

## New Bedford Bus Service Evaluation Final Report

Southeastern Regional Transit Authority

May 2023





### **Table of Contents**

1.	Overview	page	3
2.	Market Analysis	page	5
3.	Route Analysis	page	16
4.	Proposed Alignment Changes	page	28
5.	Service Scenarios	page	35
6.	Public Engagement	page	45
7.	Conclusion	page	62





## Overview

### Introduction

#### **PROJECT OVERVIEW**

The New Bedford Bus Service Evaluation is a comprehensive operational analysis (COA) of the Southeastern Regional Transit Authority (SRTA)'s New Bedford bus network. SRTA operates eleven fixed routes that originate from downtown New Bedford, MA, in addition to three school routes. This study is the first time since 2014 that SRTA is completing a comprehensive evaluation of the entire New Bedford network. The purpose of this study is to make recommendations to match SRTA's New Bedford fixed-route service with the changing demand for transit, by adjusting routes and schedules to better meet the needs of bus riders.

In addition, state and local funding sources that provide a large portion of the fixed-route operating budget are not keeping pace with the rising costs of providing service. Budget projections for the coming years suggest fixed-route service will need to be reduced to match available funding. Reducing service is not SRTA's preferred approach to balancing the budget, as it can have profound effects on the lives of the people that rely on the transit system.

The objective of this comprehensive operational analysis is to develop service scenarios for New Bedford that can be implemented under a reduced-operating funds scenario that limit the extent of service cuts and do the least harm to the communities served by transit. The final sections of this report also explore the level of transit service needed to fully meet the needs of New Bedford residents, which would require additional funding above what is provided today.

#### **STUDY COMPONENTS**

The following chapters detail the components of the New Bedford Bus Service Evaluation, conducted from December 2022 to May 2023:

- Chapter 2: Market Analysis An analysis of transit markets defined according to population, employment, and socioeconomic characteristics as well as activity centers and commute patterns.
- Chapter 3: Route Analysis Evaluation of existing transit services, service performance, and network ridership trends.
- Chapter 4: Proposed Alignment Changes Based on the market and route analyses and public engagement results, a proposed network of alignment changes to make routes more direct and easier to use.
- Chapter 5: Service Scenarios Two scenarios for frequency and span of service levels for the proposed network under reduced funding constraints, as well as additional service improvements that would be needed to fully meet transit demand in New Bedford.
- Chapter 6: Public Engagement Two rounds of public engagement conducted during the project timeline, the first to understand how riders are currently using SRTA's bus service and what changes they would like to see, and the second to collect feedback regarding proposed route and schedule changes.



# **Market Analysis**

### Introduction

#### **NEW BEDFORD CONTEXT**

The SRTA service area covers New Bedford, Fall River, and surrounding communities. One intercity route connects New Bedford and Fall River, with local routes serving each community signified by NB and FR designations before the route numbers, respectively. There is additional transit service connecting with Providence, Rhode Island provided by RIPTA. This market analysis looks specifically at New Bedford and its neighboring communities of Dartmouth, Fairhaven, and Acushnet, and the NB routes that serve them.

#### **PURPOSE OF MARKET ANALYSIS**

The market analysis aims to provide a picture of the underlying demand and need for transit service in New Bedford. This analysis includes looking at local demographics and density, travel flows, and key trip generators in the study area to understand where current and potential transit riders live, work, and travel to, and how that compares to current transit access.

The findings from the market analysis will inform service scenarios to design a network that maximizes positive impacts and minimizes negative impacts to the areas most supportive of transit service.

#### **METHODOLOGY**

The market analysis consists of three key pieces, a demographic and employment analysis, a travel flows analysis, and identification of key trip generators.

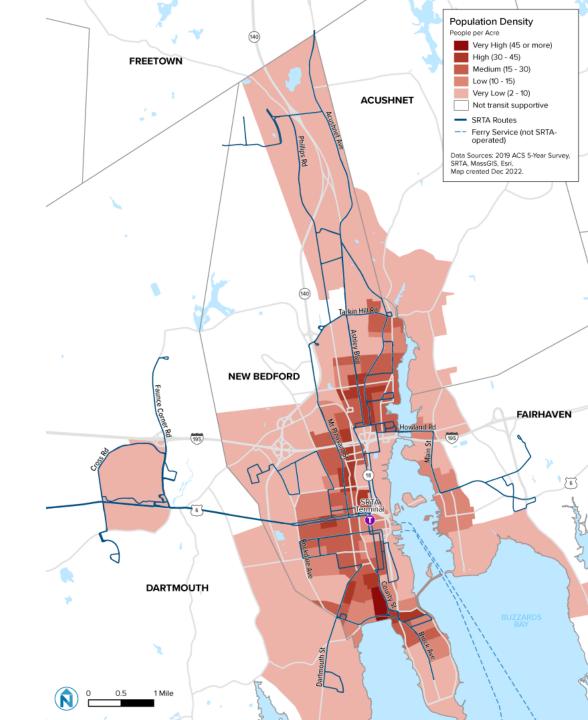
The demographic and employment analysis uses 2019 ACS data to understand where people live and work in the SRTA service area and to identify key socioeconomic characteristics of transit riders and residents. The travel flows analysis uses 2019 Census Longitudinal Employer-Household Dynamics data to analyze where people are commuting to and from within the SRTA service area. Finally, the market analysis identifies key trip generators to understand specific locations where people may travel to and from for daily activities.

#### **POPULATION DENSITY**

Population density is an important indicator for transit demand, since effective transit systems require people living within walking distance to transit stops. New Bedford is a relatively dense city, with the areas closer to downtown with moderate density or higher. Neighborhoods that have high to very high population density and are strong markets for transit services include:

- The South End: along County St., Dartmouth St., and Cove Rd.
- The North End: along Ashley Blvd, Acushnet Ave, and Mt. Pleasant St.
- The West End (adjacent to Buttonwood Park): around NB 6 and Liberty St.

Density is significantly lower in suburban areas, west of Rockdale Ave, north of Tarkin Hill Rd, and outside of New Bedford in Fairhaven and Acushnet. There may be small pockets of density in Fairhaven, north New Bedford, and Acushnet that are obscured by the geographic size of the block groups, though overall they are not as transit supportive.



#### TRANSIT PROPENSITY FACTOR

In addition to population density, socioeconomic characteristics of a population influence propensity towards using transit. Many population groups, often those historically and currently marginalized, rely on transit more than the general public. In order to plan transit equitably, transit agencies should focus investments on areas with high populations of these communities. The Transit Propensity Adjustment helps to highlight and prioritize those populations

The project team used 2019 ACS 5-Year Estimates to determine the relative propensity of socioeconomic groups to take transit in New Bedford at the block group level. Data on mode of travel to work by race and ethnicity, nativity, poverty status, and vehicles available was compared with the overall demographics of New Bedford to create a transit propensity adjustment factor. The table to the right shows the relative likelihood of a demographic group to use transit compared to the overall population. For example, the transit propensity adjustment factor of 6.67 for people without a vehicle means that those with no vehicles are 6.67 times more likely to take transit than the general population.

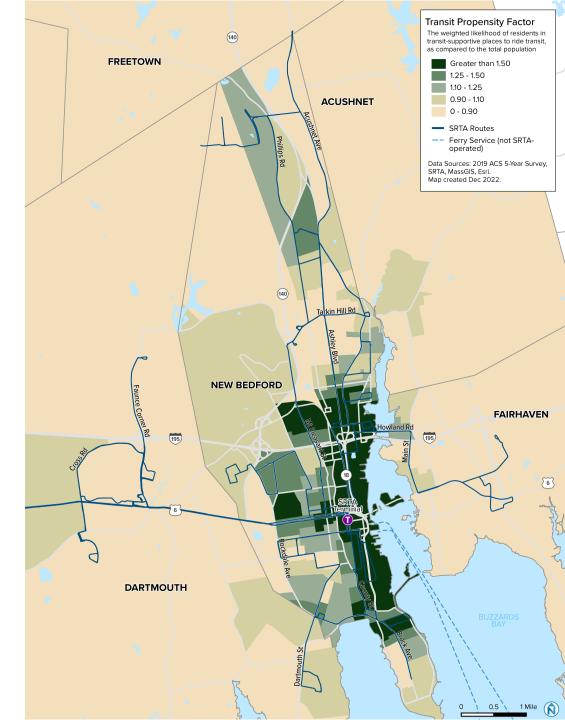
Values greater than 1.0 indicate groups that use transit more than the overall population, and values less than 1.0 indicate groups that use transit less than the overall population. In New Bedford, residents of color are most likely to generate transit trips. Residents that are below the poverty level and/or with no vehicle available are also more likely to generate transit trips.

Socioeconomic Group	Transit Propensity Adjustme nt Factor
Race and Ethnicity	
White, not Hispanic or Latino	0.54
Residents of Color	1.78
Poverty Status	
Below 100 percent of the poverty level	2.92
Between 100 - 149 percent of the poverty level	1.09
At or above 150 percent of the poverty level	0.82
Vehicles Available	
No vehicle available	6.67
1 vehicle available	0.82
2+ vehicles available	0.21

#### TRANSIT PROPENSITY FACTOR

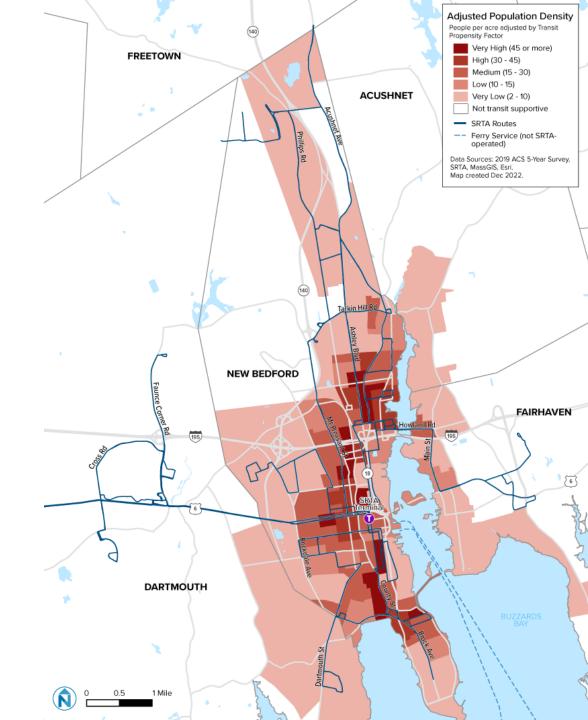
The transit propensity factor was calculated at the block group level for the SRTA service area. Using the New Bedford propensity factor for the entire service area ensured that the less transit-inclined demographics in the surrounding towns did not overwhelm differences within New Bedford.

Transit propensity is high throughout the city, especially downtown. Residents living downtown and along Ashley Blvd have the highest transit propensity. Peripheral areas of New Bedford such as Dartmouth, Fairhaven, and Acushnet have transit propensity factors below 1, indicating a population that is less likely to ride transit.



#### **ADJUSTED POPULATION DENSITY**

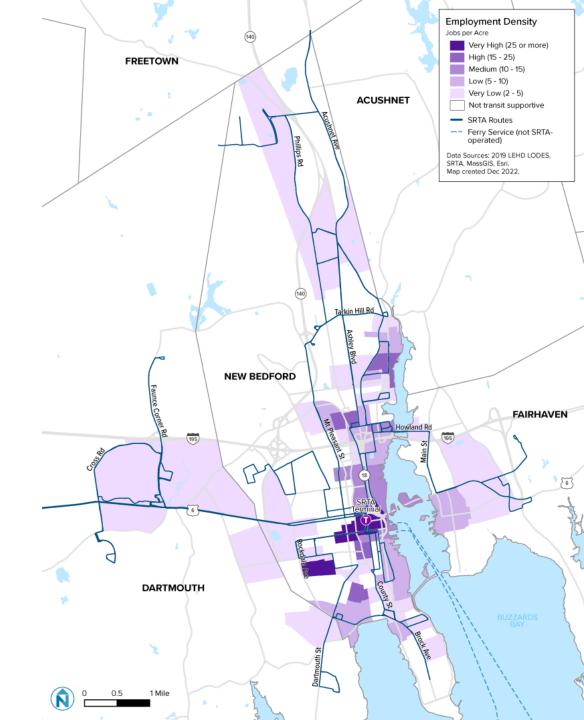
The Transit Propensity Factor can be used to create an Adjusted Population Density by applying the factor to the demographics of each block group. The adjusted population density in New Bedford is geographically similar to the unadjusted population density, indicating populations with high transit propensity are already living in denser areas of the city.



#### **EMPLOYMENT DENSITY**

Employment density provides a strong indication of transit demand by people traveling to work, as well as to the services that these jobs provide. Analyzing employment density shows both the transit demand generated by the employee traveling to the job and by any customers, clients, or visitors to the job sites. Job density by block group data comes from the 2019 LEHD Origin-Destination Employment Statistics (LODES).

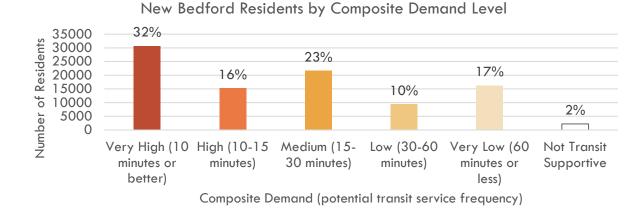
Employment density is concentrated in Downtown New Bedford and in the area where St. Luke's Hospital is located. There is also higher employment density along several major corridors including Ashley Blvd, Rockdale Ave, and Acushnet Ave.

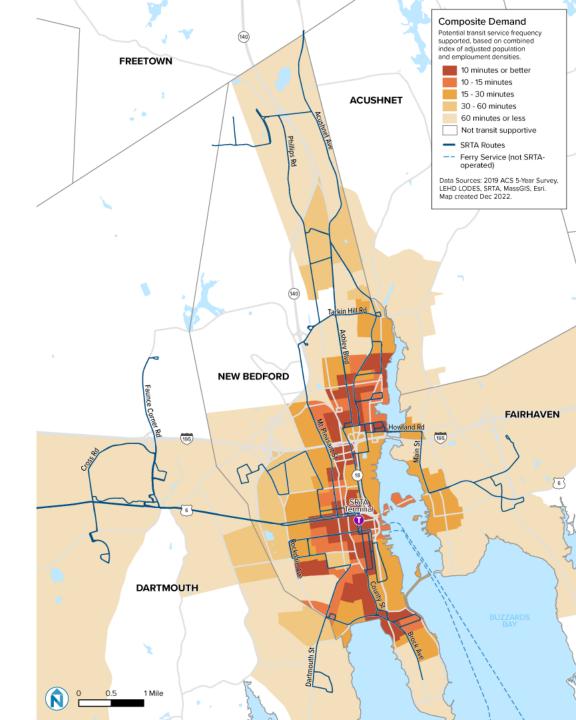


#### **COMPOSITE DEMAND**

Combining the adjusted population density and employment density creates Composite Demand, showing the level of transit service supported by a certain area based on multiple intersecting factors. This indicated where demand for transit is greatest, and where to focus transit investments.

