NB Line Shuttle Evaluation, 2013
Year 2
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Polling and Program Evaluation Series No.111
Contents

Executive Summary ........................................................................................................................................i

1.0 Introduction ........................................................................................................................................1

2.0 Project Background ............................................................................................................................2

3.0 NB Line Shuttle Routes and Schedule .................................................................................................4

4.0 On-Board Passenger Survey and Qualitative Assessment ...............................................................5

   4.1 On-Board Passenger Survey ........................................................................................................5

   4.2 Qualitative Assessment, NB Line Shuttle Operations ..................................................................13

5.0 Telephone Survey of Local Residents ..............................................................................................17

   5.1 Results ..........................................................................................................................................17

6.0 Key Informant Interviews ..................................................................................................................31

7.0 Other Key Data ..................................................................................................................................32

   7.1 Passenger Counts ..........................................................................................................................32

   7.2 New Bedford Whaling NHP Visitation Counts ..........................................................................34

   7.3 Walking Distance ..........................................................................................................................35

   7.4 Media Reports Related to the NB Line Shuttle ............................................................................35

   7.5 Environmental Sustainability .......................................................................................................36

8.0 Recommendations ..............................................................................................................................37

Appendix A – Telephone Survey Questionnaire ..................................................................................38

Appendix B – Telephone Survey Methodology ....................................................................................46

Appendix C – Telephone Survey Data Tables .......................................................................................48

Appendix D – On Board Survey Questionnaire ......................................................................................51
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EXECUTIVE SUMMARY

During the summer of 2012, the UMass Dartmouth Center for Policy Analysis (CFPA) conducted a baseline evaluation of the NB Line, a shuttle service being piloted over three years by the New Bedford Whaling National Historical Park and operated by Southeastern Regional Transit Authority (SRTA). The NB Line connects visitors and residents to cultural and recreational destinations throughout New Bedford along three routes: Downtown, Buttonwood, and Fort Taber, with a fare of $1.00 for adults and free for children and students. The intended outcome of the shuttle is to reduce visitor inconvenience, enhance visitor experience, and improve access to destinations throughout New Bedford, while at the same time reducing the environmental impact of National Park visitors by decreasing automobile use. The shuttle is funded through a three-year implementation grant from the U.S. Department of Transportation, Transit in the Parks Program.

This report presents an analysis of Year 2 of the shuttle’s three-year pilot phase and employs a similar methodology to the 2012 baseline report, including key informant interviews, passenger surveys, observations conducted while riding the NB Line, and a random sample telephone survey of greater New Bedford residents. Additional data was provided by the National Park Service and SRTA. A summary of results follows.

Ridership

The NB Line continues to exhibit low levels of ridership; while the number of passengers increased by 11% from 2012 to 2013, the shuttle carried an average of 17 passengers per day across all three routes and only 21% of those routes carried 10 or more passengers for the entire day. The busiest route was the Downtown Route with 704 passengers (4.6% increase from 2012), followed by the Fort Taber Route (574 passengers, 33.2% increase from 2012) and the Buttonwood Park Zoo Route (281 passengers, 10% decrease from 2012).

The NB Line will be required to cover a greater share of operating costs if the project is to be successful beyond the three-year pilot phase.1 Achieving this goal will be a challenge due to weak demand among tourists, which is the shuttle’s primary target population. In 2012, its first year of operation, low ridership levels were partly a result of a delayed start of operations, one of the shuttles going un-branded until August, the unavailability of marketing materials until late August, and limited awareness of NB Line operations among park partners.

However, it must be questioned at this time if significant numbers of tourists will ever use the shuttle regardless of new or enhanced marketing strategies due to the walkability of the Whaling National Historical Park. A primary purpose of the JFK Highway Improvement Project (Route 18) is to link the Park to the city’s working waterfront through creation of a pedestrian-friendly boulevard. Pedestrians now have easy, walkable access to MacArthur Drive, the Fairfield Inn, the Waterfront Grill, the Wharfinger Building, Schooner Ernestina, and similar waterfront attractions via Union, Walnut, and Elm Streets. The downtown area itself is compact enough that most tourists can walk to the attractions, a feature which adds to the historical experience that attracts many visitors to the Park in the first place.

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1 The implementation grant covered the cost of purchasing the shuttles.
Moreover, there is little demand among tourists for the Fort Taber and Buttonwood Park Zoo routes, which are primarily ridden by locals. Observations from CFPA staff and shuttle drivers estimate that more than half of riders on these routes are New Bedford residents who use the shuttle to access the beaches (particularly on Sundays) or various sites along the route. These observations are supported by on-board survey data that show that the highest percentages of riders during a week-long observation were visiting Fort Tabor (66%), Buttonwood Park Zoo (38%), and the beaches (31%), with most of these riders being New Bedford residents. Going forward, SRTA should consider working with its partners to develop marketing strategies aimed at attracting more locals to these routes. A second consideration is eliminating the Buttonwood Route, which carries a low number of passengers, and reconfiguring the Fort Taber Route so that it accesses both the Fort and the North End. These strategies are explored further in Section 8.0.

The Downtown Route continues to primarily serve a tourist market, albeit a small one. A possible strategy to increase demand for this route is to repackage the NB Line as a destination unto itself. As in 2012, CFPA observed that out-of-town tourists who board the bus expect to receive a guided tour. NPS does not provide ranger-guided interpretive talks on the NB Line, although volunteer interpreters provide talks when they are available, which is infrequent. The shuttle can be repackaged and produced as a destination experience that includes a narrated tour such as the Salem (MA) Trolley (http://www.salemtrolley.com). The current 20-minute trips can be replaced with longer, peak time trips accompanied by interpretive guide services that share New Bedford’s history and present-day narratives to make a compelling experience. This strategy was partly instituted on the Downtown Route in August, 2013 when narrated tours were offered from 11am to 1pm.

Low ridership throughout the season affects almost all of the evaluation team’s other findings across the areas of assessment. These findings include:

Visitor Experience

Based on the on-board survey results, the shuttle improved visitor experience by taking them to destinations they would not have otherwise visited. Satisfaction among shuttle riders was high; 92% had a “very positive” experience, despite the fact that many expected a narrated tour. However, relatively few National Park visitors actually used the shuttle, pointing to a need for more effective and widespread marketing so that more can benefit from the positive experiences enjoyed by most NB Line riders on the Downtown Route. For example, a majority of respondents were not aware of the shuttle until they arrived at the Whaling National Park.

National Park Partners

Most National Park partners and stakeholders interviewed report little to no increase in tourism/business that could be attributed to the NB Line, primarily because of the low number of shuttle riders and the fact that the shuttle is not well integrated into city life as they had hoped. There is a significant opportunity to improve the overall impact of the NB Line by more effectively engaging partners and stakeholders, who have many creative ideas to doing so, particularly if the shuttle will be strategically marketed to locals.
Parking

While one of the goals of the NB Line is to reduce off street parking and the number of cars in the downtown area, the reality is that parking in the National Park and at other New Bedford attractions is not a significant issue for most visitors; only 7% of riders surveyed indicate that “limited availability of parking” was the reason they rode the NB Line shuttle, while 9% also indicate that “parking is too far from attractions/sites.”

Moreover, the availability of the NB Line shuttle may not have had a significant effect on respondents’ decision to park in an off-street location; 60% report they would have parked in the same location if the NB Line shuttle service were not available, while only 11% would have parked in a different location. Again, this may be partly attributable to the fact that a majority of respondents who rode the shuttle did not learn about the service until they arrived in downtown New Bedford.

Environment

Once again, limited ridership affected the ability of the NB Line to reduce greenhouse gases, because its own emissions were likely to have exceeded those by personal vehicles on low-ridership days. Nevertheless, the onboard survey suggests that the shuttle’s availability encouraged visitors to walk instead of drive, which points to the NB Line’s ability to succeed in this area if more people choose to ride.

Community Awareness

Based on telephone interviews conducted with residents in greater New Bedford, awareness of the National Park is very high; 80% of respondents are aware that there is a national park in downtown New Bedford and 70% have visited the park. Awareness of the NB Line is also relatively high; 46% of respondents report they are familiar with the NB Line, although only 10% have actually ridden the shuttle. Importantly, 58% report they would consider riding the NB Line in the future.

Awareness about the city’s historical and cultural impact, around which the New Bedford Whaling National Historical Park was formed, is also high among city residents and suburban residents alike. For example, 70% of the telephone survey respondents feel that New Bedford played a very important role in shaping the history and culture of our country, 47% believe that New Bedford’s role in the abolishment of slavery was very important, and 51% feel that the cultural resources New Bedford offers today are very important to our country as a whole.
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1.0 INTRODUCTION

The Center for Policy Analysis at UMass Dartmouth, along with its Urban Initiative, was retained by the Southeastern Regional Transit Authority (SRTA) in 2012 to conduct an evaluation of the Alternative Transportation Shuttle that serves the New Bedford Whaling National Historical Park (NHP), Buttonwood Park Zoo, and Fort Taber. Named the NB Line, the shuttle system connects visitors and residents to cultural and recreational destinations throughout New Bedford. The intended outcome of the shuttle is to reduce visitor inconvenience, enhance visitor experience, and improve access to destinations, while at the same time reducing the environmental impact of National Park visitors by decreasing automobile use.

Specifically, the shuttle project seeks to:

- reduce traffic congestion and reduce pollution throughout the New Bedford Whaling NHP and in downtown New Bedford by encouraging visitors to park in off-street locations,
- enhance visitor mobility, accessibility, and safety by alleviating parking shortages and traffic congestion throughout the NHP, and
- enhance visitor education, recreation, and health benefits by providing easier access to New Bedford’s attractions, while promoting the history of New Bedford and creating a cohesive visitor experience.

This report presents an analysis of Year 2 of the 3-year evaluation period and employs similar techniques and instruments used in the 2012 baseline evaluation, including:

I. On-Board Passenger Survey and Qualitative Analysis

Conducted on-board each of the three NB Line shuttle routes during the week of August 5 through August 11, the survey measures visitor experience, including comfort and reliability of the shuttle, driver behavior, interpretation, walking distance, ADA accessibility, and impact on visitors’ parking behavior. The survey also captures passenger demographic data, such as education, sex, race, age, and place of residence.

Survey staff also collected data on the variation in ridership levels by time of day and ridership distribution by stop/pickup point. In addition, a qualitative assessment highlights issues related to the shuttle route and stops, schedule adherence, capacity-related problems, and vehicle and equipment reliability on each segment of the three shuttle routes.

II. Telephone Survey of Area Residents

A random sample telephone survey was conducted with 704 residents of Acushnet, Dartmouth, Fairhaven, Freetown, and New Bedford to measure local residents’ awareness and usage of the NB Line shuttle, local community awareness of the New Bedford Whaling National Historical Park and its institutional partners, and local community awareness of New Bedford’s historical significance and impact as it relates to whaling, slavery, and arts and culture.

III. Key Informant Interviews

Key informant interviews were conducted with stakeholders and partners of the New Bedford Whaling NHP to gauge stakeholder opinions on the benefits of collaboration, challenges experienced while collaborating, and satisfaction with the 2013 implementation of the shuttle.
IV. Other Data and Indicators

a. A record of media reports related to the project.
b. Passenger counts on all shuttle routes throughout the operating season.
c. Total visitation counts at the National Park Visitor Center and park partner sites.
d. A measure of walking distance from both the National Park Visitor Center and from the shuttle route to key sites.
e. Environmental sustainability of the shuttle service.

2.0 PROJECT BACKGROUND

New Bedford Whaling National Historical Park was established by Congress in 1996 to help preserve and interpret America’s nineteenth century whaling industry. The park, which encompasses a 13-block National Historic Landmark District, is the only National Park Service area addressing the history of the whaling industry and its influence on the economic, social, and environmental history of the United States. The National Park Visitor Center is located at 33 William Street in downtown New Bedford and offers information, exhibits, and a free orientation movie.

