



Town of Chincoteague Transit Development Plan

Chincoteague, Virginia
July, 2020



Prepared for the Town of Chincoteague
and the Virginia Department of Rail and Public Transportation
by Connetics Transportation Group



Under Contract to AECOM



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1. Overview of the Transit System

1.1. History

The Town of Chincoteague is located on the far northeastern Virginia coast in Accomack County, Virginia. The Town originally incorporated in 1908 and has since annexed additional land on three occasions, the latest of which occurred in 1989 making the entire island part of the Town. Today, Chincoteague has a total of 37.48 square miles, made up of 9.26 square miles of land and 28.22 square miles of water. A map of the Town of Chincoteague is shown in Figure 1-1.

In the 17th century, settlers utilized land on the island for livestock grazing. An increase in population coincided with a developing seafood industry through the 18th century. Tourism in Chincoteague was able to develop with the completion of the causeway in 1922 and continued to mature as the primary industry as the bridge to Assateague was completed in 1962.

The most recent American Community Survey (2013-2017 ACS) total population estimate for Chincoteague was 2,903, yielding a population density of 313 people per square mile over the island. This represents a slight decrease in population (8.8%) compared to 2010, when there were 3,183 residents. By comparison, Accomack County decreased in population by 3.6%, while the Commonwealth of Virginia increased by 6.6% over the same time period.

Today, the economy is diverse, but still has a large component of tourism. As indicated by the 2013-2017 American Community Survey (ACS) in Table 1-1, the leading industries for employment are 1) education services, and health care and social assistance; 2) arts, entertainment, and recreation, and accommodation and food services; and 3) retail trade. The unemployment rate for Chincoteague is 6.4%, which is slightly higher than Accomack County (5.4%), as well as the Commonwealth of Virginia (5.5%). The unemployment rate has, however, been declining. At the last decennial US Census the unemployment rate in Chincoteague was 8.8%.

Table 1-1: Town of Chincoteague Top Five Employment Industries

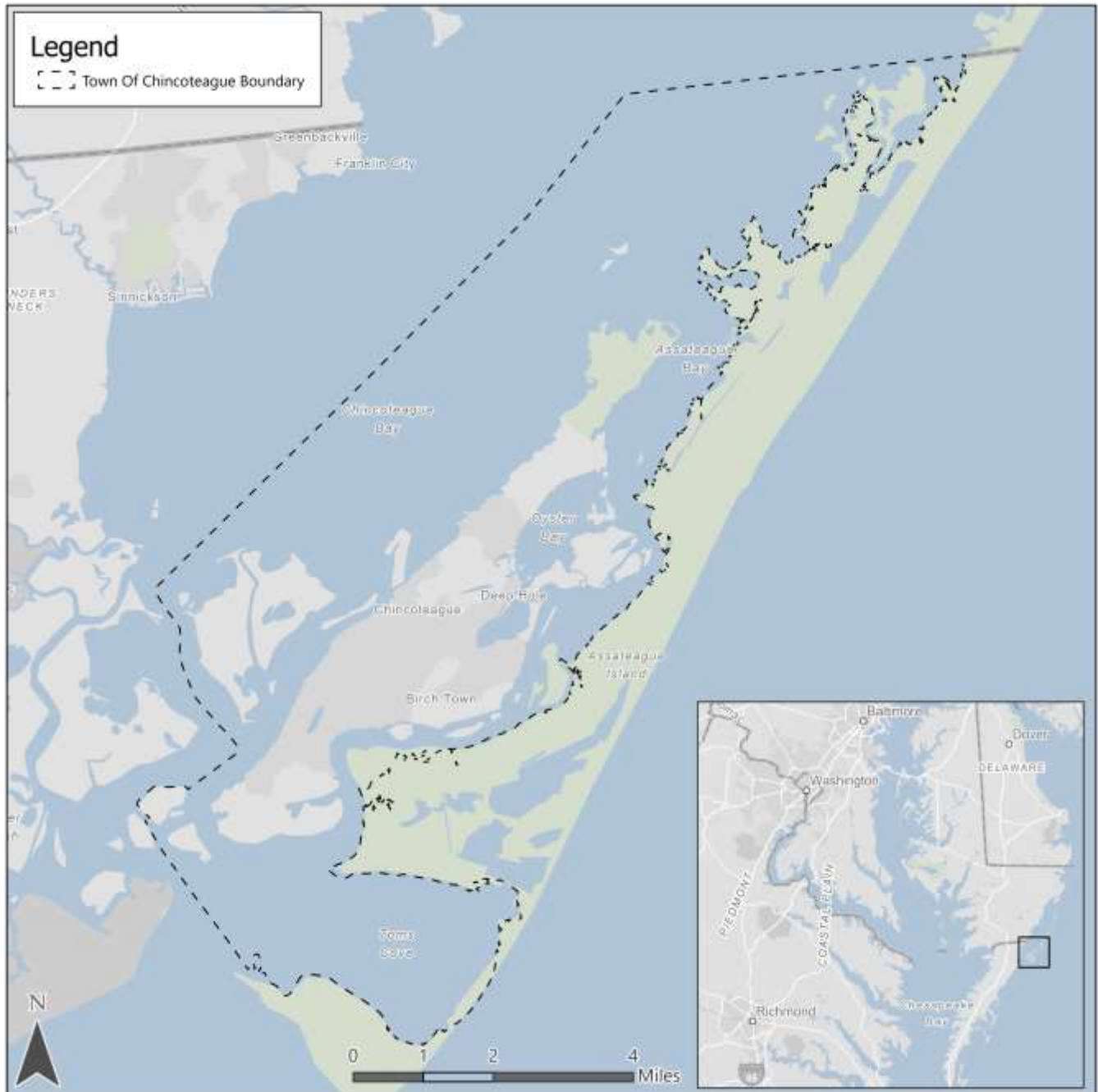
Employment Rank	Employment Industry	Percent of Workforce
1	Educational services, and health care and social assistance	21.4%
2	Arts, entertainment, and recreation, and accommodation and food services	20.8%
3	Retail trade	17.9%
4	Professional, scientific, and management, and administrative and waste management services	10.7%
5	Construction	6.7%

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

The Town of Chincoteague owns and operates the Pony Express trolley system. Initially, the trolley was proposed as part of the Chincoteague 2020 Transportation Plan created in 2002. The Pony Express began operating in 2004 with funding from the town and a Demonstration Project Grant from the Virginia Department of Public Transportation (VDRPT). Since inception, the trolley system has largely remained unchanged in terms of route alignments and level

of service provided. The trolley has always operated on a seasonal schedule during the summer months, serving the large influx of visitors to the Island over the tourist high season.

Figure 1-1: Chincoteague Island and Surrounding Area



1.2. Governance

The Pony Express is directly operated by the Town of Chincoteague. The Town is governed by the mayor and six council members, each of which are elected by voters/citizens to serve four-year terms. Council terms are staggered so that every two years, three new council members are elected. The chief administrative officer of the Town is the

Town Manager, an appointed position that also acts as the Clerk to the Council. The Town Council meets on the first Monday of each month at 7 PM in the Council Chambers. All meetings are open to the public and are handicap accessible. The mayor and council members are included in Table 1-2 below, along with active terms.

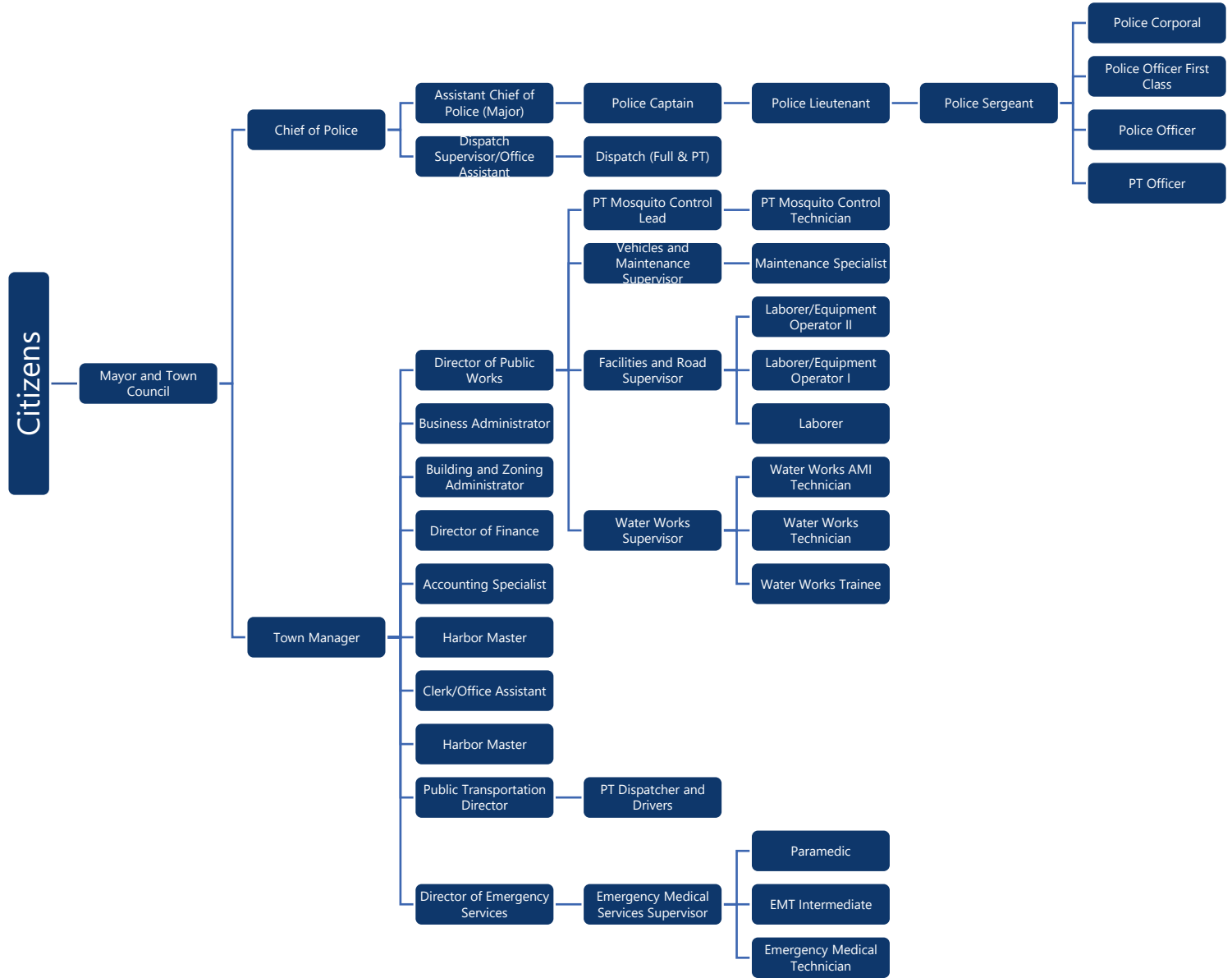
Table 1-2: Town of Chincoteague Mayor and Councilmembers

Name	Position	Term
J. Arthur Leonard	Mayor	July 1, 2016 - June 30, 2020
Denis P. Bowden	Vice Mayor	July 1, 2016 - June 30, 2020
Ellen W. Richardson	Councilwoman	July 1, 2018 - June 30, 2022
Edward W. Lewis Jr.	Councilman	July 1, 2016 - June 30, 2020
Matthew T. Reed	Councilman	July 1, 2018 - June 30, 2022
Gene W. Taylor	Councilman	July 1, 2016 - June 30, 2020
Christopher D. Bott	Councilman	July 1, 2018 - June 30, 2020

1.3. Organizational Structure

A summary of the Town of Chincoteague’s organizational structure is shown in Figure 1-2. As stated in the previous section, the Town is governed by an elected Mayor and Town Council, and an appointed Town Manager. The Public Transportation Director, who reports to the Town Manager, manages the Pony Express and oversees dispatch and drivers. All drivers serve as dispatcher on a rotating basis. Daily service requires two drivers and one dispatcher on days without special events. Due to the seasonal nature of the trolley, all Pony Express employees are part-time.

Figure 1-2: Town of Chincoteague Organizational Chart



1.4. Services Provided and Areas Served

Chincoteague operates fixed route and paratransit service on the island. The fixed route service is made up of the Green Route and the Red Route, which are operated with vintage-style trolley vehicles, while the paratransit service is operated with a single lift-equipped minivan. Overall, service is focused on connecting passengers to major tourist and commercial areas, particularly along Main Street and Maddox Boulevard. Table 1-3 shows the 2019 schedule for the fixed route service, which runs during the tourist high season. Service operates during evening hours only, except for designated extended-hour days for special events. A table of the special events and modified service for 2019 is shown in Table 1-5.

Table 1-3: Trolley Calendar of Operation

May							June							July						
SUN	MO	TUE	WED	THU	FRI	SAT	SUN	MO	TUE	WED	THU	FRI	SAT	SUN	MO	TUE	WED	THU	FRI	SAT
			1	2	3	4							1		1	2	3	4	5	6
5	6	7	8	9	10	11	2	3	4	5	6	7	8	7	8	9	10	11	12	13
12	13	14	15	16	17	18	9	10	11	12	13	14	15	14	15	16	17	18	19	20
19	20	21	22	23	24	25	16	17	18	19	20	21	22	21	22	23	24	25	26	27
26	27	28	29	30	31		23/30	24	25	26	27	28	29	28	29	30	31			

August							September							October						
SUN	MO	TUE	WED	THU	FRI	SAT	SUN	MO	TUE	WED	THU	FRI	SAT	SUN	MO	TUE	WED	THU	FRI	SAT
				1	2	3	1	2	3	4	5	6	7			1	2	3	4	5
4	5	6	7	8	9	10	8	9	10	11	12	13	14	6	7	8	9	10	11	12
11	12	13	14	15	16	17	15	16	17	18	19	20	21	13	14	15	16	17	18	19
18	19	20	21	22	23	24	22	23	24	25	26	27	28	20	21	22	23	24	25	26
25	26	27	28	29	30	31	29	30						27	28	29	30	31		

Green Route

Red Route

1.4.1. Fixed Route Service

Fixed Route service in Chincoteague is made up of two routes, the Green Route and the Red Route, shown in Figure 1-3. In the past, the routes ran slightly different alignments, necessitating the distinction between Green and Red routes. However, since the removal of the southernmost stop on Ridge Road in late 2018, the routes operate virtually the same alignment. Both routes depart the Chincoteague Municipal Complex, where the trolleys are stored, and begin service at the Pine Grove Campground off Deep Hole Road. The routes then turn around and head south on Deep Hole Road to turn right onto Maddox Boulevard, where there are several restaurants and retail establishments.