Most of New Bedford is supportive of fixed-route transit. 48% of residents are supportive of 15-minute or higher frequency transit, 32% of which supports very high frequency (10-minute or faster) service. Overall, 71% of New Bedford is transit supportive of at least 30-minute frequencies. Only 29% of residents live in low, very low, or not transit supportive areas, justifying higher frequency service in more areas. Areas in New Bedford that are supportive of frequent service are generally consistent with the adjusted population density, such as Downtown New Bedford along Ashley Blvd and the North End along Acushnet Ave.



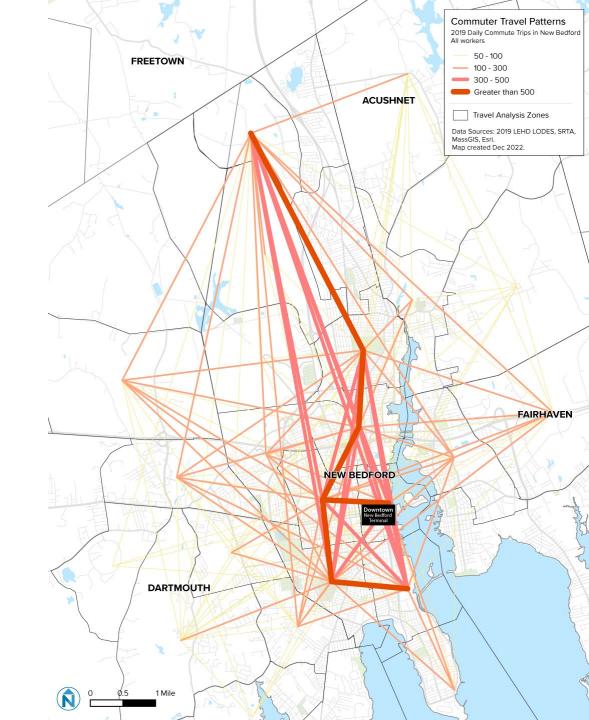


### **Travel Flows Analysis**

#### **NEW BEDFORD TRAVEL FLOWS**

Using LODES data and custom travel analysis zones, the project team mapped the origin-destination flows of daily commute trips within New Bedford for all workers across all modes of travel. The largest overall commute flows in New Bedford show workers traveling east-west between neighborhoods north and south of downtown, in particular, between Acushnet Ave and Downtown New Bedford, and between New Bedford Industrial Park and Downtown New Bedford.

Other strong commute patterns show workers traveling all directions between neighborhoods via downtown. Many strong flows are into downtown, but others connect between neighborhoods outside of downtown, indicating that crosstown bus connections may be needed.

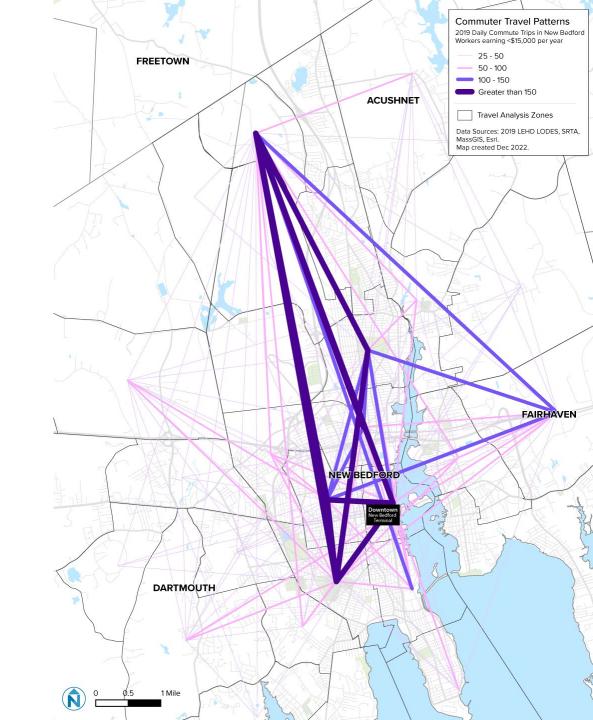


### **Travel Flows Analysis**

#### **NEW BEDFORD TRAVEL FLOWS**

Using the same zones, daily commute trips were narrowed just to those trips taken by workers earning below \$15,000 per year. Compared to the flow of all workers, this subset shows increased travel by low-income workers in neighborhoods northeast and south of downtown, especially out to Fairhaven, to New Bedford Industrial Park, and into Downtown.

Other commute strong patterns show low-income workers traveling north-south between neighborhoods into or through downtown.

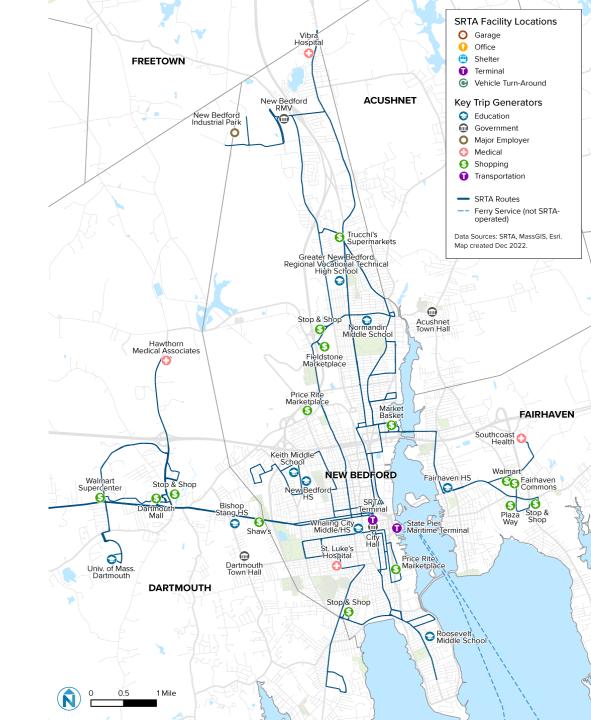


### **Activity Centers**

#### **NEW BEDFORD POINTS OF INTEREST**

Specific activity centers can often generate additional transit demand beyond what employment density may suggest, due to customers and visitors, or if they serve a transit-dependent demographic. Many of the major destinations shown on the map to the right are outside of the more densely populated areas. Some of the largest grocery stores and shopping centers are located north, east, and west of downtown New Bedford on major thoroughfares. By contrast, most schools and major employers are located in and on the periphery of Downtown New Bedford—in Fairhaven and Dartmouth—and areas further north towards Freetown. Some of the most popular destinations outside of New Bedford are the University of Massachusetts Dartmouth Campus, Dartmouth Mall, and Fairhaven Commons.

Hospitals and other healthcare services are both major trip generators and employment centers in New Bedford, with most located outside of Downtown.





## **Route Analysis**

### Introduction

#### **NETWORK DESIGN**

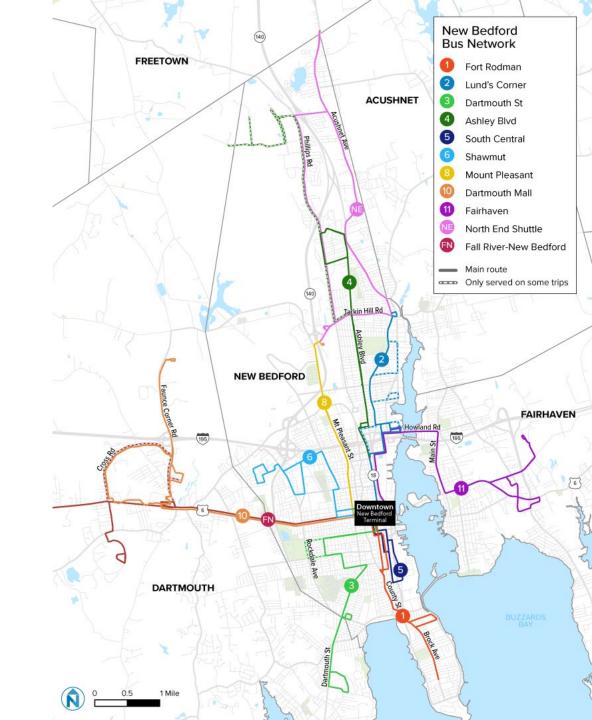
SRTA's current fixed-route network consists of 11 routes which operate from approximately 6AM to 9:30PM on weekdays and 7:30AM to 6:00PM on Saturdays, with no service on Sunday. SRTA's route frequency ranges from 20 to 60 minutes on weekdays, and 30 to 60 minutes on Saturdays (refer to figures on next page). In addition to SRTA's fixed-route network, SRTA operates demand-response service on weekdays, Saturdays, and Sundays, based on eligibility.

SRTA's current fixed route network operates a nearly entirely "radial" network where all routes except the NB21 North End Shuttle connect in downtown New Bedford and routes then "radiate" to other areas in New Bedford and adjacent towns (e.g., Dartmouth, Fairhaven). Systems that are designed this way largely rely on connections to other routes at a single location—New Bedford's Downtown Terminal, in this case—to reach destinations throughout the network.

#### **PURPOSE OF ROUTE ANALYSIS**

The route analysis section of this report provides an understanding of SRTA's existing transit services, route productivity, and overall network performance. It includes an analysis of route-level boardings, stop-level boardings and alightings, scheduled and actual trip travel times, and demand-response destinations.

The route analysis findings will inform service scenarios – designing a network that has positive impacts on service efficiency and reliability by understanding trip characteristics, key routes within the network, key destinations, and peak travel times.



### Service Spans and Frequency

Weekday Service	5AM	6	7	8	9	10	11	12PM	1	2	3	4	5	6PM	7	8	9	10	11
NB1 Fort Rodman																			
NB2 Lund's Corner																			
NB3 Dartmouth St																			
NB4 Ashley Blvd																			
NB5 South Central																			
NB6 Shawmut																			
NB8 Mt Pleasant																			
NB9 Intercity																			
NB10 Dartmouth Mall																			
NB11 Fairhaven																			
NB21 North End Shuttle																			
Saturday Service	5AM	6	7	8	9	10	11	12PM	1	2	3	4	5	6PM	7	8	9	10	- 11
	5AM	6	7	8	9	10	11	12PM	1	2	3	4	5	6PM	7	8	9	10	11
NB1 Fort Rodman	5AM	6	7	8	9	10	11	12PM	1	2	3	4	5	6PM	7	8	9	10	11
NB1 Fort Rodman NB2 Lund's Corner	5AM	6	7	8	9	10	11	12PM	1	2	3	4	5	6PM	7	8	9	10	11
Saturday Service NB1 Fort Rodman NB2 Lund's Corner NB3 Dartmouth St NB4 Ashley Blvd	5AM	6	7	8	9	10	11	12PM	1	2	3	4	5	6PM	7	8	9	10	11
NB1 Fort Rodman NB2 Lund's Corner NB3 Dartmouth St NB4 Ashley Blvd	5AM	6	7	8	9	10		12PM	1	2	3	4	5	6PM	7	8	9	10	11 
NB1 Fort Rodman NB2 Lund's Corner NB3 Dartmouth St NB4 Ashley Blvd NB5 South Central	5AM	6	7	8	9			12PM	1	2	3	4	5	6PM	7	8	9	10	11 
NB1 Fort Rodman NB2 Lund's Corner NB3 Dartmouth St NB4 Ashley Blvd NB5 South Central NB6 Shawmut	5AM	6	7	8	9			12PM	1	2	3	4	5	6PM	7	8	9	10 	11 
NB1 Fort Rodman NB2 Lund's Corner NB3 Dartmouth St NB4 Ashley Blvd NB5 South Central NB6 Shawmut NB8 Mt Pleasant	5AM	6	7	8	9			12PM	1	2	3	4	5	6PM	7	8	9	10	
NB1 Fort Rodman NB2 Lund's Corner NB3 Dartmouth St NB4 Ashley Blvd NB5 South Central NB6 Shawmut NB8 Mt Pleasant NB9 Intercity	5AM	6	7	8	9			12PM	1	2	3	4	5	6PM	7	8	9	10 	
NB1 Fort Rodman NB2 Lund's Corner NB3 Dartmouth St	5AM	6	7	8	9			12PM	1	2	3	4	5	6PM	7	8	9	10	

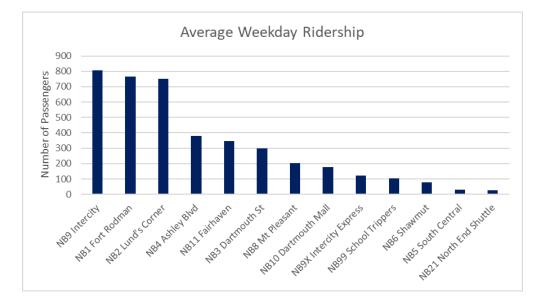
### **Ridership by Route**

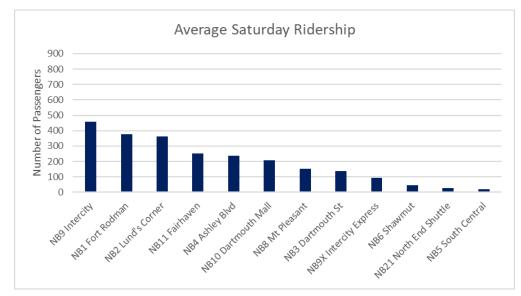
#### WEEKDAY RIDERSHIP

In October 2021 on weekdays, SRTA carried an average of 4,080 riders in New Bedford. SRTA's highest ridership routes in New Bedford were NB9 Intercity and NB1 Fort Rodman followed by routes NB2 Lund's Corner and NB4 Ashley Blvd. SRTA's lowest ridership routes, on weekdays, were routes NB21 North End Shuttle and NB5 South Central (figure on the top right).

#### SATURDAY RIDERSHIP

In October 2021 on Saturdays, SRTA carried an average of 2,366 riders. SRTA's three highest ridership routes were the same as on weekdays. SRTA's highest ridership Saturday routes NB9 Intercity and NB1 Fort Rodman, followed by routes NB2 Lund's Corner and NB11 Fairhaven. On Saturdays, SRTA's lowest ridership routes were routes NB5 South Central and NB21 North End Shuttle (figure on the bottom right).





\*Average ridership by route is derived from October 2021 SRTA farebox route totals

Note that data also includes NB9X Intercity Express, which ran in October 2021 when these data were collected, but is no longer active.

### **Performance by Route**

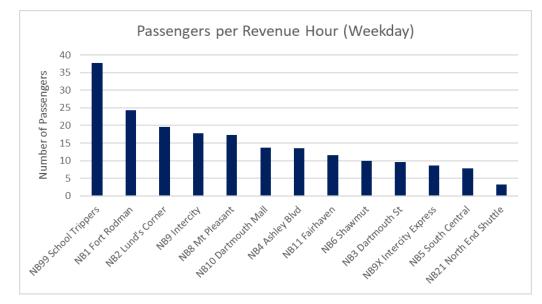
#### PASSENGERS PER REVENUE HOUR

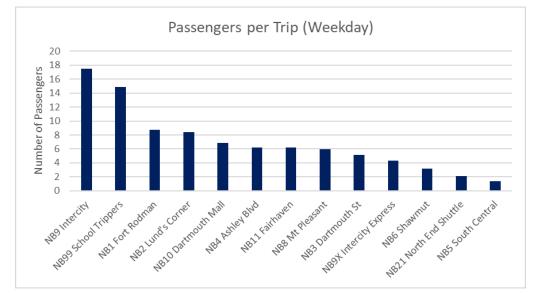
Revenue hours are the hours of travel while a bus is in service and on-route (including layover). Revenue hours can be used to understand an agency's overall investment in transit services, and it's cost efficiency. In October 2021, on weekdays, SRTA carried an average of 15 passengers per vehicle revenue hour (productivity) across all routes.

