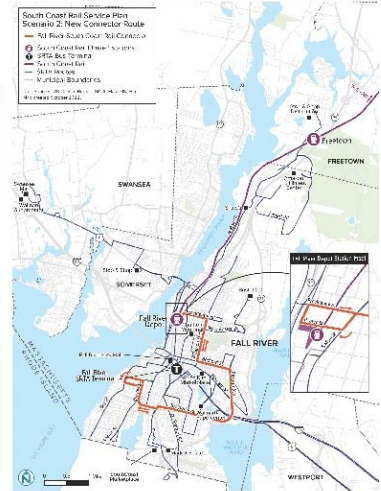
Fall River Depot Station
In Fall River, there would be a new route called the Fall River South Coast Rail Connector. The route would operate in several neighborhoods, on Sprague Street, Broadway, Globe Street, Brayton Avenue, Eastern Avenue, Bedford Street, Roberson Street, and President Avenue.

Routes FR2 and FR14 could also be used to access stations, although their operating hours would not change from today.

When would the new route run?
The new Fall River South Coast Rail Connector would arrive at Fall River Depot Station 10 minutes before each train's departure and would depart the station five minutes after each train arrival.

What do you think of Scenario 2?

I Like This Idea
I Don't Like This Idea



South Coast Rail Service Plan Scenario 2: New Connector Route

Fall River SCENARIO 3

NEW DEMAND-RESPONSE SYSTEM

In this scenario, there would be new demand-response service in Fall River that allows riders to reserve a trip to and from Fall River Depot Station. Riders would call or use an app to reserve a trip.

What routes would go to South Coast Rail Stations?

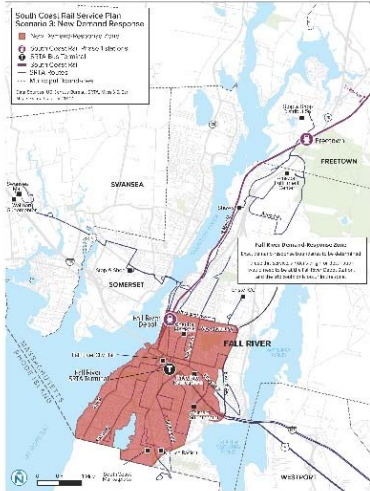
Fall River Depot Station
The new demand-response zone would include most of Fall River south of President Avenue and west of Eastern Avenue and Jefferson Street. To use this service, a rider's origin or destination would need to be at the Fall River Depot Station, and the trip could only occur in the zone.

Routes FR2 and FR14 could also be used to access stations, although their operating hours would not change from today.

When would the new demand response service run?
Service would be available one hour before the first South Coast Rail train departs, and an hour after the last South Coast Rail train arrives.

What do you think of Scenario 3?

I Like This Idea
I Don't Like This Idea



South Coast Rail Service Plan Scenario 3: New Demand-Response

South Coast Rail Service Plan | Final Report

Southeastern Regional Transit Authority

Project staff had several long conversations with attendees. Highlights from these conversations are below.

GENERAL

- One attendee suggested the market analysis be more inclusive and count all workers living in the SRTA service area that work within ½-mile of any train service that connects to South Station.
- There were several comments regarding SCR service times and locations, which are outside the purview of this project, as SRTA has little to no influence over SCR operations.
- There were several comments about aspects of service not directly related to the SCRSP; these comments were noted and transmitted to SRTA staff.
- One attendee wanted to know how SRTA would serve SCR stations on Sundays and how the driver shortage impacts potential SCR service.
- One attendee suggested SRTA better advertise public meetings and service changes using social media; put up flyers two weeks before public meetings on buses and at transit centers; and that more posters be used at transit centers, both inside and outside. The attendee also suggested posters be placed at public libraries and at major bus stops, and that posters be removed immediately after events.
- One attendee suggested keeping SRTA routes as-is, and only providing an express shuttle service from the SRTA Fall River Terminal to Fall River Depot Station (similar to the Downtown Middleborough Shuttle).
- There were several comments regarding the number of parking stalls at each SCR station.
- One attendee provided a draft bus schedule, train schedule recommendations, park-and-ride recommendations, and turn-by-turn directions for new bus routes that would serve SCR stations.
- There were several comments regarding building new park-and-rides in Somerset.

SCENARIO 1

- Some attendees considered this the best scenario, as it would benefit far more people than only SCR riders.
- There were concerns that the FR14 southbound stop is too far from the Fall River Depot Station, and a suggestion that the route should turn around under Route 79 to serve the station on Davol Street northbound.

South Coast Rail Service Plan | Final Report

Southeastern Regional Transit Authority

- There were several comments regarding Route FR14 serving the Somerset park-and-ride on Route 103.
- One attendee was concerned that many current and future riders may not feel safe at transit stops or park-and-rides late at night or early in the morning.
- One attendee suggested having two buses running between SRTA Fall Terminal and the Fall River Depot Station.
- One attendee suggested deviating a route onto President Avenue and Robeson Street.

SCENARIO 2

- Several attendees suggested the Connector route serve the SRTA Terminal.
- One attendee suggested that serving the Fall River Depot Station via Turner Street and Davol Street northbound is better than serving the station via Pearce Street. Pearce Street may be difficult for buses to navigate and some riders may not like walking up the ADA-accessible ramp to the station. In addition, turning the route around on Bradford Avenue, around Kennedy Park, may be a better option than the current concept.
- One attendee identified the importance of ensuring the naming of a route serving the SCR station be clear and easy to read on a headsign.
- One attendee recommended serving Plymouth Avenue with a new connector route, as there is a lot of pedestrian activity along this street during the day.