The routes continue on Maddox Boulevard until reaching Main Street, onto which they turn left to reach the densest commercial and hotel area of the island. The Pony Express continues southwest on Main Street and then turns left onto Beebe Road, and then left onto Ridge Road at Tom's Cove Park. The next turn occurs at East Side Road, passing Memorial Park and Recreation Area. The trolley then turns left onto Wayne Road and passes through single family residential development before turning right back onto Ridge Road. At Maddox Boulevard, the trolley turns right to serve a multitude of restaurants and attractions before turning around on Beach Access Road. From here, the trolley continues on Maddox Boulevard and then turns right onto Ridge Road to return to Pine Grove Campground.

Figure 1-3: Chincoteague Pony Express Trolley Routes



Each route has a total of 19 posted stops, five of which have shelters. An example of a posted stop with shelter from Tom's Cove Park is shown in Figure 1-4. The map of stop locations with a posted trolley stop sign are shown in Figure 1-3. In addition to the many designated bus stop locations, the Pony Express utilizes flag stops. Passengers have the option of waiting at one of the bus stops or flagging down the driver to stop at any location along the route. While using the flag stop system is uncommon for passenger pick up, it is frequently utilized for drop offs. Drivers are typically active in discussing destinations with passengers and dropping them off at the closest location along the route. Drivers will also accommodate boardings and alightings on Main Street north to the Chincoteague High School upon request.

Figure 1-4: Tom's Cove Park Trolley Stop and Shelter



The Green and Red routes both run on 30-minute headways, yielding a combined 15-minute headway for all but the Pine Grove Park stop. Although every effort is made to maintain the schedule, a key operational feature of the trolley is managing the 15-minute separation between the Green and the Red routes. To accomplish the 15-minute spacing, dispatch and drivers communicate the timing of service at the Maddox Boulevard and Beach Access Road turnaround point on every trip. With this knowledge, drivers can elect to increase or decrease the operating speed to preserve the 15-minute spacing between vehicles. Passengers, therefore, observe a 15-minute service, creating average wait times of 7.5 minutes.

Green Route

The Pony Express Green Route begins service during the first weekend in May with the Chincoteague Seafood festival and ends the second weekend in October with the Chincoteague Oyster Fest. Service is on weekends only for the first six weeks and then operates seven days a week until mid-September. Of the two routes, the Green Route begins earlier and ends later than the Red Route, both in terms of calendar as well as span of service. The span of service is shown in Table 1-4, with the Green Route beginning at 5:02 PM and ending at 10:25 PM. Scheduled exceptions to the span of service occur throughout the summer to meet the additional demand when special events take place on the island. The Green Route sometimes makes additional non-scheduled courtesy trips when the island is especially busy. To the extent possible, drivers and dispatch coordinate at the end of the evening to make sure riders are not left without a return trip.

All stops on the Green Route are serviced every thirty minutes, except for Pine Grove Park, which is served once an hour. It takes 30 minutes to complete one trip on the Green Route, and thus requires one vehicle to operate 30-minute headways. The combination of Green and Red Route service yields 15-minute service along the entire loop. In addition to the service outlined in Table 1-3, the Green Route has free service on the days and times in Table 1-5, courtesy of the Chincoteague Chamber of Commerce.

Table 1-4: Green Route Schedule

Trip #	Pine Grove	Maddox Blvd & Deep Hole Rd	Main St & Church St	Beebe Rd & Ridge Rd	Memorial Park	Pony Centre	Museum of Chincoteague Is.
1	5:02 PM	5:05 PM	5:08 PM	5:13 PM	5:17 PM	5:21 PM	5:25 PM
2	-	5:35 PM	5:38 PM	5:43 PM	5:47 PM	5:51 PM	5:55 PM
3	6:02 PM	6:05 PM	6:08 PM	6:13 PM	6:17 PM	6:21 PM	6:25 PM
4	-	6:35 PM	6:38 PM	6:43 PM	6:47 PM	6:51 PM	6:55 PM
5	7:02 PM	7:05 PM	7:08 PM	7:13 PM	7:17 PM	7:21 PM	7:25 PM
6	-	7:35 PM	7:38 PM	7:43 PM	7:47 PM	7:51 PM	7:55 PM
7	8:02 PM	8:05 PM	8:08 PM	8:13 PM	8:17 PM	8:21 PM	8:25 PM
8	-	8:35 PM	8:38 PM	8:43 PM	8:47 PM	8:51 PM	8:55 PM
9	9:02 PM	9:05 PM	9:08 PM	9:13 PM	9:17 PM	9:21 PM	9:25 PM
10	-	9:35 PM	9:38 PM	9:43 PM	9:47 PM	9:51 PM	9:55 PM
11	10:02 PM	10:05 PM	10:08 PM	10:13 PM	10:17 PM	10:21 PM	10:25 PM

Table 1-5: Green Route 2019 Free Ride Schedule

Date	Event	Service Modification
May 4th	Seafood Festival	10:00 AM-11:00 PM (Ride free 10 AM - 5 PM)
September 28th	Chili Chowder Cook Off	10:00AM-10:30 PM
October 12th	Oyster Fest	10:00 AM-10:30 PM (Ride free 10 AM - 5 PM)

Red Route

While the Green Route operates during the tourist shoulder and high season in Chincoteague, the Red Route is restricted to the high season only. The Red route begins service on the first weekend in June and ends after the last

weekend in August. However, the Red Route also operates on opening day of the trolley season on the first weekend in May for the Seafood Festival, as well as the final day with the Oyster Festival.

Every evening, the Red Route starts service shortly after the Green Route, staggered about 15 minutes apart. Like the Green Route, the Red Route serves every stop once every thirty minutes, except for Pine Grove Park, which is served once an hour. The Red Route requires one vehicle to operate 30-minute headways. Together, with the Green Route, the Pony Trolley operates at 15-minute headways.

The Red Route has modified service on select days when demand is particularly strong due to special events on the island. Table 1-7 shows the 2019 schedule for the extended hours.

Table 1-6: Red Route Schedule

Trip #	Pine Grove	High School	Main St & Church St	Beebe Ranch Turnaround	Beebe Rd & Ridge Rd	Memorial Park	Museum of Chincoteague Is.
1	5:15 PM	5:20 PM	5:22 PM	-	5:30 PM	5:34 PM	5:38 PM
2	-	-	5:51 PM	5:59 PM	-	-	6:08 PM
3	6:15 PM	6:20 PM	6:22 PM	-	6:30 PM	6:34 PM	6:38 PM
4	-	-	6:51 PM	6:59 PM	-	-	7:08 PM
5	7:15 PM	7:20 PM	7:22 PM	-	7:30 PM	7:34 PM	7:38 PM
6	-	-	7:51 PM	7:59 PM	-	-	8:08 PM
7	8:15 PM	8:20 PM	8:22 PM	-	8:30 PM	8:34 PM	8:38 PM
8	-	-	8:51 PM	8:59 PM	-	-	9:08 PM
9	9:15 PM	9:20 PM	9:22 PM	-	9:30 PM	9:34 PM	9:38 PM

Table 1-7: Red Route 2019 Extended Hours Schedule

Date	Event	Extended Hours Service Changes
July	Carnival	5:15 PM - 11:00 PM
July 4th	Independence Day Fireworks	5:00 PM - Midnight
July 24th	Pony Swim	TBA - Midnight
July 25th	Pony Auction	7:00 AM - 1:00 PM
July 26th	Pony Swim Back	6:00 AM - 1:00 PM

1.4.2. Paratransit Service

In accordance with ADA rules and regulations, Chincoteague offers paratransit services to individuals who are unable to ride the trolley due to disability. Paratransit service is offered by Chincoteague in the form of point to point transportation within $\frac{3}{4}$ of a mile from the fixed route service. Passengers must apply and be certified by ADA requirements to participate in the program. Chincoteague asks that riders using the service call at least two hours in advance to arrange the transportation service. The cost of the service is \$0.50, or two tokens, which is \$0.25 more than the fixed-route service.

1.4.3. Bicycle and Pedestrian Accommodations and Connectivity

Most of the bicycle and pedestrian infrastructure in the Town of Chincoteague is located along the major retail/restaurant corridors and the adjacent neighborhoods. To illustrate this patchwork of bike lanes and sidewalks, a map was created using satellite imagery. As shown in Figure 1-5, sidewalk infrastructure is concentrated from Main Street southeast to Pension Street. Many of the neighborhoods in this area have sidewalks on both sides of the street, providing access to Main Street and Maddox Boulevard. The stop and shelter at Tom's Cove Park, as previously shown in Figure 1-4, shows no sidewalk infrastructure leading to the stop. This is representative of the lack of sidewalk infrastructure in the southwestern park of the island.

Bike lanes are present along the commercial areas of Maddox Boulevard from Beach Access Road to Deep Hole Road and Pension Street. Deep Hole Road also has bike lanes, from Maddox Boulevard to Hallie Whealton Smith Drive. Maddox Boulevard also has a scenic boardwalk with views of the Assateague Channel, which are popular with tourists fishing for crab. Overall, about 60% of the alignment of the Pony Express routes have some type of bicycle or pedestrian path for riders to use to access the bus stops. A total of five of the bus stops have shelters.

Figure 1-5: Chincoteague Bicycle and Pedestrian Infrastructure



1.5. Fare Structure, Payments, and Purchasing

Fares are \$0.25 per trip for the Pony Express Trolley and \$0.50 per trip for the ADA paratransit service. Cash or tokens are acceptable forms of payment on the trolley, although no change is tendered onboard. Trolleys are equipped with non-electronic cash fareboxes. Tokens can be purchased for \$0.25 at the Chincoteague Municipal Complex. On some days with special events, the Chincoteague Chamber of Commerce funds fares for the entire day, making rides free for all passengers. Additionally, some businesses along the Pony Express route alignment purchase tokens from the Town to distribute to customers to encourage patronage.

1.6. Asset Management

In July 2016, the Federal Transit Administration (FTA) published a Transit Asset Management (TAM) final rule requiring all grantees to develop asset management plans. In Virginia, DRPT has developed a group plan that gives transit providers the option to participate in a statewide transit asset management plan instead of submitting to FTA individually. Chincoteague participates in the DRPT group plan, which includes vehicles, facilities, equipment, and other infrastructure. A summary report of the DRPT TAM plan is available online on the DRPT website.

1.6.1. Fleet

Chincoteague owns a total of three vehicles used for fixed-route service and one vehicle used for paratransit service, shown below in Table 1-8. The fixed route vehicles are 28-passenger Ford cutaway buses that have been converted to vintage-style trolleys by Supreme Corporation. Trolleys are equipped with simple vintage-style fareboxes, wooden interior, and vintage details. All three trolleys and the paratransit van are equipped with wheelchair lifts. Figure 1-6 reveals the interior of the trolley and Figure 1-7 shows the exterior. The paratransit van is shown in Figure 1-8.

Table 1-8: Fleet Inventory

Make	Model	Year	Vehicle Name	Approximate Replacement Cost	Current Mileage (mi)	Fuel Type	Seating Capacity
Ford	Trolley Conversion	2015	Stormy	\$154,406	19,678	Gasoline	28
Ford	Trolley Conversion	2012	Misty	\$152,819	39,261	Gasoline	28
Ford	Trolley Conversion	2012	Pied Piper	\$152,819	48,492	Gasoline	28
Dodge	Caravan	2016	Surfer Dude	\$37,788	3,051	Gasoline	2

Figure 1-6: Chincoteague Trolley Interior



Figure 1-7: Chincoteague Trolley Exterior



Trolley names (left to right): Stormy, Pied Piper, and Misty.

Figure 1-8: Chincoteague Paratransit Vehicle



1.6.2. Facilities

Offices and dispatch are located at the Town's Municipal Complex, at 6150 Community Drive. All Pony Express vehicles are stored and maintained at the Municipal Complex. Light maintenance such as oil changes are performed on site, while more major work is completed offsite through a work order process.

1.7. Transit Safety and Security Program

The Town of Chincoteague does not have an official Transit Security Program for the Pony Express. However, Chincoteague does have procedures in place for the trolley regarding the safety and security of the staff and the public. All drivers are trained on securing the vehicles and extinguishing fires. Drivers are also responsible for requesting fare payment onboard. Cameras are installed on all trolleys as well as at the Municipal Complex for surveillance. The Pony Express has a strong relationship with the Chincoteague Police Department, also located on the Municipal Complex, where officers ride the trolley at various unannounced times for additional security measures. In the event of an emergency, such as a severe weather event, the Pony Express is included in the Town's Emergency Operations Plan as an available resource for evacuation purposes.

1.8. Intelligent Transportation Systems (ITS) Programs

The Town of Chincoteague currently operates the Pony Express without the technology that many larger systems operate. Historically, the size and scale of the operation hasn't justified the additional cost of many technological upgrades, such as computer aided dispatch (CAD) or specialized scheduling software. Drivers and dispatch currently utilize the two-way radio system for adequate spacing of vehicles and bus-bunching prevention, as discussed in section 1.4.1 above.

1.9. Data Collection and Ridership/Reporting Methodology

Drivers for the Pony Express currently use tally counters for collecting ridership counts. Ridership counts are collected every day, including days with free fare. Every evening, fareboxes are removed from the vehicles and dropped off with police dispatch, who hold the fareboxes overnight before they are taken back to the vehicles for use the following day. Fares are collected twice a week and counted by Chincoteague staff. Submission of data to the National Transit Database (NTD) is facilitated by DRPT. Drivers record daily timesheets with start and end work times. Time records are then summarized in Microsoft Excel and used for accounting purposes.

DRPT completes a financial audit on the Pony Express once every four years. The Town also completes their own financial audits within the Finance Department, which also tracks budgeting for the Pony Express. Required data are submitted to DRPT through the Online Grant Administration (OLGA).

1.10. Other Transportation Service Providers

There are several other transportation services in Chincoteague and the surrounding area. This includes STAR Transit, the regional public transit provider, as well as human service transportation providers like the Eastern Shore Area Agency on Aging/Community Action Agency (ESAA/CAA) and the Eastern Shore Community Services Board (ESCSB). Although the Pony Express does not make any direct connections to the following transportation service providers, they should be recognized and documented for potential connections in the future.

1.10.1. STAR Transit

The region is also served by STAR Transit which is the multi-county public transportation provider for Virginia's Accomack-Northampton Transportation District Commission (ANTDC). STAR Transit is operated by Virginia Regional Transit and overseen by a Board of Directors who are appointed by the Board of Supervisors for Accomack and Northampton Counties. The STAR Transit System runs Monday through Friday and provides bus service via seven deviated fixed routes, which are described below:

Red and Purple Routes

These routes provide services connecting the Walmart in Onley to Cape Charles. The Red Route provides northbound service from 6:20 a.m. to 5:50 p.m., while the Purple Route provides southbound service from 6:30 a.m. to 5:50 p.m.