On weekdays, routes NB99 School Trippers (multiple routes to schools at the start/end of the school day) and NB1 Fort Rodman had the greatest productivity, followed by routes NB2 Lund's Corner and NB9 Intercity. Routes NB21 North End Shuttle and NB5 South Central had the lowest weekday productivity (figure on the top right).

#### **PASSENGERS PER TRIP**

In October 2021, on weekdays, SRTA carried an average of 7 passengers per trip across all routes. On weekdays, routes NB9 Intercity, NB99 School Trippers, and NB1 Fort Rodman carried the greatest number of passengers per trip. Routes NB5 South Central and NB21 North End Shuttle carried the least passengers per trip (figure on the bottom right).





\*Route Productivity is derived from October 2021 SRTA farebox route totals

Note that data also includes NB9X Intercity Express, which ran in October 2021 when these data were collected, but is no longer active.

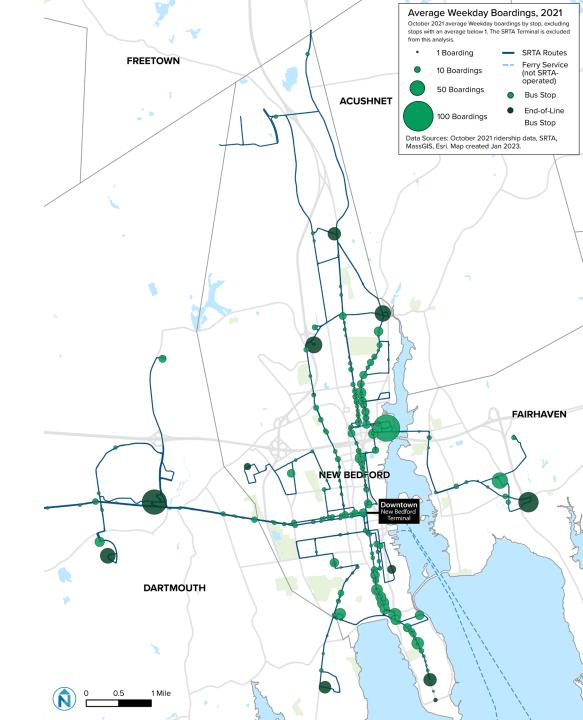
### **Ridership by Stop**

#### WEEKDAY RIDERSHIP

In October 2021, SRTA's highest weekday ridership stops were at SRTA's New Bedford Terminal, New Bedford Market Basket, Dartmouth Mall, Fairhaven Stop & Shop, and Fieldstone Marketplace. SRTA's weekday ridership exhibits few stops with ridership over 100 average daily boardings, while most stops have one to ten average passenger boardings (map shown on the right).

In addition to nearly all corridors leading into and out of downtown New Bedford, the following corridors stand out with relatively strong and consistent ridership activity with one to ten passenger boardings per stop:

- Kennedy Memorial Highway (south of Elm St.)
- Acushnet Ave (between Sawyer St. and Tarkiln Hill Rd.)
- Kempton St (between Purchase St. and Slocum Rd.)



\*Average stop boarding data is derived from October 2021 SRTA APC counts \*End-of-Line stop ridership figures include on-board passenger carryover and "through the door" boardings and appear higher because of this counting method.

### **Ridership by Stop**

#### **SATURDAY RIDERSHIP**

In October 2021, SRTA's highest Saturday ridership stop was at SRTA's New Bedford Terminal. Other major stops included Dartmouth Mall, New Bedford Market Basket, Fairhaven Stop & Shop, and Fairhaven Walmart. SRTA's weekday ridership exhibits few stops with ridership over 100 average daily boardings, while most stops have one to ten average passenger boardings (map shown on the right).

Unlike weekdays, only few travel corridors in New Bedford stood out with relatively strong and consistent ridership activity with one to ten passenger boardings per stop. However, these corridors are the same as the strong weekday corridors:

- Kennedy Memorial Highway (south of Elm St.)
- Acushnet Ave (between Sawyer St. and Tarkiln Hill Rd.)
- Kempton St (between Purchase St. and Slocum Rd.)



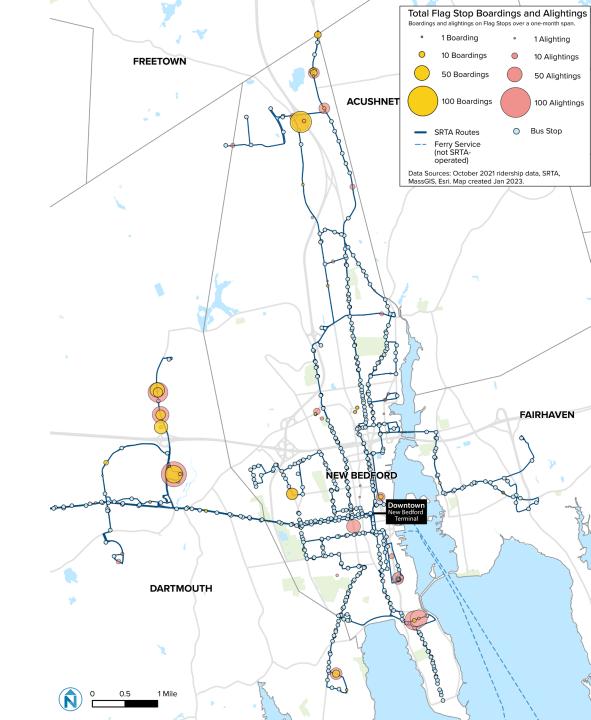
\*Average stop boarding data is derived from October 2021 SRTA APC counts \*End-of-Line stop ridership figures include on-board passenger carryover and "through the door" boardings and appear higher because of this counting method.

### **Ridership at Flag Stops**

#### TOTAL MONTHLY RIDERSHIP

Flag stops are boardings and alightings that do not occur at a designated bus stop. SRTA allows for flag stops in areas that have limited pedestrian infrastructure, such as in Dartmouth and in the New Bedford Industrial Park.

Flag stops are determined by any stop-activity occurring on a vehicle in a location greater than 600 feet away from a stop. Most flag stop boardings take place at the far north end of New Bedford and on the Faunce Corner Road leading up to Hawthorn Medical Center. Some alightings also occur in the south end on NB1 and NB3.

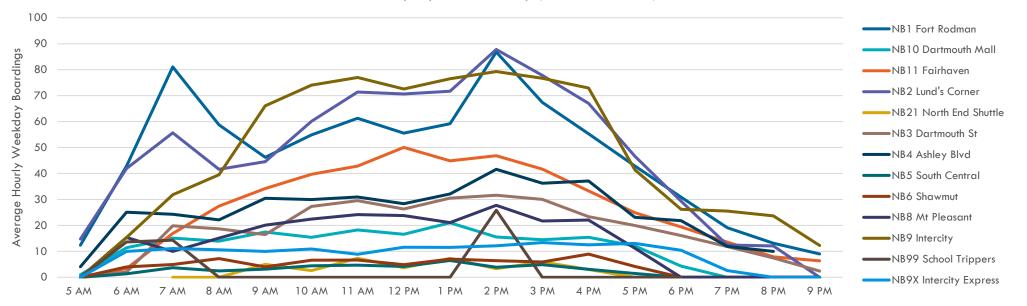


### **Ridership by Time of Day**

#### TIME OF DAY RIDERSHIP

In October 2021, SRTA's ridership didn't show any distinct peaks, and instead showed a gradual ramp up throughout the morning and into the early afternoon, steady mid-day ridership, and then a subsequent ramp down into the evening. Systems that aren't heavily commuter-based often share this, as the morning and evening commute periods don't impact ridership quite as much. These peaks are stronger on some routes than others, and most routes have their highest ridership in the middle of the service day. On Weekdays, during the AM Peak, routes NB1 Fort Rodman and NB9 Intercity experience the highest ridership with 80 average boardings. During the PM Peak, routes NB9 Intercity, NB1 Fort Rodman, and NB2 Lund's Corner experience the highest ridership with 80 - 90 average boardings.

As shown in the chart below, much of SRTA's ridership is oriented around a gradual ramp up and ramp down, with peak ridership often occurring sometime in the early afternoon. With high mid-day ridership, most routes maintain a similar number of total passengers carried, which is between 10 and 40 throughout the day.



Ridership by Time of Day (October 2021)\*

\*Ridership by Time of Day counts are derived from October 2021 SRTA APC counts \*End-of-Line stop ridership figures include on-board passenger carryover and "through the door" boardings and appear higher because of this counting method.

### Schedule Adherence by Route

#### **ON-TIME PERFORMANCE**

The figure to the right shows SRTA's on-time performance by route. SRTA's on-time performance are based on APC (Automated Passenger Counter) in October 2021. On-time performance is a measure of the percentage of trips that operate early, late, and on-time. In this analysis, these thresholds are defined as:

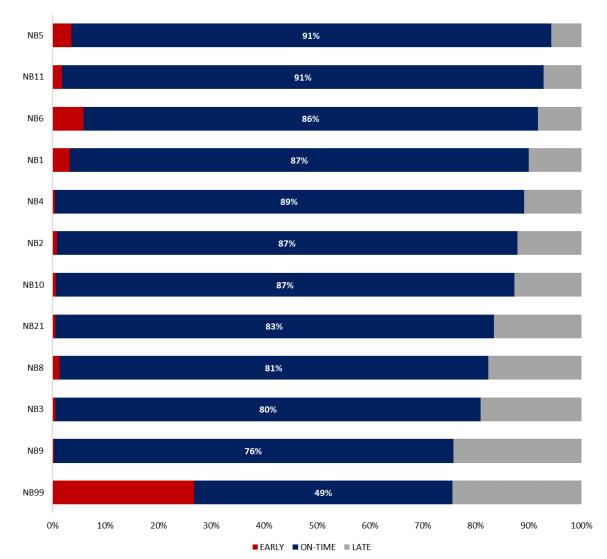
**Early** – Departing from first stop on route/SRTA terminal more than one minute before scheduled

**Late** – Departing from first stop on route/SRTA terminal more than five minutes after scheduled

**On-Time** – Departing from first stop on route/SRTA terminal within one minute before scheduled and five minutes after scheduled

In October 2021, SRTA's on-time performance averaged 85%. SRTA routes with high on-time performance included routes NB5 South Central and NB11 Fairhaven followed by routes NB6 Shawmut and NB1 Fort Rodman. Routes NB99 School Trippers and NB9 Intercity had the low on-time performance. These routes may need additional time added to the schedule, while some routes with a high percentage of early departures may need to have time removed from the schedule (figure shown on the right).





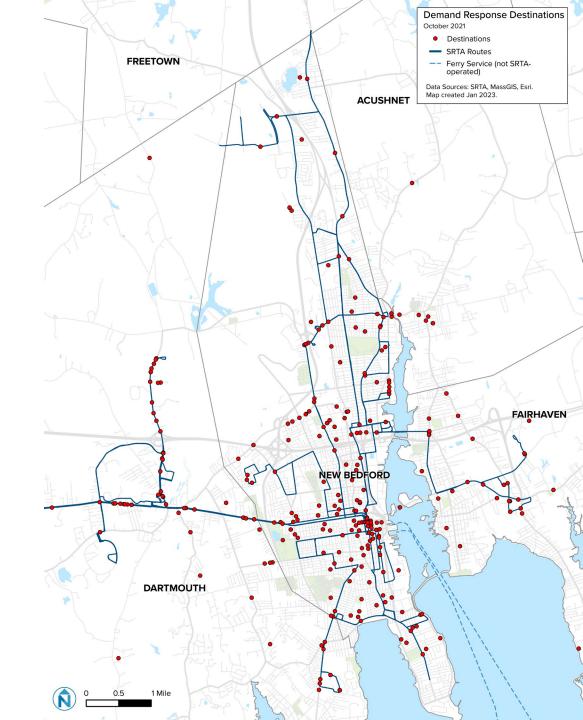
### **Demand-Response**

#### **DEMAND-RESPONSE SERVICE**

SRTA operates curb-to-curb demand-response service in all ten communities within SRTA's service area, seven days a week, including holidays. In October 2021, SRTA operated 1,983 demand-response trips in New Bedford.

Most of SRTA's demand-response trip destinations in October 2021 were similar to destinations served by SRTA's fixed-routes. There are only a few destinations in west end and in Fairhaven that are not served by SRTA's fixed-route service, meaning there are not many geographic gaps in SRTA's fixed-route service that people are supplementing with demand-response service. Key demandresponse destinations include (figure shown on the right):

- Hawthorn Medical Center
- Downtown New Bedford
- Dartmouth Mall and Walmart
- Various Grocery Stores in the Area



### **Summary**

Based on the analysis of SRTA's transit market and network, SRTA's radial network provides coverage along most major travel corridors to and from Downtown, and to destinations beyond New Bedford. The current network supports riders commuting to and from work or school throughout the day and provides access to grocery stores and other places of commerce, however, service levels, specifically on evenings and weekends, may not be enough to adequately support the needs of riders.

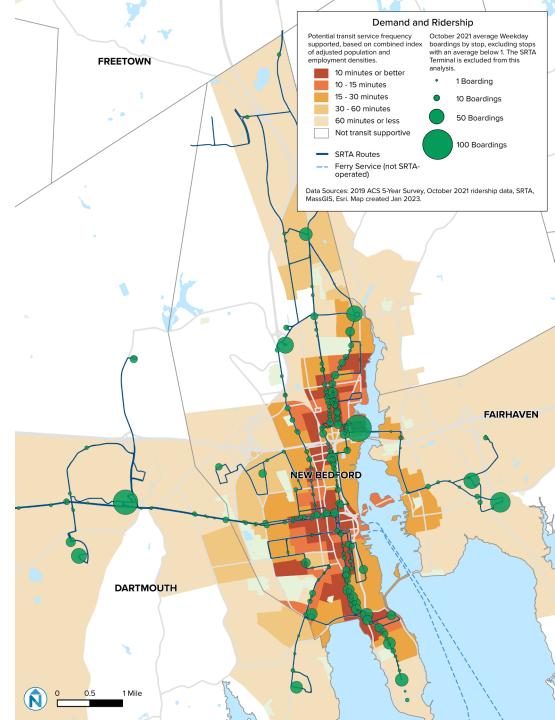
Although most of the demand for transit service is centered in downtown New Bedford, most neighborhoods would be able to support frequent transit service on all service days based on socioeconomic characteristics, key activity centers, and ridership. Ridership is consistent along most routes in neighborhoods outside of downtown, specifically routes traveling out to Fairhaven, Dartmouth, and towards Freetown.

While some routes experience steady and consistent ridership on weekdays, there are several New Bedford routes that have ridership far below the system average. These routes should have changes made to garner more ridership.