SCENARIO 3

- One attendee appreciated this concept because it appeared to be a lower operating and capital cost than Scenario 1.
- One attendee recommended only providing microtransit to and from stations for people who meet ADA requirements.
- There were several comments from attendees concerned about large numbers of people using this service, and those volumes reducing the quality of service for people with disabilities.

New Bedford Public Meeting

The New Bedford public meeting was held at the Wilks Branch of the New Bedford Public Library on Tuesday, October 25th at 5:00 p.m. The meeting was held in an open forum setting, allowing attendees to review public meeting boards, participate in the meeting board activity, and provide direct feedback on scenarios to the consultant team

South Coast Rail Service Plan | Final Report

Southeastern Regional Transit Authority

and SRTA staff. Approximately eight community members attended and a Spanish-speaking SRTA staff member was present.

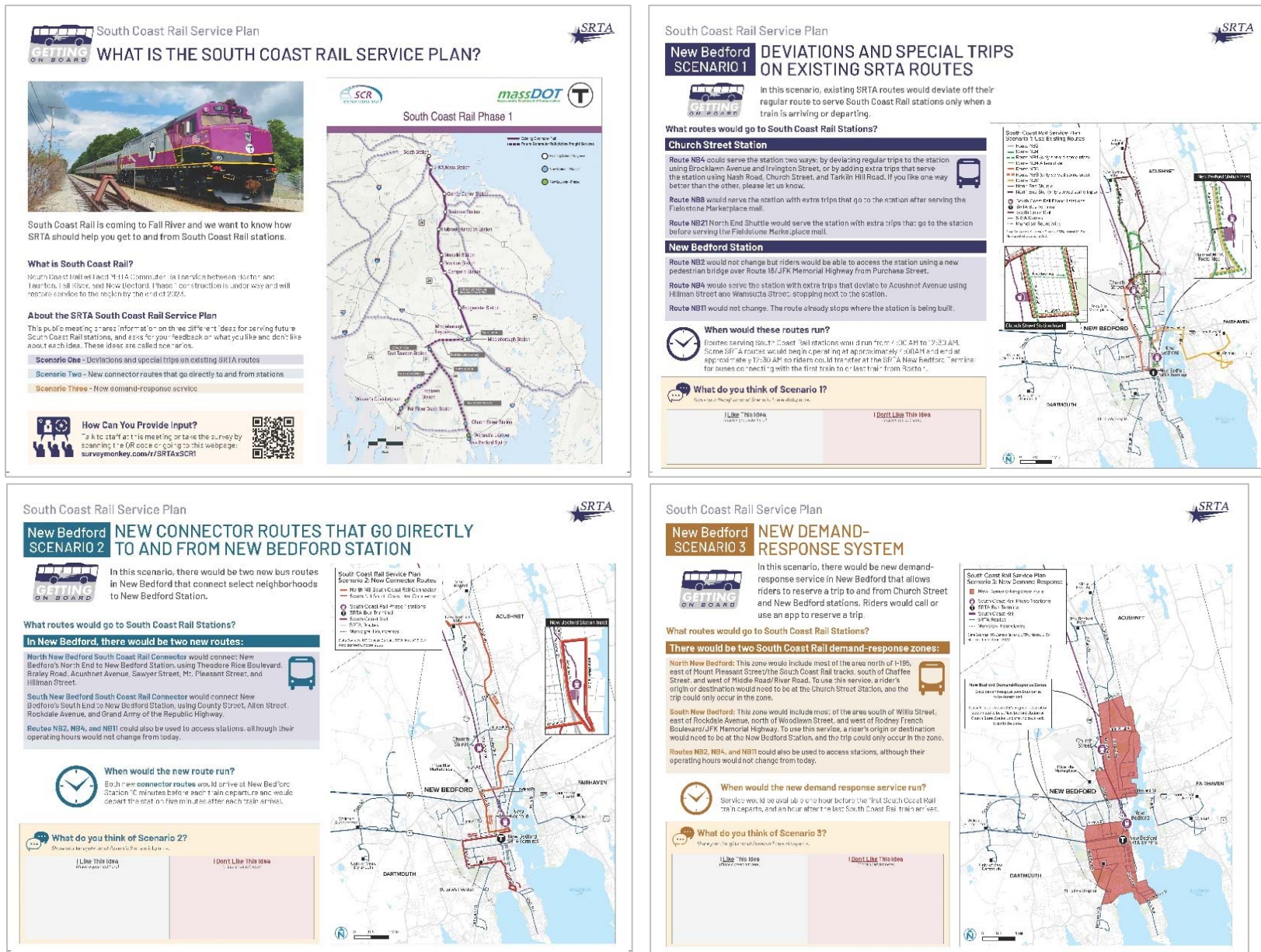
Feedback

The boards presented at the meeting are in Figure and photographs of the boards after dots were placed are in Appendix B. Dots placed on the boards indicate most community members preferred Scenario 2, new SCR Connector routes that go directly to and from New Bedford SCR stations.