Blue and Gold Routes

These routes provide service connecting the Town of Onley and the Town of Parksley. The Blue Route provides northbound service from 8:00 a.m. to 5:30 p.m., and the Gold Route provides southbound service from 6:30 a.m. to 6:05 p.m.

Silver and Orange Routes

These routes provide service from Parksley Pavilion to the Chincoteague Town Office. The Silver Route provides northbound service from 6:45 a.m. to 6:20 p.m., and the Orange Route provides southbound service from 7:30 a.m. to 5:40 p.m. STAR Transit stops on Chincoteague Island are shown in Figure 1-9.

Figure 1-9: STAR Transit Stops in Chincoteague



Yellow Route

The Yellow Route provides loop service connecting the towns of Cape Charles, Cheriton, Cheapside, Townsend, and Kiptopeke. This route operates from 6:30 a.m. to 6:15 p.m. and connects to the Purple and Red Routes at the Cape Charles Food Lion.

1.10.2. Taxi and Private Transportation Companies

There are no private taxi providers operating in the Town of Chincoteague. Transportation Network Companies (TNCs) such as Uber or Lyft are seldomly available. Tour buses regularly bring groups for planned events and vacations to Chincoteague hotels and recreation destinations.

1.10.3. Human Service Transportation

Human service transportation in the region is provided primarily by the Eastern Shore Area Agency on Aging/Community Action Agency (ESAAA/CAA) and the Eastern Shore Community Services Board (ESCSB). The ESAAA/CAA operates programs for the elderly, disabled, and economically disadvantaged. Programs include senior centers, Head Start, Meals on Wheels, care transition, insurance counseling, and emergency assistance. The ESAAA/CAA operates and provides transportation to three centers where seniors receive medical education, routine screenings, nutritional assessments and are provided meals. The ESAAA/CAA also provides transportation to local stores, medical appointments, prevention and behavioral health services, and other places based on specific needs.

1.10.4. Medicaid Transportation

Non-emergency medical transportation is arranged by LogistiCare for this region of Virginia.

1.10.5. Intercity Bus

The Greyhound bus station is in Oak Hall, at the intersection of Routes 13 and 175 at 6491 Lankford Highway. The station is served by the Norfolk-Baltimore and Norfolk-New York routes. Northbound trips from the station leave at 1:05 a.m. and 8:10 a.m. towards New York and Baltimore, respectively. Southbound trips depart Oak Hall at 2:40 a.m. towards Norfolk.

1.10.6. Amtrak

The closest Amtrak service to the Town of Chincoteague is along the Northeast Regional route. Virginia Beach is connected to the Northeast Regional Route by connecting services to Norfolk station. The Northeast Regional Route connects Virginia Beach to Boston via Richmond, Washington, DC, Baltimore, Philadelphia, New York, and New Haven.

1.11. Public Outreach, Engagement, and Involvement

The Town of Chincoteague leadership emphasize the importance of community engagement in the overall success of the Pony Express on the island. As such, Pony Express staff are proud to be a part of public outreach efforts that benefit the community whenever possible. Currently, the Pony Express is involved in the Ride to Read and Stuff the Trolley events. Ride to Read is an event that takes place twice a year, where the trolleys are used to take toddlers to the Town's library. Stuff the Trolley is another event where the trolley is used to gather and donate school supplies to the local schools. In addition to these community outreach events, the Pony Express is critical in the transport of thousands of passengers during the major events such as the Seafood Festival, Chili Chowder Cook Off, Oyster Festival, Fourth of July Fireworks, Carnival, Pony Swim, Pony Auction, and Pony Swim Back.

It should be noted that Chincoteague previously operated an additional form of public outreach, the Chincoteague History Tour. The tour gave locals and tourists an opportunity to learn about the island by featuring the Town's

historic people and places. Chincoteague operated the tours twice daily on Tuesdays and Thursdays, with \$2.00 fares. Although the tour was successful, the service was discontinued in 2017 to avoid public funding complications. Since then, the Museum of Chincoteague purchased school buses and now operates a Chincoteague History Tour, similar to the tour previously operated by the Town.

2. Goals, Objectives, and Service Design Standards

This chapter of the TDP describes the specific goals, objectives, and service design standards necessary to effectively and meaningfully meet the transit needs of the Town of Chincoteague. This chapter also details the process for reviewing and updating the goals, objectives, and service design standards so they remain current and relevant to the evolving needs of the transit system. To accomplish a comprehensive list of these goals, a series of discussions with Chincoteague staff and select stakeholders took place, as well as a review of existing documents on the subject. To the extent possible, the goals, objectives, and service design standards are based on SMART principles, that is, they are Specific, Measurable, Agreed, Realistic, and Time-bound.

2.1. Introduction

Goals are broad policy statements and are defined here as the desired outcomes the Town of Chincoteague strives to achieve in operating the Pony Express. Objectives are then established to specify the required steps to accomplish the goals. Although the Pony Express currently does not have an officially adopted set of goals or objectives, the 2011 TDP and most recent Chincoteague Comprehensive Plan (created in 2010 and updated in 2015) were available as reference points to build from. The goal for transportation in the Town of Chincoteague Comprehensive Plan is to “provide for the safe and efficient movement of people and goods”. The objectives defined for reaching this goal are as follows:

Objectives:

1. Provide a safe and connected system of pedestrian and bicycle pathways
2. Pursue opportunities for additional public parking to serve the Main Street and Maddox Boulevard commercial districts
3. Provide safe, efficient, reliable transportation for many modes of transportation
4. Enhance public transportation opportunities by continuing to improve the Pony Express trolley service, and to encourage the addition of a private taxi service
5. Encourage private investment to upgrade and convert significant private roads to meet public street standards so that they may be added to the VDOT street inventory for maintenance. Improve standards for maintenance of the private road network.

Although not all the objectives from the Town of Chincoteague Comprehensive Plan refer to the Pony Express trolley explicitly, all goals do have impacts on public transport on the island. In addition, the goals and objectives from the Comprehensive Plan reflect the overarching spirit and vision of the community, which should be reflected in the goals and objectives for the Pony Express trolley.

It is also important to note the role the trolley plays as part of the overall transit service strategy on the island. The trolley has historically operated over the summer months when tourism is greatest. Moreover, the hours of operation are most conducive to a hospitality and recreation schedule of evenings only. While this schedule would typically raise an immediate interest in operating during the entire year and an entire day for residents who are more transit dependent, this role is currently fulfilled by STAR Transit. Therefore, the goals and objectives are written in light of the niche that it fulfills without a focus on traditional year-round, all day transit service that STAR Transit offers.

2.2. Recommended Goals and Objectives

The goals and objectives established in the 2011 Chincoteague TDP were reviewed and updated with input from Town and DRPT staff, local stakeholders, and the consultant team. This section details the updated goals for the Pont Express trolley, each with a set of objectives. To elaborate on the objectives, specific strategies and measures are provided, thereby helping Chincoteague measure and ultimately reach the goals. The following goals are proposed for the Pony Express:

1. Manage and maintain the existing public transportation system to ensure safe and reliable transportation services for the community.
2. Provide mobility options that enable residents and visitors to maintain personal independence and engage in civic and social life.
3. Continue to improve community awareness of the Town's transit services.

Although Goal 1 originates from the 2011 Chincoteague TDP, the objectives to reach it have been updated to fit the current vision of the Pony Express. The objectives to reach Goal 1, shown below, now focus on keeping the existing system safe and in a state of good repair. Driver training has been added to stress the importance of keeping drivers well informed on regulatory requirements and industry change. Safe and reliable service begins with operators that are trained and knowledgeable on best practices.

Goal 2 also originates from the 2011 Chincoteague TDP, but has been updated to focus on service modifications through data collection and analysis. A data-driven approach to service planning will give Chincoteague the tools necessary to better inform future route modifications. A two-pronged approach that combines quantitative analysis with service statistics as well as qualitative analysis via surveys will help Chincoteague staff stay current as the population and travel patterns evolve on the island.

Goal 3 has been added to the list of recommended goals to emphasize the importance of the trolley's role in the community. Engaging the public with community outreach activities such as the Ride to Read and Stuff the Trolley programs increase public awareness and create positive associations with the trolley. Chincoteague leadership wishes to continue and grow this relationship with the community to create long-lasting, positive impacts. Each of the three goals with associated objectives are as follows:

Goal 1: Manage and maintain the existing public transportation system to ensure safe and reliable transportation services

Objective 1.1: Promote the safety of employees and passengers

Strategy	Measure
Develop and implement driver education program	<ul style="list-style-type: none"> Annual percent of drivers completing driver training
Coordinate with local fire and police departments to periodically conduct safety drills	<ul style="list-style-type: none"> Number of drills completed per year
Monitor frequency, type, and cause of incidents	<ul style="list-style-type: none"> Incident frequency rate

Objective 1.2: Continue to maintain fleet and equipment

Strategy	Measure
Implement asset management plan with vehicle and equipment replacement	<ul style="list-style-type: none"> Use DRPT's Group Transit Asset Management (TAM) Plan and TransAM software to monitor assets consistent with best practices
Monitor frequency, type, and cause of service breakdowns	<ul style="list-style-type: none"> Miles between in-service breakdowns

Goal 2: Provide mobility options that enable residents and visitors to maintain personal independence and engage in civic and social life

Objective 2.1: Collect and analyze data to enable the objective evaluation of existing service.

Strategy	Measure
Monitor ridership levels throughout the operating season.	<ul style="list-style-type: none"> Passengers per revenue vehicle hour Passengers per revenue vehicle mile
Monitor on-time performance	<ul style="list-style-type: none"> Percent of trips that maintain scheduled headway interval
Monitor system efficiency	<ul style="list-style-type: none"> Operating cost per revenue vehicle hour Operating cost per revenue vehicle mile Operating cost per passenger

Objective 2.2: Examine ways to provide better transportation options for residents and tourists

Strategy	Measure
Engage riders and non-riders through surveying efforts to monitor demand for new services (e.g. extending operating season)	<ul style="list-style-type: none"> Annual or bi-annual in-person and/or online survey questionnaire
Strengthen coordination and explore partnerships between Town of Chincoteague and Accomack-Northampton Transportation District Commission (STAR Transit)	<ul style="list-style-type: none"> Maintaining relationship with STAR Transit with annual meeting

Goal 3: Continue to improve public awareness of the Town’s transit services

Objective 3.1: Outreach through positive community involvement

Strategy	Measure
Engage the community through participation in events and services	<ul style="list-style-type: none"> Consistent participation in various community events (Stuff the trolley, Ride to read, etc.)
Continue to coordinate with special events to offer extended/additional service when there is additional demand	<ul style="list-style-type: none"> Establish special event service schedules that correspond with events that increase demand for public transportation

Objective 3.2: Provide the public with up-to-date information on the service

Strategy	Measure
Maintain detailed and up-to-date schedules and maps	<ul style="list-style-type: none"> Post updated schedules and maps online annually Provide updated schedules and maps to hotels, businesses, and organizations along trolley line annually Maintain and replace bus stop signs as needed
Provide real-time passenger information.	<ul style="list-style-type: none"> Implement mobile application-based vehicle location and real-time passenger information system.

2.3. Service Standards

Service standards are intended to guide Chincoteague leadership in making service modifications. They are the benchmarks for service performance and should be used to decide when service changes are necessary or when remedial actions need to take place. Although Chincoteague does not have an official set of service design standards for the Pony Express, the 2011 TDP set forth a proposed list. The list of service design standards is provided below, with updates based on the existing service.

Category	Metric	Standard
Productivity	Passenger Trips per Vehicle Revenue Hour	Review and modify, if warranted, if passenger trips per vehicle revenue hour falls 20% below previous year
Cost Efficiency	Operating cost Per Vehicle Revenue Hour	Review and modify, if warranted, if operating cost per vehicle revenue hour increases 20% above previous year
Cost Effectiveness	Operating Cost Per Passenger Trip	Review and modify, if warranted, if operating cost per passenger trip increases 20% above previous year
Passenger Loads	Percent Standees	10% standees is acceptable for 10 minutes or less
Performance	On-Time Performance	Maintain scheduled headway for 80% of all trips. Trips within five minutes of scheduled headway will be considered on time.
Safety	Safety Incidents per 100,000 miles	0.10 or fewer "reportable incidents per 100,000 miles, as defined by the National Transit Database. A reportable incident is one in which one or more of the following conditions apply: <ul style="list-style-type: none"> • A fatality • Injuries requiring medical attention away from the scene for one or more persons • Property damage equal to or exceeding \$25,000
Passenger Comfort	Air Conditioning and vehicle cleanliness	Air conditioning is in working condition and vehicles are clean
Public information	Bus stops	Bus stop signs at locations with 20 or more riders per day
	Route Map and Schedules	Route maps and schedules reviewed and updated annually

2.4. Process for Reviewing and Updating

The goals, objectives, and service design standards outlined in this section are meant to aid the Town of Chincoteague in maintaining a healthy and successful transit system for now and into the future. They have been developed as part of the TDP major update process through discussions with Chincoteague staff, stakeholders, and a thorough review of existing documents on the topic including the 2011 TDP. Intended as a guide for Chincoteague to measure and assess the system, these goals, objectives, and service design standards will need to be reviewed critically and amended as necessary over time. It is recommended that Chincoteague not only analyzes and assesses the performance of the system on an annual basis, but also assesses the goals, objectives, and service design standard metrics as well. Giving critical attention to these areas will help ensure that the Pony Express stays current with the needs of the community.

It would also be beneficial for the Pony express to have input from an external source in the form of a Transit Advisory Committee (TAC). The formation of a TAC, which was recommended in the 2011 TDP, would provide Chincoteague with outside advice on the direction of the trolley. The TAC could review and help update the goals, objectives, and service design standards annually to ensure that they are up to date. Additionally, the TAC could help ensure that the Town of Chincoteague has regular coordination with STAR Transit, so the needs of the community (especially historically marginalized populations) are collectively being met between service provided by the Pony Express and STAR Transit.

3. Service and System Evaluation

The service and system evaluation chapter provides both quantitative and qualitative analysis of the current environment and operations of Chincoteague Pony Express. This chapter begins with an in-depth discussion on the various socioeconomic factors that influence the demand for transit, such as population, jobs, autoless households, seniors, low-income, and Title VI protected populations. The existing service analysis follows, which details the service statistics and major trip generators on the island. A retrospective performance evaluation is included in Section 3.3, highlighting operating statistics trends over the past four years. Immediately following is a section on public outreach, which details the results of the onboard and online surveys as well as stakeholder interviews that were conducted as part of this TDP update. Finally, a section on the opportunities for service improvement completes the chapter.