Saturday ridership data shows that there is a continued demand for transit service on the weekend. However, the limited hours and lower frequency service do not adequately support the transit demand.

Not offering Sunday service gives transit-dependent individuals no way to travel. Considering that service in New Bedford is not commuter-based, expanding weekend service is a logical next step, since riders tend to be using buses to get to commercial destinations, which can be highly frequented on weekends.

Based on the analysis conducted, SRTA should continue to focus on transit service within downtown New Bedford and along the key corridors heading to Freetown, Fairhaven, and Dartmouth. However, investing more in weekend service should be a priority, as limited weekend service does not meet the needs of New Bedford's population.





## **Proposed Alignment Changes**

### Introduction

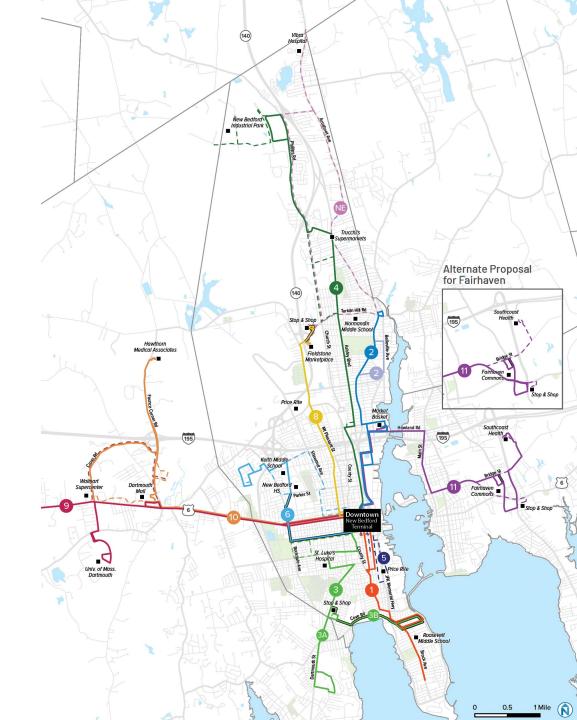
The proposed New Bedford network consists of adjusting existing transit routes based on the route design principles and the needs of transit riders. The proposed alignment changes within this section were developed by the consultant team and SRTA staff, in three parts:

- 1. The project team developed the proposed route alignments, based on reviewing the market and route analyses to understand the purpose and performance of each route in New Bedford. The team also incorporated public feedback from the Phase 1 engagement period, which asked riders their desired service improvements and destinations.
- 2. SRTA staff members and the project team held a workshop to discuss and refine the proposed route alignments, focused on the operational feasibility of the proposals as well as rider need and receptivity.
- 3. The draft route alignment changes were shown for public feedback through the Phase 2 engagement period, after which the project team refined the network for final recommendations.

In addition to the route analysis and public engagement, the following best practices for standard route design were used to develop the proposed alignment changes:

- Providing direct and simple service by eliminating large loops, reducing the number of turns, and operating most routes on major roads. Simpler routes and fewer turns make service easier to use and understand.
- Improving route efficiency by discontinuing service in areas with little ridership. Transit service focused around destinations ensures service is where riders need it most and can help riders find their way more easily.
- Improving neighborhood connectivity by providing more options along major travel corridors and at important destinations. Service can be made faster by operating the bus on main roadways, removing closely spaced bus stops, and eliminating service patterns.

29 | Final Report | New Bedford Bus Service Evaluation



### Proposed North End and Fairhaven Route Changes

#### **OVERVIEW**

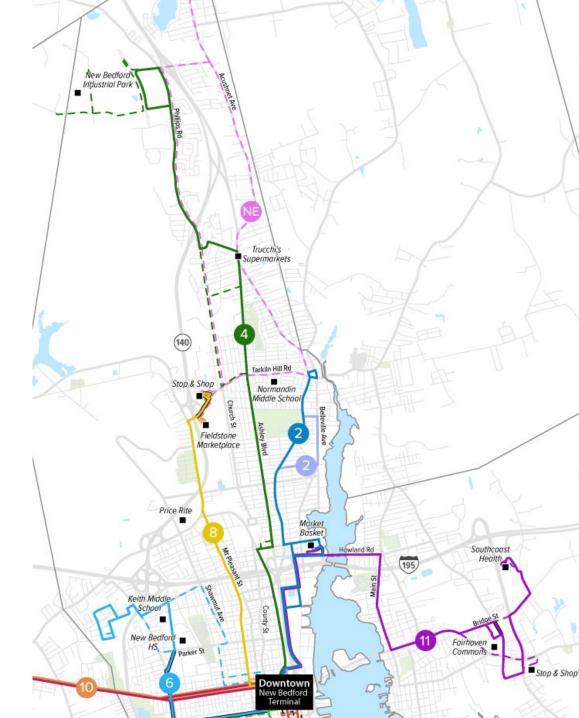
In the North End, changes to Routes NB4, NB8, and NB21 are being proposed. There are no changes being proposed for Route NB2; the route would continue operating between Downtown and Lund's Corner via Market. The proposed changes for NB4 would be packaged with discontinuing NB21. NB4 would operate direct service between Downtown and the New Bedford RMV on all trips via Ashley Blvd. This service would replace existing NB21 service in the Far North End along Phillips Road. Service would not be replaced on Acushnet Avenue.

The proposed changes to NB8 would provide service on the northwestern part of New Bedford between Downtown and Stop & Shop via Mt Pleasant St. This route change would ensure that service operates between strong anchor points and would eliminate transfers at the Fieldstone Marketplace. Residents along NB8 would be able to travel directly to and from Stop & Shop.

The proposed Fairhaven route changes are described on the next page.

- **NB2 Lund's Corner**: No proposed route changes. Route will continue operating from Downtown to Lund's Corner via Market Basket
- NB4 Ashley Blvd: Extend route to New Bedford Business Park every trip via Phillips Road, Industrial Park Road, and Duchaine Boulevard, and a new endpoint at New Bedford RMV
- NB8 Mt Pleasant: Extend route to Stop & Shop via Kings Highway/Tarkiln Hill Road
- NB21 North End Shuttle: Discontinue route





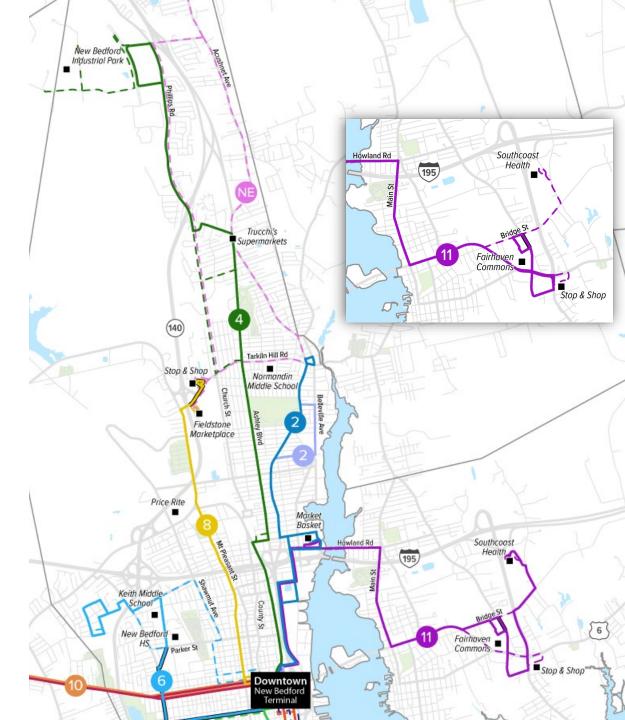
### Proposed North End and Fairhaven Route Changes

#### **OVERVIEW**

In Fairhaven, the proposed NB11 includes operating the route to Walmart (Fairhaven Commons), Stop & Shop, and Southcoast Health via Market Basket. This route would no longer operate on Huttleston Avenue and would not serve the Stop & Shop entrance. Additionally, the route would service the Walmart entrance during inbound and outbound trip. The proposed changes for NB11 would ensure the route is direct and easier to understand. The route would connect riders to multiple shopping destinations before serving Southcoast Health, the route's terminus.

The proposed NB11 Alternate includes operating the route to Walmart and Stop & Shop via Huttleston Street. These changes would eliminate service on Bridge Street and the route would no longer service Southcoast Health. These proposed changes would simplify the route and shorten its length, making it easier to travel between Downtown New Bedford and Fairhaven.

- NB11 Fairhaven: Operate route to Southcoast Health via Bridge Street, Alden Road, Alden Road, David A. Drown Boulevard, and Sconticut Neck Road
  - Directly serve Walmart entrance during inbound and outbound trips.
     Discontinue direct service to Stop & Shop entrance
- NB11 Fairhaven (Alternate): Operate route to Walmart via Huttleston Avenue, Alden Road, David A. Drown Boulevard, and Sconticut Neck Road
  - Discontinue service to Southcoast Health
  - New endpoint at Walmart
- 31 | Final Report | New Bedford Bus Service Evaluation



### Proposed West End and Dartmouth Route Changes

#### **OVERVIEW**

In the West End, the proposed route changes include routes NB6, NB9, and NB10. Proposed changes include operating service on Rockdale Avenue to service New Bedford High School more directly. The proposed changes shifting NB6 service from Mill and Hillman Streets to Union Street. This service would replace removed NB3 service. These changes will make service within the West End more direct and would remove duplicative service from the Rt.6 corridor.

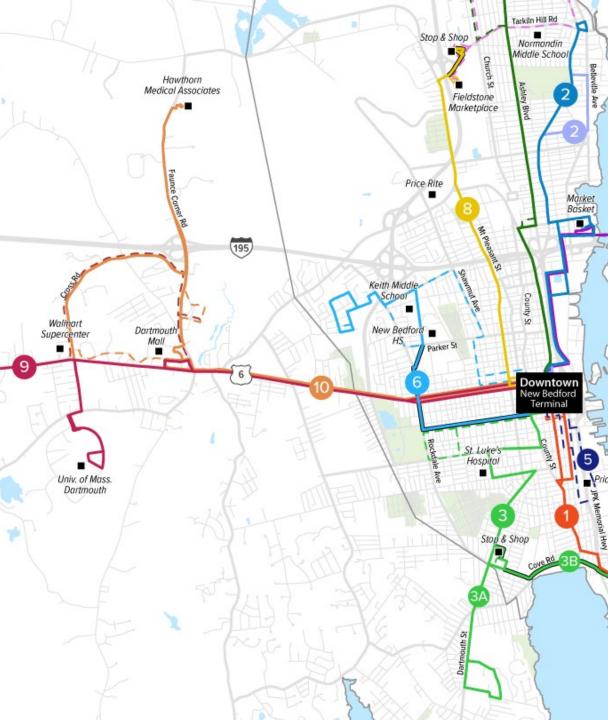
In Dartmouth, the proposed changes to NB9 include discontinuing night service operated on Cross Road and Faunce Corner Mall Road and keeping the nighttime alignment the same as the daytime. This change would make evening service on the NB9 more direct between Fall River and New Bedford.

Lastly, the proposed changes to NB10 would include shifting service on the mall frontage road to Rt. 6 and eliminating direct service to Kohl's and Lowe's. These changes would improve route efficiency and eliminate deviations that increase travel times.

The proposed alternate NB10 route changes are described on the next page.

- NB6 Shawmut: Shift route from Mill/Hillman Street and Union Street to Hathaway Boulevard and Rockdale Avenue
- NB9 Intercity: Discontinue service at night that operates along Faunce Corner Mall Road and Cross Road
- **NB10 Dartmouth Mall**: Shift route along mall frontage road to Rt.6 before serving Dartmouth Mall. Discontinue direct service to Kohl's and Lowe's





### Proposed West End and Dartmouth Route Changes

#### **OVERVIEW**

In Dartmouth, an alternate route change for NB10 is being proposed. This alternate would operate service to and from Hawthorn Medical via Dartmouth Mall. NB10 service would be eliminated along Cross Road, the mall frontage road, and service to Kohl's and Lowe's. These changes would significantly shorten the route's length and ensure faster service to key destinations in Dartmouth.

#### **PROPOSED ROUTE CHANGES**

• NB10 Dartmouth Mall (Alternate): NB10 Dartmouth (Alternate): Operate route to Hawthorn Medical via Dartmouth Mall and discontinue service to Dartmouth Walmart and Cross Road. Discontinue direct service to Kohl's and Lowe's

After conducting Phase 2 engagement, the project team does not recommend going forward with this alternate route for NB10 at this time, as community feedback highlighted the importance of serving Cross Rd.



## **Proposed South End Changes**

#### **OVERVIEW**

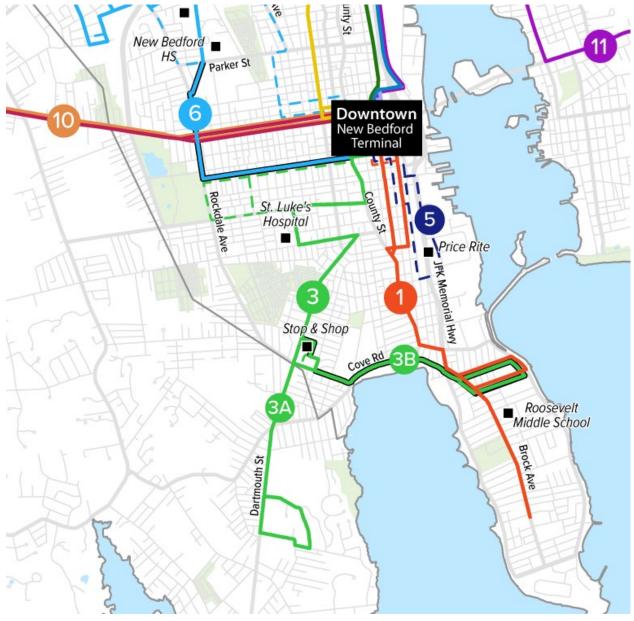
In the South End, changes to routes NB3 and NB5 are being proposed. Changes to NB3 would include operating service along County Street and Dartmouth St to Big Value Plaza via Stop & Shop. Service would be discontinued along Union Street, Rockdale Avenue, and Rotch Street. These changes would ensure the route operates more directly to St. Luke's Hospital and removing service from low ridership areas. Additional changes to NB3 include operating every other trip to Tripp Towers. This additional service would add service to Cove Road and connect residents to shopping centers in the South End.

There are no changes being proposed to NB1. This route will continue to operate the same as existing service and operate between Downtown and UMass SMAST via Tripp towers.

The proposed changes to NB5 would include discontinuing the route. This is a low ridership area and service is almost duplicative to NB1.

- **NB1 Fort Rodman:** No proposed route changes. Route will continue operating from Downtown to UMass SMAST via Tripp Towers
- NB3 Dartmouth St: Shift route from Union Street and Rotch Street to County
   Street and Hawthorn Street
  - Continue operating route to Big Value Plaza via Stop & Shop on every other trip
  - Operate other half of trips to Tripp Towers via Cove Road
- NB5 South Central: Discontinue Route







## **Service Scenarios**

### Introduction

Along with the proposed alignment changes, two service scenarios are proposed and constrained within SRTA's financial outlook. The project team developed these scenarios with public and staff feedback to complement the recommended route changes. A third scenario was created at the end of the project, as an exercise to determine the service levels and funding required to fully meet transit demand in New Bedford that was identified in the market analysis.