New Bedford Whaling NHP was created to be a partnership park; the federal government does not own property within the park except what is absolutely necessary to achieve the park’s mission. However, the park works with its institutional partners to achieve its mission, including the New Bedford Whaling Museum, Rotch-Jones-Duff House and Garden Museum, Seamen’s Bethel, and Schooner Ernestina.

According to the Transit in the Parks Implementation Project Proposal, New Bedford Whaling NHP hosts close to 300,000 visitors annually and this number is expected to increase significantly in coming years. There are approximately three visitors per vehicle at the park and it is estimated that as many 100,000 visitor vehicles are in the park annually. Peak visitation in the summer months accounts for about 70% of total visitations, which means that daily vehicle traffic is between 600 and 800 vehicles per day during peak months. The capacity of downtown New Bedford’s Elm Street Garage is 1,011 vehicles. Consequently, vehicle trips in the park could conceivably be reduced by 100% if visitors parked in the garage and relied on a shuttle and walking for transportation around the park, significantly easing traffic congestion.

The park’s 2001 General Management Plan (GMP) identifies traffic and parking as a major challenge. Moreover, the City of New Bedford’s 2004 Central Business District and New Bedford Whaling NHP Traffic and Circulation Study and Parking Master Plan specifically recommends a shuttle system to reduce parking congestion. Similarly, a 2007 Partner Strategic Action Plan also proposed a shuttle system for the park. However, since the GMP was prepared, other developments have increased the need for a shuttle, such as the 2003 opening of a new ferry terminal on the State Pier that serves ferry passengers to and from Martha’s Vineyard and Cuttyhunk Island. In addition, cruise ships now visit the terminal in the summer and a new hotel opened on the waterfront adjacent to the park in 2009.

This evaluation is focused on the second phase of a three phased alternative transportation shuttle project that will link New Bedford Whaling NHP sites with the Elm Street Parking Garage, ferry and cruise ship terminals at the historic waterfront, the University of Massachusetts Dartmouth campus during the fall, winter, and spring, and prominent downtown New Bedford lodging and cultural sites (see Figure 1 for area map). The project is funded through an implementation grant from the U.S. Department of Transportation, Transit in the Parks Program. The City of New Bedford Office of Planning is the recipient of the grant. Phase 1 of the project, which began in 2010,
evaluates an existing shuttle system currently piloted by the New Bedford Harbor Development Commission and the University of Massachusetts Dartmouth. The shuttle system serves ferry passengers and university students, staff, and faculty but does not directly serve the New Bedford Whaling NHP.

Phase 2, which is the focus of this evaluation, institutes a shuttle pilot (NB Line) that serves the park – including the Rotch-Jones-Duff House and Garden Museum – over a three-year period. The intended outcome is that the shuttle will draw more visitors to the downtown district, while reducing pollution, traffic congestion, and visitor inconvenience. In addition, the ADA compliant shuttles will help the NHP to become universally accessible. Phase 3 of the project will purchase accessible alternative energy shuttle vehicles, install shuttle stop kiosks and signage, and launch a permanent shuttle service.
3.0 **NB Line Shuttle Routes and Schedule**

The NB Line shuttle system connects visitors and residents to cultural and recreational destinations throughout New Bedford. Southeast Regional Transit Authority (SRTA) supplies and operates the shuttles. Buses are 18-passenger with a wheelchair lift and each bus is wrapped with the NB Line logo. The shuttle’s 2013 schedule was as follows:

- May 25 to June 21, weekends only; 9am to 5pm.
- June 22 to September 2, seven days per week; 9am to 5pm and an additional 4 hours on AHA! nights.
- September 3 to October 14, 9am to 5pm weekends only.

The shuttle includes three routes - Downtown, Buttonwood, and Fort Taber – with a fare of $1.00 for adults and free for children and students. The one-dollar fare is good for the entire day, and is transferable between the two bus routes during that day. Riders receive a colored wristband to show to the driver when they get on a bus and a different colored band was issued to riders on successive days. Two buses are used to serve the three routes; the Fort Taber and Buttonwood Park Zoo routes functionally comprise a single 70-minute tour (see Figure 2).^{2}

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^{2} Route map courtesy of New Bedford Whaling NHP.
4.0 **On-Board Passenger Survey and Qualitative Assessment**

CFPA and Urban Initiative staff rode the NB Line shuttle during all operating hours over the week of Monday, August 5 through Sunday, August 11, 2013. Staff conducted a survey with passengers during these hours and recorded anecdotal data relating to schedule adherence, capacity-related problems, and vehicle and equipment reliability on each segment of the three NB Line routes. These observations also included the variation in ridership levels by time of day, by day of week, and across stop/pickup points.

4.1 **On-Board Passenger Survey**

The on-board passenger survey was implemented using a questionnaire similar in design to other National Park Service shuttle surveys and was administered to all willing passengers age 18 and older who rode the NB Line during the week. The purpose of the survey is to measure the overall visitor experience, including comfort and reliability of the shuttle, driver courtesy, walking distance, ADA accessibility, and the impact on visitors’ parking behavior (i.e., a shift in preference from parking on the streets to garage parking). The survey also captures demographic data, such as respondents’ education, sex, race, age, and place of residence.

The survey was conducted each day from 9:00 am to 5:00 pm. Respondents were provided the option to fill out a paper survey or complete the survey using a tablet. While all passengers age 18 years and older were asked to complete the survey, in most cases one person in the party filled out the survey for their group. Thus, although a total of 57 surveys were completed during the week, the responses of these survey-takers generally represent those of a larger group.

Overall, results of the passenger survey show that a significant percentage of riders are not tourists but rather New Bedford residents who use the NB Line to travel to various locations around the city. Many locals use the shuttle to get to Fort Taber (and its beach), while others simply ride the comfortable air-conditioned shuttles to pass the time during hot summer days. Results of the survey follow.

4.11 **Previous Visitation to the New Bedford Whaling National Historical Park and NB Line Usage**

Forty-seven percent of respondents (47%) were first time visitors to the New Bedford Whaling NHP, while 11% visited once before, 13% visited 2 to 4 times, and 29% visited 5 times or more (see Figure 3). Most are first-time riders; 70% were riding the NB Line shuttle for the first time, while 11% had ridden once before, 6% had ridden 2 to 4 times, and 12% had ridden 5 times or more (see Figure 4). These results are similar to those from the 2012 survey.

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3 A copy of the survey can be found in Appendix D.
4 A total of 273 passengers rode the shuttle during the survey period.
5 Due to the low number of respondents, conclusions from the survey should be made with caution.
4.12 Parking Behavior

Respondents were asked several questions regarding their parking behavior during their visit. Respondents were first asked how they arrived at the shuttle stop. Forty-two percent (42%) report they drove then walked from the stop to their car,\(^6\) while 38% walked to the stop,\(^7\) 13% used other means, 6% used public transportation, and 2% biked to the stop (see Figure 5).

![Figure 5](image.png)

How Did You Get to the NB Line Shuttle Today?

One of the goals of the NB Line is to alleviate downtown traffic congestion by transitioning visitors from parking on the street to parking in the city’s two garages. Results of the on-board survey, although limited due to the small sample size, suggest that most NB Line shuttle users did not park on the street. For example, among respondents who drove to the shuttle stop, 49% parked in the Elm Street garage while only 24% parked on the street (both metered and un-metered parking) (see Figure 6).

![Figure 6](image.png)

If You Drove to the Area Today, Where Did You Park?

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\(^6\) These respondents reside out of town.

\(^7\) These are primarily New Bedford residents.
However, the availability of the NB Line shuttle may not have had a significant effect on respondents’ decision to park in an off-street location; 60% report they would have parked in the same location if the NB Line shuttle service were not available, while only 11% would have parked in a different location and 29% did not know (see Figure 7).

This may be partly attributable to the fact that more than half of respondents (51%) who rode the shuttle did not learn about the service until they arrived in downtown New Bedford, while 24% learned about the shuttle at the Visitors Center, 12% from a National Park Service employee, 10% at the Fairfield Inn, and 4% from signage at the shuttle stops. Print and other media were less effective in promoting the shuttle; no respondents learned about the shuttle from the newspaper, while 6% learned about the shuttle from the NPS website and 2% from the guidebook (see Figure 8).
4.13 MOTIVES FOR RIDING THE NB LINE

Parking in the National Park and at other New Bedford attractions is not a significant issue for most respondents; while respondents cite various reasons for riding the NB Line, only 7% indicate that “limited availability of parking” was the reason they rode the NB Line shuttle, while 9% also indicate that “parking is too far from attractions/sites” (see Figure 9). Higher percentages of respondents cite other reasons for riding, including the opportunity to relax and enjoy the scenery (67%), limited knowledge of the visitor site locations (38%), environmental friendliness of shuttles (26%), and other reasons (26%).

Figure 9

Why Did You Decide to Ride the NB Line Today?

- Opportunity to relax and enjoy the scenery: 67% (2012), 50% (2013)
- Limited or no knowledge of the visitor site locations: 38% (2012), 25% (2013)
- Environmental friendliness of shuttles: 26% (2012), 19% (2013)
- Other reasons: 26% (2012), 19% (2013)
- Save money on gas: 13% (2012), 9% (2013)
- Save money on parking: 9% (2012), 6% (2013)
- Dislike driving in an unfamiliar area: 11% (2012), 9% (2013)
- Parking too far from attractions/sites: 9% (2012), 8% (2013)
- Limited availability of parking: 9% (2012), 7% (2013)
- Mobility/accessibility needs: 9% (2012), 7% (2013)
- Allivate walking: 25% (2012), 25% (2013)

8 These are primarily New Bedford residents.
4.14 Rider Satisfaction

Overall, respondents rate their NB Line experience positively; 92% had a very positive experience, 2% had a somewhat positive experience, and 6% had neither a positive nor negative experience. No riders had a negative experience (see Figure 10).

**Figure 10**
Overall, How Would You Rate Your Experience Using the NB Line?

Respondents were asked to rate specific aspects of the shuttle service. Overall, respondents are satisfied with most all aspects of the shuttle service, particularly the fare price (85% very satisfied), the comfort of the shuttle (78% very satisfied), and driver courtesy (73% very satisfied) (see Figure 11).

**Figure 11**
How Satisfied Are You With the Following?
4.15 ATTRACTIONS VISITED

Respondents visited or planned to visit a variety of New Bedford attractions, with the highest percentages visiting Fort Tabor\(^9\) (66%), New Bedford Whaling Museum (40%), Buttonwood Park Zoo (38%), and the beaches (31%) (see Figure 12).

Respondents were asked how they would have reached the attractions they visited or planned to visit if the NB Line Shuttle was not available. The highest percentage of respondents report that they would have walked to the attractions or sites (22%), while 27% would have driven and 22% would not have visited the attractions at all (see Figure 13). Thus, the NB Line shuttle did succeed somewhat in decreasing the number of visitors driving to attractions, while at the same time attracting visitors who would not have visited if it were not for the shuttle.

\(^9\) These are nearly all New Bedford residents.
4.17 Demographic Background of Respondents

Respondents reside in a geographically wide range of locations and represent a variety of demographic groups in terms of age, gender, income, educational attainment, and race/ethnicity (see tables that follow).