3.1. Demographics

This section provides an overview of the general population of the Town of Chincoteague and geospatial analyses of various demographic characteristics that may contribute to the population’s transit needs, including employment, age, income, and access to personal vehicles. In addition, this section identifies and conducts further geospatial analysis of Chincoteague’s major trip generators and of populations protected by Title VI of the Civil Rights Act of 1964.

General Population

Table 3-1 shows U.S. Census decennial population estimates in Chincoteague Island, Accomack County, and the State of Virginia from 2000 to 2018. The State of Virginia experienced 13% population growth from 2000 to 2010, and 6.5% growth from 2010 to 2018. In contrast, the populations in both Accomack County and Chincoteague decreased for both time periods. From 2000 to 2010, Chincoteague experienced a population decrease of 26.3%, more than double the population decrease in Accomack County. From 2010 to 2018, Chincoteague’s population continued to decline, but at a slower rate of 9.6%, decreasing from 3,183 to 2,879.

Table 3-1: Decennial Population Change (2000-2018)

	2000 Population	2010 Population	2018 Population	2000 to 2010 Percent Change	2010 to 2018 Percent Change
State of Virginia	7,078,515	8,001,024	8,517,685	13.0%	6.5%
Accomack County	38,305	34,066	32,412	-11.1%	-4.9%
Town of Chincoteague	4,317	3,183	2,879	-26.3%	-9.6%

Source: U.S. Census

Population projections shown in Table 3-2 are from the Weldon Cooper Center for Public Service at University of Virginia. The figures indicate that while the state is forecasted to experience a population increase of over 1.3 million people from 2018 to 2040, the population in Accomack County is expected to decrease from 32,412 to 25,558 over the same time period.

Table 3-2: Population Projections for Accomack County and the State of Virginia

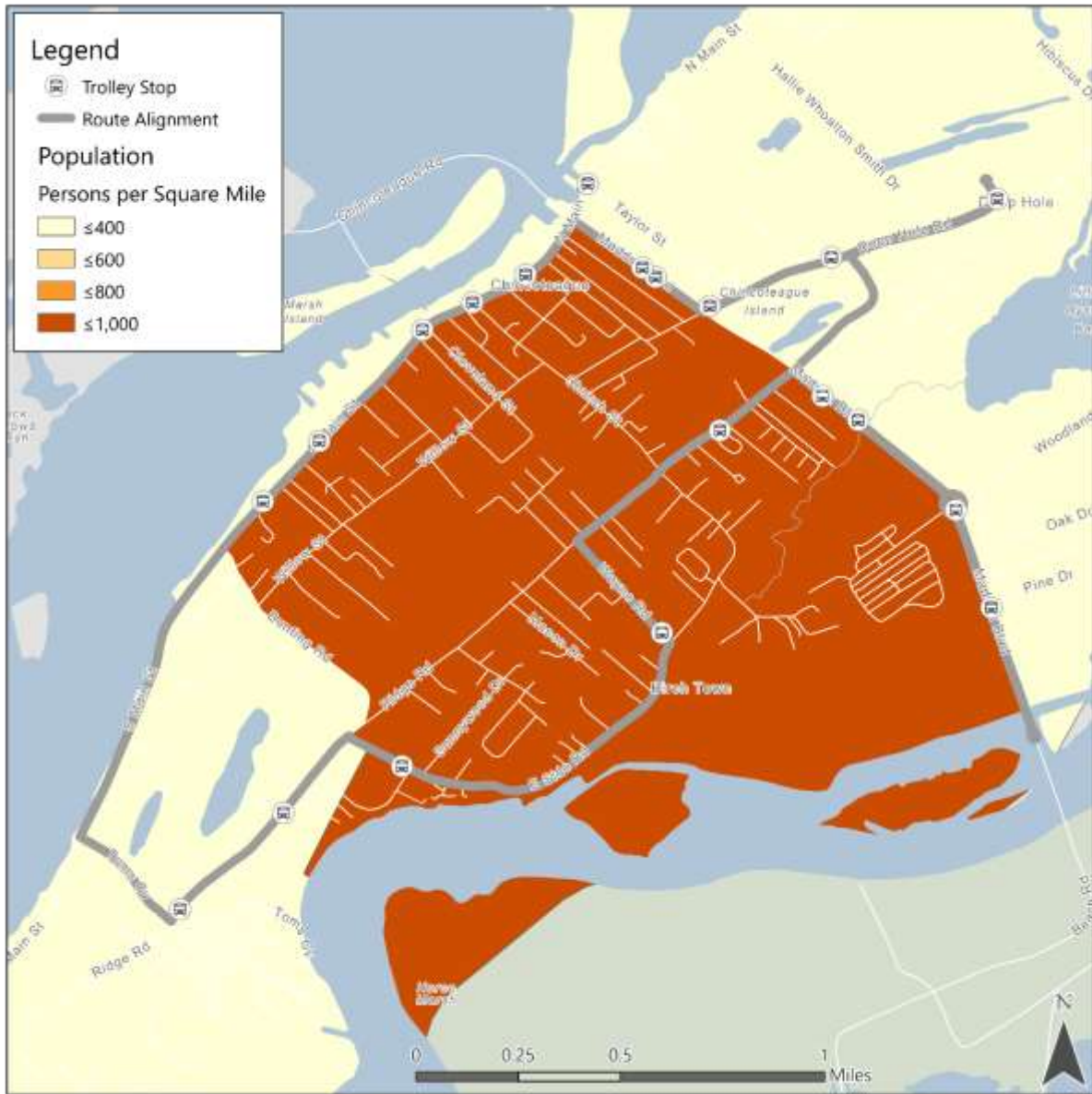
	2018 Estimate	2020 Forecast	2030 Forecast	2040 Forecast
State of Virginia	8,517,685	8,655,021	9,331,666	9,876,728
Accomack County	32,412	32,754	29,292	25,558

Source: Weldon Cooper Center for Public Service

Population Density

Population density oftentimes correlates with the transit ridership in a given area. Data from 2017 American Community Survey (ACS) 5-Year Estimates are used to determine the population density at the block group level for the four block groups on Chincoteague Island. As shown in Figure 3-1, of the four block groups, the two that make up the center of the island have the highest population densities. The block group to the west of Ridge Road has 964 persons per square mile, while the block group to the east of Ridge Road has 887 persons per square mile. The northernmost and southernmost block groups have similarly lower densities of 285 and 258 persons per square mile, respectively. It is important to note however, that in addition to Chincoteague’s year-round population, numerous tourists and summer residents not counted by the U.S. Census bring additional density to the town every March through September.

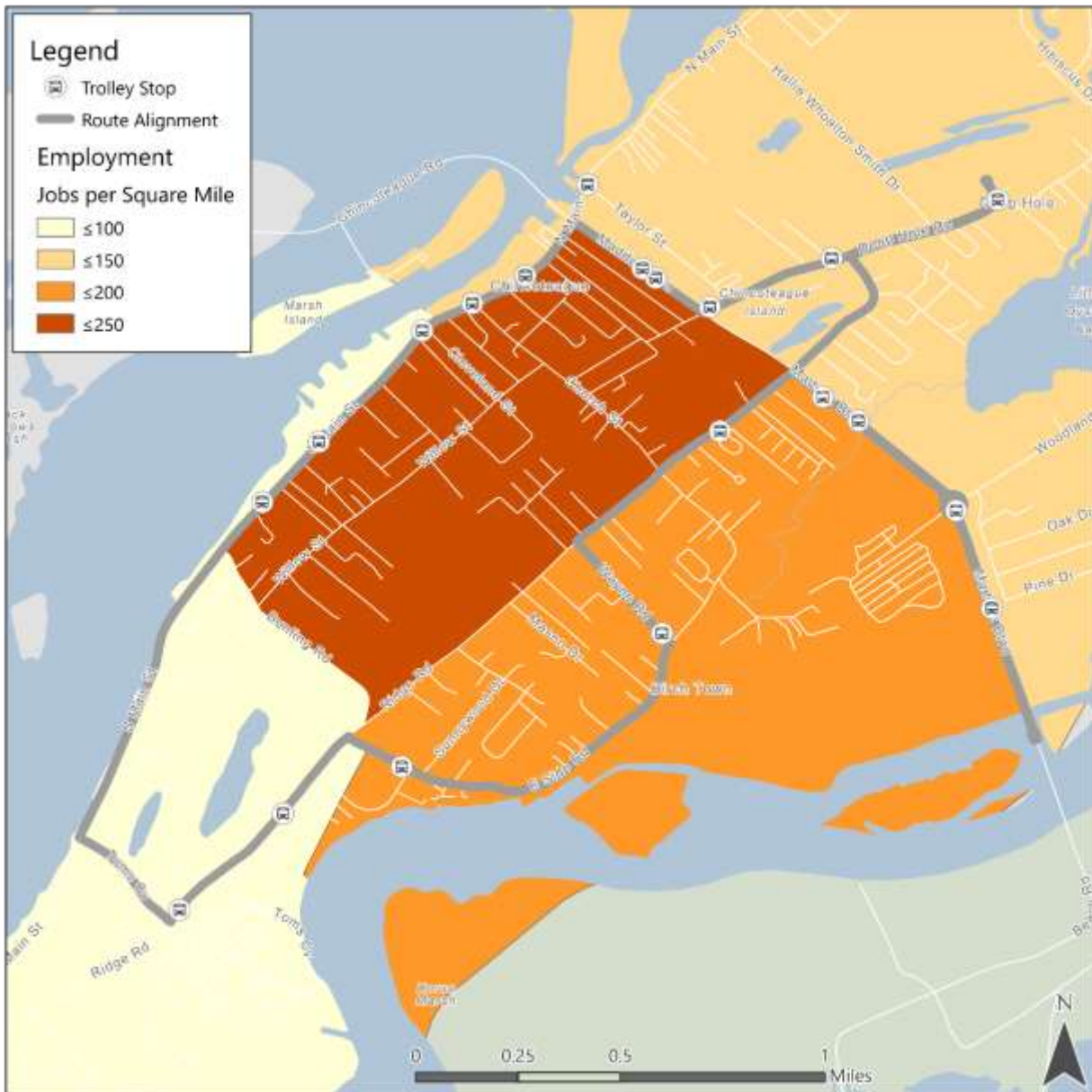
Figure 3-1: Population Density



Job Density

Like population density, areas with higher job densities typically indicate opportunity for higher transit ridership. Job density is mapped here using 2015 Longitudinal Employer-Household Dynamics (LEHD) Origin-Destination Employment Statistics (LODES) data. The LODES data provide spatial distributions of worker's employment locations at the census block level, which are visualized below in Figure 3-2. Of the four block groups, the block group in the center of the island to the west of Ridge Road has the highest density of 250 jobs per square mile. The southernmost census block has the lowest density of 66 jobs per square mile, while the remaining two block groups have job densities of 134 and 179 jobs per square mile.

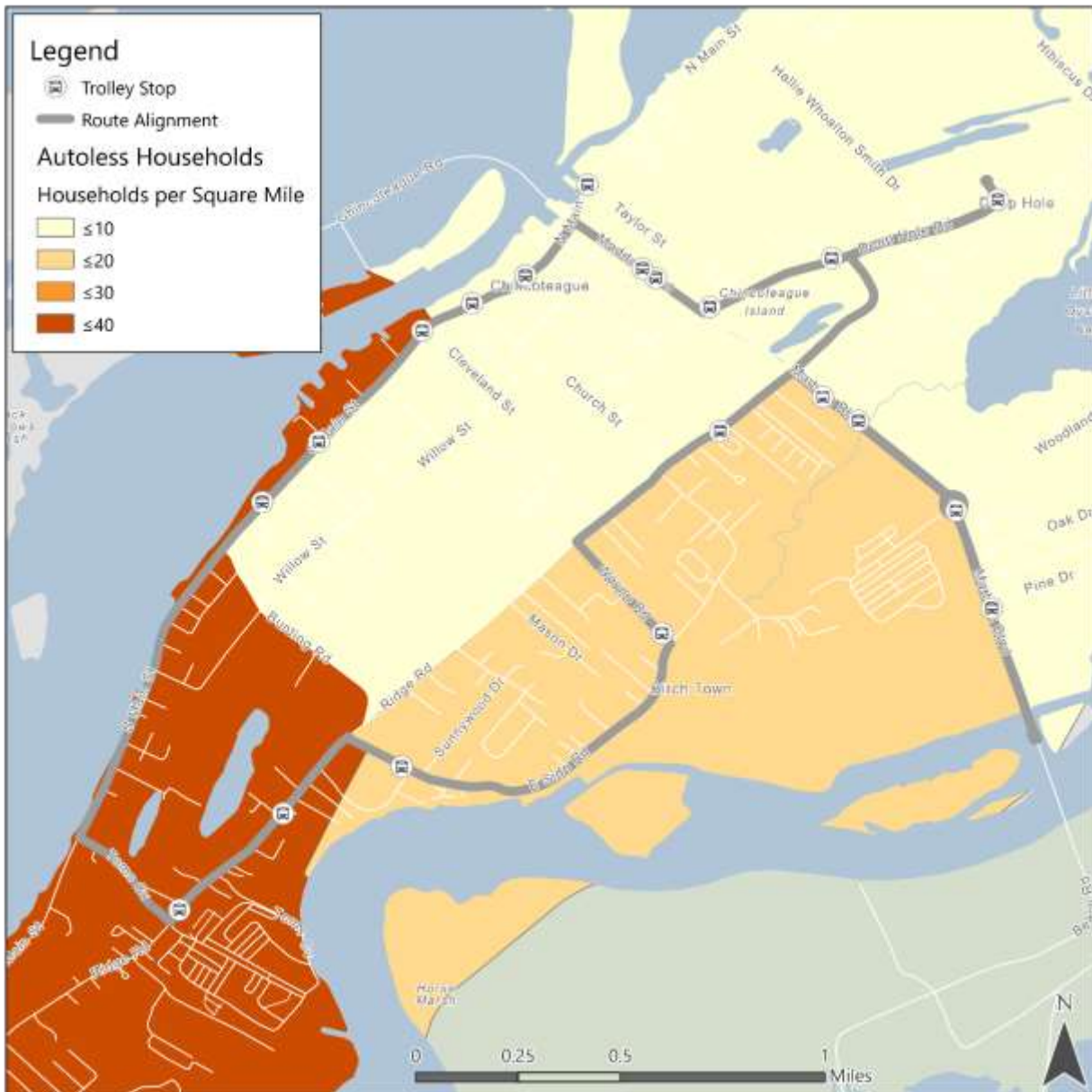
Figure 3-2: Job Density



Autoless Households

Individuals living in households without access to a personal vehicle are more likely to depend on public transportation to travel to work and other essential activities than those with access to an automobile. Data from the 2017 ACS are used to determine the density of autoless households at the block group level, shown in Figure 3-3. The two northernmost census blocks have the lowest density of autoless households of 0 and 4.3 autoless households per square mile. The southernmost census block has a density of 34 autoless households per square mile, double that of the census block south of Maddox Blvd and east of Ridge Road, which has a density of 17 autoless households per square mile.