South Coast Rail Service Plan | Final Report

Southeastern Regional Transit Authority

Figure 4-2 New Bedford Public Meeting Boards



South Coast Rail Service Plan | Final Report

Southeastern Regional Transit Authority

Project staff had several long conversations with attendees. Highlights from these conversations are below.

GENERAL

- One attendee thought all buses should go directly to the platform at SCR stations, so people with limited mobility wouldn't have to walk to/from the street.
- There was general support for park-and-ride options that would allow people to avoid paying for parking at SCR stations. The DATTCO park-and-ride was suggested as an option, as were state buildings near the Registry of Motor Vehicles in the North End.
- One attendee suggested another SCR station be built north of Church Street.
- One attendee suggested Commuter Rail service from New Bedford to Providence.
- One attendee expressed concerns about future train cancellations. They also recommended providing bus service from New Bedford to East Taunton so New Bedford and Fall River riders could access trains from either city if a train is delayed or cancelled.
- One attendee thought there wouldn't be enough parking at New Bedford Station during summer months due to increased ferry service and riders.
- One attendee expressed concerns about local taxes increasing due SCR.
- Attendees were concerned there is not enough parking at either station.

SCENARIO 1

- Attendees were concerned that operating any buses on Brooklawn Avenue would run into school-time congestion from parents dropping off and picking up, and from school buses.
- One attendee thought it was best for buses to serve Church Street Station southbound only.
- One attendee noted that Irvington Street is a one-way westbound.
- One attendee recommended having an express shuttle from the SRTA New Bedford Terminal to New Bedford Station.
- One attendee was concerned about UMass Dartmouth students not having direct access to SCR stations.

SCENARIO 2

- One attendee suggested the northern route serve Church Street Station and the southern route be extended to serve more of Brock Avenue.

- One attendee recommended expanding the north SCR Connector further north on Acushnet Avenue.

SCENARIO 3

- Attendees were concerned about the cost and usefulness of this option.
- One attendee suggested expanding the North End zone further north.

Online Survey

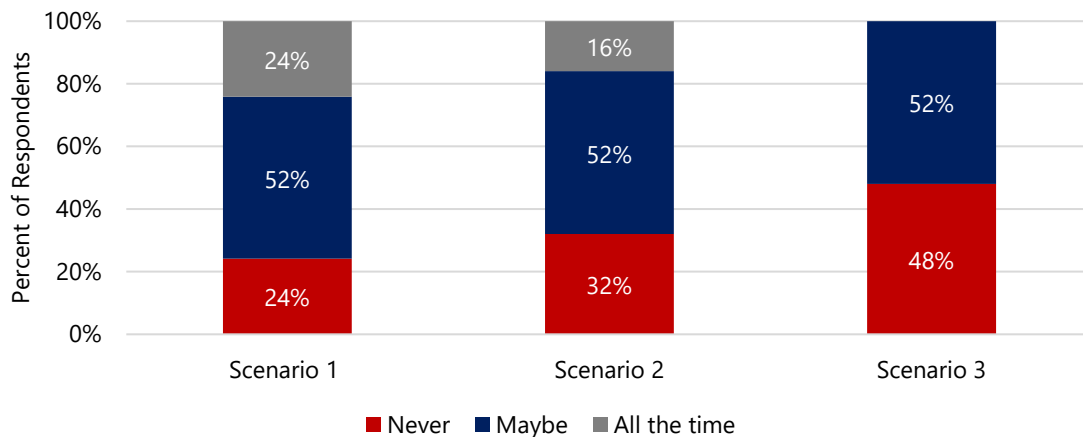
To obtain feedback from a larger group of riders and community members, an online survey was produced. The survey was built in SurveyMonkey and open to the public from October 17 through November 3, 2022. The survey was promoted via social media, public meetings, posters/flyers, and SRTA’s website. Respondents could take the survey in English, Haitian Creole, Spanish, or Portuguese.

Survey Results

The survey received 49 total responses and most surveys were taken in English.

Of the three scenarios, Scenario 1 and Scenario 2 were most likely to be used “All the time” or “Maybe” by respondents (Figure). Scenario 3 is most likely to “Never” be used.

Figure 4-3 Preferred Scenario for Travel to and from South Coast Rail Stations

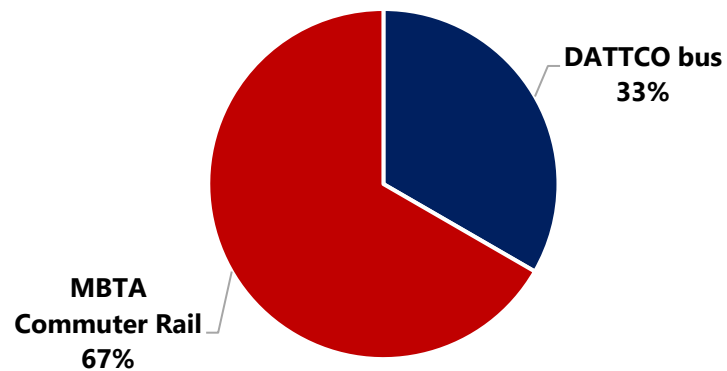


Of the 49 responses, only nine survey respondents reported they currently use existing non-SOV modes of transportation to commute to points north, with most of those respondents reporting they currently use MBTA Commuter Rail services (Figure).