Table 1
Place of Residence

<table>
<thead>
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<th>Place of Residence</th>
<th>Number</th>
<th>Place of Residence</th>
<th>Number</th>
</tr>
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<tbody>
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<td>18</td>
<td>Boston</td>
<td>1</td>
</tr>
<tr>
<td>Campbellsport, WI</td>
<td>4</td>
<td>Bourne</td>
<td>1</td>
</tr>
<tr>
<td>Canada</td>
<td>4</td>
<td>Norton</td>
<td>1</td>
</tr>
<tr>
<td>Washington D.C.</td>
<td>3</td>
<td>Swansea</td>
<td>1</td>
</tr>
<tr>
<td>Agawam</td>
<td>2</td>
<td>Pawtucket</td>
<td>1</td>
</tr>
<tr>
<td>Plymouth</td>
<td>2</td>
<td>Avondale, PA</td>
<td>1</td>
</tr>
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<td>New York, NY</td>
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<td>Marietta, GA</td>
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<td>Fredericksburg, VA</td>
<td>2</td>
<td>Font Du Lac, WI</td>
<td>1</td>
</tr>
<tr>
<td>East Longmeadow</td>
<td>1</td>
<td>Tuscan, AZ</td>
<td>1</td>
</tr>
<tr>
<td>Boxford</td>
<td>1</td>
<td>San Bernandino, CA</td>
<td>1</td>
</tr>
</tbody>
</table>

Figure 14
Number of People in Group (Including Respondent)

Figure 15
Age Group of Riders
4.2 **QUALITATIVE ASSESSMENT, NB LINE SHUTTLE OPERATIONS**

In addition to the on-board passenger survey, staff collected anecdotal data relating to schedule adherence, capacity-related problems, and vehicle and equipment reliability on each segment of the three NB Line routes during the survey week. These observations also include the variation in ridership levels by time of day, and day of week, and its distribution by stop/pickup point. Importantly, although the NB Line is described on the NPS web site as comprising three routes, two buses are utilized, and operationally the drivers perceive their operations as comprising two routes. Thus, the separate Fort Taber and Buttonwood Zoo routes functionally comprise a single 70-minute tour that travels from the NPS Visitor Center to Fort Taber and back to the Visitor Center, then west to the Zoo with a return to the Visitor Center.

### 4.21 ROUTE AND SCHEDULING OBSERVATIONS

The routes are vastly different with regard to pacing and scheduling. The Downtown Route is very challenging for the driver, while the Fort Taber/Buttonwood Park Zoo Route is much easier.

**Downtown Route (20 minutes)**

Typically the drivers were able to keep to schedule in 2013, unlike the previous year when the Downtown Route was modified and was more challenging due to ongoing construction activity necessitating closure of the Elm Street intersection with Route 18. However, there still remain blockages caused by poorly parked cars, trash pickup operations, and similar situations on narrow streets that necessitate a change in route. For example, Madison Street is frequently too difficult to navigate.

**Fort Tabor / Buttonwood Park Zoo route (70 minutes):**

In contrast to the downtown route, the 70-minute Fort Tabor/Buttonwood Park Zoo route has perhaps too much slack time built into the schedule. There are no tight city streets to negotiate, except for First Street on the Zoo leg of the trip. Unlike the downtown route, the Fort Tabor/Zoo route is characterized by long drives on wide roads, with few turns and good sight lines ahead to scan for obstacles, traveling along scenic vistas of Clark’s Cove, the Fort, and the eastern beaches.

### 4.22 RIDERSHIP ISSUES

The NB Line is intended to connect visitors and residents to New Bedford’s cultural and recreational destinations. In 2012, those who rode the shuttle were often low-income New Bedford residents. On hot summer days, for a fee of one dollar, local riders benefited from air-conditioned comfort as needed throughout the day. During the week in 2013 that staff traveled the routes, this pattern of local ridership was not observed to the same degree, possibly because temperatures were not as high in the study week of 2013 as they were in 2012.

Some stops do not generate any ridership such as the State Pier and Zeiterion Theater. The Zeiterion Theatre stop is located around the corner from the theatre entrance, against a blank wall. Few or no pedestrians are typically seen at this stop, never mind people who want to board a shuttle. The service is no longer in its infancy, and promotional materials were not delayed in 2013 as was the case in 2012. But quite apart from promotional issues, it appears that certain locations, like the stop along the blank south wall of the Zeiterion Theatre, do not seem to promise success under any scenario.
As a rule, NB Line passengers almost never board or leave the shuttle bus at State Pier. Tourists at State Pier are typically bound for or returning from Martha’s Vineyard. They travel at no charge on the trolley between the Whale’s Tooth Parking Lot to the north and State Pier. In addition, passengers were never picked up at Wings Court (Wings Court is labeled “City Center” on bus maps and brochures, which may confuse visitors from out-of-town).

The busiest passenger days for the week were Friday, August 9 for the Downtown Route and Tuesday, August 6 for the Fort Taber/Buttonwood Park Zoo Route (see Figure 20). In terms of specific stops, the National Park Visitors Center and the Fairfield Inn were by far the busiest stop for the Downtown Route (see Figure 21), while the Visitor Center and Fort Taber were the busiest stops on the Fort Taber/Buttonwood Park Zoo routes (see Figure 22). There were no passengers who boarded or disembarked at the Zeiterion (Downtown Route) and Antiques West (Fort Taber Route).
4.23 Bus and Route Identification Issues

The electronic message signage on the two designated shuttle buses has been improved for 2013. Electronic signage now informs potential riders of the purpose of the shuttle, and the destinations it serves. The exterior graphic wraps on the two designated 18-passeneger shuttle buses have also been improved for 2013. They are now informative, as well as attractive. The graphic wrap now communicates where the bus travels and the purpose for which it is intended. New signage on the sides and rear of the buses tells prospective riders that for one dollar they can travel all day to downtown New Bedford, Fort Taber, and Buttonwood Park Zoo. Prospective riders on the street cannot see the shuttle interiors through the tinted glass. It may be of value to consider whether clear glass and the ability to see other tourists in the bus would encourage those on the street to enter the bus.

NB Line porcelain enamel metal signage at each stop continues to be of poor quality. Portions of the signs are missing at the NPS Visitor Center stop on Second Street and the Rotch-Jones-Duff stop on Madison Street. Even the intact signs at other stops are too small and the messages are printed using small fonts. The signs are mounted at a height suitable for only a tall adult to read. Those of shorter stature or in wheelchairs would find the sign difficult or impossible to read. At some locations, such as the “City Center” stop at Wings Court, the small sign is set back so far from the roadway that potential riders may miss it. In addition to a portion of the NPS Visitor Center sign being missing, the portion that remains is functionally hidden from most sight lines by poles and trees.

Large, attractive posters mapping the bus routes posted at the Wharfinger Building, the Elm Street Garage, and the ticket office at State Pier, and an open-air kiosk near Custom House Square, constitute a signage improvement for 2013. A smaller 11” x 17” poster was seen attached to the front glass of the New Bedford Chamber of Commerce building.

4.24 Interpretation Issues

In 2013, we again observed that out-of-town tourists who board the bus expect to receive a guided tour. Some of the bus drivers feel limited by their lack of strong communication skills in English, and do not attempt to converse with passengers. Others are motivated individuals who like to share what they know about the city of New Bedford. Talking while they drive, they attempt to do a good job, but the typical presentation is by no means professional in tone.

NPS does not provide ranger-guided interpretive talks on the NB Line. Volunteer interpreters provide talks when they are available, which is infrequent. On Friday, August 9, an NPS volunteer interpreter entered the Downtown Route bus to offer her first interpretive session of the 2013 season. She happened to be present when five tourist riders were riding the bus. The volunteer interpreter did an excellent job of engaging riders and revealing to them otherwise hidden aspects of New Bedford’s history and culture. However, on another day, a volunteer interpreter entered the bus and, there being no riders, exited the bus after making one 20-minute trip. These were the only two opportunities for interpretation noted during the week-long study period.

4.25 Competing Services

The Fairfield Inn (one of the NB Line shuttle stops) operates its own shuttle bus as a free service, upon request of a client, within a five-mile radius of the Inn. The Inn bus has taken clients to local downtown locations such as the New Bedford Whaling Museum and also to further destinations such as the New Bedford Airport. However, it does not make regular trips. The general manager at the Fairfield Inn noted that use of the NB Line by
her clients is down in 2013 compared to 2012. We speculate that the improvements to pedestrian passage across Route 18 have made it much easier for foot traffic to and from the Fairfield Inn and New Bedford’s downtown district.

An attractive and free passenger ferry shuttle service also operates to and from the Whale’s Tooth Parking Lot and the ferry terminal at State Pier.
5.0 **Telephone Survey of Local Residents**

A random sample telephone survey was conducted with residents 18 years of age and older from the communities of Acushnet, Dartmouth, Fairhaven, Freetown, and New Bedford. The purpose of the survey is threefold:

- to measure local residents' awareness and usage of the NB Line shuttle,
- to measure local community awareness of the New Bedford Whaling National Historical Park and its institutional partners, and
- to measure local community awareness of New Bedford’s historical significance and impact, particularly as it relates to whaling, slavery, and arts and culture.

A total of 704 telephone interviews were conducted from July 31, 2013 through August 4, 2013 using a questionnaire developed by the Center for Policy Analysis and staff from the New Bedford National Whaling NHP. The overall margin of error for the poll is +/-3.7 percent for the complete set of data and the response rate for the survey is 15.8% (AAPOR#4). Twenty test interviews were conducted before full implementation of the survey began and Spanish and Portuguese speaking interviewers were available to administer the survey in those languages.

To ensure equal representation among the five communities, a proportional sample of surveys was conducted based on each community’s population 18 years of age and older (See Table 2).

<table>
<thead>
<tr>
<th>Town/City</th>
<th># Census Pop 18+</th>
<th>% Census Pop 18+</th>
<th># Completed Surveys</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acushnet</td>
<td>8,197</td>
<td>6.4%</td>
<td>45</td>
</tr>
<tr>
<td>Dartmouth</td>
<td>27,571</td>
<td>21.6%</td>
<td>152</td>
</tr>
<tr>
<td>Fairhaven</td>
<td>12,904</td>
<td>10.1%</td>
<td>71</td>
</tr>
<tr>
<td>Freetown</td>
<td>6,879</td>
<td>5.4%</td>
<td>38</td>
</tr>
<tr>
<td>New Bedford</td>
<td>72,227</td>
<td>56.5%</td>
<td>398</td>
</tr>
</tbody>
</table>


5.1 **Results**

Basic frequencies are presented for each survey question. In addition, crosstabulations were run by each question to determine if significant differences exist among respondents based on their demographic background. In most cases, the survey results are presented for all respondents as well as by New Bedford versus its surrounding suburban towns, which may provide useful market segmentation data. Comparisons to the 2012 survey are also included. The detailed data tables that include all crosstabulations can be found in Appendix C. Results follow.

---

10 The telephone survey was also conducted in 2012 using a similar methodology and questionnaire.
11 A copy of the questionnaire can be found in Appendix A.
12 The number of respondents for some questions is lower, thus the margin of error is higher in those instances.
13 More on the methodology can be found in Appendix B.
14 Demographic crosstabulations are presented within the main body of the report only if they are statistically significant at the .05 level and below.
5.11  Awareness and Usage of NB Line Shuttle

Forty-six percent (46%) of respondents report they are familiar with the NB Line, with a higher percentage of New Bedford respondents (54%) being familiar with the shuttle in comparison to respondents from surrounding communities (35%) (see Figure 23). Similar percentages of respondents report they have seen the NB Line shuttle while they were walking or driving around New Bedford (see Figure 24). Results are similar for both the 2012 and 2013 surveys.

Although significant percentages of respondents are familiar with the NB Line and have seen the shuttle driving around the city, only 10% have ridden the shuttle (see Figure 25).
5.12 Potential Ridership

Fifty-eight percent of respondents (58%) report they would consider riding the NB Line in the future, with New Bedford respondents (62%) more likely to consider riding than suburbanites (54%) (see Figure 26). Results are similar for both the 2012 and 2013 surveys (see Figure 27).

**Figure 26**

Would You Consider Riding the NB Line Shuttle If You Visited New Bedford Whaling National Historical Park, Buttonwood Park Zoo, or Fort Taber In the Future?