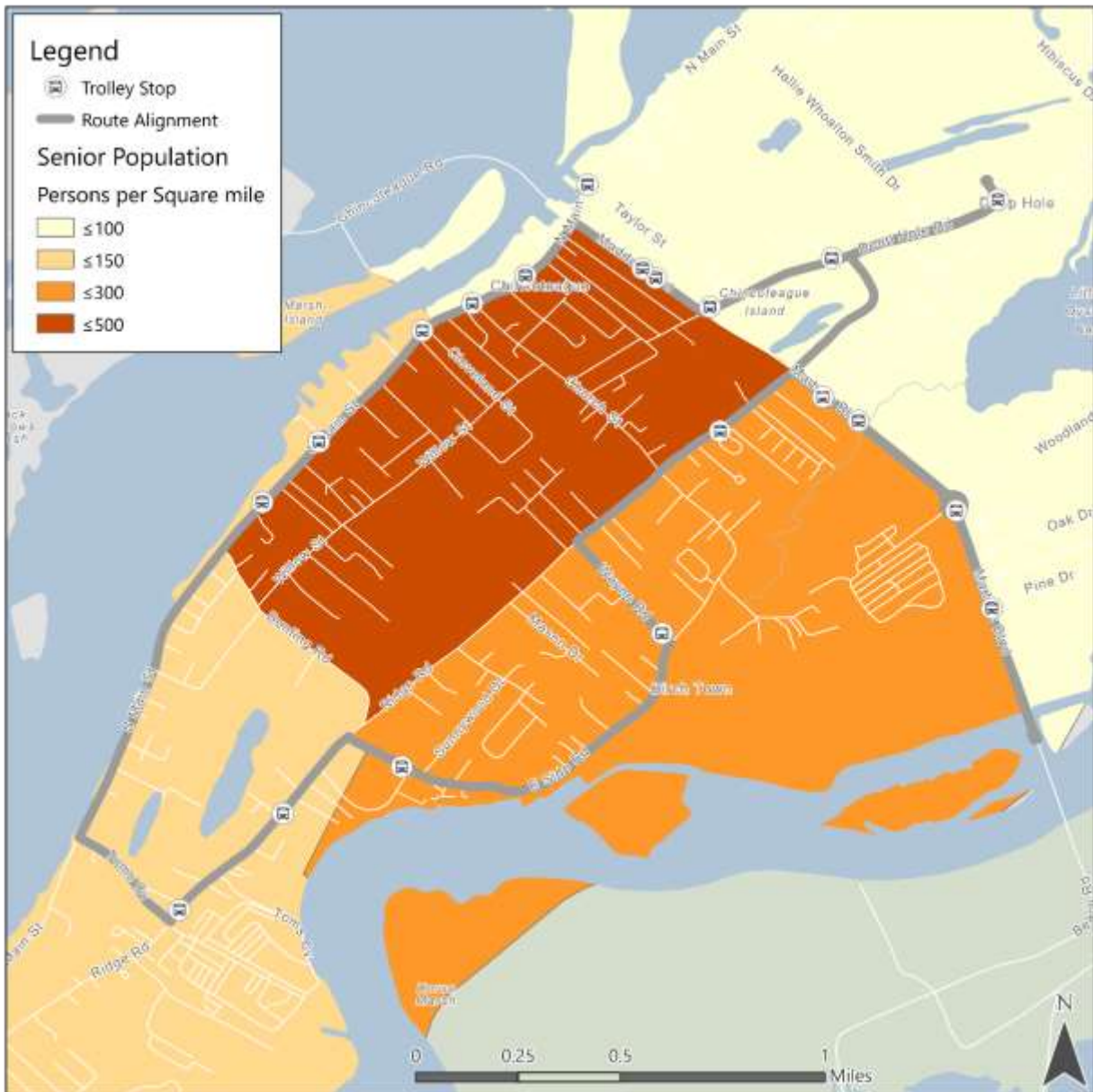
Figure 3-3: Autoless Household Density



Senior Population

Figure 3-4 shows the population distribution of older adults, who may depend on public transportation to travel to medical appointments, human services, and other essential activities. Here, 2017 ACS data are used to determine the density of the population ages 60 and above at the block group level. The two census blocks that make up the center of the island have the highest elderly population densities. The census block to the east of Ridge Road has 257 senior persons per square mile, while the census block to the west of Ridge Road has 465 senior persons per square mile. The lowest density is in the northernmost block group, which has an estimated 85 senior persons per square mile.

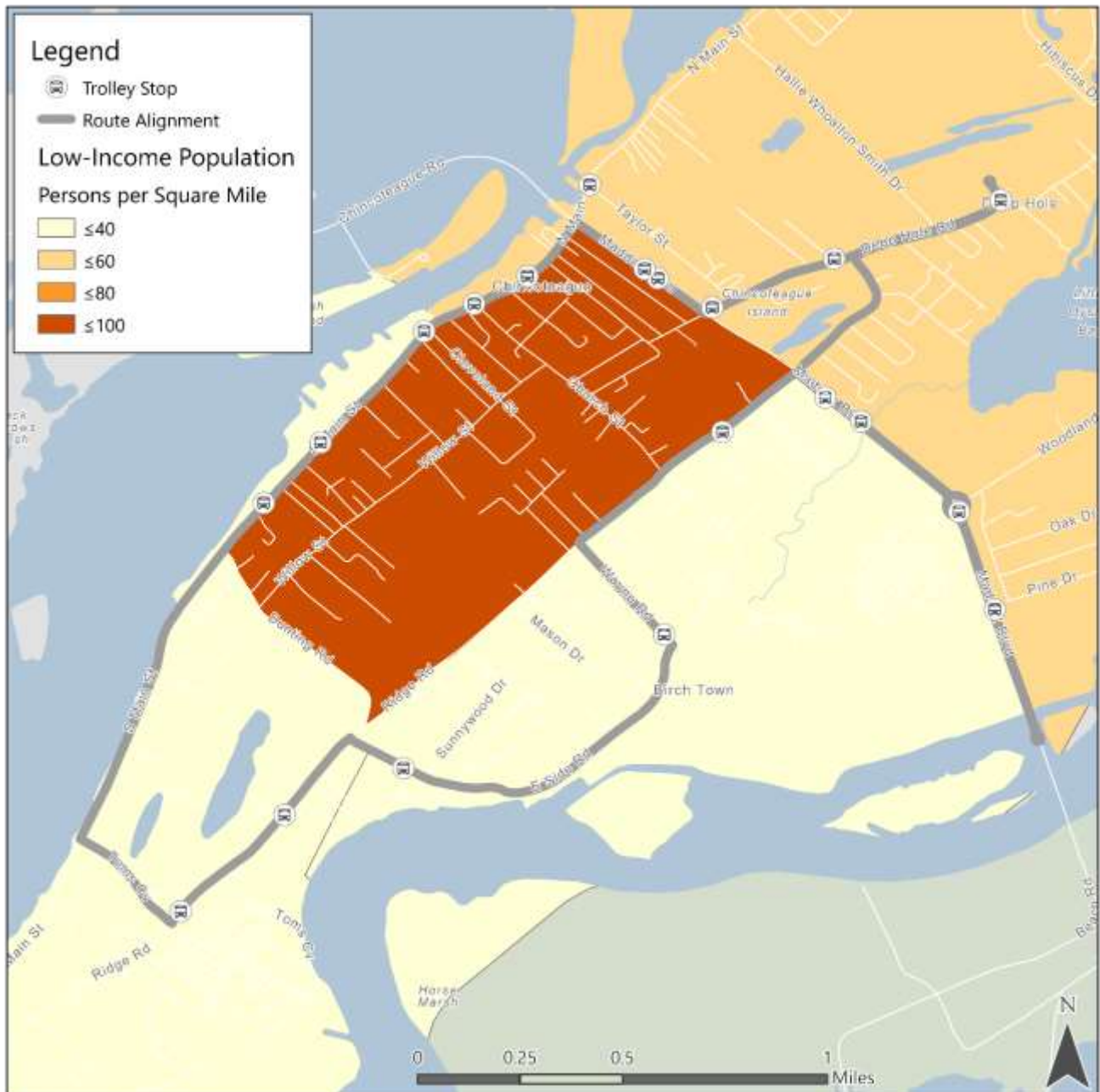
Figure 3-4: Senior Population Density



Low-Income Population

Income is a potential indicator of transit dependency as individuals who earn less may not have the economic means to purchase or maintain a personal vehicle. 2017 ACS data are used to determine the low-income population at the block group level, shown in Figure 3-5. For the purpose of this analysis, low-income persons are considered persons who earned an income below the poverty threshold defined by the U.S. Census during a 12-month period. The highest densities of low-income persons are found in the northernmost block group and the block group south of Maddox Boulevard and west of Ridge Road, with densities of 52.1 and 96.6 persons per square mile, respectively. The southernmost census block has the lowest density of 19.6 persons per square mile.

Figure 3-5: Low Income Population Density



Title VI Protected Populations

Agencies providing public transportation services have a responsibility to ensure nondiscriminatory service in accordance with Title VI of the Civil Rights Act of 1964. Title VI prohibits discrimination based on race, color, or national origin, including the denial of meaningful access for limited English proficient (LEP) persons, in programs and activities that receive federal assistance. In addition to the above demographic analysis, the following section provides a geospatial analysis of Chincoteague's minority and limited English proficient populations.

Minority Population

Shown in Figure 3-6, 2017 ACS data are used to determine the minority population at the block group level for the four block groups on Chincoteague Island. All persons counted by the 2017 ACS with a race other than "white" are considered part of the minority population. The northernmost block group has the highest minority population density of 60 persons per square mile, while the block group south of Maddox Boulevard and east of Ridge Road has no minority residents. The remaining two block groups have between 22 and 33 minority residents per square mile.

Limited English Proficiency Population

Table 3-3 and Table 3-4 describe the population above the age of 5 and households in Chincoteague that are limited in English proficiency and their languages spoken at home, based on 2017 ACS data. English is the primary language spoken by 94% of Chincoteague residents. The remaining 6% of residents speak Spanish or Spanish Creole and Other Indo-European languages, with varying levels of English proficiency. Out of all Chincoteague residents age 5 and older, only 4% are limited in English proficiency. Most Spanish speakers in Chincoteague speak English "very well" with only 35% who speak English less than "very well." Most speakers of Indo-European languages in Chincoteague are limited in English proficiency, with only 29% who speak English "very well."

Of all non-English speaking households, only 4% are limited English-speaking households, meaning that no household member 14 years old and over speaks English "very well." Households that speak various Indo-European languages make up 100% of all limited English proficient households in Chincoteague.

Figure 3-6: Minority Population Density

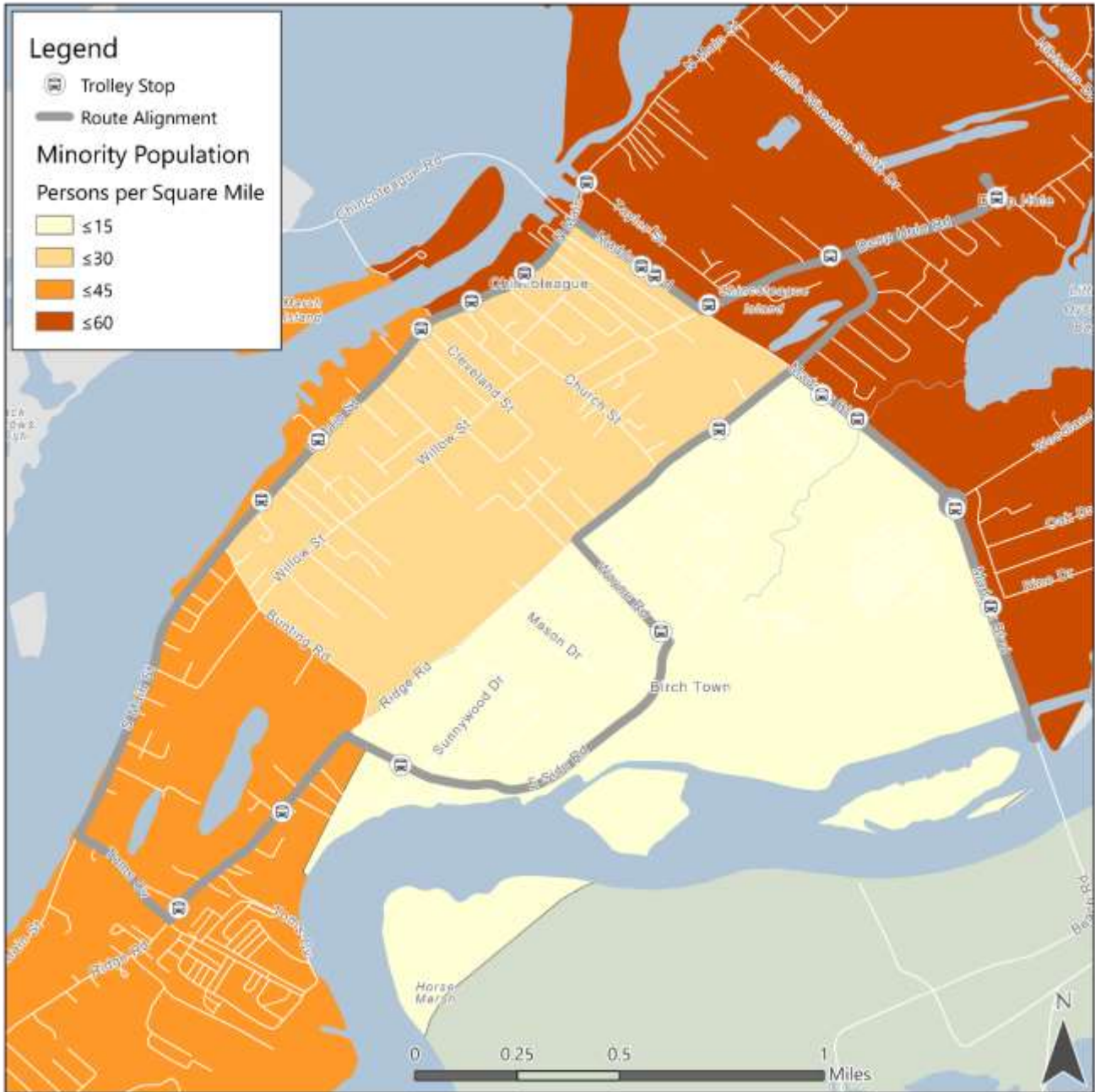


Table 3-3: Population with Limited English Proficiency

Population 5 Years and Older	Total	Percent	Ability to Speak English			
			"Very Well"	Percent	Less Than "Very Well"	Percent
Speaks English only	2,597	94%	-	-	-	-
Speaks Spanish or Spanish Creole	37	1%	24	65%	13	35%
Speaks Other Indo-European languages	143	5%	41	29%	102	71%
Total	2,777	100%	65	0%	115	4%

Source: 2017 ACS 5-Year Estimates

Table 3-4: Limited English-Speaking Households

Non-English Speaking Households	Total	Percent	Limited English Proficient	
			"Very Well"	Percent
Spanish or Spanish Creole	29	2%	0	0%
Other Indo-European languages	74	5%	46	62%
All households	1,423	100%	46	3%

Source: 2017 ACS 5-Year Estimates

3.2. Existing Service Analysis

This section provides insight into the existing service characteristics of each route. Table 3-5 summarizes the existing daily service provided by Pony Express. The Green and Red routes each operate at 30-minute frequencies from 5:02 PM to 10:25 PM and 5:15 PM to 9:38 PM, respectively. The combination of both routes provides 15-minute service to residents and visitors of Chincoteague between 5:00 PM and 9:30 PM and 30-minute service after 9:30 PM. Two vehicles are required for peak service, with one vehicle assigned to each route. Maps showing existing routes, bus stops, bus shelters, and sidewalk infrastructure can be found in Chapter 1.