South Coast Rail Service Plan | Final Report

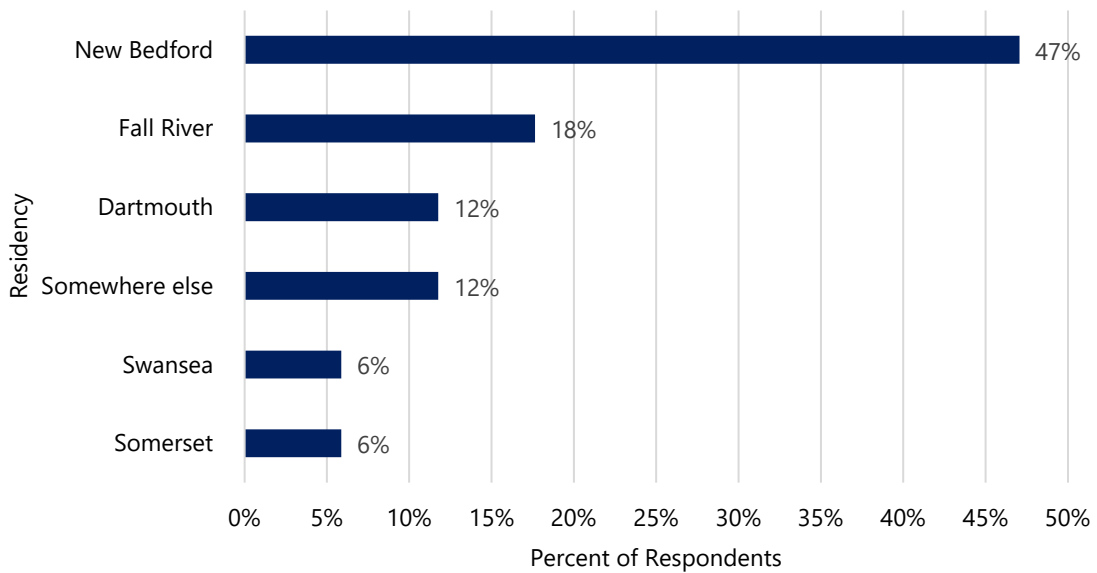
Southeastern Regional Transit Authority

Figure 4-4 Existing Use of Non-SOV Mode for Travel to Points North



Almost half of survey respondents live in New Bedford (Figure 4-5). Respondents that indicated that they live "Somewhere else" live in Cambridge and Easton.

Figure 4-5 Residency

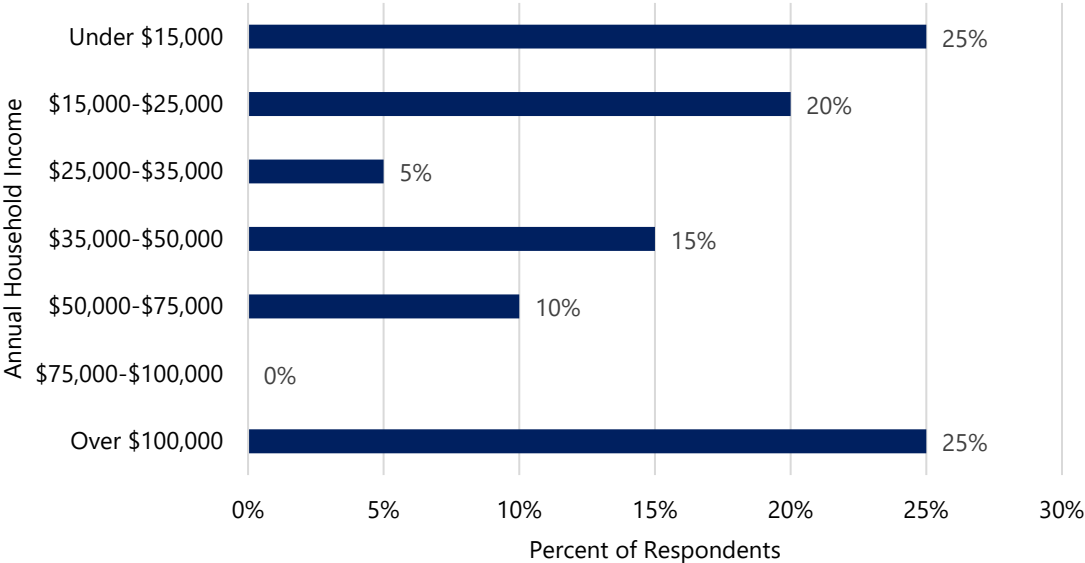


South Coast Rail Service Plan | Final Report

Southeastern Regional Transit Authority

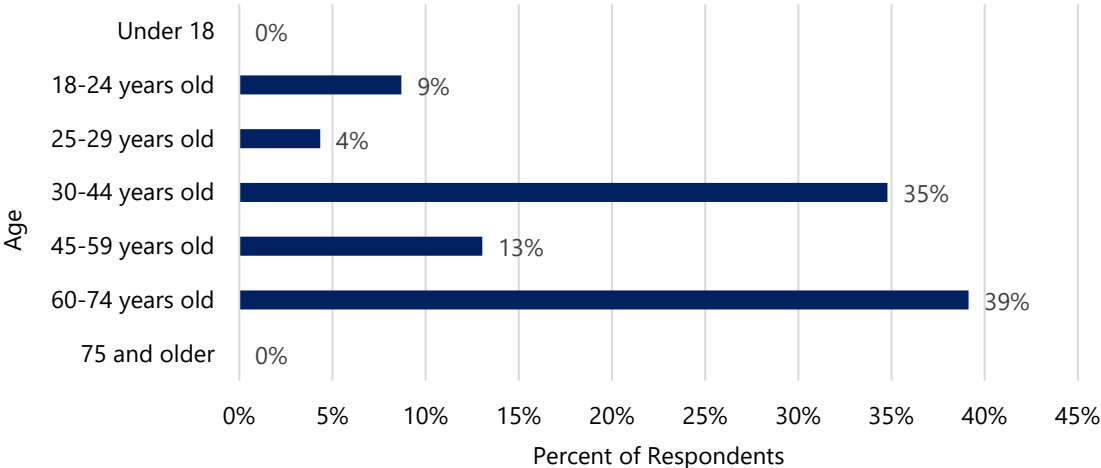
Respondents reported a range of annual household incomes, with most falling under \$50,000 per year (Figure 4-6).