<table>
<thead>
<tr>
<th></th>
<th>All Respondents</th>
<th>New Bedford Residents</th>
<th>Suburban Residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>58%</td>
<td>62%</td>
<td>54%</td>
</tr>
<tr>
<td>No</td>
<td>34%</td>
<td>1%</td>
<td>7%</td>
</tr>
<tr>
<td>Not Sure</td>
<td>7%</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td>Don’t ever plan on</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>

**Figure 27**

Would You Consider Riding the NB Line Shuttle If You Visited New Bedford Whaling National Historical Park, Buttonwood Park Zoo, or Fort Taber In the Future? 2012 & 2013: Percent "Yes"

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Respondents</td>
<td>61%</td>
<td>58%</td>
</tr>
<tr>
<td>New Bedford Residents</td>
<td>64%</td>
<td>62%</td>
</tr>
<tr>
<td>Suburban Residents</td>
<td>58%</td>
<td>54%</td>
</tr>
</tbody>
</table>
Among respondents who would consider riding the NB Line (see Figure 25), 39% report they are very likely to ride, 49% are somewhat likely to ride, 9% are not likely to ride, and 3% don’t know (see Figure 28). New Bedford respondents report that they are slightly more likely to ride in comparison to suburban respondents (41% vs. 36%). Respondents’ likeliness to ride has changed little from 2012 to 2013 (see Figure 29).

**Figure 28**  
How Likely Are You to Ride the NB Line Shuttle During Your Visit to Any of These Places?

![Figure 28](image-url)

**Figure 29**  
How Likely Are You to Ride the NB Line Shuttle During Your Visit to Any of These Places?  
Percent "Very Likely" or "Somewhat Likely"

![Figure 29](image-url)
Respondents who report they would not ride the NB Line were asked the reason. The highest percentages of respondents report that they would not ride because they would rather drive their car/they have a car (39%), it is easier to walk/they would rather walk (22%), and because they are handicapped or ill (22%) (see Figure 30).\footnote{15 Conclusions should be made with caution due to the low number of respondents.}

![Figure 30: Reasons Respondent Would Not Ride the New Bedford Line Shuttle](image)

*Note: Percentages do not add to 100% because respondents were allowed to choose more than one category.*
5.13 AWARENESS OF NEW BEDFORD WHALING NATIONAL HISTORICAL PARK

Eighty percent (80%) of respondents are aware that there is a national park in downtown New Bedford, with a slightly higher percentage of New Bedford respondents (82%) being aware of the NHP in comparison to suburban respondents (77%) (see Figure 31). There are only minor differences in results between the 2012 and 2013 surveys.

Respondents who are aware of the NHP were asked the degree to which they are aware of what the park comprises and offers to visitors. A quarter (25%) of respondents report they are very aware of what the park offers and comprises, while 56% are somewhat aware and 20% are not aware. There are only minor differences in levels of awareness between New Bedford and suburban respondents (see Figure 32) and results are similar for both the 2012 and 2013 surveys (see Figure 33).

Respondents with higher levels of education are more aware of what the NHP comprises; 30% who have a Bachelor’s or higher are very aware compared to 17% with a high school diploma or less. Similarly, older respondents are more aware of what the park comprises in comparison to respondents in younger age cohorts; 18% age 18-34, 19% age 35-49, 26% age 50-64, 33% age 65 and older are aware of what the NHP offers and comprises.
5.14 Park Visitation

Seventy percent (70%) of respondents report they have visited the New Bedford Whaling NHP, with a slightly higher percentage of New Bedford respondents (71%) having visited in comparison to suburban respondents (69%) (see Figure 34). There are only minor differences in results between the 2012 and 2013 surveys.
Respondents who have not visited the National Park were asked to explain why they have not visited. The highest percentage of respondents report they have not visited the park because they don’t know enough about it (32%), followed by the fact that they have no time (31%), are not interested (19%), they don’t know (7%), other reasons (6%), they don’t have transportation (3%), they don’t feel safe in the area (1%), and they can’t afford it (1%) (see Figure 35).\(^{16}\)

16 Other reasons include disability/medical issues (N=7) and that the respondent is new to the area (N=3).
5.15 **Familiarity with National Park Partners and Institutions**

Respondents were asked if they are familiar with various New Bedford museums and institutions. Specifically, respondents were asked: “Can you tell me if you are familiar with any of the following New Bedford museums and institutions?” Respondents who reported they are familiar with a museum or institution were then asked if they are aware that it is an institutional partner of the NHP. Specifically, respondents were asked: “And before this interview, did you know that <museum or institution name> was part of the Whaling National Historical Park?”

Respondents are generally aware of each of the museums and institutions; 98% are aware of the Whaling Museum, followed by the Seamen’s Bethel (83% aware), the Schooner Ernestina (73% aware), Rotch-Jones Duff House and Garden Museum (65% aware), Waterfront Visitors Center (59% aware), and the National Park Visitor Center (49% aware) (see Figure 36).

Respondents are also largely aware that these museums or institutions are part of the National Park. For example, 72% of respondents who are familiar with the National Park Visitors Center are aware that it is a partner of the National Park, followed by 65% for the Whaling Museum, 62% for the Waterfront Visitors Center, 62% for the Seamen’s Bethel, 58% for the Schooner Ernestina, and 54% for the Rotch-Jones Duff House and Garden Museum (see Figure 36). Respondents who reside in New Bedford are more likely to be aware of each museum and institution than are respondents who reside in the surrounding communities. These results are similar to those from the 2012 survey.

In addition, respondents with higher levels of education are more likely to be aware of each museum and institution than are respondents with lower levels of education and are also more likely to know that each is part of the NHP. Lastly, older respondents are also more likely to be aware of each museum and institution than are respondents in younger age cohorts.

![Figure 36](image)

*Familiarity with New Bedford Museums and Institutions and Awareness That These Are Institutional Partners of New Bedford Whaling National Historical Park*

17 Again, this question was only asked if a respondent was aware of the museum or institution.
5.16 RECOMMENDATIONS FOR FUTURE EVENTS AND ACTIVITIES

All respondents were asked to specify events or activities that the National Park could sponsor that would encourage them to visit the Park. Responses include:\(^{18}\)

- Festivals (N=12)
- Children’s events/Activities (N=7)
- Folk festival (N=3)
- Musical events/concerts (N=7)
- Animals
- Barbecue food events
- Chowderfest
- Craft fair
- Display of local art
- Highlight Norwegian heritage
- Family events
- Food related events
- Historical-based events
- LBGT events
- Lectures
- Massachusetts 54th Regiment
- Whaling history festivals
- More working waterfront weekends
- More whaleboat racing
- Morgan ship returning
- Movies
- Sail boat racing
- Scallop festival
- Student functions
- Vegan living
- Walking tours

\(^{18}\) In some cases the actual wording of responses was grouped into general categories and themes.
5.17 AWARENESS OF NEW BEDFORD’S HISTORICAL SIGNIFICANCE AND IMPACT

The telephone survey included five questions that measure respondent awareness of New Bedford’s impact and imprint on our country’s history and identity in terms of whaling, slavery, and art and culture. It is these issues around which the New Bedford Whaling National Historical Park was formed and organized. The questions seek to measure the connection between the history of New Bedford and the mission of the Whaling NHP in presenting and preserving that history. Overall, results show that respondents are generally aware of New Bedford’s historical significance.

Role in Shaping the History and Culture of Our Country

Seventy percent (70%) of respondents feel that New Bedford played a very important role in shaping the history and culture of our country, while 25% feel the city played a somewhat important role, 2% feel it played not a very important role, and 0.2% feel that its role was not important at all (see Figure 37). Results from the 2012 and 2013 surveys are similar (see Figure 38).

![Figure 37](image-url)

![Figure 38](image-url)
Role in the Abolishment of Slavery

Forty-seven percent of respondents (47%) feel that New Bedford’s role in the abolishment of slavery was very important, while 32% feel it was somewhat important, 7% feel it was not very important, 2% feel it was not important at all, and 13% don’t know. A higher percentage of New Bedford respondents feel that New Bedford’s role in the abolishment of slavery was very important in comparison to suburban respondents (53% vs. 39%). Results from the 2012 and 2013 surveys are similar (see Figure 40).
Importance of Cultural Resources

Just over half of respondents (51%) believe that the cultural resources New Bedford offers today are very important to our country as a whole, while 42% believe they are somewhat important, 3% believe they are not very important, 2% believe they are not important at all, and 4% don’t know (see Figure 41). There are only minor differences between the results of New Bedford and suburban respondents. Results from the 2012 and 2013 surveys are also similar (see Figure 42).

Figure 41
How Important Are the Cultural Resources New Bedford Offers Today - For Example, the Museums, the Artifacts, the Architecture, and the Streetscapes - to Our Country As a Whole?

Figure 42
How Important Are the Cultural Resources New Bedford Offers Today - For Example, the Museums, the Artifacts, the Architecture, and the Streetscapes - To Our Country As a Whole?
Whaling and Wealth

Most all respondents (96%) are aware that New Bedford was once the nation’s leading whaling port. There are only minor differences between New Bedford and suburban respondents and between results from the 2012 survey (see Figure 43).

Figure 43
Did You Know That In the Mid 1800’s New Bedford Was the Nation’s Leading Whaling Port? (\% “Yes”)

<table>
<thead>
<tr>
<th></th>
<th>All Respondents</th>
<th>New Bedford Respondents</th>
<th>Suburban Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>94%</td>
<td>92%</td>
<td>96%</td>
</tr>
<tr>
<td>2013</td>
<td>96%</td>
<td>95%</td>
<td>96%</td>
</tr>
</tbody>
</table>

Sixty-five percent (65\%) of respondents report that they know that New Bedford was the wealthiest city in the country during its whaling peak, with a slightly higher percentage of respondents from New Bedford knowing this fact in comparison to suburban respondents (68\% vs. 61\%). Results from the 2012 and 2013 surveys are similar (see Figure 44).

Figure 44
Did You Know That During This Same Period New Bedford Was the Wealthiest City In the Country? (% “Yes”)

<table>
<thead>
<tr>
<th></th>
<th>All Respondents</th>
<th>New Bedford Respondents</th>
<th>Suburban Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>63%</td>
<td>65%</td>
<td>59%</td>
</tr>
<tr>
<td>2013</td>
<td>65%</td>
<td>68%</td>
<td>61%</td>
</tr>
</tbody>
</table>
6.0 **Key Informant Interviews**

During August 2013, ten key informant interviews were conducted with stakeholders and partners of the New Bedford Whaling NHP to gauge satisfaction with the implementation of the NB Line shuttle and recommendations for the NB Line going forward. Four standardized questions were asked to each key informant, while various follow-up questions were asked depending on the direction of the interview. The standard questions included:

- Are you familiar with the NB Line Shuttle?
- Were you a partner with the National Park Service?
- How does the NB Line Shuttle serve your organization and its clients?
- How could shuttle service be developed to more effectively serve the city, your organization, or its clients?

6.10 **Interview Summary**

Of the ten persons interviewed, all but one was familiar with the NB Line Shuttle. Only one person reported they were engaged to be a partner with the National Park Service and participated in the process of planning the shuttle. Key informants have seen little evidence of change in the level of ridership from 2012 to 2013 and suggested that promotion of the shuttle service needs to increase. Nearly all key informants agree that the NB Line did not contribute significantly to their organizational mission because of the low number of shuttle riders and that the shuttle is not well integrated into city life as they had hoped. They attribute low ridership partly to the fact that the shuttle schedule as currently operated does not fit with the times when non-residents are actually in town and that young people do not realize they have access to the shuttle for a dollar. Other comments from key informants indicate that the cessation of Route 18 construction activities and improvements to the pedestrian passage across Route 18 have encouraged foot traffic and decreased demand for the shuttle.