The two trade-off service scenarios are based upon public input, ridership patterns, and underlying demand, such as density and key destinations. The cost constraints for these scenarios are based on two assumptions: operating costs will continue to rise and the SRTA budget will remain the same. This amounts to a budget cut from current conditions, as the budget cannot sustain the same level of service without additional budget increases. The streamlining of routes and the elimination of routes NB5 and NB21 as proposed in the previous section provide limited cost savings that can be used to make targeted scheduling improvements.

Each of the two budget-constrained service scenarios focus on bringing a specific improvement to the New Bedford bus network:

- Scenario 1 is a **span-focused** option where buses operate service earlier in the morning and later in the evening on weekdays and on Saturdays, while reducing frequencies of some routes.
- Scenario 2 is a **frequency-focused** option where buses operate more frequently, ultimately reducing wait times, but offering reduced service spans.

The project team evaluated the two scenarios based on operating cost, vehicle needs, residential and employment access to transit, and Title VI implications. This chapter details the results of these analyses.

A third service scenario was developed based on findings from the market and route analyses and public outreach that showed New Bedford has the density, demographics, and resident desire for high frequency transit with long service spans. The scenario identifies the level of service that could be provided if SRTA were to meet the full needs of New Bedford. This scenario was not circulated for public feedback nor evaluated like the other two scenarios, and it should be viewed as a roadmap for potential future improvements under a different budget outlook.

During Phase 2 engagement, community members expressed a strong desire for Scenario 1 over Scenario 2, prioritizing maintaining and increasing spans over frequencies.

# **Scenario 1: Span-Focused**

### PROPOSED SPAN CHANGES

Scenario 1, the span-focused scenario, extends bus service earlier in the morning and later in the evening on most routes. Currently, many businesses and destinations served by transit are open later than buses run, resulting in limited hours for customers and difficulty returning home for late workers. Under this scenario, New Bedford routes will begin service at 6 AM on weekdays and Saturdays and run until at least 9 PM on weekdays and at least 8 PM on Saturdays.

Bus every 20

Bus every 30

Bus every 40 r 📵 Bus every 60 r

30

40

#### **PROPOSED FREQUENCY CHANGES**

Under Scenario 1, frequencies for most routes decrease or stay the same, with a lowest possible frequency of 60 minutes. The exceptions to this are the NB1, NB2, NB3, and NB4, which all maintain their 30-minute frequency or better. On Saturdays, only routes NB1 and NB2 maintain their same frequency as they currently have.



#### Improved Rider Experience with Scenario 1

Hannah needs to get groceries at the Stop & Shop after she finishes work at 6 PM, but the NB8 currently runs until 6 PM. Under Scenario 1, she has time to travel and finish her shopping, with the NB8 running every 60 minutes until 9 PM.

in. Route		Existing	Option 1	Option 2
n.			Service later into the night	Buses that come more often
n.	M-F	20) 5:20AM-9:20PM	200 5:20AM-9:20PM	200 5:20AM-8:00PM
1 Fort Rodman	Sat	30 6:40AM-6:00PM	30 6:00AM-8:00PM	<b>30</b> 6:40AM-6:00PM
	M-F	20) 5:40AM-9:40PM	200 5:40AM-9:40PM	20) 5:40AM-8:00PM
2 Lund's Corner	Sat	<b>30</b> 6:50AM-6:35PM	30 6:00AM-8:00PM	30 6:50AM-8:35PM
	M-F	<b>30</b> 6:35AM-6:00PM	30 6:00AM-9:00PM	30 6:00AM-6:00PM
<b>3</b> Dartmouth St	Sat	(60) 7:40AM-5:31PM	6:00AM-8:00PM	30 7:00AM-6:00PM
	M-F	<b>30</b> 5:40AM-8:56PM	30 6:00AM-9:00PM	30 6:00AM-6:00PM
4 Ashley Blvd	Sat	(60) 7:45AM-5:56PM	6:00AM-8:00PM	30 7:00AM-6:00PM
	M-F	6:50AM-5:06PM	Discontinued	Discontinued
5 South Central	Sat	8:00AM-5:16PM	Discontinued	Discontinued
	M-F	6:10AM-5:45PM	6:00AM-9:00PM	6:00AM-6:00PM
6 Shawmut	Sat	(60) 7:20AM-4:55PM	6:00AM-8:00PM	600 7:00AM-6:00PM
	M-F	6:45AM-6:01PM	6:00AM-9:00PM	<b>30</b> 6:00AM-6:00PM
8 Mount Pleasant	Sat	8:05AM-5:11PM	6:00AM-8:00PM	600 7:00AM-6:00PM
Fall River -	M-F	<b>30</b> 6:00AM-9:51PM	6:00AM-9:00PM	30 6:00AM-6:00PM
9 New Bedford	Sat	8:00AM-7:55PM	6:00AM-8:00PM	60 7:00AM-6:00PM
	M-F	6:45AM-6:45PM	6:00AM-9:00PM	6:00AM-6:00PM
10 Dartmouth Mall	Sat	9:30AM-6:30PM	6:00AM-8:00PM	600 7:00AM-6:00PM
	M-F	<b>30</b> 6:35AM-6:12PM	6:00AM-9:00PM	30 6:00AM-6:00PM
11 Fairhaven	Sat	30 7:55AM-5:25PM	6:00AM-8:00PM	(60) 7:00AM-6:00PM
North End	M-F	9:05AM-5:01PM	Discontinued	Discontinued
Shuttle	Sat	9:05AM-4:55PM	Discontinued	Discontinued

## **Scenario 2: Frequency-Focused**

### PROPOSED SPAN CHANGES

Under Scenario 2, service spans will remain similar to or be more limited than their current spans. Weekday service will run from 6 AM until 6 PM on all routes except for NB1 and NB2, which start at 5:20 and 5:40, and end at 8 PM. Saturday service will operate from 7 AM to 6 PM on all routes except for the NB1 and NB2, which will run from 6:40 AM and 6:50 AM until 6 PM and 6:35 PM. Most routes will see decreased spans in this scenario to favor higher frequencies. Routes that will see decreased morning service spans are NB4 and NB10. Routes that will see decreased evening service are NB1, NB2, NB8, NB11, NB3, NB10, NB4, and NB9.

Bus every 20 m

Bus every 30 m

Bus every 40 m Bus every 60 m

30

40

#### **PROPOSED FREQUENCY CHANGES**

As the frequency-focused service scenario, Scenario 2 increases the frequency of weekday and Saturday service for many New Bedford bus routes. All routes except for NB6 and NB10 will operate at 30-minute frequencies on weekdays. On Saturdays, NB1, NB2, NB3, and NB4 will have 30-minute frequencies while routes NB6, NB8, NB9, NB10, and NB11 will run every 60 minutes.



#### Improved Rider Experience with Scenario 2

Don uses the NB9 to get to UMass Dartmouth, where he teaches an 8 AM class. If he misses the 7 AM bus, he has to cancel that class since the NB9 has hourly headways in the morning. With Scenario 2, Don always has a backup plan to get to his morning classes if he misses that 7 AM bus, since the NB9 would run every 30-minutes.

Route		Existing	Option 1	Option 2
			Service later into the night	Buses that come more often
	M-F	20 5:20AM-9:20PM	200 5:20AM-9:20PM	20 5:20AM-8:00PM
Fort Rodman	Sat	30 6:40AM-6:00PM	<b>30</b> 6:00AM-8:00PM	<b>30</b> 6:40AM-6:00PM
	M-F	20) 5:40AM-9:40PM	200 5:40AM-9:40PM	20 5:40AM-8:00PM
2 Lund's Corner	Sat	<b>30</b> 6:50AM-6:35PM	30 6:00AM-8:00PM	<b>30</b> 6:50AM-8:35PM
	M-F	<b>30</b> 6:35AM-6:00PM	<b>30</b> 6:00AM-9:00PM	30 6:00AM-6:00PM
3 Dartmouth St	Sat	(60) 7:40AM-5:31PM	6:00AM-8:00PM	30 7:00AM-6:00PM
	M-F	<b>30</b> 5:40AM-8:56PM	<b>30</b> 6:00AM-9:00PM	<b>30</b> 6:00AM-6:00PM
4 Ashley Blvd	Sat	(60) 7:45AM-5:56PM	6:00AM-8:00PM	30 7:00AM-6:00PM
	M-F	6:50AM-5:06PM	Discontinued	Discontinued
5 South Central	Sat	8:00AM-5:16PM	Discontinued	Discontinued
	M-F	6:10AM-5:45PM	6:00AM-9:00PM	6:00AM-6:00PM
6 Shawmut	Sat	(60) 7:20AM-4:55PM	6:00AM-8:00PM	600 7:00AM-6:00PM
	M-F	6:45AM-6:01PM	6:00AM-9:00PM	30 6:00AM-6:00PM
8 Mount Pleasant	Sat	8:05AM-5:11PM	6:00AM-8:00PM	600 7:00AM-6:00PM
9 Fall River -	M-F	<b>30</b> 6:00AM-9:51PM	6:00AM-9:00PM	30 6:00AM-6:00PM
New Bedford	Sat	8:00AM-7:55PM	6:00AM-8:00PM	60 7:00AM-6:00PM
	M-F	6:45AM-6:45PM	6:00AM-9:00PM	6:00AM-6:00PM
0 Dartmouth Mall	Sat	9:30AM-6:30PM	6:00AM-8:00PM	600 7:00AM-6:00PM
	M-F	<b>30</b> 6:35AM-6:12PM	6:00AM-9:00PM	30 6:00AM-6:00PM
11 Fairhaven	Sat	30 7:55AM-5:25PM	6:00AM-8:00PM	60 7:00AM-6:00PM
North End	M-F	9:05AM-5:01PM	Discontinued	Discontinued
Shuttle	Sat	9:05AM-4:55PM	Discontinued	Discontinued

# Scenario Evaluation: Operating Costs and Vehicles

Due to transit agency budgets not on track with the rising costs of providing transit services, the project team developed two scenarios for this study under a financial constraint. SRTA is currently running approximately 75,000 revenue hours and 933,000 revenue miles annually on its New Bedford fixed-route services, using 22 peak buses. This totals approximately \$10,709,000 in annual operating cost based on the following Fiscal Year 2023 fixed-route cost factors:

- \$74.57 per revenue hour
- \$3.84 per revenue mile
- \$68,167.88 per peak vehicle

As shown on the table to the right, Scenarios 1 and 2 represent decreases in revenue vehicle hours and miles and peak vehicles compared to the existing service. Scenario 1 has an operating cost that is 17% less than current spending and uses four fewer peak vehicles. Scenario 2 has an operating cost that is 9% less than current spending and uses the same number of peak vehicles.

	Existing Service	Scenario 1: Span-Focused	Scenario 2: Frequency-Focused
Weekday: Daily Revenue Vehicle Hours	265.50	220.15	239.15
Weekday: Daily Revenue Vehicle Miles	3,276.47	2,534.25	2,832.21
Saturday: Daily Revenue Vehicle Hours	149.73	154.00	145.75
Saturday: Daily Revenue Vehicle Miles	1,894.82	1,854.86	1,746.6
Annual: Revenue Vehicle Hours	75,393	64,365	68,585
Annual Revenue Vehicle Miles	933,320	746,031	813,509
Peak Buses	22	18	22
Annual Operating Cost	\$10,709,000	\$8,894,000	\$9,741,000
Percent Change from Existing		-17%	<b>-9</b> %

\* Operating and vehicle cost estimates are derived from SRTA's 2022 annual operating budget

## Scenario Evaluation: Access to Transit

The goal of New Bedford's bus network is to connect people to the places they want to go efficiently, frequently, and at a convenient time. This analysis considers a resident or job to be served by transit if there is a bus route within 1/4 mile, or approximately a 5-minute walk. Access is broken down by level of frequency and level of evening service to compare what levels of transit service a person or job has access to in each of the two scenarios, compared to what is provided currently. The analysis uses 2019 data from the ACS and LEHD.

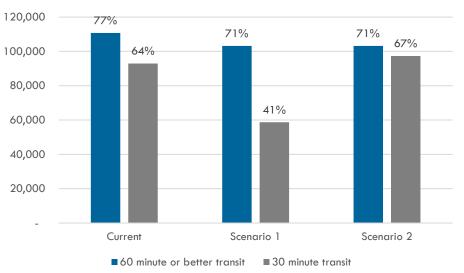
#### ACCESS BY FREQUENCY

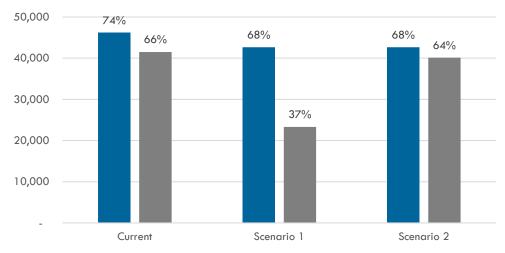
Due to making the routes more direct in the proposed realignments, access to transit that comes every 60 minutes or better declines by six percentage points for residents and jobs in New Bedford. This decrease is the same in both scenarios, as 60-minute for better transit consists of all fixed-route transit under the new alignment.

The frequency-focused, reduced-funding Scenario 2 maintains access to 30-minute or better transit at a level similar to the current network. The percentage of New Bedford residents within 1/4 mile of buses that come every 30 minutes increases by three percentage points. The number of jobs within 1/4 mile of 30-minute transit decreases under Scenario 2 by two percentage points.

Alternately, the span-focused, reduced-funding Scenario 1 results in a decrease of residents with nearby access to 30-minute transit by 23 percentage points, and a decrease in jobs within  $\frac{1}{4}$  mile of 30-minute transit by 29 percentage points.

Residential Access to Transit by Frequency Level





Employment Access to Transit by Frequency Level

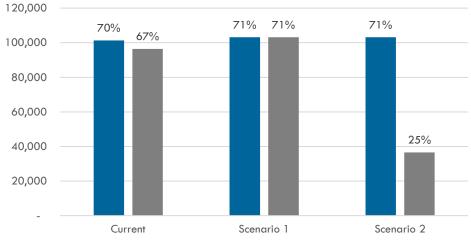
# Scenario Evaluation: Access to Transit

### ACCESS BY SPAN

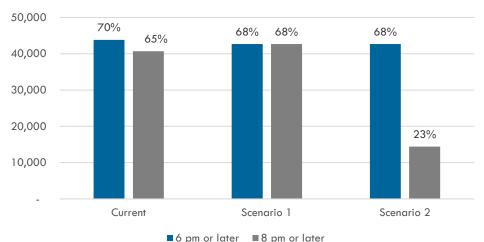
Both service scenarios result in a slightly increased number of residents and slightly decreased number of jobs within  $\frac{1}{4}$  mile of transit that operates until at least 6 PM.

The span-focused, reduced-funding Scenario 1 maintains access to transit that runs into the night. It provides an increase in service after 8 PM for both residents—4 percentage points—and jobs—3 percentage points, as all routes under Scenario 1 run past 8 PM.