Table 3-5: Service Summary

Route	Daily Trips	Span of Service	Headway	Vehicle Requirements	Daily Revenue Hours	Daily Revenue Miles
Green	11	5:02 PM - 10:25 PM	30 min	1	5.5	102.3
Red	9	5:15 PM - 9:38 PM	30 min	1	4.4	83.7

Table 3-6 provides route characteristics, as calculated based on the published schedules for each route. Both the Green Route and Red Route operate at 30-minute headways covering a distance of about 9.3 miles. The scheduled speeds for both routes is about 18.6 mph.

Table 3-6: Route Characteristics

Route	Trip Length	Distance (miles)	Speed (miles/hour)
Green	30 min	9.3	18.6
Red	30 min	9.3	18.6

Table 3-7 shows monthly ridership for fiscal years 2017 and 2018 for both fixed-route and paratransit services. Overall, ridership remained consistent between FY17 and FY18 except for May and October, which saw lower ridership in FY18. For both years, ridership peaked in July at over 5,000. Total ridership on the fixed-route service was 11,507 in FY17 with a slight increase in FY18. Paratransit ridership totals are less than 0.1% ridership on the Green and Red routes. Total trips provided by the Town’s paratransit service in FY17 and FY18 were 9 and 10, respectively.

Table 3-7: Fixed Route and Demand Response Monthly Ridership (FY17-FY18)

Month	Fixed Route		Paratransit	
	FY17	FY18	FY17	FY18
July	5,337	5,520	2	3
August	2,873	3,099	1	2
September	519	570	6	0
October	80	10	0	0
November to April	No Service			
May	569	230	0	0
June	2,129	2,390	0	5
Total	11,507	11,819	9	10

Source: Town of Chincoteague 2018 TDP Update Letters

A ridership inventory analysis was conducted on every trip on August 1st, 2nd and 3rd 2019 to help understand the daily ridership numbers at a more granular level. As shown in Figure 3-7, the Green and Red routes experienced similar total boardings over the three survey days. Of the days surveyed, Friday experienced the greatest number of riders. The chart in Figure 3-8 displays the average ridership and maximum load by trip for both routes. Ridership was lowest at the beginning and end of service with fewer than five boardings per trip. Ridership generally increased until the middle of the service span at 7:15 PM, reaching an average of almost 17 boardings per trip. Interestingly, on several trips the maximum load is greater than the number of boardings because many riders take the trolley to sightsee and often remain on board for an entire loop.

Figure 3-7: Ridership by Day (August 1-4, 2019)

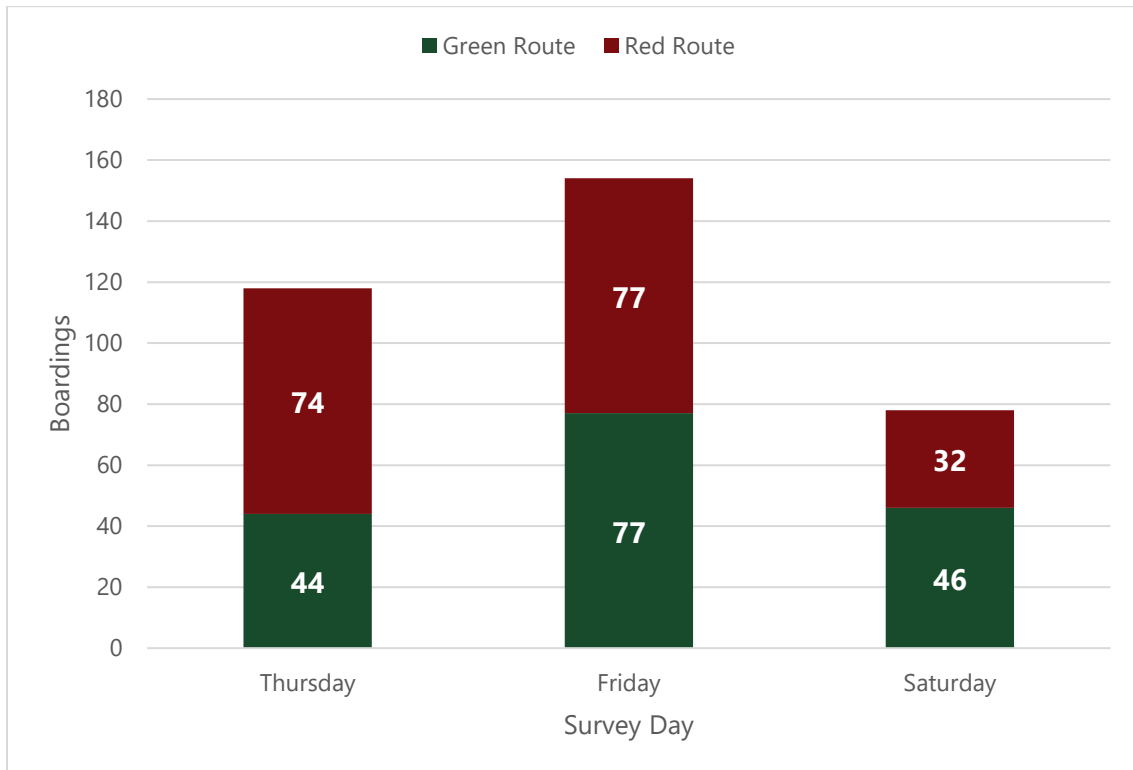
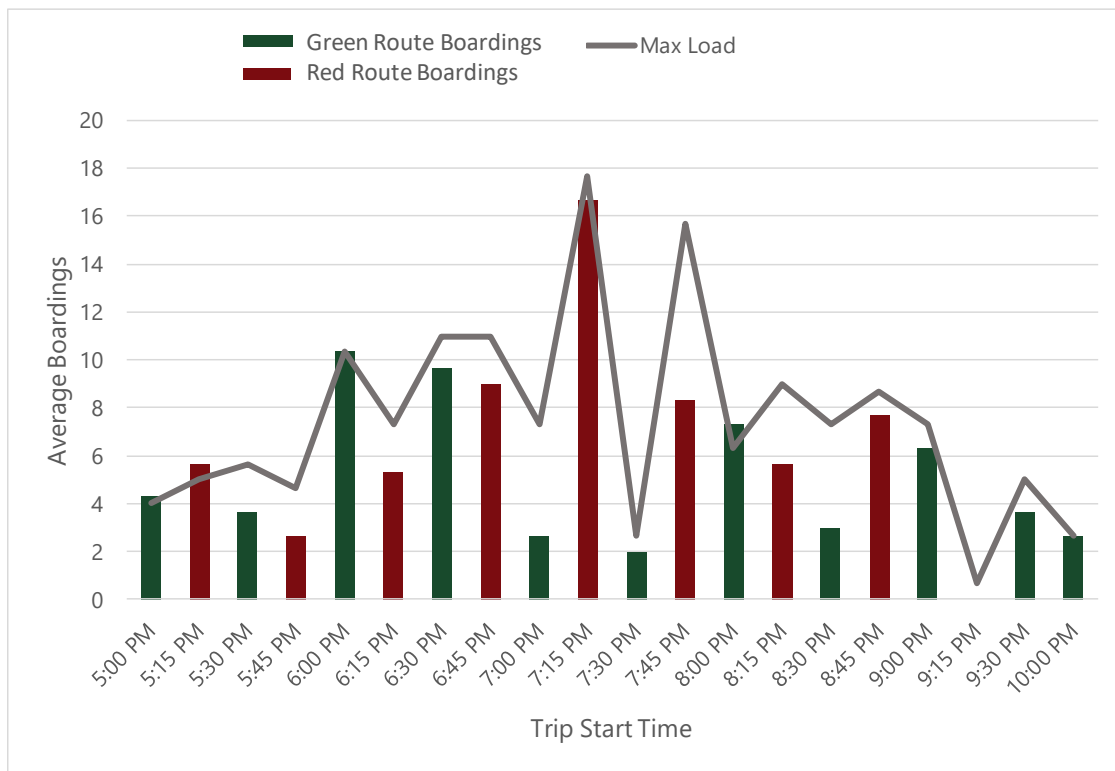


Figure 3-8: Average Ridership by Trip (August 1-3, 2019)



Ridership over the three-day study period was summarized into average daily ridership at the stop level, shown below in Figure 3-9. The highest activity observed was at the Island Creamery, with 36 boardings/alightings per day. This is followed with Don’s Seafood on Mainstreet with 33 boardings/alightings per day. The third and fourth highest activity occurred at Funland South with 24 and Tom’s Cove Park with 22. Although few riders chose to use the flag stop system, an average of seven riders boarded/alighted at the corner of Wayne Road and Ridge Road.

Figure 3-9: Average Daily Ridership (August 1-3, 2019)



In addition to passenger counts, on-time performance (OTP) was tracked during the three-day study period. The average OTP for the study period was calculated and graphed in Figure 3-10 by route. Both routes became late early in the evening and never recovered. The most difficult time to maintain the schedule occurred between 4 PM and 7 PM, when ridership was highest. Figure 3-11 shows the difference between the desired headways (evenly spaced buses at 15-minutes) and the observed headways over the study period. The line graph shows that on Thursday the headways became irregular early in the evening, but managed to even out later into the night. The reverse seems to be true for Friday and Saturday, where headways were more consistent earlier on, and falter later into the evening.

Figure 3-10: Average Daily On-Time Performance (August 1-3, 2019)

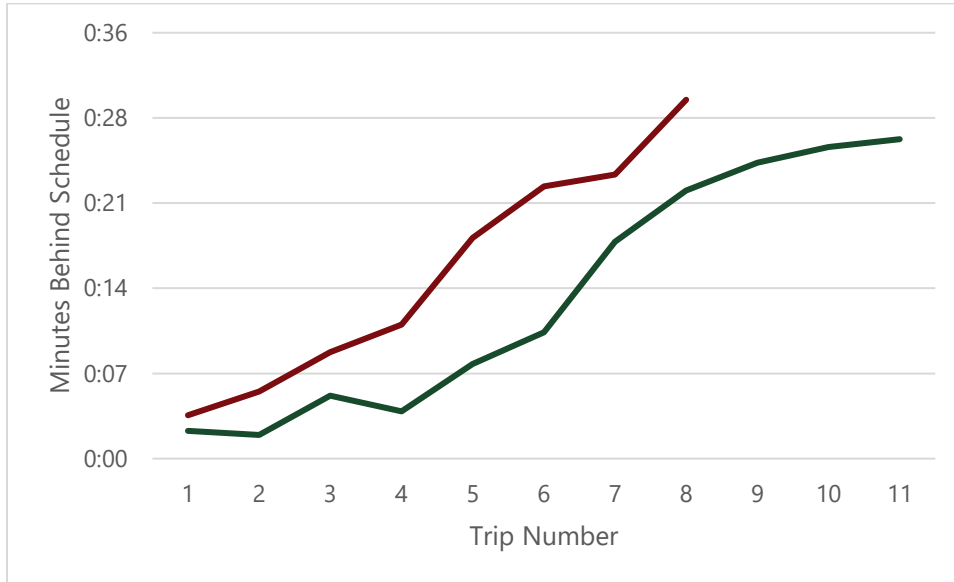


Figure 3-11: Comparison of Desired and Actual Headways (August 1-3, 2019)

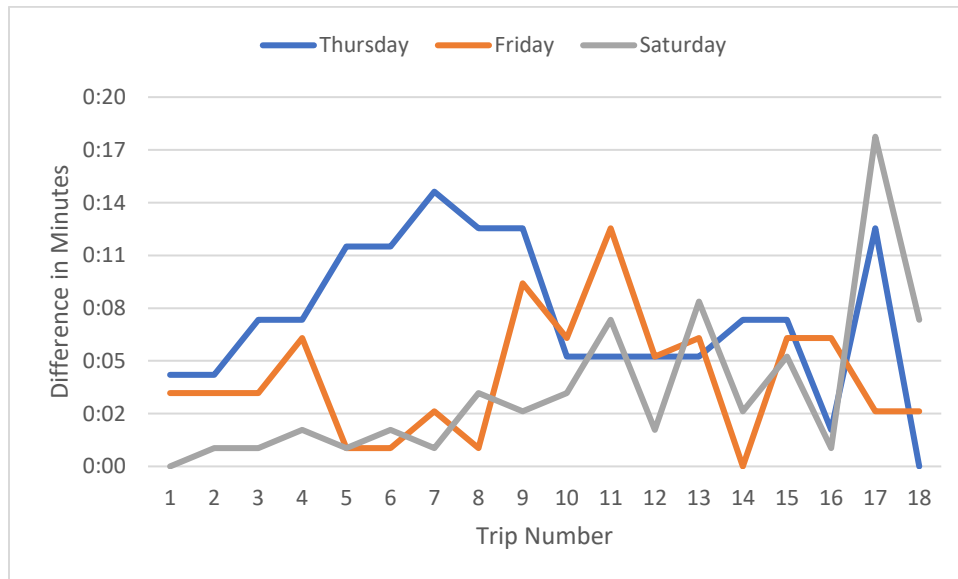


Table 3-8 compares the OTP of the Pony Express over the three-day study period using schedule and headway adherence-based methods. For the schedule-based OTP, a trip was considered “on-time” if it was within five minutes of the scheduled time. For the headway-based OTP, a trip was considered “on-time” if it was within five minutes of the 15-minute scheduled headway. Thursday had the worst OTP using both methods, with about one out of every 5 trips arriving “on-time”. On both Friday and Saturday however, the Pony Express performed much more favorably when using the headway-based OTP method. Overall, the trolley was considered “on-time” for 50% of all trips using the headway-based OTP method, compared to only 27% using the schedule-based method.