Most key informants report little to no increase in tourism/business that could be attributed to the NB Line, although some organizations did see benefits. For example, the city’s Parks and Recreation Department cited the continued importance of the NB Line shuttle as the only bus running to the Fort Tabor beaches on Sunday. The New Bedford Office of Tourism and Marketing cited that the Fort Taber and Buttonwood lines are value added services to tourists wanting to visit these areas of the city. Other suggestions provided by key informants include:

- Form a Programming Committee to meet and make plans while riding on and experiencing the bus.
- Implement the plan to create a new stop at the new recreation center at 181 Hillman St. to connect east and west sides of the city.
- Continue to focus marketing on tourists from the marinas on the New Bedford side of the harbor, since many boaters have no means of transportation on land.
- Consider removing tinting from shuttle windows. The windows on the shuttle appear too dark and you can’t see who is riding the shuttle. People like to see other people, and may think the shuttle is unavailable.
- Offer shuttle tours at staggered times during the day at peak times. A tour guide can point out areas of interest, and offer New Bedford history and storytelling to make the ride an experience.
- Incorporate the North End into the shuttle route since New Bedford has great culture, diversity, ethnic foods and unique places to explore in this area. Points of interest could include the Glass Museum, Madeira Museum, and the new International Marketplace with great ethnic cafes/bakeries.
- Garner stronger input from “Destination New Bedford” and “Invest in Kids” program.
7.0 **Other Key Data**

7.1 **Passenger Counts**

The NB Line carried a total of 1,531 passengers during its 91-day schedule, an increase of 11% from 2012.\(^{19}\) The busiest route was the Downtown Route with 704 passengers (4.6% increase), followed by the Fort Taber Route (574 passengers, 33.2% increase) and the Buttonwood Park Zoo Route (281 passengers, 10% decrease) (see Figure 45). In terms of passengers per day, the Downtown Route carried the highest average number of passengers (8 per day), followed by the Fort Taber route (6 per day), and the Buttonwood Park Zoo route (3 per day).

![Figure 45: Total Passengers, 2012 to 2013](image)

Shuttle ridership was highest throughout the month of August, which is likely a result of more local residents riding the shuttle as opposed to an increase in tourists riding since attendance at the National Historical Park was lower in August than in July.

![Figure 46: Total Passengers By Week, 2013](image)

Note: The first 5 and last 6 data points are weekends only.

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\(^{19}\) This total does not represent unique passengers; passengers were counted each time they boarded even if they had previously ridden that day. This differs from passenger data recorded by the consultant during the week of August 5-August 11, which counted unique passengers, i.e. passengers were counted only once during the day regardless of the number of times they disembarked or boarded. While SRTA maintains data on the number of wrist bands sold, this does not represent an accurate count of the total number of unique passengers since children and students rode the shuttle free and did not always receive wrist bands.
There were 57 shuttle trips over the summer in which a shuttle transported 10 or more passengers for the day (highlighted in gray in Table 3). The total number of “route days” travelled by the NB Line shuttle is 273 (91 days * 3 routes). Thus, out of 273 routes driven over the season, 21% carried 10 or more passengers for the entire day, with a high of 78 passengers and a low of zero, while the shuttles transported less than 10 passengers on 79% of the route days.

Table 3

<table>
<thead>
<tr>
<th>Date</th>
<th>Downtown Loop</th>
<th>Buttonwood Route</th>
<th>Fort Taber Route</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-May</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>26-May</td>
<td>17</td>
<td>13</td>
<td>6</td>
<td>36</td>
</tr>
<tr>
<td>27-May</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>1-Jun</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>2-Jun</td>
<td>7</td>
<td>2</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>8-Jun</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>9-Jun</td>
<td>1</td>
<td>4</td>
<td>11</td>
<td>16</td>
</tr>
<tr>
<td>13-Jun</td>
<td>3</td>
<td>0</td>
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</tr>
<tr>
<td>15-Jun</td>
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<td>24</td>
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<tr>
<td>16-Jun</td>
<td>2</td>
<td>9</td>
<td>11</td>
<td>22</td>
</tr>
<tr>
<td>22-Jun</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>23-Jun</td>
<td>11</td>
<td>7</td>
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<td>29-Jun</td>
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<td>24</td>
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<td>1-Jul</td>
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<td>10</td>
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<td>0</td>
<td>18</td>
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<td>0</td>
<td>1</td>
</tr>
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<td>4-Jul</td>
<td>0</td>
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<td>3</td>
<td>4</td>
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<td>8</td>
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<td>12</td>
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<td>54</td>
</tr>
<tr>
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Total 704 253 574 1,531
7.2 **NEW BEDFORD WHALING NHP VISITATION COUNTS**

As noted, one of the goals of the NB Line shuttle is to promote access to and awareness of the Whaling National Park’s attractions. The Whaling NHP recorded 280,992 visits in FY 2013, which is an increase of 3.1% from FY 2011 (see Table 4).\(^{20}\) Not surprisingly, the busiest months for the Whaling NHP are July and August.\(^{21}\) Although the availability of the shuttle cannot be directly tied to the attendance increase, results of the on-board survey show that a small percentage of tourists would not have attended the park if the shuttle was not available.

<table>
<thead>
<tr>
<th>New Bedford Whaling National Historical Park Attendance By Month</th>
<th>Monthly Change</th>
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<tr>
<td>FY 2011 FY 2012 FY 2013</td>
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<td>October 14,306 13,852 12,530</td>
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<tr>
<td>November 7,192 7,638 8,365</td>
<td>16.3%</td>
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<tr>
<td>December 11,277 13,605 10,395</td>
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<tr>
<td>January 5,191 7,929 8,829</td>
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<td>February 6,156 8,356 6,917</td>
<td>12.4%</td>
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<tr>
<td>March 8,970 7,660 8,008</td>
<td>-10.7%</td>
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<td>April 10,900 10,687 13,200</td>
<td>21.1%</td>
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<td>May 12,994 15,496 13,712</td>
<td>5.5%</td>
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<tr>
<td>June 15,268 16,191 20,815</td>
<td>36.3%</td>
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<td>July 147,700 135,774 135,774</td>
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<td>August 19,247 21,810 23,355</td>
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<td>September 13,341 14,682 19,092</td>
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<tr>
<td>272,542 273,680 280,992</td>
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</table>

Source: New Bedford Whaling NHP

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\(^{20}\) The National Park’s fiscal year runs from October through September.

\(^{21}\) July attendance figures include totals from the Greater New Bedford Summerfest, which brings together over 70 renowned and emerging performers and 90 juried arts and crafts vendors in New Bedford’s authentic historic district during the first weekend in July.
7.3 **Walking Distance**

Table 5 highlights the walking distance from the National Park Visitor Center and the shuttle routes to key sites. While the Downtown Route carried the most passengers over the summer, most attractions are within a half mile walking distance. The furthest walking distance in the Downtown from the Visitors is to the Rotch-Jones Duff House, although this is one of the least used stops on the route and is one of the lowest attended of the Whaling NHP partner sites.

Distances are greater between the stops and attractions on the Buttonwood and Fort Taber routes, although the number of passengers using these routes is lower than the Downtown Route. This is particularly true of the Buttonwood route, which carried an average of only 3 passengers per day. The relatively significant walking distance between the Buttonwood Park Zoo and downtown (compounded by the lack of stops/attractions along the route) may be affecting ridership along the Buttonwood Route. Potential zoo and park visitors may be put off by the need to wait 70 minutes for a return shuttle.

| NB Line Route and Stop | National Park Visitor Center | Ocean Explorium | Seamen’s Bethel | New Bedford Whaling Museum | Waterfront Visitors Center | Schooner Erminista | NB Fire Museum | Public Library/ Whaleman Statue | NB Art Museum | Gallery X |
|------------------------|-----------------------------|---------------|----------------|---------------------------|---------------------------|------------------|____________|-----------------------------|-------------|----------|
| **Downtown Loop**      | NA                          | 0.2           | 312 ft.        | 466 ft.                   | 430 ft.                   | 371 ft.          | 0.4         | 0.7                         | 0.2         | 0.3      |
| National Park Visitor Center | 0.4                   | 0.4           | 0.3            | 0.3                        | 0.4                       | 0.3              | N/A         | 0.9                         | 0.5         | 0.5      |
| State Pier             | 0.3                        | 0.3           | 0.2            | 0.4                        | 0.4                       | 0.3              | 0.3         | 0.9                         | 0.5         | 0.5      |
| Waterfront Hotel       | 0.2                        | 0.2           | 0.2            | 0.4                        | 0.3                       | 0.4              | 0.4         | 0.5                         | 0.2         | 0.2      |
| Zeiterion Theater      | 0.1                        | 0.1           | 0.1            | 0.1                        | 0.1                       | 0.1              | 0.1         | 0.1                         | 0.1         | 0.1      |
| Rotch-Jones-Duff House | 0.1                        | 0.1           | 0.2            | 0.2                        | 0.2                       | 0.2              | 0.2         | 0.2                         | 0.2         | 0.2      |
| City Center            | 0.1                        | 0.1           | 0.2            | 0.2                        | 0.2                       | 0.2              | 0.2         | 0.2                         | 0.2         | 0.2      |
| **Buttonwood Route**   | 0.2                        | 1.8           | 2.0            | 1.9                        | 2.0                       | 2.2              | 2.0         | 1.5                         | 1.8         | 1.8      |
| National Park Visitor Center | 0.1                   | 0.1           | 0.1            | 0.1                        | 0.1                       | 0.1              | 0.1         | 0.1                         | 0.1         | 0.1      |
| **Fort Taber Route**   | NA                         | 0.2           | 312 ft.        | 446 ft.                    | 0.2                       | 0.3              | 0.4         | 1.0                         | 0.3         | 0.4      |
| National Park Visitor Center | 0.2                   | 1.6           | 1.6            | 1.6                        | 1.7                       | 1.6              | 1.6         | 1.6                         | 1.7         | 1.7      |
| Antiques West          | 2.1                        | 2.0           | 2.1            | 2.0                        | 2.1                       | 2.2              | 2.2         | 2.1                         | 2.1         | 2.2      |
| Fort Taber             | 3.2                        | 3.1           | 3.2            | 3.1                        | 3.2                       | 3.3              | 3.3         | 3.2                         | 3.2         | 3.3      |
| East Beaches           | 3.1                        | 3.1           | 3.1            | 3.1                        | 3.1                       | 3.1              | 3.1         | 3.1                         | 3.1         | 3.3      |
| Antiques East          | 1.7                        | 1.7           | 1.7            | 1.6                        | 1.8                       | 1.8              | 1.9         | 1.3                         | 1.8         | 1.8      |

Note: Highlighted cells are those that are more than .5 mile walking distance.

7.4 **Media Reports Related to the NB Line Shuttle**

Two stories related to the NB Line were featured over the summer:


7.5 **ENVIRONMENTAL SUSTAINABILITY**

The final component of this evaluation was a consideration of the shuttle’s impact in respect to environmental sustainability. Theoretically, by encouraging more National Park visitors to ride the shuttle instead of driving between destinations, the NB Line will reduce vehicle emissions. And if those visitors park their cars in parking garages, they would further reduce greenhouse gases by mitigating downtown traffic congestion caused by an excess of cars parked on city streets.

Because one of the key findings of this evaluation is that shuttle ridership represented such a low proportion of National Park visitors, it is unlikely that the NB Line had a positive environmental impact. Indeed, on days when ridership was particularly low, it is entirely possible that overall greenhouse gas emissions would have been lower if riders had used their own vehicles. And as section 7.30 demonstrates, walking distances between downtown stops are very short. It may be more environmentally beneficial if downtown visitors are encouraged to walk the short distances between downtown destinations, and only use the shuttle to reach places to which visitors would otherwise drive (or not visit at all). Finally, the on-board survey suggests that the NB Line had little impact on visitors’ parking decisions. These findings suggest that NB Line ridership will have to increase significantly to achieve positive environmental outcomes.
8.0 RECOMMENDATIONS

As noted, NB Line will be required to cover a greater share of operating costs if the project is to be successful beyond the three-year pilot phase, which will require ridership levels to grow significantly. Several strategies presented below may be effective in meeting that goal.