Under the frequency-focused, reduced-funding Scenario 2, more residents and jobs will have access to transit until at least 6 PM than under the current network. However, there is a severe decrease in access to service that runs until at least 8 PM, with a 42-percentage point reduction in residential access and a 32-percentage point reduction in employment access. Residential Access to Transit by Span Level









41 | Final Report | New Bedford Bus Service Evaluation

# Scenario Evaluation: Title VI Implications

Per FTA C 4702.1B, SRTA conducts equity analyses for all permanent fare changes and service changes that exceed the major service change threshold. SRTA defines a major service change as "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%".

In the case of a major service change that is intended to be permanent, SRTA will conduct a service equity analysis prior to the change occurring. In the case of a major service change that is initially meant to be temporary but becomes permanent by lasting more than 12 months, SRTA will conduct a service equity analysis immediately after determining the service change is permanent. Service changes that have potential for adverse effects include route elimination, shortlining, rerouting, headway changes, or span of service changes.

#### WEEKDAY

The chart on the right shows New Bedford's current weekday revenue vehicle miles (RVM) and the RVMs for the proposed route change alternatives. This chart summarizes the percent change in RVMs and indicates whether an equity analysis would need to be conducted. There are three routes included in the first weekday scenario and three routes included in the second weekday scenario that would need to undergo a service equity analysis if the proposed routes changes occurred.

			Scenario 1			Scenario 2	
Route	Existing Revenue Vehicle Miles	RVMs	RVM % Change	Service Equity Analysis (Yes/No)	RVMs	RVM % Change	Service Equity Analysis (Yes/No)
NB1	7.63	7.63	0%	NO	7.63	0%	NO
NB2	9.12	9.12	0%	NO	9.12	0%	NO
NB3	9.52	9.13	-4%	NO	9.13	-4%	NO
NB4	10.27	14.37	40%	YES	14.37	40%	YES
NB5	2.84	0.00	-100%	YES	0.00	-100%	YES
NB6	7.65	7.41	-3%	NO	7.41	-3%	NO
NB8	6.99	7.42	6%	NO	7.42	6%	NO
NB9	34.04	34.04	0%	NO	34.04	0%	NO
NB10	14.41	13.85	-4%	NO	13.85	-4%	NO
NB11	13.67	15.20	11%	NO	12.77	-7%	NO
NB21	11.02	0.00	-100%	YES	0.00	-100%	YES
Total	127.16	118.17	-7%	NO	115.74	-9%	NO

# Scenario Evaluation: Title VI Implications

### SATURDAY

The chart on the right shows New Bedford's current Saturday revenue vehicle miles (RVM) and the RVMs for the proposed route change alternatives. There are three routes included in the first Saturday alternative and three routes included in the second Saturday scenario that would need to undergo a service equity analysis if the proposed routes changes occurred.

		Scenario 1			Scenario 2			
Route	Existing Revenue Vehicle Miles	RVMs	RVM % Change	Service Equity Analysis (Yes/No)	RVMs	RVM % Change	Service Equity Analysis (Yes/No)	
NB1	7.63	7.63	0%	NO	7.63	0%	NO	
NB2	9.12	9.12	0%	NO	9.12	0%	NO	
NB3	9.52	9.13	-4%	NO	9.13	-4%	NO	
NB4	10.27	14.37	40%	YES	14.37	40%	YES	
NB5	2.84	0.00	-100%	YES	0.00	-100%	YES	
NB6	7.65	7.41	-3%	NO	7.41	-3%	NO	
NB8	6.99	7.42	6%	NO	7.42	6%	NO	
NB9	34.04	34.04	0%	NO	34.04	0%	NO	
NB10	14.41	13.85	-4%	NO	13.85	-4%	NO	
NB11	13.67	15.20	11%	NO	12.77	-7%	NO	
NB21	11.02	0.00	-100%	YES	0.00	-100%	YES	
Total	127.16	118.17	-7%	NO	115.74	-9%	NO	

# **Fully Meeting Transit Market Demand**

The two scenarios previously discussed represent changes that can be made to the New Bedford network under a constrained financial situation. However, as shown in the map to the right, New Bedford has a very high level of transit demand throughout the city, based on population and employment density and socioeconomic characteristics. In an ideal funding scenario, much of the city should be served by transit that runs all days of the week, at frequencies between 10 and 30 minutes. The following scenario represents the level of service that SRTA should strive for with more funding.

On weekdays in this scenario, all routes would run from 6AM to 10PM (with NB1 and NB2 starting earlier). This scenario would also bring back the NB9X which ran express from the New Bedford Terminal to the Fall River Terminal with no stops in between. Route frequencies are as follows:

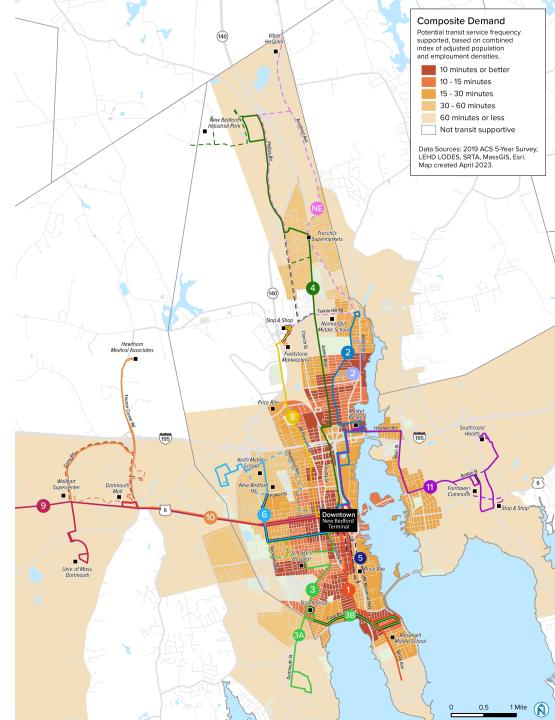
- 10-minute frequencies on NB1 and NB2
- 15-minute frequencies on NB3
- 20-minute frequencies on NB4 and NB8
- 30-minute frequencies on NB6, NB10, NB9, and NB9X

SRTA should provide the same level of service on Sundays as on Saturdays, for which the span is recommended for expansion to the same as weekdays. Route frequencies on weekends are as follows:

- 10-minute frequencies on NB1 and NB2
- 20-minute frequencies on NB3, NB4, and NB11
- 30-minute frequencies on NB6, NB8, NB9, NB10

### **COST AND VEHICLE NEEDS**

If SRTA implemented these proposed changes, the operating cost for the New Bedford network is estimated to be \$21,790,000 per year, a 103% increase from current funding. The network would require 32 peak vehicles, compared to 22 vehicles needed in the current network.





# **Public Engagement**

### Introduction

The project team and SRTA staff completed two rounds of public engagement. The purpose of the first round of engagement was to collect feedback regarding how SRTA riders are currently using SRTA's bus services and what changes they would like to see. The purpose of the second round of engagement was to collect feedback regarding the proposed route and schedule changes that were developed after the first round of engagement.

The first round of engagement was held in January 2023 and included several pop-ups in New Bedford. These pop-ups allowed community members to provide feedback directly to the consultant team and SRTA staff and participate in an outreach activity. An online survey was also made available to community members and SRTA bus riders to provide feedback regarding SRTA's current service and choose their most important service improvements with SRTA's limited funding.

The second round of engagement was held in March 2023; this round of engagement included one open forum at the New Bedford Terminal and two additional pop-ups at New Bedford Market Basket and The Dartmouth Mall. This open forum allowed community members and riders to provide feedback on the proposed route and schedule changes directly to the consultant team and SRTA staff and participate in an outreach activity. Materials were also posted on the SRTA website, where an online form was made available to community members and SRTA bus riders to provide feedback regarding the proposed changes on the SRTA project website. The feedback received from the second round of engagement informed the final route and schedule scenarios for New Bedford.



### **PHASE 1 KEY FINDINGS**

Phase 1 of public engagement conducted as part of the New Bedford Bus Service Evaluation occurred in January 2023 with a focus on determining what service improvements are most important to riders. The key findings from the first phase of engagement are:

- Most survey respondents and pop-up participants noted that they would like to see bus service spans increased.
- There is a desire amongst survey respondents and pop-up participants to have shorter walks to bus stops. Riders are willing to have longer and slower trips if their bus stop is easy to reach and accessible.
- Most survey respondents identified the New Bedford Market Basket as one of the most important destinations in New Bedford.
- Most survey respondents identified more frequent bus service, on-time buses, and later bus service as their top three desired service improvements.

# Help plan the future of New Bedford bus service!

Ede planifye avni sèvis otobis Fall River!

SRTA wants to hear from you about how to improve the New Bedford bus routes to work better for riders. Fill out the online survey by **January 31st** and let us know what types of service improvements are most important.

SRTA vle tande ou sou fason pou amelyore wout otobis New Bedford yo pou travay pi byen pou pasaje yo. Ranpli sondaj sou Entènèt la anvan **31 janvye** epi fè nou konnen ki kalite amelyorasyon sèvis ki pi enpòtan.



Stop by a pop-up event or go online and make your voice heard!

Kanpe nan yon evènman pop-up oswaale entènèt epi fè tande vwa ou!

#### Tuesday, January 24 Madi 24 janvye

New Bedford Bus Terminal 8 AM - 10 AM 134 Elm St, New Beford New Bedford Market Basket 10:30 AM - 11:30 AM 122 Sawyer St, New Beford Fairhaven Walmart 1 PM - 2 PM 42 Fairhaven Commons Way, Fairhaven UMass Dartmouth 2:30 PM - 3:30 PM 285 Old Westport Rd, Dartmouth Dartmouth Mall 4 PM - 5 PM 200 N Dartmouth Mall, Dartmouth





Complete our online survey to share your thoughts:

Ranpli sondaj sou entènèt nou an pou pataje panse ou:

surveymonkey.com/r/NBCOA1

Buses that run early in the morning

Autobuses que pasen temprano en la

What is most important to you as a current or potential bus rider?

Place a sticker next to your <u>top 2</u> preferences. Coloque esta etiqueta en sus <u>dos opciones</u> preferidas.

mañana

### Public Engagement: Phase 1 Pop-Ups

#### PHASE 1 POP-UP OVERVIEW

During the first round of public engagement, pop-ups were held at different high ridership bus stops in New Bedford to engage riders while waiting for the bus. During the pop-ups, riders had the opportunity to discuss general feedback about SRTA and participate in the outreach activity. New Bedford pop-up locations included: :

- New Bedford Bus Terminal (8AM 10AM)
- New Bedford Market Basket (10:30AM 11:30AM)
- Fairhaven Walmart (1PM 2PM)
- UMass Dartmouth (2:30PM 3:30PM)
- Dartmouth Mall (4PM 5PM)

The outreach activity was intended to further engage community members and allow them to answer two of the survey questions regarding bus service improvements by placing stickers and/or providing additional feedback on sticky notes. On the left-hand side of the engagement board, participants were asked to place stickers next to their preferred service improvement tradeoff. On the right-hand side of the engagement board, participants were asked to place stickers on their top two preferred service improvements.



### NEW BEDFORD BUS SERVICE EVALUATION EVALUACIÓN DEL SERVICIO DE AUTOBÚS EN NEW BEDFORD

Buses that run late at night

Autohuses que nasen tarde en la noch

#### Help plan the future of bus service in New Bedford

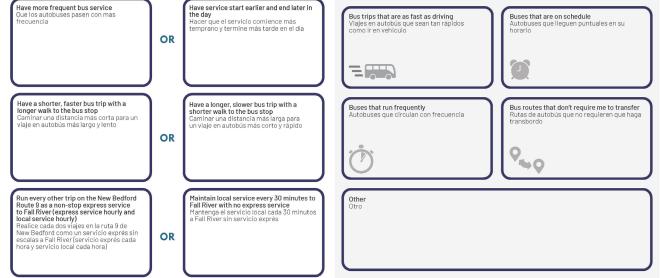
SRTA is evaluating the New Bedford bus network in order to adjust routes to better meet the needs of bus riders. This study is the first time since 2014 that SRTA is completing a comprehensive evaluation of the entire New Bedford network.

#### Ayuda a mejorar las paradas de autobús de SRTA

SRTA está evaluando la red de autobuses de New Bedford a fin de ajustar las rutas para satisfacer mejor las necesidades de los pasajeros de autobuses. Con este estudio es la primera vez, desde 2014, que SRTA completa una evaluación integral de toda la red de autobus de New Bedford.

Given SRTA's limited funding, would you rather... Tomando en consideracion las limitaciones de fondos de SRTA, usted preferiría..

Place a sticker next to your preference. Coloque una etiquetta en su opcion más preferida.

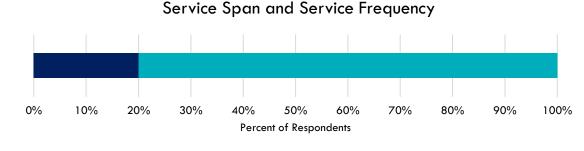


### Public Engagement: Phase 1 Pop-Ups

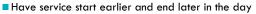
#### PHASE 1 POP-UP FINDINGS

During the pop-up events, approximately 22 community members and riders participated in the public engagement board activity. The charts on the right show the results of the activity. The charts on the right show the results of the trade-off questions, asking participants if they'd prefer certain improvements over others given SRTA's limited funding. Out of the 22 responses, most participants preferred increased service spans over more frequent bus service, walking a shorter distance to a slower bus trip, and having Route 9 run express service every other trip. Additional feedback received during conversations with community members and SRTA bus riders included:

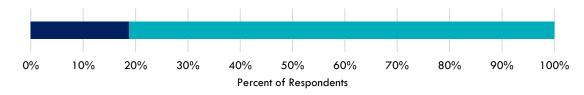
- Most riders would like to be more comfortable and would like additional amenities at bus stops (e.g., shelters, benches, trash cans).
- There is a desire amongst riders for all New Bedford routes to start and end at the same time. Some routes start later and end later than others. Riders would like service to be easy to understand and simplified.
- There is a desire amongst intercity bus riders to have timed transfers to local service at the New Bedford Bus Terminal.
- There is a strong desire amongst SRTA riders for bus service on Sundays, even if service is very limited with few routes operating service.

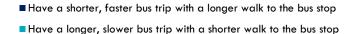


Have more frequent bus service

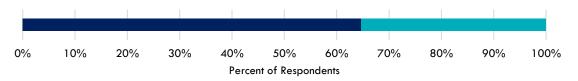








### Route NB9 Intercity Express Service and Local Service



Run every other trip on the New Bedford Route 9 as non-stop express service to Fall River (express service hourly and local service hourly)

Maintain local service every 30 minutes to Fall River with no express service.

### PHASE 1 SURVEY OVERVIEW

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 January 10, 2023 through January 31, 2023. The survey was promoted via social media, a public meeting, posters and flyers, and SRTA's website. Respondents could take the survey in English, Haitian Creole, Spanish, or Portuguese. The survey received 36 total responses; most surveys were taken in English.