Table 3-8: Schedule-Based and Headway-Based OTP

Observation Day	Schedule-Based OTP	Headway-Based OTP
Thursday	20%	22%
Friday	20%	56%
Saturday	40%	72%
Total	27%	50%

Major Trip Generators

This section identifies important transit trip generators for residents and tourists in Chincoteague. Major trip attractions are locations such as major employers, government buildings, human services, medical facilities, recreation areas, and shopping destinations. Major trip productions are apartment complexes, high density housing, and hotels are also considered major trip generators.

Figure 3-12 shows that while parks, campgrounds, and high-density housing are dispersed evenly throughout the island, most trip attractions, such as hotels, human services, medical facilities, are concentrated in the center of the island along Main Street and Maddox Boulevard. Few trip generators are located in the northern and southern portions of the island, and all but three trip generators are within a half mile of the Pony Express route alignment. The three that are beyond a half mile are Chincoteague High School in the northern portion of the island and the Inlet View Campgrounds and mobile homes on Seaweed Drive in the southernmost portion of the island. Detailed lists of Chincoteague’s trip generators are provided in Table 3-9 and Table 3-10. The tables show that almost all of the trip generators fall within walking distance, or a half-mile, of transit service. Though Chincoteague High School falls just outside of walking distance of the route alignment, Pony Express provides service to the school upon request. Inlet View Campgrounds and Ocean Breeze Mobile Home Park both fall beyond a half-mile of the route. Previously, the Pony Express provided service to Inlet View Campgrounds but has since removed service to the area due to resident noise complaints.

Figure 3-12: Major Trip Generators

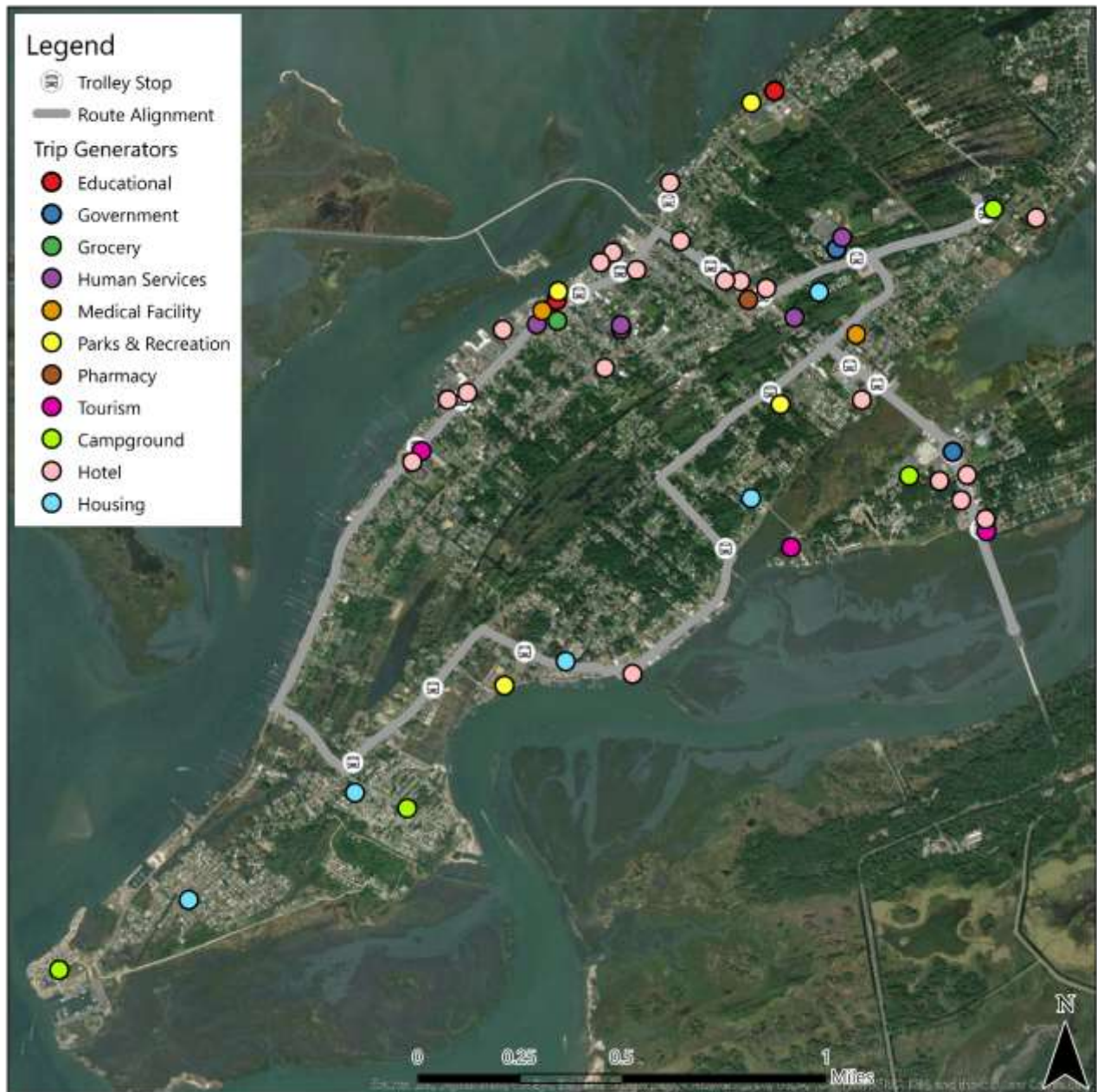


Table 3-9: Major Trip Generators

Type	Name	Address	1/2 Mile from Transit Service
Educational	Chincoteague High School	4586 Main Street	No
Educational	Chincoteague Library	4077 Main Street	Yes
Government	Chincoteague Municipal Complex	6155 Community Drive	Yes
Government	Chincoteague Chamber of Commerce	6733 Maddox Boulevard	Yes
Grocery	Island Foods Great Value	6277 Cleveland Street	Yes
Housing	Mobile Home Park	Ridge Road and Beebe Road	Yes
Housing	Mobile Home Park	Magnolia Drive	Yes
Housing	Ocean Breeze Mobile Home Park	Seaweed Drive	Yes
Housing	Grand Bay Court Townhomes	Grand Bay Court	Yes
Housing	Mobile Home Park	Thomas Circle	Yes
Human Services	Chincoteague YMCA	6395 Maddox Boulevard	Yes
Human Services	Chincoteague Senior Service Center	6309 Church Street	Yes
Human Services	Chincoteague Cultural Alliance	6309 Church St	Yes
Human Services	Chincoteague Volunteer Fire Company	4028 Main Street	Yes
Human Services	Chincoteague Center	6155 Community Drive	Yes
Major Employer	Eastern Shore Rural Health	4049 Main Street	Yes
Major Employer	Town of Chincoteague	6155 Community Drive	Yes
Medical Facility	Chincoteague Island Community Health Center	4049 Main Street	Yes
Medical Facility	Peninsula Regional Medical Center	6295 Teal Lane	Yes
Parks and Recreation	Memorial Park and Recreation Area	Memorial Park Drive	Yes
Parks and Recreation	Donald J. Leonard Park	North Main Street	Yes
Parks and Recreation	Downtown Park	Mumford Street	Yes
Parks and Recreation	Chincoteague Pony Centre	6500 Leonard Lane	Yes
Pharmacy	H&H Pharmacy	6300 Maddox Boulevard	Yes
Tourism	Museum of Chincoteague Island	7125 Maddox Boulevard	Yes
Tourism	Chincoteague Carnival Grounds	Main Street and Davis Street	Yes
Tourism	Chincoteague Island Adventures	4436 Williams Ln	Yes

Table 3-10: High Density Housing, Hotels, and Campgrounds

Type	Name	Address	1/2 Mile from Transit Service
Campground	Chincoteague Island KOA Resort	6742 Maddox Boulevard	Yes
Campground	Tom's Cove Park	8128 Beebe Road	Yes
Campground	Pine Grove Campground	5283 Deep Hole Road	Yes
Campground	Inlet View Campground	Inlet View	No
Hotel	Anchor Inn	3788 Main Street	Yes
Hotel	Assateague Inn	6570 Coach's Lane	Yes
Hotel	Best Western Chincoteague Island	7150 Maddox Boulevard	Yes
Hotel	Birchwood Motel	3650 Main Street	Yes
Hotel	Blue Heron Inn	7020 Maddox Boulevard	Yes
Hotel	Chincoteague Inn Motel	4417 Deep Hole Road	Yes
Hotel	Comfort Suites	4195 Main Street	Yes
Hotel	Dove Winds	7023 Maddox Boulevard	Yes
Hotel	Hampton Inn and Suites	4179 Main Street	Yes
Hotel	Island Motor Inn	4391 Main Street	Yes
Hotel	Lighthouse Inn	4218 Main Street	Yes
Hotel	Atlantic Shores Inn and Suites	6273 Maddox Boulevard	Yes
Hotel	Refuge Inn	7058 Maddox Boulevard	Yes
Hotel	Seahawk Motel	6250 Maddox Boulevard	Yes
Hotel	Sea Shell Motel	3730 Willow Street	No
Hotel	Sunrise Motor Inn	4491 Chicken City Road	Yes
Hotel	Waterside Inn	3761 S Main Street	Yes
Hotel	Fairfield Inn & Suites	3913 Main St	Yes
Hotel	Americas Best Value Inn & Suites	6151 Maddox Blvd	Yes
Hotel	Days Inn	7020 Maddox Blvd	Yes
Hotel	Snug Harbor Marina & Resort	7536 East Side Rd	Yes
Hotel	Cedar Gables Seaside Inn	6095 Hopkins Ln	Yes
Housing	Mobile Home Park	Ridge Road and Beebe Road	Yes
Housing	Mobile Home Park	Magnolia Drive	Yes
Housing	Ocean Breeze Mobile Home Park	Seaweed Drive	No
Housing	Grand Bay Court Townhomes	Grand Bay Court	Yes
Housing	Mobile Home Park	Thomas Circle	Yes

3.3. Retrospective Performance Evaluation

This section provides a performance evaluation of the Town’s transit system from 2014 to 2017. This analysis is based on data from the most recently available National Transit Database (NTD) reports, which did not include data on the Town’s paratransit service. Table 3-11 shows operating measures such as operating expenses, revenue, ridership, and revenue hours and miles. From 2014 to 2017, operating expenses increased by 19% overall, but peaked significantly at \$90,603 in 2015 despite the lack of significant change in revenue hours or revenue miles. The Pony Express saw a slight overall decrease in annual ridership from 2014 to 2017. However, ridership in 2016 experienced a surprising increase, reaching 19,377 trips for the year. Vehicle revenue miles decreased by 26%, or 4,657 miles, from 2014 to 2017, while annual revenue hours have increased over time by 48%, or 632 hours.

Table 3-11: Town of Chincoteague Operating Measures

Year	Operating Expenses	Fare Revenue	Passenger Trips	Revenue Hours	Revenue Miles	Riders per Revenue Hour	Riders per Revenue Mile
2014	\$74,138.00	\$5,965.00	14,381	1,306	17,614	11.0	0.8
2015	\$90,603.00	\$7,586.00	14,728	1,325	17,378	11.1	0.8
2016	\$78,750.00	\$8,302.00	19,377	1,505	15,747	12.9	1.2
2017	\$88,377.00	\$6,985.00	13,884	1,938	12,957	7.2	1.1

Source: National Transit Database (NTD)

Table 3-12 shows how the Pony Express performed during the same time period based on various measures, including productivity, cost efficiency, and cost effectiveness. These metrics correspond to several proposed service standards (described in Chapter 2), which establish a 20% decline in performance from the previous year as the threshold for the review and potential modification of service. Each metric is calculated based on NTD data shown above in Table 3-11.

From 2016 to 2017, cost per revenue hour decreased by 13%, which satisfies the proposed service standard. Cost per trip, on the other hand, increased by 57% from \$4.06 to \$6.37 per trip. Although this does not meet the service standard for cost effectiveness, modification of service may not be warranted. Because of the large increase in ridership in 2016, using 2016 figures as a base for performance metrics may not provide an accurate understanding of the system’s current performance. On average, the cost per trip increased year to year by 14% from 2014 to 2017. When compared to 2015 metrics, the cost per trip in 2017 increased by 3%.

Table 3-12: Town of Chincoteague Performance Measures

Year	Cost per Hour	Cost per Mile	Cost per Trip	Farebox Recovery
2014	\$56.77	\$4.21	\$5.16	8%
2015	\$68.38	\$5.21	\$6.15	8%
2016	\$52.33	\$5.00	\$4.06	11%
2017	\$45.60	\$6.82	\$6.37	8%

Note: Figures are calculated based on annual data from the NTD.

3.4. Public Outreach

Public outreach was conducted for the TDP with two distinct efforts: a public survey and stakeholder interviews. The survey, which was administered onboard the Pony Express and also made available online, aimed to gather information on who uses the Pony Express and why. Section 3.4.1 gives a description of the survey methods, with the results detailed in section 3.4.2. Immediately following is a section on stakeholder input in section 3.4.3, which relays the positions and ideas of a sample of key stakeholders in the community.

3.4.1. Survey Methodology

The surveys were conducted both on paper and online. The paper surveys were conducted onboard the trolley from August 1st to 3rd, 2019 from the start to end of service each day. The paper survey included questions relating to respondent demographic characteristics, current trip, and travel behavior, and asked riders to provide feedback on the service. The online survey was designed for two groups of respondents: riders and non-riders. The riders were asked to answer all the questions from the onboard survey, while the non-riders were asked to answer only those not directly related to using the service. The online survey was made available from August 2nd through October 4th, advertised on the Town of Chincoteague website.