Market the Fort Taber and Buttonwood Routes to Local Residents

There is little demand for the Fort Taber and Buttonwood Zoo routes from tourists, and demand among this segment is unlikely to increase to a level that supports the shuttle’s operating costs. Most tourists visiting the Whaling National Park do not consider Fort Taber or the Zoo as part of their itinerary; they generally spend their day touring downtown attractions and are not amenable to take the 40-minute round trip ride to Fort Taber or the Zoo or endure the 70-minute wait between shuttles.

In addition to the current tourist-focused marketing, the Fort Tabor and Buttonwood routes should be heavily marketed to New Bedford residents as a low cost alternative to travelling around the city. Locals, who already constitute the majority of the riders on these routes, are particularly interested in using the shuttle to reach the beaches, especially on Sundays when the NB Line is the only public transportation available to those destinations.

Some local riders also expressed interest in having the shuttle access the city’s North End, which is an idea supported by key informants. One option is to eliminate the Buttonwood Route, which carries the least number of passengers, and reconfiguring the Fort Taber Route so that it accesses both the Fort and the North End. This can be accomplished using the same 70-minute round trip schedule currently in place. Points of interest for stops could include the Glass Museum, Madeiran Museum, and the new International Marketplace, providing an authentic cultural experience with great cafés, bakeries, restaurants, and shopping that will be an attraction for both locals and tourists. In the opposite direction, North End residents will have a low cost means to reach downtown attractions, the beaches, and other points in the southern part of the city. Lastly, including the North End provides an opportunity for additional partnerships and collaboration between NHP, SRTA, and various North End organizations and businesses.

Market the Downtown Route as a Destination

Tourists continue to represent the majority of riders on the Downtown Route, albeit small in number. It is unlikely that significant numbers of tourists will ever ride the Downtown Route as constituted regardless of new or enhanced marketing strategies because the New Bedford Whaling National Historical Park and nearby blocks are very walkable. In fact, it is this walkability that is an attraction unto itself and in some ways the NB Line detracts from that experience. The Downtown shuttle can be repackaged as a destination experience that includes a narrated tour such as the Salem (MA) Trolley (http://www.salemtrolley.com). The current 20-minute trips can be replaced with longer, peak time trips accompanied by interpretive guide services that share New Bedford’s history and present-day narratives to make a compelling experience. This strategy was employed on a small scale in August, 2013 when narrated tours were offered on the Downtown Route each Friday from 11am to 1pm. Repackaging the shuttle as a destination experience might also allow the $1.00 fare to be increased without affecting demand and most importantly, visitors would be more likely to include such an experience as part of their itinerary before arriving at the park rather than learning about the shuttle on-site as most visitors currently do.
When NPS volunteers or rangers are not available to ride the buses, the shuttle might utilize a 30-minute pre-recorded audio tour. Each shuttle bus currently is equipped with a dispatch radio and a general broadcast radio. The broadcast radio can be replaced with an iPod attached to the existing speaker system that would play a 30-minute audio recording introduced by the mayor of New Bedford giving riders his "Welcome to New Bedford," similar to the recordings by Mayor Tom Menino of Boston and Massachusetts Gov. Deval Patrick that are broadcast in Logan Airport as passengers travel between the terminal and the central parking garage. An audio description of New Bedford history, easily adapted from existing texts on NPS educational signage at the NPS Visitor Center, would follow the Mayor’s message. At almost no cost, this idea solves the problem of no skilled, live interpreter being available. When a live interpreter becomes available, the audio system will simply be turned off for the duration of his or her time on the bus.

Other recommendations include:

Shuttle Routes and Schedule

- The redesign of the Route 18 corridor makes the area much more permeable to foot traffic. The area may now be sufficiently walkable that the Downtown Route shuttle need not go to State Pier or to the Fairfield Inn. Not a single passenger accessed the bus at either stop during the entire week that ridership was studied. A ticket agent at State Pier reported that most ferry passengers walk if they want to go to the downtown district.

- Passengers are rarely picked up or discharged at the stop on the south exterior wall of the Zeiterion Theatre. If these stops are retained, a purposeful plan to develop ridership that accesses the bus at those points should be developed and implemented. For State Pier, this might include close coordination with coastal cruise ships.

Shuttle and Signage

- Prospective riders on the street cannot see the shuttle interiors through the tinted glass. It may be of value to consider whether clear glass and the ability to see other tourists in the bus would encourage those on the street to enter the bus.

- NB Line porcelain enamel metal signage at each stop continues to be of poor quality. Portions of the signs are missing at the NPS Visitor Center stop on Second Street and the Rotch-Jones-Duff stop on Madison Street. Even the intact signs at other stops are too small and the messages are printed using small fonts. The signs are mounted at a height suitable for only a tall adult to read. Those of shorter stature or in wheelchairs would find the sign difficult or impossible to read. At some locations, such as the “City Center” stop at Wings Court, the small sign is set back so far from the roadway that potential riders may miss it. In addition to a portion of the NPS Visitor Center sign being missing, the portion that remains is functionally hidden from most sight lines by poles and trees.

Marketing

- Include special offers for shuttle passengers who display their wristbands at local businesses, which will serve to both increase NB Line ridership and spending at local businesses. A similar program was implemented on just one day in both 2012 and 2013, with NB Line riders receiving offers from various retailers. A similar program should be extended throughout the summer since both the NB Line and local retailers would benefit.
APPENDIX A – TELEPHONE SURVEY QUESTIONNAIRE

<INTRO>

Hi, my name is _________ and I’m calling from UMass Dartmouth. How are you today? We are conducting a short 5-minute survey about the New Bedford Whaling National Historical Park and the NB Line shuttle. Your opinions are important to our study even if you have never visited the National Park and we would greatly appreciate your participation. Keep in mind that all responses are strictly confidential and that we do not have any information about you other than your telephone number.

[INTERVIEWER: IF ASKED - THIS SURVEY SHOULD TAKE NO MORE THAN 5 MINUTES OF YOUR TIME.]  
[IF RESPONDENT SAYS THEY ARE NOT INTERESTED IN PARTICIPATING IN THE SURVEY OR SEEMS READY TO END THE INTERVIEW, READ:  
“YOUR OPINIONS ON THIS ISSUE ARE VERY IMPORTANT AND WE’D LIKE TO GIVE YOU AN OPPORTUNITY TO MAKE YOUR OPINIONS HEARD, EVEN IF YOU HAVE NEVER VISITED THE NATIONAL PARK. ARE YOU SURE YOU DO NOT HAVE JUST A FEW MINUTES TO COMPLETE THE SURVEY?”]

Q1. To confirm that we are talking only to residents in our study area, can you tell please tell me in which city or town you live?

1. Acushnet
2. Dartmouth, North Dartmouth, or South Dartmouth
3. Fairhaven
4. Freetown, Assonet, or East Freetown
5. New Bedford
6. Other [INTERVIEWER READ: SORRY, BUT YOU DO NOT RESIDE IN THE AREA WE ARE STUDYING]  
   (SKP END)
9. Refused (SKP END)

Q2. And since we need to ensure that every resident has an equal chance of participating, may I please speak with the adult living in your household aged 18 or older - including yourself -- who had the most recent birthday? I don’t mean who is the youngest, but rather, who had the most recent birthday.

1. Current Respondent (SKIP TO Q6)
2. Someone else: Ask to speak to that person (DISPLAY INTRO THEN SKIP Q4)
3. Person with most recent birthday not available [SCHEDULE CALLBACK]
4. Don’t know all birthdays, only some (CONTINUE Q3)
5. Don’t know any birthdays other than own (SKP Q6)
6. No person 18 or over available (SCHEDULE CALLBACK)
99. Refused (SKP END)
Q3. Of the ones that you do know, who had the most recent birthday?

1 Current informant (SKIP TO Q6)
2 Someone else: Ask to speak to that person (DISPLAY INTRO THEN SKIP Q4)
3 Person with most recent birthday not available (SCHEDULE CALLBACK)
99 Refused (SKP END)

Q4. Do you have a few minutes to complete the survey?

1 Yes (SKP Q6)
2 No

Q5. Your opinions on this issue are very important and we’d like to give you an opportunity to make your opinions heard. Are you sure you do not have just a few minutes to complete the survey?

1 Yes, will participate
2 No, will not participate [SKP END]

Q6. INTERVIEWER: RECORD RESPONDENT’S SEX

1 Male
2 Female

Q7. OK, thanks. Let’s begin. Did you know that there is a National Park in downtown New Bedford?

1 Yes
99 Refused

Q8. Are you familiar with the NB Line shuttle that connects sites throughout the New Bedford Whaling National Historical Park and with Buttonwood Park Zoo and Fort Taber?

1 Yes
2 No [INTERVIEWER READ: LET ME BRIEFLY EXPLAIN WHAT THE NB LINE SHUTTLE IS ALL ABOUT. THE SHUTTLE CONNECTS THE NEW BEDFORD WHALING NATIONAL HISTORICAL PARK WITH BUTTONWOOD PARK ZOO AND FORT TABER. THERE ARE SEVERAL STOPS WITHIN THE NATIONAL PARK AND YOU CAN RIDE THE SHUTTLE ALL DAY FOR JUST A DOLLAR.] (SKP Q10)
99 Refused (SKP Q10)

Q9. Have you ridden the NB Line shuttle?

1 Yes
2 No
Q10. (IF Q1<5 OR Q1>5) Have you been to New Bedford this summer?

1. Yes
2. No (SKP Q12)
3. Refused (SKP Q12)

Q11. Have you seen the NB Line shuttle while driving or walking around New Bedford?

1. Yes
2. No
3. Not sure (Vol.)
4. Refused

Q12. Would you consider riding the NB Line shuttle if you visited New Bedford Whaling National Historical Park, Buttonwood Park Zoo, or Fort Taber in the future?

1. Yes
2. No (SKP Q14)
3. Not sure (Vol.) (SKP Q14)
4. Don’t plan on ever visiting those places (Vol.) (SKP Q15)
5. Refused (SKP Q15)

Q13. How likely are you to ride the NB Line shuttle during your visit to any of these places? [INTERVIEWER: READ CHOICES]

1. Very likely (SKP Q15)
2. Somewhat likely (SKP Q15)
3. Not likely
4. Don’t know (Vol.) (SKP Q15)
5. Refused (SKP Q15)

Q14. Why wouldn’t you ride the NB Line shuttle? Is it because [INTERVIEWER: READ ALL CHOICES AND CHECK ALL THAT APPLY]

<Randomize>

1. You don’t ever plan on visiting the National Park, Buttonwood Zoo, or Fort Taber
2. Too inconvenient
3. Don’t know enough about it
4. Easier to walk/Would rather walk
5. The shuttle doesn’t run frequently enough
6. The shuttle doesn’t stop where you want it to
7. Not enough stops
8. Don’t want to pay a dollar to ride
9. Other (please specify) __________________
88. Don’t know
99. Refused
Q15. Now I would like to ask you just a few questions about the New Bedford Whaling National Historical Park. (IF Q7>1 SKP Q18)

Q15a. How aware would you say you are about the National Park in terms of what it comprises and offers to visitors? Are you [INTERVIEWER: READ CHOICES]

1 Very aware
2 Somewhat aware
3 Not aware
8 Don’t know (Vol.)
9 Refused

Q16. Have you visited the Park?