### **SRTA NEW BEDFORD BUS SERVICE EVALUATION SURVEY**



#### About This Survey

SRTA is evaluating the New Bedford bus network in order to adjust routes to better meet the needs of bus riders. This study is the first time since 2014 that SRTA is completing a comprehensive evaluation of the entire New Bedford network. We want to hear from our riders on how

SRTA	can redesign the bus networ	k to be more efficient and reliable for Nev	w Bedford residents.
1. Ho	ow often do you ride SF	RTA?	5. Given SRTA's limite (Check ONE box pe
	Regularly (almost every da Occasionally (a few times Rarely (a few times a mon	a week)	Have more frequent to service
	Very rarely (a few times a Never		Have a shorter, faster bus trip with a longer walk to the bus stop
	NB2 - Lund's Corner 🔲 NB3 - Dartmouth St 📮	NB8 - Mt. Pleasant NB10 - Darmouth Mall NB11 - Fairhaven NB21 - North End Shuttle	Run every other trip o the New Bedford Rou 9 as a non-stop expre service to Fall River (express service hour and local service hour 6. Do you have any oth could improve trans
	hat is most important tential bus rider? (Self Buses that run late at nigh Buses that run early in the Buses that run frequently Bus routes that don't requ Bus trips that are as fast a Buses that are on schedul Other:	ect top 2) It morning ire me to transfer is driving	
	hich destinations are r elect top 3) ] New Bedford High School ] Whaling City Middle and High School Greater New Bedford Regional Vocational Technical High School ] Trucchi's Supermarkets (North New Bedford) ] New Bedford Market Basket ] Seabra Foods	nost important to you?  Price Rite Marketplace (North New Bedford)  St. Luke's Hospital New Bedford Waterfront (e.g., Ferry Terminal, State Pier Maritime Terminal) Dartmouth Mall UMass Dartmouth Fairhaven Commons/ Walmart	7. If you would like to project, please prov If you are not able to r SRTA staff, please ser survey to info@srtabu survey online at www. service-evaluation/.

□ Stop & Shop (South New □ Southcoast Health (Fairhaven)

Price Rite Marketplace

Other:

(South New Bedford)

(Fairhaven) New Bedford Industrial

Park:

ed funding, would you rather... rrow)

bus OR 🛛 Have service start earlier and end later in the day? Have a longer, slower bus OR 🔲 trip with a shorter walk to the bus stop? ٦n ute Maintain local service ess OR Devery 30 minutes to Fall River with no express service? -1 rly) her feedback about how SRTA

sit service in Fall River?

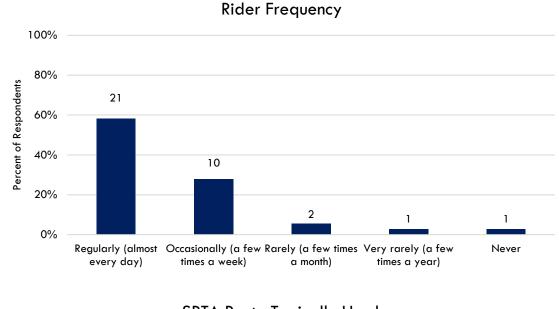
stay up-to-date with this vide your email here:

return your completed survey to nd a picture of your completed is,com or please complete the full .srtabus.com/new-bedford-bus-

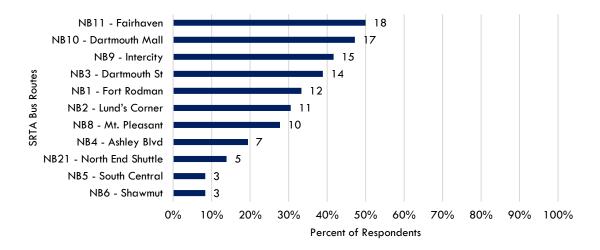
#### **PHASE 1 SURVEY RESULTS**

Out of 35 responses, most of the survey respondents indicated they ride SRTA almost every day, while only one respondent said they never ride SRTA (top right). These results show that most survey respondents ride SRTA regularly and would be impacted the most if any service changes were to take place.

Most survey respondents indicated they typically ride Route NB11, and Route NB10, the intercity route between New Bedford and Fall River, and Route NB3 (bottom right). The routes that most survey respondents don't typically ride included Route NB5 and NB6.





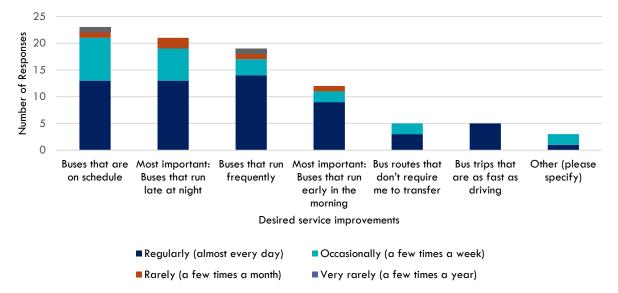


#### **PHASE 1 SURVEY RESULTS**

When survey respondents' desired service improvements were compared with how often they ride, responses indicated that most riders desired on-time buses, service late at night, and increased frequencies (top right). Those who responded "Other" noted that they would like to Sunday service and increased service on weekends.

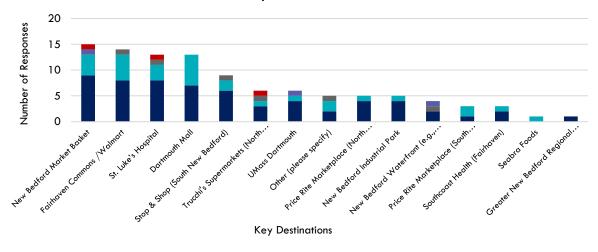
Most survey respondents indicated that their most important destinations were the New Bedford Market Basket, Fairhaven Commons/Walmart, and St. Luke's Hospital. When respondents' important destinations were compared with how often they ride, most regular riders indicated that there most important destination was the New Bedford Market Basket followed by Fairhaven Commons/Walmart. "Other" service important destinations were mostly listed by respondents that regularly ride or occasionally. These destinations included:

- Ocean State Job Lot (Fairhaven)
- Stop & Shop (North End)
- Rockdale West
- Savers Thrift Store



### Desired Service Improvements and Rider Frequency





Occasionally (a few times a week) Rarely (a few times a month)

■ Very rarely (a few times a year) ■ Never

Regularly (almost every day)

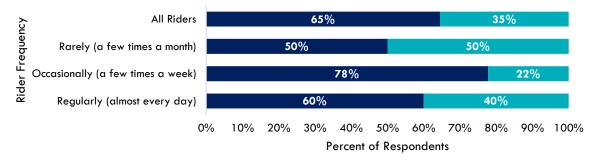
### **PHASE 1 TRADEOFF QUESTIONS**

The New Bedford Bus Service Evaluation Survey included three tradeoff questions regarding trip times, frequency, service spans, and service expansion. These tradeoff questions allowed survey respondents to choose their most desired service improvements over others in lieu of SRTA's limited funding. These decisions can help SRTA staff and the consultant team inform draft service scenarios and determine what service improvements should be prioritized. The figures shown on the right depict the three tradeoff questions cross-tabulated with respondents' rider frequency and bus routes that they typically ride (though it is important to take into consideration that some routes only had a few respondents).

Out of all responses, 65% of respondents that ride almost every day would rather walk a shorter distance to a longer, slower bus trip (top right). Respondents that noted they ride occasionally felt even stronger about this, with 78% opting for the shorter walk to the bus.

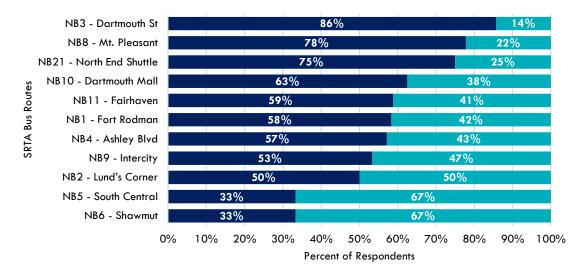
Out of all responses, over 50% of respondents that typically ride NB2, NB5, and NB6 would rather walk farther to the bus for a faster bus trip, whereas riders of other routes would rather walk a shorter distance for a longer bus trip (bottom right).

### Rider Frequency and Proximity to Service/Trip Times



Have a longer, slower bus trip with a shorter walk to the bus stopHave a shorter, faster bus trip with a longer walk to the bus stop

### Bus Routes and Proximity to Service/Trip Times



 $\blacksquare$  Have a longer, slower bus trip with a shorter walk to the bus stop

Have a shorter, faster bus trip with a longer walk to the bus stop

### PHASE 1 TRADEOFF QUESTIONS

Out of all responses, 70% of respondents would rather have bus service start earlier and end later in the day (top right). Regardless of rider frequency, responses were resoundingly in favor of service starting earlier and ending later in the day. Respondents that ride regularly had the highest percent of responses in favor of more frequent service, at 38%.

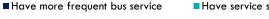
Out of all responses, only riders of route NB5 favored more frequent service. Respondents that ride all other routes preferred expanded service hours. Riders of routes NB9 and NB21 were most in favor of service starting earlier and ending later in the day, at 75%-80% (bottom right).



30%

40%

### Rider Frequency and Service Frequency/Spans



10%

20%

0%

Rider Frequency

Have service start earlier and end later in the day

60%

50%

Percent of Responses

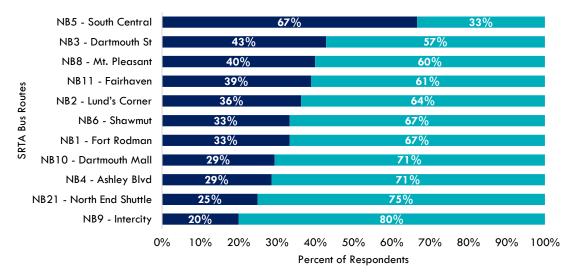
70%

80%

90%

100%

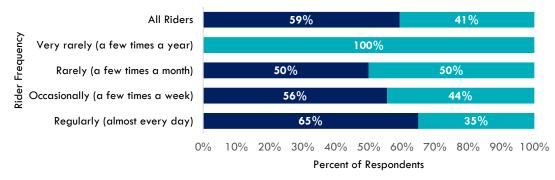
### Bus Routes and Service Frequency/Spans



### PHASE 1 TRADEOFF QUESTIONS

Out of all responses, a slight majority of respondents noted that they would rather have local service every 30 minutes to Fall River with none of it being express service than having every other trip on the NB9 as non-stop express service to Fall River. There was correlation between rider frequency and preference, respondents that rode regularly (more than a few times a month) felt stronger about 30-minute service to Fall River at 65% favoring this choice (top right). Based on these results, more respondents who ride regularly may currently be commuting to Fall River from New Bedford and would like to stop at destinations in between the two terminals along Route 6 (e.g., Dartmouth Mall, Walmart).

Out of all responses, there is not a strong correlation between route, rider frequency, and preference between service every 30-minutes to Fall River with no express service or every other trip on the NB9 going to Fall River (bottom right). Respondents that typically ride the NB9 Intercity route were almost split with increasing service to Fall River, though most respondents favored maintaining local service every 30 minutes. Respondents that typically ride the NB9 are most likely stopping at key destinations between New Bedford and Fall River.

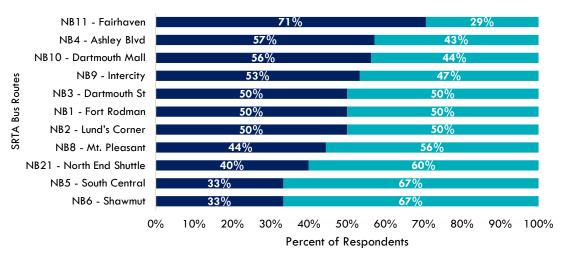


Rider Frequency and Exisiting Service/Service Expansion

■ Maintain local service every 30 minutes to Fall River with no express service.

Run every other trip on the New Bedford Route 9 as non-stop express service to Fall River (express service hourly and local service hourly)

### Bus Routes and Exisiting Service/Service Expansion



■ Maintain local service every 30 minutes to Fall River with no express service.

Run every other trip on the New Bedford Route 9 as non-stop express service to Fall River (express service hourly and local service hourly)

### **PHASE 2 KEY FINDINGS**

Phase 2 of public engagement that was conducted as part of the New Bedford Bus Service Evaluation occurred in March 2023, with a focus on gathering input on draft route and schedule scenarios and understanding how riders may be impacted with each scenario. The key findings from engagement are:

- Most SRTA riders and community members were very receptive to making bus routes more efficient if the proposed changes create faster trips.
- Most SRTA riders and community members were willing to trade higher bus frequencies for extended/longer service spans on most routes. These riders expressed that they would like to be able to work later in the evening if spans increased
- Many SRTA riders and community members were receptive to eliminating or realigning bus routes that are not productive and/or do not serve important destinations.
- There is a strong desire to simplify service by eliminating deviations on long routes and re-align routes so that they are operate to and from strong anchor points.
- There is a desire for increased access to other cities and towns such as Providence, Wareham, East Fairhaven, and Lakeville.

#### 56 | Final Report | New Bedford Bus Service Evaluation

### Give your feedback on potential bus service changes

Bay opinyon w sou chanjman potansyèl sèvis otobis yo

SRTA is proposing changes to the New Bedford bus routes and schedules, and we want to know what you think. Come see our proposals for changes to the network and provide comments in person on March 30th or **online by April 13th.** 

SRTA ap pwopoze chanjman nan wout ak orè otobis New Bedford yo, epi nou vle konnen sa ou panse. Vin wè pwopozisyon nou yo pou chanjman nan rezo a epi bay kòmantè an pèsòn sou 30 mas oswa **sou entènèt anvan 13 avril.** 

### Stop by a pop-up event to learn more and provide

to learn more and provide feedback on potential changes.

Kanpe pa yon evènman pop-up pou aprann plis epi bay fidbak sou chanjman potansyèl yo.

> **Thursday, March 30th** Jedi 30 mas

New Bedford Bus Terminal 9 AM - 12 PM 134 Elm St, New Beford New Bedford Market Basket 1 PM - 2 PM 122 Sawyer St, New Beford Dartmouth Mall 2:30 PM - 3:30 PM 200 N Dartmouth Mall, Dartmouth

**New Bedford** 

# You can also visit the website below to view materials and leave a comment.

Ou kapab tou vizite sit entènèt ki anba a pou w wè materyèl epi kite yon kòmantè.

srtabus.com/new-bedford-bus-service-evaluation/



SCAN ME



### PHASE 2 OPEN FORUM/OPEN HOUSE OVERVIEW

During the second round of public engagement, the project team held one open forum at the New Bedford Bus Terminal on March 30<sup>th</sup> from 9AM until 12PM and two additional pop-ups at the New Bedford Market Basket and the Dartmouth Mall. During the open forums and pop-ups, riders had the opportunity to discuss general feedback about SRTA's proposed route and schedule changes and participate in an outreach activity. During the outreach event, two engagement boards were used to engage community members and riders. One engagement board was used to inform riders about the proposed route and schedule changes (shown on the right), and another engagement board was used for an outreach activity.