Figure 4-6 Annual Household Income



All survey respondents were between 18 and 74 years old (Figure 4-7).

Figure 4-7 Age Group

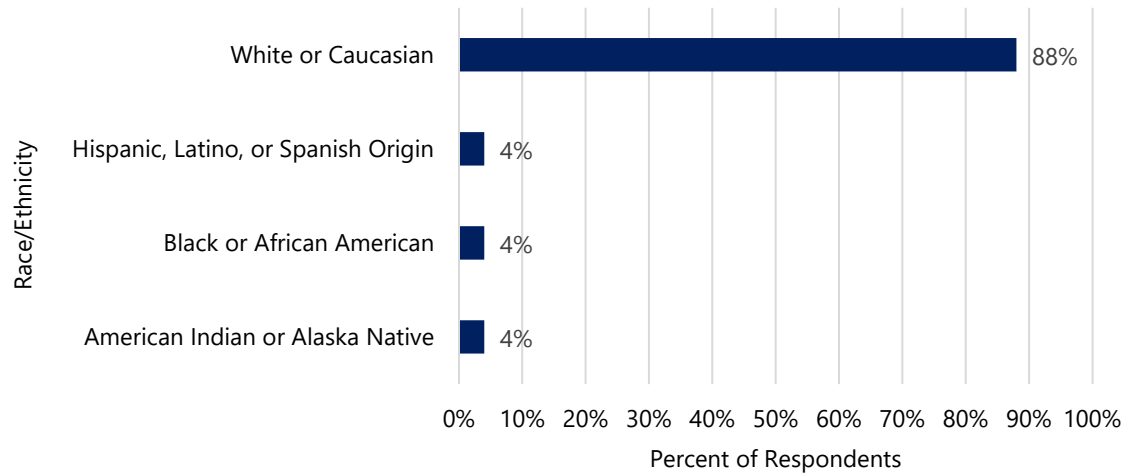


South Coast Rail Service Plan | Final Report

Southeastern Regional Transit Authority

Most respondents identified as White or Caucasian. The remaining respondents were evenly split among Hispanic, Latino, or Spanish origin; Black or African American; and American Indian or Alaska Native groups (Figure 4-8).

Figure 4-8 Race/Ethnicity



Open-ended responses to survey questions from this engagement period are in Appendix E. These responses were mixed, although several themes appeared:

- Service should be well-timed with SCR trains.
- Service to SCR stations should be well-matched with the markets of riders that will be using SCR.
- Microtransit zones may not be a good way to serve a large amount of people.

5 SCENARIO RESOURCE ESTIMATION

SUMMARY

SRTA does not have the resources to operate any of the three scenarios in this plan. To assess what resources would be required, the study team estimated the annual operating cost and one-time capital costs (in terms of vehicles) for each scenario, based on the number of revenue hours, revenue miles, and peak vehicles SRTA would need to add in each scenario.

In general, Scenario 1 would be the costliest scenario, followed by Scenario 3, and then by Scenario 2 (Figure 5-1). The cost estimates are somewhat conservative; each scenario could be operated at a lower cost, which would degrade the quality of service offered to the public.

Figure 5-1 Scenario Cost Estimates

	One-Time Capital Costs	Annual Operating Costs
Scenario 1	\$14,000,000	\$9,740,000
Scenario 2	\$7,000,000	\$3,120,000
Scenario 3	\$1,085,000	\$6,380,000

Estimate methods and more detailed cost breakdowns are below.

METHODS

Methods and assumptions for cost estimates are described below. In general, these cost estimates are somewhat conservative, introducing a tolerance that may accommodate potential near-term inflation or changes in cost structures. Throughout the analysis, costs are assumed in 2022 dollars.

South Coast Rail Schedules

A key assumption for all cost estimates were the projected SCR schedules, as scenarios were designed to serve all SCR train arrivals and departures. Because the MBTA has yet to determine SCR schedules, the study team developed placeholder weekday and Saturday schedules for SCR, in consultation with MassDOT and the MBTA. These schedules used reasonable assumptions for travel times and were based on the current Middleborough/Lakeville Commuter Rail schedules.³

Operating Costs

Operating costs for the three scenarios were estimated based on SRTA’s existing three-point cost model. This approach divides costs by mode and into three types: per-revenue-hour, per-revenue-mile, and peak-vehicle costs. For each scenario, the estimated revenue hours, revenue miles, and count of vehicles in peak service were multiplied by the values in Figure 5-2, and then summed.⁴

Figure 5-2 Assumed Operating Costs

Mode	Cost per Revenue Hour	Cost per Revenue Mile	Cost per Vehicle in Peak Service
Fixed-Route	\$74.57	\$3.84	\$68,168
Demand Response	\$70.67	\$2.84	\$43,950

³ As an example of how these schedules were developed, it was assumed that it would take a SCR train approximately 32 minutes to travel from New Bedford Station to Middleborough Station. Therefore, to estimate when a SCR train would depart from New Bedford Station, 32 minutes was subtracted from the existing Commuter Rail scheduled departure from Middleborough/Lakeville.