1 Yes (SKP Q18)
2 No
3 Don’t know (Vol.)
9 Refused

Q17. We are interested in knowing why some people do not visit the National Park. I’m going to read you reasons that might explain why some people have not visited. Please tell me if any of these reasons apply to you. How about: [INTERVIEWER: READ CHOICES]

<Randomize>

1 You are just not interested
2 You have no time
3 You don’t know enough about it
4 You can’t afford it
5 You don’t have transportation
6 You don’t feel safe in the area
7 Any other reasons? (please specify) ____________________________
8 Don’t know
9 Refused
Q18. Can you tell me if you are familiar with any of the following New Bedford museums and institutions? How about:

<Randomize>

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Refused</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q18a. New Bedford Whaling Museum</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Q18b. Rotch-Jones Duff House and Garden Museum</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Q18c. Seamen’s Bethel</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Q18d. Waterfront Visitor Center</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Q18e. Schooner Ernestina</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Q18f. National Park Visitor Center</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
</tbody>
</table>

Q19. (IF Q18a through Q18f=1 THEN ASK) And before this interview, did you know that <museum or institution name> was part of the Whaling National Historical Park?

1. Yes
2. No [INTERVIEWER: CODE “NOT SURE” OR DON’T KNOW” as “NO.”]
9. Refused

Q20. Are there any events or activities that the National Park could sponsor that would encourage you to visit the Park?

1. Yes (Please specify) ____________________
2. No/Don’t know
9. Refused

Now I’d like to ask you just a few questions about New Bedford and its historical significance. I would like you to answer each of these questions on a scale of very important, somewhat important, not very important, or not important at all. You can also answer don’t know if you are not sure.

Q21. Looking back over the past 200 years, how important do you feel the role of New Bedford was in shaping the history and culture of our country? [INTERVIEWER: READ CHOICES]

1. Very important
2. Somewhat important
3. Not very important
4. Not important at all
8. Don’t know
9. Refused
Q22. And how important do you feel New Bedford’s role was in the abolishment of slavery?

1. Very important
2. Somewhat important
3. Not very important
4. Not important at all
5. Don’t know
6. Refused

Q23. And lastly, how important are the cultural resources New Bedford offers today -- for example, the museums, the artifacts, the architecture, and the streetscapes -- to our country as a whole?

1. Very important
2. Somewhat important
3. Not very important
4. Not important at all
5. Don’t know
6. Refused

Q24. Did you know that in the mid 1800’s New Bedford was the nation’s leading whaling port?

1. Yes
2. No
3. Refused

Q25. And did you know that during this same period New Bedford was the richest city in the country?

1. Yes
2. No
3. Refused

The final questions are for statistical purposes only, so that we can make sure we interview a representative group of people. I want to remind you that your responses will be kept confidential.

Q26. Can you please tell me your age?

_____ years
97 97 or older
99 Don’t know/Refused (VOL.)

Q27. And how many people are in your household? _________
Q28. What is the last grade or class that you completed in school? [INTERVIEWER: DO NOT READ CHOICES]

1. None, or grade 1-8
2. High school incomplete (Grades 9-11)
3. High school graduate (Grade 12 or GED certificate)
4. Technical, trade, or vocational school AFTER high school
5. Some college, associate degree, no 4-year degree
6. College graduate (B.S., B.A., or other 4-year degree)
7. Post-graduate training or professional schooling after college
   (e.g., toward a master's Degree or Ph.D.; law or medical school)
8. Don't know/Refused (VOL.)

Q29. Now I’m going to read to you some racial and ethnic categories. Can you please tell me which racial or ethnic group you identify yourself with? You can choose more than one. [INTERVIEWER: READ CHOICES AND CHECK ALL THAT APPLY]

1. White, non-Hispanic
2. Black or African American
3. Hispanic or Latino
4. Portuguese or Azorean
5. Cape Verdean
6. Asian
7. American Indian
8. More than one race
88. Don't know
99. Refused

Q30. I am going to read several different income categories. Without telling me your exact income, into which category did your total household income for the past year fall? [INTERVIEWER: READ CHOICES]

1. Under $25,000
2. $25,000 up to $50,000
3. $50,000 up to $75,000
4. $75,000 up to $100,000
5. Over $100,000
99. Don't know/refused

Thank you very much for your participation.
APPENDIX B – TELEPHONE SURVEY METHODOLOGY

A total of 704 telephone interviews were conducted from July 31, 2013 through August 4, 2013 using a questionnaire developed by the Center for Policy Analysis and staff from the New Bedford National Whaling NHP. The overall margin of error for the poll is +/-3.7 percent for the complete set of data and the response rate for the survey is 15.8% (AAPOR#4). Twenty test interviews were conducted before full implementation of the survey began and Spanish and Portuguese speaking interviewers were available to administer the survey in those languages.

To ensure equal representation among the five communities, a proportional sample of surveys was conducted based on each community’s population 18 years of age and older (See Table 6).

| Table 6 |
|---|---|---|---|
| Town/City | *Census Pop 18+ | % Census Pop 18+ | # Completed Surveys |
| Acushnet | 8,197 | 6.4% | 45 |
| Dartmouth | 27,571 | 21.6% | 152 |
| Fairhaven | 12,904 | 10.1% | 71 |
| Freetown | 6,879 | 5.4% | 38 |
| New Bedford | 72,227 | 56.5% | 398 |


The household member surveyed was randomly chosen using the “latest birthday” screen. Interviews were conducted between 2:00 pm and 8:00 pm on weekdays and 10:00 am and 4:00 pm on Saturday and Sunday. This range of hours provides the interviewers with an opportunity to contact hard to reach respondents, a procedure crucial to producing high quality survey data. Return calls were scheduled at the convenience of the respondents, primarily during the morning hours. Respondents were called a minimum of 5 times before they were determined to be unreachable.

A total of 15,222 dialings were made during the survey period. Overall, interviews averaged 7.1 minutes, with the shortest survey completed in 4.2 minutes and the longest survey taking nearly 19 minutes. The Center’s senior staff continually monitored the progress of interview outcomes to prevent problem cases that could interfere with the integrity of survey procedures.

Sampling Procedures

The Center for Policy Analysis uses the Genesys Sampling System from Marketing Systems Group to generate random telephone numbers. The Genesys Sampling System is used by many private and university-based polling and survey research organizations. The system uses a list of all possible telephone numbers in a particular geographic area (e.g., a state) to randomly generate a telephone sample for the designated geographic area. The survey was conducted using a random digit dialing (RDD) sample. The RDD sample insures an equal and known probability of selection for every residential telephone number (listed and unlisted) in the sample geographic frame.

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22 The number of respondents for some questions is lower, thus the margin of error is higher in those instances.
Survey Administration

The Center for Policy Analysis uses Computer Assisted Telephone Interviewing, or CATI, to conduct telephone surveys. Specifically, CFPA uses WinCATI software from Sawtooth Technologies, which is one of most widely used CATI systems in the world. Using WinCATI, telephone interviewers conduct interviews via computers, which provides highly reliable data because the computer controls the questionnaire, skip patterns are executed exactly as intended, responses are within range, and there are no missing data. Spanish and Portuguese speaking interviewers were available for respondents who speak those languages.

Telephone Interviewer Training and Supervision

Center staff and student research assistants were employed as telephone interviewers. These interviewers have conducted numerous telephone polls on behalf of the Center and all have been trained intensively, including practice interviews. Senior-level staff at the Center for Policy Analysis monitored the interviewers at all times to ensure high quality data collection.

Sample Weighting

The data have been weighted by the number of adults in a household and the number of landline telephone numbers at which adults in the household can be reached in order to equalize the chances of an individual in the study area being selected. The sample was then weighted to account for sampling bias. Sampling bias is defined as the tendency of a sample to exclude some members of the sampling universe and over-represent others. In this sample, females and older respondents are over-represented. Weighting the data allocates more “weight” to groups that are under-represented (e.g. younger males), while providing less weight to groups that are over-represented (e.g. older females). In other words, weighting adjusts the sample so that it looks more like the actual population of the study area as defined by the U.S. Census Bureau (2007-2011 American Community Survey estimates). All data in this report have been weighted to adjust for sex and age, although the differences between the weighted and unweighted samples for each question are generally small (between 0.1% and 2.5%).
## NB Line Shuttle Survey

**Margins & Cross-tabs**

<table>
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<td>17%</td>
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**Q8. Are you familiar with the NB Line shuttle that connects sites throughout the New Bedford Whaling National Historical Park and with Buttonwood Park Zoo and Fort Taber?**

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**Q9. Have you ridden the NB Line shuttle?**

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**Q10. How often do you travel to the National Park, Buttonwood Park Zoo, and Fort Taber in the future?**

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</table>

**Q11. Would you consider riding the NB Line shuttle if you visited New Bedford Whaling National Historical Park, Buttonwood Park Zoo, or Fort Taber in the future?**

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**Q12. Why wouldn’t you ride the NB Line shuttle?**

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**Q13. How likely are you to ride the NB Line shuttle during your visit to any of these places?**

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**Q14. Why wouldn’t you ride the NB Line shuttle?**

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<td>54</td>
<td>14%</td>
<td>New Bedford</td>
<td>18-34</td>
<td>50K-100K</td>
<td>Some/Assoc.</td>
<td>Male</td>
</tr>
<tr>
<td>352</td>
<td>49</td>
<td>14%</td>
<td>Suburbs</td>
<td>35-49</td>
<td>50K-100K</td>
<td>Some/Assoc.</td>
<td>Male</td>
</tr>
<tr>
<td>290</td>
<td>40</td>
<td>6%</td>
<td>Suburbs</td>
<td>28-34</td>
<td>50K-100K</td>
<td>Some/Assoc.</td>
<td>Male</td>
</tr>
<tr>
<td>278</td>
<td>38</td>
<td>6%</td>
<td>Suburbs</td>
<td>40-49</td>
<td>50K-100K</td>
<td>Some/Assoc.</td>
<td>Male</td>
</tr>
<tr>
<td>264</td>
<td>36</td>
<td>5%</td>
<td>Suburbs</td>
<td>50-64</td>
<td>50K-100K</td>
<td>Some/Assoc.</td>
<td>Male</td>
</tr>
</tbody>
</table>

Note: Small N value. Conclusions should be made with caution.

**Cells highlighted are statistically significant at the .05 level**

**Margin of Error: 3.7%**

**Study Dates: July 31, 2013 through August 4, 2013**

**Total Surveys Completed: 704**

Appendix C - Telephone Survey Data Tables
Q7. Did you know that there is a National Park in downtown New Bedford?

<table>
<thead>
<tr>
<th>Total</th>
<th>Sex</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>556</td>
<td>70</td>
<td>20</td>
</tr>
<tr>
<td>No</td>
<td>148</td>
<td>21</td>
<td>100</td>
</tr>
</tbody>
</table>

Q15. How aware would you say you are about the National Park in terms of what it comprises and offers to visitors?

<table>
<thead>
<tr>
<th>Total</th>
<th>Sex</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td></td>
</tr>
<tr>
<td>Very aware</td>
<td>122</td>
<td>22</td>
<td>25</td>
</tr>
<tr>
<td>Somewhat aware</td>
<td>109</td>
<td>17</td>
<td>25</td>
</tr>
<tr>
<td>Not aware</td>
<td>113</td>
<td>21</td>
<td>25</td>
</tr>
</tbody>
</table>

Q16. Have you visited the Park?

<table>
<thead>
<tr>
<th>Total</th>
<th>Sex</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>100</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>No</td>
<td>158</td>
<td>20</td>
<td>100</td>
</tr>
</tbody>
</table>

Q17. Why have you not visited the National Park?