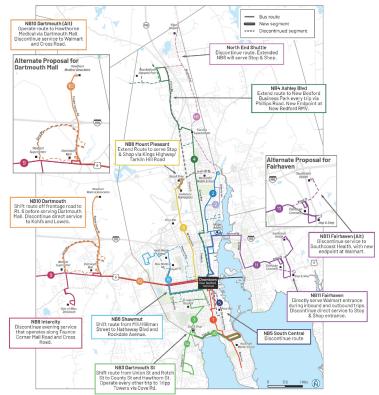
The outreach activity was intended to further engage community members and allow them to answer three survey questions regarding the proposed route and schedule changes by placing stickers and/or providing additional written feedback on sticky notes. Participants were given red and green colored stickers - green indicating they like a proposed changed, and red indicating they dislike a proposed change. Activity participants were encouraged to place stickers within the three columns of the engagement board to indicate which changes they liked or disliked regarding specific routes. Additionally, participants were given sticky notes to explain their decision further and/or to provide general feedback about SRTA's bus service.

### Southeastern Regional Transit Authority: Getting On Board NEW BEDFORD BUS SERVICE EVALUATION

#### Help plan the future of bus service in New Bedford

SRTA is evaluating the New Bedford bus network in order to adjust routes to better meet the needs of bus riders. This study is the first time since 2014 that SRTA is completing a comprehensive evaluation of the entire New Bedford network.

#### **Proposed Route Changes**





#### **Proposed Schedule Changes**

Route		Existing	Option 1	Option 2
<ul> <li>Bus every 20 min.</li> <li>Bus every 30 min.</li> <li>Bus every 40 min.</li> <li>Bus every 40 min.</li> <li>Bus every 60 min.</li> </ul>		Service hours and frequency very significantly across bus routes, operating every 20–60 minutes. Most routes begin service between 6 AM and 7 AM and end between 5 PM and 7 PM.	Service later into the night: Most buses arrive every 60 minutes with service from 6 AM to 9 PM. Four routes run every 20-30 minutes. On Saturdays, most buses arrive every 60 minutes from 6 AM to 8 PM.	Buses that come more often: Most buses arrive every 20-30 minutes with service from 6 AM to 6 PM or 8 PM on weekdays. and every 60 minutes from 7 AM to 6 PM on Saturdays. Four routes arrive every 30 minutes on Saturdays.
	M-F	20) 5:20AM-9:20PM	200 5:20AM-9:20PM	20 5:20AM-8:00PM
Fort Rodman	Sat	30 6:40AM-6:00PM	30 6:00AM-8:00PM	30 6:40AM-6:00PM
	M-F	20 5:40AM-9:40PM	200 5:40AM-9:40PM	20 5:40AM-8:00PM
2 Lund's Corner	Sat	30 6:50AM-6:35PM	5:00AM-8:00PM	30 6:50AM-8:35PM
	M-F	30 6:35AM-6:00PM	6:00AM-9:00PM	30 6:00AM-6:00PM
3 Dartmouth St	Sat	(1) 7:40AM-5:31PM	6:00AM-8:00PM	30 7:00AM-6:00PM
	M-F	30 5:40AM-8:56PM	6:00AM-9:00PM	30 6:00AM-6:00PM
4 Ashley Blvd	Sat	60 7:45AM-5:56PM	6:00AM-8:00PM	30 7:00AM-6:00PM
•	M-F	6:50AM-5:06PM	Discontinued	Discontinued
5 South Central	Sat	60 8:00AM-5:16PM	Discontinued	Discontinued
	M-F	6:10AM-5:45PM	6:00AM-9:00PM	6:00AM-6:00PM
6 Shawmut	Sat	(1) 7:20AM-4:55PM	6:00AM-8:00PM	(1) 7:00AM-6:00PM
	M-F	6:45AM-6:01PM	6:00AM-9:00PM	30 6:00AM-6:00PM
8 Mount Pleasant	Sat	8:05AM-5:11PM	6:00AM-8:00PM	(1) 7:00AM-6:00PM
Fall River -	M-F	30 6:00AM-9:51PM	6:00AM-9:00PM	30 6:00AM-6:00PM
9 New Bedford	Sat	(1) 8:00AM-7:55PM	6:00AM-8:00PM	(60) 7:00AM-6:00PM
	M-F	6:45AM-6:45PM	6:00AM-9:00PM	6:00AM-6:00PM
10 Dartmouth Mall	Sat	(0) 9:30AM-6:30PM	6:00AM-8:00PM	60 7:00AM-6:00PM
	M-F	6:35AM-6:12PM	6:00AM-9:00PM	30 6:00AM-6:00PM
Fairhaven	Sat	30 7:55AM-5:25PM	6:00AM-8:00PM	60 7:00AM-6:00PM
North End	M-F	9:05AM-5:01PM	Discontinued	Discontinued
ND Shuttle	Sat	9:05AM-4:55PM	Discontinued	Discontinued
			1	

### PHASE 2 OPEN FORUM/POP-UP KEY FINDINGS

During the second round of public engagement, approximately 20 community members and SRTA riders participated in the public engagement board activity. Overall, most participants liked the proposed route and service changes, specifically regarding changes to eliminate deviations on routes NB11, discontinue Route NB21 and NB5, and extend Route FR4. Route schedule changes in Scenario 1 that prioritized service spans were also liked by most participants. Additional feedback received during conversations with community members and SRTA riders included:

- Many SRTA riders and community members would like the NB9x Intercity express bus service to be re-instated.
- Most SRTA riders would like Sunday service, even if service is very limited or ran on a Saturday schedule.
- There is a desire for more bus stop amenities such as bike racks and shelters among all routes and stops, specifically at shopping centers and grocery stores.
- Many SRTA riders would like more connections to other cities in the region including Wareham, Providence, and Lakeville.

Route	What do you like and dislike about the proposed route changes?	What do you like and dislike about proposed schedule Option 1?	What do you like and dislike about proposed schedule Option 2?
Fort Rodman	No proposed route changes	200 5:20AM-8:20PM (M-F) 50 6AM-8PM (Sat)	20) 5:20AM-8PM(M-F) 30) 8:40AM-6PM(Sat)
2 Lund's Corner	No proposed route changes	20) 5:40ам-9:40РМ (М-F) 30) БАМ-ВРМ(Sat)	20) 5:40 AM-8PM (M-F) 30) 8:50 AM-8:35PM (Sat)
3 Dartmouth St	Shift route from Union Street and Rotch Street to County Street and Hawthorn Street. 34: Continue operating route to Big Value Plaza via Stop & Shop on every other trip 36: Operate other half of trips to Tripp Towers via Cove Road	SAM-SPM(M-F)	<ul> <li>EAM-EFM (M-F)</li> <li>7AM-EFM (Sat)</li> </ul>
4 Ashley Blvd	Extend route to New Bedford Business Park every frip Vad Phillips Rood, Industrie Park Rood, and Duchaine Boulevard New endpoint at New Bedford RMV	БАМ-ЭРМ (М-F) (1) БАМ-ВРМ (Sat)	30) EAM-6PM(M-F) 30) 7AM-6PM(Sat)
5 South Central	Route discontinued	Route discontinued	Route discontinued
6 Shawmut	Shift route from Mill/Hillman Street and Union Street to Heitheway Boulevard and Rockdale Avenue	() BAM-8PM(M-F) () BAM-8PM(Sat)	(1)         ВАМ-ВРМ (М-F)           (1)         7АМ-ВРМ (Sat)
8 Mount Pleasant	Extend route to Stop & Shop via Kings Highwey/Tarkiin Hill Road	(B) SAM-SPM(M-F) (B) SAM-SPM(Sat)	
9 Fall River - New Bedford	Discontinue service at night that operates along Faunce Corner Mail Road and Cross Road	(BAM-SPM(M-F) (BAM-SPM(Sat)	
10 Dartmouth Mall	Shift route along mall frontage road to Rt. Before serving Dartmouth Mall. Discontinue direct service to Kohfs and Lowe's Atternate: Discontinue service to Dartmouth Walmart and Cross Road Discontinue direct service to Kohfs and Lowe's	EAM-SPM(M-F)	(1) EAM-GPM(M-F) (1) 7AM-GPM(Sat)
11 Fairhaven	Directly serve Walmart entrance during inbound and outbound trips. Discontinue direct service to Stop & Shop entrance Altermate: Discontinue service to Southcoast Health New endpoint at Walmart	ВАМ-ЭРМ (М-F)           (1)           8АМ-ЭРМ (Sat)	
NE North End Shuttle	Route Discontinued	Route discontinued	Route discontinued

#### **PROPOSED ROUTE CHANGES FEEDBACK**

Most SRTA riders and community members were very receptive to the proposed route changes. Although participants were allowed to provide feedback on all changes for each New Bedford bus route, most participants only provided feedback on routes that are most important to them and/or bus routes they ride most frequently. Out of the 25 responses received from the 20 community members about the proposed route changes, 18 responses indicated that participants were in favor of proposed route changes. Seven responses, were not in favor of proposed route changes, specifically re-aligning Route NB11.

In addition to placing comments on the activity board, community members told project staff their thoughts verbally as well. Key findings from the feedback received about proposed route changes included:

- Some SRTA riders and community members would like Route NB10 to continue operating service onto Cross Road.
- SRTA riders and community members were generally receptive to removing deviations from routes that did not have high ridership or made their trip longer. Changes to routes NB8 (Fieldstone Marketplace) and Routes NB10 and NB9 (Ann & Hope Plaza).
- There were some concerns about discontinuing Route NB21. Most participants that use this route needed reassurance that service to the New Bedford RMV and areas in the Far North End would be replaced and have the same or better service frequencies.

New Bedford	Stickers (Likes/Dislikes)	Comments
NB1 Fort Rodman	Green: 3 Red: 0	<ul> <li>NB1 is always late</li> </ul>
NB2 North Main	Green: 2 Red: 0	<ul> <li>Bus is always late arriving to Market Basket</li> </ul>
NB3 Dartmouth St	Green: 1 Red: 1	<ul> <li>Use Hemlock instead of Dartmouth Street</li> </ul>
NB4 Ashley Blvd	Green: 1 Red: 1	<ul> <li>Keep service the way it is</li> </ul>
NB5 South Central	Green: 2 Red: 1	
NB6 Shawmut	Green: 0 Red: 0	
NB8 Mount Pleasant	Green: 4.5 Red: 0.5	<ul><li>Need more buses on route</li><li>Need bus to go to Stop and Shop</li></ul>
NB9 Intercity	Green: 1 Red: 0	<ul> <li>Keep on Cross Road</li> </ul>
NB10 Dartmouth Mall	Green: 0 Red: 1	
NB11 Fairhaven	Green: 3 Red: 2	<ul> <li>Shift NB11 to Front Street (closer to waterfront)</li> <li>Keep existing service</li> <li>Okay to not service SouthCoast health</li> </ul>
NB21 North End Shuttle	Green: 1 Red: 0	

#### **PROPOSED SCHEDULE CHANGES FEEDBACK**

Most SRTA riders and community members were very receptive to the two schedule change scenarios proposed. Overwhelmingly, most participants preferred Scenario 1 over Scenario 2. Although, participants were allowed to provide feedback on all changes for each New Bedford bus route, most participants only provided feedback on routes that are most important to them and/or bus routes they ride most frequently. Key findings from the feedback received about proposed schedule changes included:

#### Scenario 1

- Most SRTA riders and community members preferred Scenario 1 (service later into the night) for most routes. This was also a common theme during conversations with SRTA riders and community members because many SRTA routes only run until 6PM and 8PM.
- There were concerns about riding SRTA in the evening, and riders being left stranded or unable to find a ride. Many riders expressed that they are unable to work later shifts or carry out daily activities (e.g., shopping, doctor appointments) in the evening and later at night using SRTA.

#### Scenario 2

- Some SRTA riders and community members only preferred Scenario 2 for three bus routes. Scenario 2 for routes NB4 and NB11 were most liked. Both bus routes currently have 30-minute frequencies.
- Most SRTA riders and community members that preferred Scenario 2 were focused on travel to key shopping destinations or along major travel corridors
- Most SRTA riders and community members liked discontinuing NB21, if the NB4 would replace some of the existing service.

New Bedford Routes	Scenario 1 Stickers (Likes/Dislikes)	Scenario 1 Comments	Stickers (Likes/Dislikes)	Scenario 2 Comments
NB1 Fort Rodman	Green: 4 Red: 0		Green: 0 Red: 0	
NB2 North Main	Green: 1 Red: 0		Green: 1 Red: 0	
NB3 Dartmouth St	Green: 0 Red: 0		Green: 0 Red: 0	
NB4 Ashley Blvd	Green: 2 Red: 0		Green: 1 Red: 0	
NB5 South Central	Green: 0 Red: 0		Green: 0 Red: 0	
NB6 Shawmut	Green: 0 Red: 0		Green: 0 Red: 0	
NB8 Mount Pleasant	Green: 4 Red: 0	<ul> <li>Run later at night</li> </ul>	Green: 0 Red: 0	
NB9 Intercity	Green: 1 Red: 0		Green: 0 Red: 0	
NB10 Dartmouth Mall	Green: 1 Red: 0		Green: 0 Red: 0	
NB11 Fairhaven	Green: 1 Red: 0	<ul> <li>Run until</li> <li>10PM or</li> <li>11PM</li> </ul>	Green: 1 Red: 0	
NB21 North End	Green: 0		Green: 0	

Red: 0

Shuttle

Red: 0

Scenario 2

### PROPOSED SCHEDULE CHANGES FEEDBACK VIA GOOGLE FORM

Four responses were submitted through the Google Form made available on SRTA's project website. All respondents provided feedback on the proposed route and schedule changes, though not always on specific routes. Respondents wanted to see increased service spans, but many were in favor of prioritizing service frequencies specially on route near large employers or key destinations (e.g., Dartmouth Mall, Hawthorn Medical)

#### **Proposed Route Changes**

Respondents had mixed responses to the proposed route changes. Specific areas where respondents wanted to retain service included:

- MacArthur Avenue Price Rite (Route NB5)
- Acushnet Avenue (Far North End) (Route NB21)
- Cross Road (Routes NB10 and NB9)

#### **Proposed Schedule Changes**

Overall, all respondents who commented on the proposed schedule changes supported operating routes later over increased frequencies, although frequency improvements are also desired especially on longer routes. Both scenarios include the elimination of Route NB5 and Route NB21. Additionally, most respondents expressed their desire for Sunday service.

### Conclusion

The demographics, density, and transit utilization of New Bedford residents justifies a high-quality transit network, and the market analysis and public outreach have proven this. The service scenarios outlined in this report are aimed at providing SRTA with options to improve their service to better meet demand while still offering either a highfrequency or extensive-span based service.

The two budget-constrained options outline ways for SRTA to adjust service with a mixture of positive and negative impacts, if no additional funding becomes available. In each scenario, some aspects of service are improved based on best practices and public input, while keeping operating cost within baseline financial constraints through trade-offs and alignment changes. The third—transit-demand-based—scenario provides a menu of options for SRTA to choose from if additional money were made available and the transit needs of New Bedford could be fully met.

Regardless of SRTA's future financial clarity, there are changes to route alignments and variant elimination that could help streamline ridership and provide service that more closely suits the needs of the public. The alignment changes included in this report, if implemented without any other changes to span or frequency, could reduce costs for SRTA and improve travel times and transit service overall for riders.