⁴ Because SRTA’s three-point operating cost model is based on existing service and budget, this approach to cost estimation for future, higher levels of service likely results in a conservative estimate of costs, particularly as part of the peak-vehicle factor. Peak vehicle costs include considerable overhead costs that are spread over the entire fleet (e.g., snow removal costs for vehicle storage facility), and likely would not change (or would change very little) under a SCRSP implementation.

Capital Costs

One-time capital costs were estimated for vehicle purchases. These costs are based on recent agency experience and reflect the gross cost of the vehicle. The cost to SRTA may be considerably lower, assuming state or federal grant support for vehicle purchases. Heavy-duty transit buses were assumed to be electric, in accordance with state climate goals.⁵

Figure 5-3 Assumed Vehicle Costs

Vehicle Type	Cost Estimate	Assumed Useful Life (years)	Notes
Heavy-duty transit bus	\$1,000,000	12	Assumed to be battery electric.
Low-floor van	\$155,000	7	Assumed to be ADA accessible.

SCENARIO COSTS

Scenario 1

Scenario 1 costs were estimated by building approximate schedules for all routes with tripper service, extending the span of service for select other routes, and increasing the span of service for demand-response. It is estimated this service would require 10 additional heavy-duty transit buses for New Bedford trippers and four additional heavy-duty transit buses for Fall River trippers (Figure 5-4 **Error! Reference source not found.**). Assuming effective interlining, it is likely possible to reduce these vehicle requirements.

Figure 5-4 Scenario 1 One-Time Capital Cost Estimates by City and Mode

City	Mode	Estimated Vehicles Needed	Estimated One-Time Capital Cost
New Bedford	Fixed Route	10	\$10,000,000
Fall River	Fixed Route	4	\$4,000,000
New Bedford	Demand Response	-	-
Fall River	Demand Response	-	-
	<i>Total</i>	<i>14</i>	<i>\$14,000,000</i>

⁵ Massachusetts Executive Office of Energy and Environmental Affairs. December 2022. Clean Energy and Climate Plan for 2050. <<https://www.mass.gov/doc/2050-clean-energy-and-climate-plan/download>>

South Coast Rail Service Plan | Final Report

Southeastern Regional Transit Authority

Scenario 1 service in New Bedford is estimated to cost more than Fall River service, for both trippers and span of service expansions, as well as increased demand-response service to meet ADA paratransit requirements (Figure 5-5). Two demand-response vehicles were assumed to operate during expanded hours of service in Fall River and New Bedford (for a total of four vehicles) to meet ADA paratransit requirements.

Figure 5-5 Scenario 1 Annual Operating Cost Estimates by City and Mode

City	Mode	Additional Annual Operating Cost
New Bedford	Fixed Route	\$5,520,000
Fall River	Fixed Route	\$3,630,000
New Bedford	Demand Response	\$350,000
Fall River	Demand Response	\$240,000
<i>Total</i>		<i>\$9,740,000</i>

Scenario 2

Scenario 2 costs were estimated by building schedules for the SCR Connector routes and expanding the span of service for demand-response. It is estimated this scenario would require five total additional heavy-duty transit buses to operate the two New Bedford SCR Connector routes, and two additional heavy-duty transit buses to operate the Fall River SCR Connector route (Figure 5-6).

Figure 5-6 Scenario 2 One-Time Capital Cost Estimates by City and Mode

City	Mode	Estimated Vehicles Needed	Estimated One-Time Capital Cost
New Bedford	Fixed Route	5	\$5,000,000
Fall River	Fixed Route	2	\$2,000,000
New Bedford	Demand Response	-	-
Fall River	Demand Response	-	-
<i>Total</i>		<i>7</i>	<i>\$7,000,000</i>

South Coast Rail Service Plan | Final Report

Southeastern Regional Transit Authority

Scenario 2 service in New Bedford is estimated to cost more than Fall River service, for both the SCR Connector routes and the increased demand-response service to meet ADA paratransit requirements (Figure 5-7). Two demand-response vehicles were assumed to operate during expanded hours of service in Fall River and New Bedford (for a total of four) to meet ADA paratransit requirements.

Figure 5-7 Scenario 2 Annual Operating Cost Estimates by City and Mode

City	Mode	Additional Annual Operating Cost
New Bedford	Fixed Route	\$1,690,000
Fall River	Fixed Route	\$830,000
New Bedford	Demand Response	\$350,000
Fall River	Demand Response	\$240,000
<i>Total</i>		<i>\$3,120,000</i>

Scenario 3

Scenario 3 costs were estimated by assuming four microtransit vehicles would operate in New Bedford to provide SCR connections (two in each New Bedford zone) and three would operate in Fall River (Figure 5-8).