<table>
<thead>
<tr>
<th>Total</th>
<th>Sex</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td></td>
</tr>
<tr>
<td>Just not interested</td>
<td>34</td>
<td>22</td>
<td>19</td>
</tr>
<tr>
<td>Have no time</td>
<td>47</td>
<td>39</td>
<td>24</td>
</tr>
<tr>
<td>Don’t know enough about it</td>
<td>61</td>
<td>39</td>
<td>23</td>
</tr>
<tr>
<td>Can’t afford it</td>
<td>8</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Don’t have transportation</td>
<td>10</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Don’t feel safe in the area</td>
<td>7</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Other</td>
<td>10</td>
<td>6</td>
<td>3</td>
</tr>
</tbody>
</table>

Q18. Can you tell me if you are familiar with any of the following New Bedford museums and institutions? (%“Yes”)

<table>
<thead>
<tr>
<th>Total</th>
<th>Sex</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td></td>
</tr>
<tr>
<td>New Bedford Whaling Museum</td>
<td>689</td>
<td>98</td>
<td>98</td>
</tr>
<tr>
<td>Ratcliff-Jones Duff House and Garden Museum</td>
<td>457</td>
<td>62</td>
<td>60</td>
</tr>
<tr>
<td>Seamen’s Bethel</td>
<td>582</td>
<td>83</td>
<td>83</td>
</tr>
<tr>
<td>Waterfront Visitor Center</td>
<td>412</td>
<td>59</td>
<td>55</td>
</tr>
<tr>
<td>Schooner Ernestina</td>
<td>516</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>National Park Visitor Center</td>
<td>346</td>
<td>49</td>
<td>45</td>
</tr>
</tbody>
</table>

Q19. And before this interview, did you know that the museum or institution was part of the Whaling National Historical Park? (%“Yes”)

<table>
<thead>
<tr>
<th>Total</th>
<th>Sex</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td></td>
</tr>
<tr>
<td>New Bedford Whaling Museum</td>
<td>346</td>
<td>49</td>
<td>45</td>
</tr>
<tr>
<td>Ratcliff-Jones Duff House and Garden Museum</td>
<td>247</td>
<td>54</td>
<td>54</td>
</tr>
<tr>
<td>Seamen’s Bethel</td>
<td>363</td>
<td>38</td>
<td>36</td>
</tr>
<tr>
<td>Waterfront Visitor Center</td>
<td>256</td>
<td>62</td>
<td>62</td>
</tr>
<tr>
<td>Schooner Ernestina</td>
<td>268</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>National Park Visitor Center</td>
<td>249</td>
<td>72</td>
<td>70</td>
</tr>
</tbody>
</table>

Center for Policy Analysis

University of Massachusetts Dartmouth
# NB Line Shuttle Evaluation, Year 2 – 2013

## New Bedford and Its Historical Significance

### Crosstabulations

<table>
<thead>
<tr>
<th>Total</th>
<th>Sex</th>
<th>Education</th>
<th>Age</th>
<th>HH Income</th>
<th>City/Suburbs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>&lt;H.S.</td>
<td>Some/Assoc.</td>
<td>Bach+</td>
</tr>
<tr>
<td>Very important</td>
<td>362</td>
<td>70</td>
<td>66</td>
<td>30</td>
<td>44</td>
</tr>
<tr>
<td>Somewhat important</td>
<td>179</td>
<td>25</td>
<td>26</td>
<td>21</td>
<td>23</td>
</tr>
<tr>
<td>Not very important</td>
<td>11</td>
<td>1</td>
<td>9</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Not important at all</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Don’t know (Vol.)</td>
<td>21</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

### Question 21:
Looking back over the past 200 years, how important do you feel the role of New Bedford was in shaping the history and culture of our country?

<table>
<thead>
<tr>
<th>Total</th>
<th>Sex</th>
<th>Education</th>
<th>Age</th>
<th>HH Income</th>
<th>City/Suburbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very important</td>
<td>329</td>
<td>47</td>
<td>42</td>
<td>31</td>
<td>46</td>
</tr>
<tr>
<td>Somewhat important</td>
<td>233</td>
<td>32</td>
<td>33</td>
<td>20</td>
<td>37</td>
</tr>
<tr>
<td>Not very important</td>
<td>48</td>
<td>7</td>
<td>9</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Not important at all</td>
<td>12</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Don’t know (Vol.)</td>
<td>93</td>
<td>13</td>
<td>32</td>
<td>14</td>
<td>10</td>
</tr>
</tbody>
</table>

### Question 22:
And how important do you feel New Bedford’s role was in the abolishment of slavery?

<table>
<thead>
<tr>
<th>Total</th>
<th>Sex</th>
<th>Education</th>
<th>Age</th>
<th>HH Income</th>
<th>City/Suburbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very important</td>
<td>317</td>
<td>31</td>
<td>66</td>
<td>50</td>
<td>45</td>
</tr>
<tr>
<td>Somewhat important</td>
<td>294</td>
<td>42</td>
<td>45</td>
<td>30</td>
<td>63</td>
</tr>
<tr>
<td>Not very important</td>
<td>24</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Not important at all</td>
<td>8</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Don’t know (Vol.)</td>
<td>21</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>5</td>
</tr>
</tbody>
</table>

### Question 23:
How important are the cultural resources New Bedford offers today — for example, museums, the architecture, and the streetscapes — to our country as a whole?

<table>
<thead>
<tr>
<th>Total</th>
<th>Sex</th>
<th>Education</th>
<th>Age</th>
<th>HH Income</th>
<th>City/Suburbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very important</td>
<td>762</td>
<td>95</td>
<td>95</td>
<td>96</td>
<td>95</td>
</tr>
<tr>
<td>Not very important</td>
<td>32</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>7</td>
</tr>
</tbody>
</table>

### Question 24:
And you know that in the mid 1800’s New Bedford was the nation’s leading whaling port?

<table>
<thead>
<tr>
<th>Total</th>
<th>Sex</th>
<th>Education</th>
<th>Age</th>
<th>HH Income</th>
<th>City/Suburbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>458</td>
<td>65</td>
<td>66</td>
<td>64</td>
<td>54</td>
</tr>
<tr>
<td>No</td>
<td>246</td>
<td>35</td>
<td>34</td>
<td>40</td>
<td>46</td>
</tr>
</tbody>
</table>

---

**Note:** Percentages may not add to 100% due to rounding. Cells highlighted are statistically significant at the .05 level.

**Study Dates:** July 31, 2013 through August 4, 2013

**Total Surveys Completed:** 704

**Response Rate (AAPOR #4):** 15.8%

**Margin of Error:** 3.7%
APPENDIX D – ON BOARD SURVEY QUESTIONNAIRE

### ABOUT THIS TRIP

1. Where did you start your trip before you got on this bus or arrived at the terminal?
   - Work
   - Home
   - Shopping
   - Restaurant
   - College/University
   - Other School
   - Doctor/hospital
   - Government building (ex: courthouse, library, City Hall, Post Office)
   - Social, church, or other personal business
   - Other: ______________________

2. How did you get to this bus or to this terminal?
   - Walked
   - Car
   - Bicycle
   - Taxi
   - Transferred from SRTA bus
   - Transferred from non-SRTA bus (ex: Bonanza, Dattco)
   - Other: ______________________

3. What type of fare did you pay?
   - Regular ($1.25)
   - Monthly pass
   - Senior ($0.60)
   - Disabled ($0.60)
   - Medicare ($0.60)

4. Where are you going now?
   - Work
   - Home
   - Shopping
   - Restaurant
   - College/University
   - Other School
   - Doctor/hospital
   - Government building (ex: courthouse, library, City Hall, Post Office)
   - Social, church, or other personal business
   - Other: ______________________

5. How often do you use the bus to get to this destination during one week?
   - 6 days/week
   - 5 days/week
   - 4-3 days/week
   - 1-2 days/week
   - 1 day/week
   - I don’t make this trip
   - Regularly
   - Occasionally

6. How long will this entire trip take, including the time it takes to get to and from the bus stop?
   - 15 minutes or less
   - 16-30 minutes
   - More than one hour
   - 31-45 minutes
   - 46-60 minutes

7. Once you get off the bus, how will you reach your destination?
   - Walk
   - Car
   - Bicycle
   - Taxi
   - Transfer to another SRTA bus
   - Transfer to non-SRTA bus (ex: Bonanza, Dattco)
   - Other: ______________________

8. If bus service was not available, how would you make this trip?
   - Drive my car
   - Get a ride
   - Taxi
   - Bicycle
   - I would not make this trip

### YOUR EXPERIENCE RIDING SRTA

9. How often do you ride a SRTA bus?
   - Every day
   - Several times per week
   - Once a week
   - 2-3 times per month
   - This is my first time riding SRTA
   - Several times per year

10. Below are a few suggested changes to bus service. If the change was made, would you ride SRTA buses more than you already do?

    a. Lower fares
    - Yes
    - No
    - Don’t know
    b. Extended evening hours
    - Yes
    - No
    - Don’t know
    c. Sunday service
    - Yes
    - No
    - Don’t know
    d. More bus routes
    - Yes
    - No
    - Don’t know
    e. Free transfers
    - Yes
    - No
    - Don’t know
    f. More information on schedules, routes, etc.
    - Yes
    - No
    - Don’t know
    g. More reduced-fare bus pass options
    - Yes
    - No
    - Don’t know
    h. Improved access for passengers with disabilities
    - Yes
    - No
    - Don’t know
11. How satisfied are you with the following aspects of SRTA service? (check one box for each item)

<table>
<thead>
<tr>
<th>Option</th>
<th>VERY</th>
<th>UNSATISFIED</th>
<th>VERY</th>
<th>UNSATISFIED</th>
<th>DON’T KNOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Ability to get everywhere you need to go</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Time spent waiting for the bus</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Amount of time spent on the bus</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Safety, comfort, and shelter of bus stops</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Buses arriving and departing on schedule</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Cleanliness and comfort of buses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Courtesy of drivers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. Ability to find a seat onboard the bus</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. The days and hours buses operate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>j. Cost to ride the bus</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12. Please tell us what places in the area you would like to visit that cannot be reached by bus:


INFORMATION ABOUT YOU  (Remember, these surveys are anonymous)

13. What is your zip code OR what is the name of your street and the closest cross-street?

☑ 02740  ☐ 02744
☐ 02741  ☐ 02745
☐ 02742  ☐ 02746
☐ 02743
☐ Other: ___ ___ ___ ___ ___

Your street: ____________________________
Cross-street: ____________________________

14. How old are you?
☐ 18-24  ☐ 55-64
☐ 25-34  ☐ 65-74
☐ 35-44  ☐ 75-84
☐ 45-54  ☐ 85 or older

15. Your gender:
☐ Male
☐ Female

16. How many people live in your household, including yourself?
☐ 0
☐ 1
☐ 2
☐ 3
☐ 4
☐ 5
☐ 6
☐ 7
☐ 8
☐ 9
☐ 10 or more

17. How many working vehicles are in your household?
☐ 0
☐ 1
☐ 2
☐ 3
☐ 4
☐ 5
☐ 6
☐ 7
☐ 8
☐ 9
☐ 10 or more

18. What was your total household income last year?
☐ Less than $10,000
☐ $10,000-$14,999
☐ $15,000-$24,999
☐ $25,000-$34,999
☐ $35,000-$49,999
☐ $50,000-$74,999
☐ $75,000 or more
☐ Unsure

19. What best describes your educational background?
☐ No high school diploma
☐ High school graduate
☐ Some college, no degree
☐ Associate’s degree or technical certification
☐ Bachelor’s degree
☐ Graduate or professional degree
☐ Unsure

20. What is your employment status?
☐ Employed full-time
☐ Employed part-time
☐ Retired
☐ Homemaker
☐ Student
☐ Unemployed
☐ Disabled
☐ Unsure

21. What racial or ethnic group do you identify yourself with?
☐ White, non-Hispanic
☐ Black or African American
☐ American Indian
☐ Asian
☐ Hispanic or Latino
☐ Guatemalan Mayan
☐ Cape Verdean
☐ More than one race
☐ Unsure