Figure 5-8 Scenario 3 One-Time Capital Cost Estimates by City and Mode

City	Mode	Estimated Vehicles Needed	Estimated One-Time Capital Cost
New Bedford	Fixed Route	-	-
Fall River	Fixed Route	-	-
New Bedford	Demand Response*	4	\$620,000
Fall River	Demand Response*	3	\$470,000
<i>Total</i>		<i>7</i>	<i>\$1,090,000</i>

* There are microtransit vehicles.

South Coast Rail Service Plan | Final Report

Southeastern Regional Transit Authority

Scenario 3 service in New Bedford is estimated to cost more than Fall River service, given the higher number of microtransit vehicles (Figure 5-9). Each microtransit vehicle in Scenario 3 is assumed to operate seven days a week during the following span of service:

- Fall River weekdays: 3:30 a.m. to 10:45 p.m.
- Fall River weekends: 6:00 a.m. to 1:30 a.m.
- New Bedford weekdays: 3:30 a.m. to 1:30 a.m.
- New Bedford weekends: 3:30 a.m. to 11:00 p.m.

Figure 5-9 Scenario 3 Annual Operating Cost Estimates by City and Mode

City	Mode	Additional Annual Operating Cost
New Bedford	Fixed Route	-
Fall River	Fixed Route	-
New Bedford	Demand Response*	\$3,790,000
Fall River	Demand Response*	\$2,590,000
	<i>Total</i>	<i>\$6,380,000</i>

*In this scenario, this represents microtransit service.

6 TITLE VI ANALYSIS

SUMMARY

This plan includes a Title VI assessment of the service scenarios, to identify any potential disparate impact to racial/ethnic minorities or disproportionate burden on low-income people in SRTA’s service area.

Because each SCRSP scenario proposes only additions in service, and the resources under which this service would be available are assumed to only be available to serve SCR, there are likely no adverse effects of these scenarios, as they would only improve transit service. That being said, to assess the racial/ethnic and income-related implications of the proposed distribution of service, a Title VI service equity analysis was conducted for each scenario.

The service equity analysis found that all three scenarios would increase the overall percent of the served population that is minority or low-income (Figure). Scenario 1 had the least impact, and would only marginally increase the proportion of the served population that is minority or low-income, while Scenario 2 had the largest impact; implementing this scenario would increase the percent of the served population that is minority by 18%, and the percent of the served population that is low-income by 15%.

There is likely no disparate impact or disproportionate burden that would be caused by the SCRSP scenarios.

Figure 6-1 Percent Change in Percent of Population Served That Is Minority or Low-Income

Scenario	Minority	Low-Income
Scenario 1	+3%	+1%
Scenario 2	+18%	+15%
Scenario 3	+13%	+11%

TITLE VI REQUIREMENTS

Title VI of the Civil Rights Act of 1964 requires that “no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be

denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance". This provision of the Civil Rights Act is followed by agencies that receive federal financial assistance, which includes SRTA. The guiding document that describes the requirements of the Title VI program and establishes rules federal funding recipients must follow is the FTA circular FTA C 4702.1B.⁶ SRTA's guiding Title VI document is its 2022 Title VI Program.⁷

Per FTA C 4702.1B, SRTA must conduct equity analyses for all permanent fare changes and service changes that exceed the major service change threshold. Under SRTA's Title VI Program, a major service change is defined as one in which an individual fixed route's or the full fixed-route system's daily revenue mileage is permanently increased or decreased by more than 25%, or in which a demand-response service area's size or daily span of service is permanently increased or decreased by more than 25%. Although only Scenario 1 and Scenario 2 (by certain measures) meet these criteria, all three scenarios are assessed for Title VI impacts in this analysis, given that they all involve considerable increases in service.

RESULTS

Methods

Per the FTA's Title VI circular, the service equity analysis carried out here looks at potential adverse effects, "...measured by the change between the existing and proposed service levels...."⁸ The analysis looks at the percent of the existing SRTA service area's population that is minority and low-income, and compares that to the proposed percent of the service area's population that is minority and low-income.

These demographics are assessed using geographic information systems analysis that drew a ¼-mile buffer around fixed-route bus service and then considered the population in that buffer to be the population served. Because population data were drawn from census block group-level geographies, the population was selected from census block groups using area weighting (e.g., if 30% of a census block group of 1,000 people fell within the ¼-mile buffer of a route, the population served was considered 300 people).

⁶ FTA. October 1, 2012. Title VI Requirements and Guidelines for Federal Transit Administration Recipients. <https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Title_VI_FINAL.pdf>

⁷ SRTA. February 24, 2022. Title VI Program. <https://www.srtabus.com/wp-content/uploads/SRTA_TitleVIProgram_2022_FinalAppendix_20220331.pdf>

⁸ FTA. October 1, 2012. Title VI Requirements and Guidelines for Federal Transit Administration Recipients. p. IV-13. <https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Title_VI_FINAL.pdf>

South Coast Rail Service Plan | Final Report

Southeastern Regional Transit Authority

The analysis used U.S. Census Bureau 2021 five-year American Community Survey estimates from tables B03002 and B17021.

This analysis is considered a conservative approach to Title VI service equity analysis, as there are no obvious adverse impacts of providing more transit service. All three scenarios proposed in the SCRSP would be entirely additive, and would not result in any SRTA service being reduced. In addition, SRTA only plans to implement these changes if additional resources are made available—resources that would not be made available for other service improvements. SRTA considers it prudent to conduct the Title VI service equity analyses regardless of the lack of adverse impacts, however, as the agency wants to ensure its service changes do not result in an inequitable distribution of new transit resources. In other words, SRTA does not want the SCRSP to benefit white and non-low-income populations at a greater proportion than its existing system does.

Scenario 1

Scenario 1 proposes new tripper service to SCR stations and extending the hours of several routes that would connect to routes serving SCR stations, allowing people to make first- and last-mile fixed-route connections to SCR for every planned train.⁹ This scenario is a considerable service increase, but primarily improves frequency and span, meaning the population—and its demographics—served between the existing and proposed scenarios are quite similar. Under Scenario 1, approximately 3% more of the population served would be a racial/ethnic minority, and approximately 1% more would be low-income (Figure). Because this change would increase the percent of potential riders that are minority or low-income, this scenario would not produce a disparate impact or disproportionate burden.

Figure 6-2 Percent Change in Percent of Served Population, Title VI Demographics

Demographic	Existing Service	Scenario 1 Service	Percent Difference
Racial/Ethnic Minority	34%	35%	+3%
Low-Income	18%	19%	+1%

⁹ This scenario would also include an increase in the demand-response span of service to meet ADA paratransit requirements, but this is not analyzed here as demand-response is available service-area wide in both existing and proposed scenarios, so there is no change in population served.

South Coast Rail Service Plan | Final Report

Southeastern Regional Transit Authority

Although changes to service on individual routes do not all meet the definition of a major service change, Figure shows the percent of population served by each route that is a racial/ethnic minority or low-income, which allows for greater granularity in understanding the Title VI implications of service improvements to each route.

Figure 6-3 Percent of People Served in Scenario 1 That Are Minority and Low Income, by Route

City	Route	Improvement Type	Percent of Served Pop. That Is Minority	Percent of Served Pop. That Is Low-Income
Fall River	FR1	Extended Span	36%	24%
	FR2		28%	22%
	FR5		31%	19%
	FR8		23%	16%
	FR14		26%	22%
	FR2	Trippers	29%	23%
	FR14		25%	22%
New Bedford	NB1	Extended Span	49%	21%
	NB2		47%	27%
	NB3		41%	15%
	NB4		45%	27%
	NB2	Trippers	47%	27%
	NB4		45%	27%
	NB4 (Short-Turn)		49%	29%
	NB8		50%	24%
	NB11		43%	25%
	NB21 NES		22%	11%
<i>Overall</i>			35%	19%

Scenario 2

Scenario 2 proposes three new fixed bus routes that would provide connections to SCR stations for every planned train.¹⁰ This scenario expands the population with access to fixed-route transit by providing service to new places. Under Scenario 2, the percent of

¹⁰ This scenario would also include an increase in the demand-response span of service to meet ADA paratransit requirements, but this is not analyzed here as demand-response is available service-area wide in both existing and proposed scenarios, so there is no change in population served.

South Coast Rail Service Plan | Final Report

Southeastern Regional Transit Authority

people served that are racial/ethnic minorities would increase by about 18%, and the percent of people served that are low-income would increase by about 15%. Because this change would increase the percent of potential riders that are minority or low-income, this scenario would not produce a disparate impact or disproportionate burden.

Figure 6-4 Percent Change in Percent of Served Population, Title VI Demographics

Demographic	Existing Service	Scenario 2 Service	Percent Difference
Racial/Ethnic Minority	34%	40%	+18%
Low-Income	18%	21%	+15%

Figure shows the percent of population served by each proposed new route that is a racial/ethnic minority or low-income, which allows for greater granularity in understanding the Title VI implications of service improvements.

Figure 6-5 Percent of People Served in Scenario 2 That Are Minority and Low Income, by Route

Route/City	Percent of Served Pop. That Is Minority	Percent of Served Pop. That Is Low-Income
Fall River South Coast Rail Connector	45%	23%
North New Bedford South Coast Rail Connector	50%	20%
South New Bedford South Coast Rail Connector	33%	22%
<i>Overall</i>	<i>40%</i>	<i>21%</i>

Scenario 3

Scenario 3 proposes three new microtransit zones that would provide connections to SCR stations. This scenario expands the population with access to transit by providing open-access (i.e., no eligibility requirements) microtransit service in large parts of Fall River and New Bedford. Under Scenario 3, the percent of people served that are racial/ethnic minorities would increase by about 13%, and the percent of people served that are low-income would increase by about 11%. Because this change would increase the percent of potential riders that are minority or low-income, this scenario would not produce a disparate impact or disproportionate burden.

Figure 6-6 Percent Change in Percent of Served Population, Title VI Demographics

Demographic	Existing Service	Scenario 2 Service	Percent Difference
Racial/Ethnic Minority	34%	39%	+13%
Low-Income	18%	20%	+11%

South Coast Rail Service Plan | Final Report

Southeastern Regional Transit Authority

Figure shows the percent of population served by each proposed new microtransit zone that is a racial/ethnic minority or low-income, which allows for greater granularity in understanding the Title VI implications of service improvements.

Figure 6-7 Percent of People Served in Scenario 3 That Are Minority and Low Income, by Zone

Route/City	Percent of Served Pop. That Is Minority	Percent of Served Pop. That Is Low-Income
Fall River SCR Microtransit	33%	22%
New Bedford South End SCR Microtransit	49%	17%
New Bedford North End SCR Microtransit	39%	22%
<i>Overall</i>	<i>39%</i>	<i>20%</i>