3.4.2. Survey Results

The rider survey yielded a total of 107 respondents from both the online and paper versions with a 92% survey completion rate. The survey results are summarized below and provide a snapshot of ridership demographics, behavior, trip information, and riders' feedback on service. Charts in Figure 3-13 to Figure 3-30 on the following pages provide a breakdown of responses for each question.

Ridership Demographics: The Pony Express attracts a variety of riders and many out-of-town visitors. Figure 3-25 through Figure 3-30 provide charts that represent the survey respondents' demographic characteristics. Tourists make up 73% of the survey respondents. 14% of respondents are full-time residents and 11% are part-time residents. Almost all riders surveyed have at least one vehicle available to them, though 7% of those surveyed do not have an available vehicle. Most than half of all riders surveyed are employed full-time and about 20% are retired. 56% of riders surveyed have a household income of at least \$75,000 a year. 43% of respondents are ages 26 to 55, 18% are ages 56 to 64, and 17% are 65 or older. The majority of the riders surveyed are white (84%), and 10% are black. 61% of those surveyed are female and 39% are male

Ridership behavior: The riders were asked several questions about why they ride the trolley, how they learned about it, how they access the trolley, and when and how often they ride. These are summarized in Figure 3-13 through Figure 3-20. The most common reason by far that respondents choose to ride the trolley is because it is “less stressful and/or fun to ride”. 57% of respondents ride the trolley less than once a month and 18% ride 3 or more times a week. Most respondents ride the trolley most frequently from 6-7 PM. The majority of riders get to the trolley on foot, while 12% drive to a trolley stop and 7% get dropped off to ride the trolley. The most common way that the surveyed riders learn about the trolley is through a brochure.

Trip Origins and Destinations: The riders were asked about the trips they make in Chincoteague and about their current trip, which are summarized in APPENDIX A: Additional Survey Responses. About 70% of respondents were riding the trolley for social or recreational purposes. 10% were riding for shopping purposes, 1% were taking the trolley for school, and 20% rode for other purposes. Trolley riders were traveling to and from a variety of locations. The most common trip origins included the Chamber of Commerce, hotels, campgrounds, and various locations on Main Street, Church Street, and Ridge Road. The most common destinations included various recreational destinations, parks, carnival grounds, and restaurants. About 20% of respondents rode the trolley as a recreational activity and either had no particular destination or were riding the entire route to return to their original pickup location. Whether by trolley or another mode, at least 50% of respondents indicated that their most frequent trips in Chincoteague were to and from home or hotel, shopping destinations, and social or recreational destinations, while only 12% of respondents indicated either “work” or “school” as one of their most frequent trips.

Service Feedback: The majority of riders expressed positive feedback about various aspects of the existing service as is shown in Figure 3-21 and Figure 3-22. Around 95% of respondents agree (indicated either “agree” or “strongly agree”) that service is reliable and that fare is affordable. At least 90% of riders agree that service is convenient, that drivers are safe, friendly, and helpful, and that trolleys are comfortable and clean. 80% of respondents agree that schedules are easy to understand, and 70% of respondents agree that trolleys are on time. The top three improvements rated overall as most important were extending weekend hours, providing real-time bus location, and extending weekday hours. Riders considered increasing service frequency and providing more stop amenities as the next most important. When asked for additional thoughts and recommendations, respondents largely expressed positive comments about the service and drivers. Common suggestions included expanding hours, more frequent stops, and matching service to the posted schedule. Several respondents also suggested increasing promotion and better dispersing information about the trolley.

Figure 3-13: "Have you ever used the Pony Express trolley?"

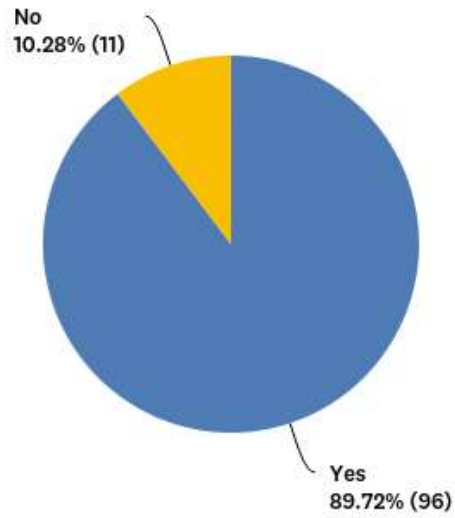


Figure 3-14: "Which route did you take?"

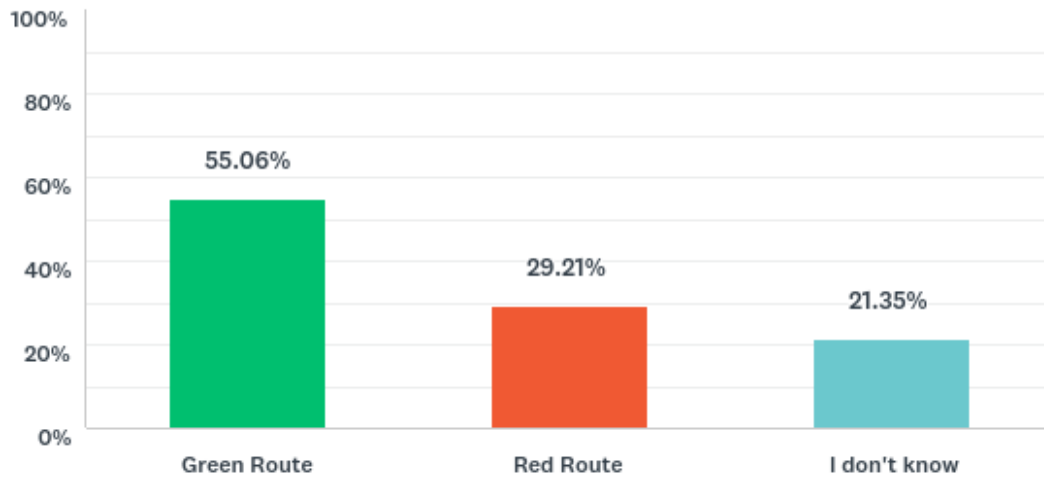


Figure 3-15: "What was the purpose of your trolley trip?"

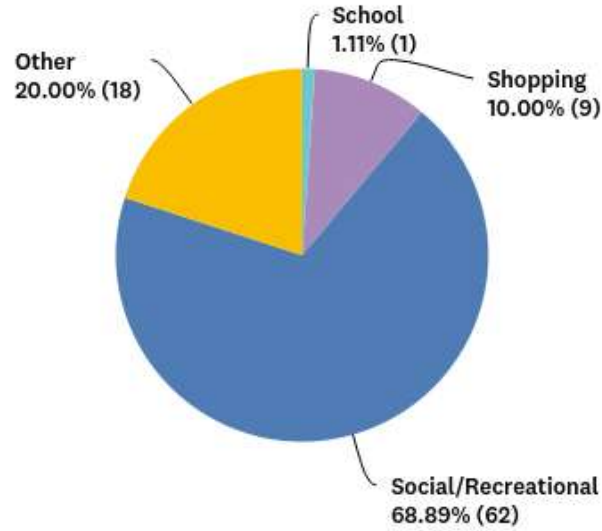


Figure 3-16: "Why did you ride the trolley? Check all that apply."

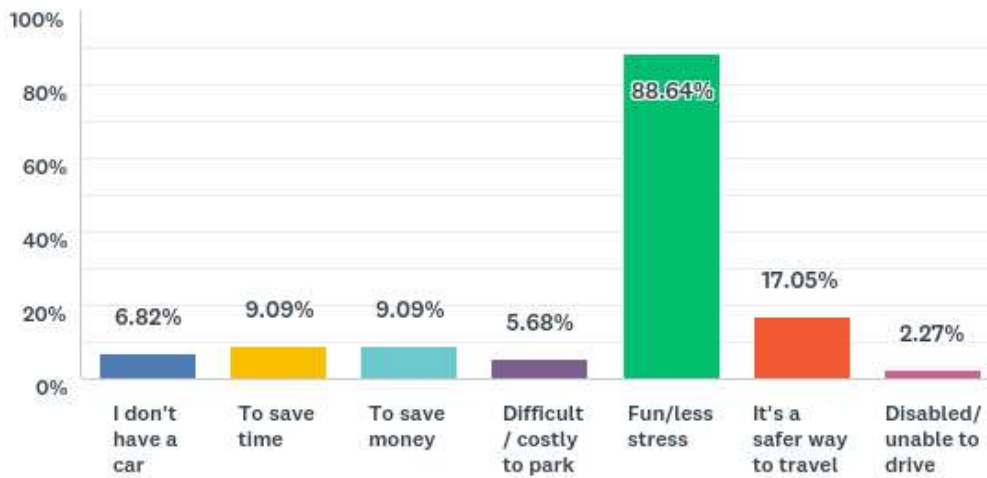


Figure 3-17: "How did you get to the trolley?"

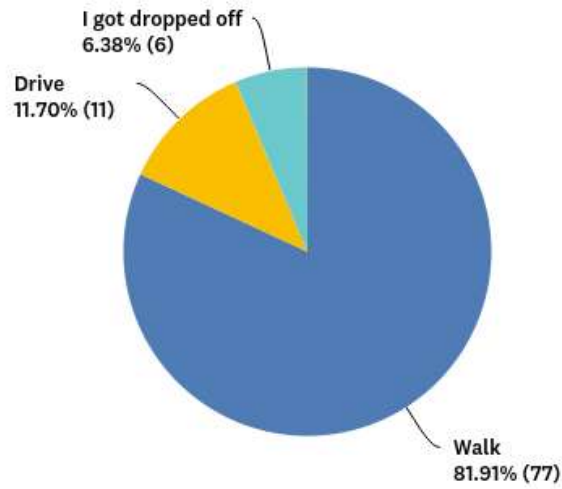


Figure 3-18: "How did you find out about the trolley?"

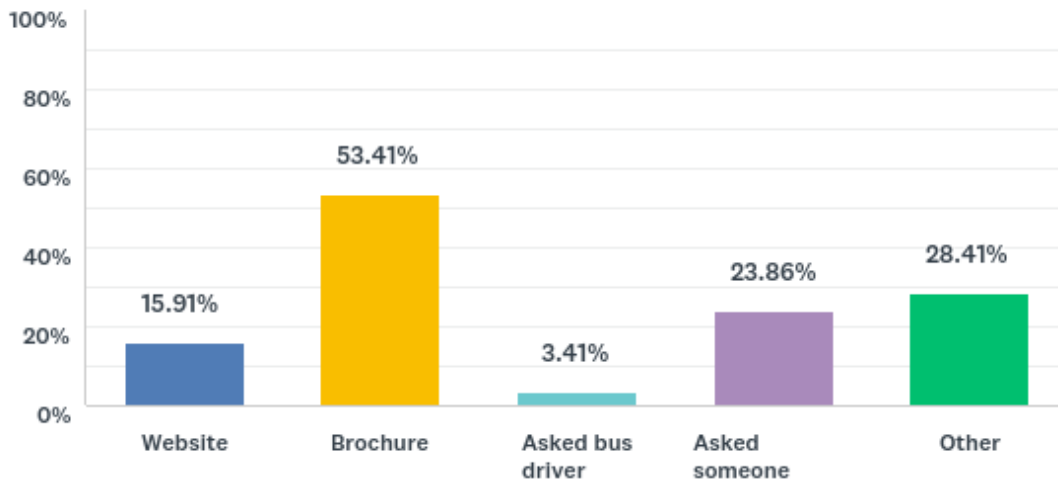


Figure 3-19: "How often do you ride the trolley?"

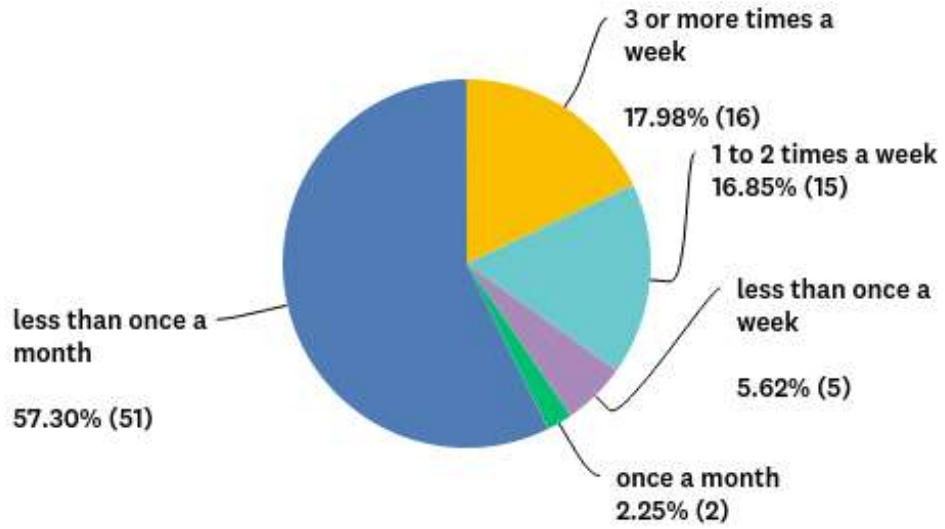


Figure 3-20: "What times of day do you ride the trolley the most? Check all that apply."

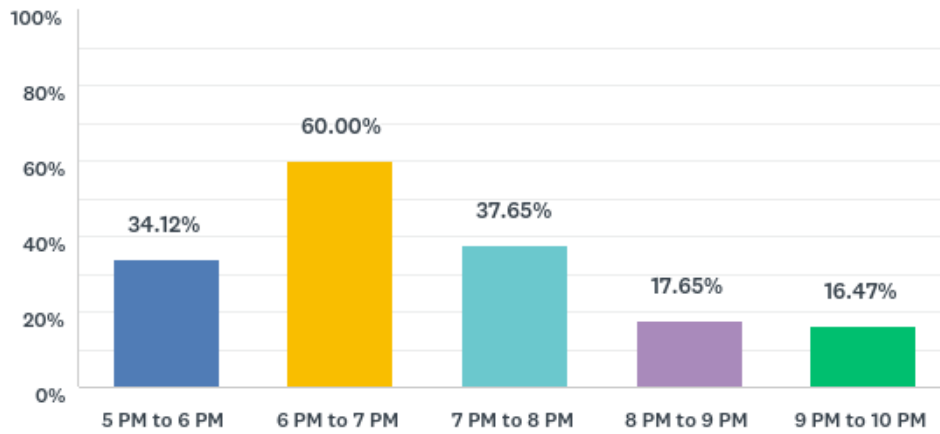


Figure 3-21: "To what extent do you agree with the following statements?"

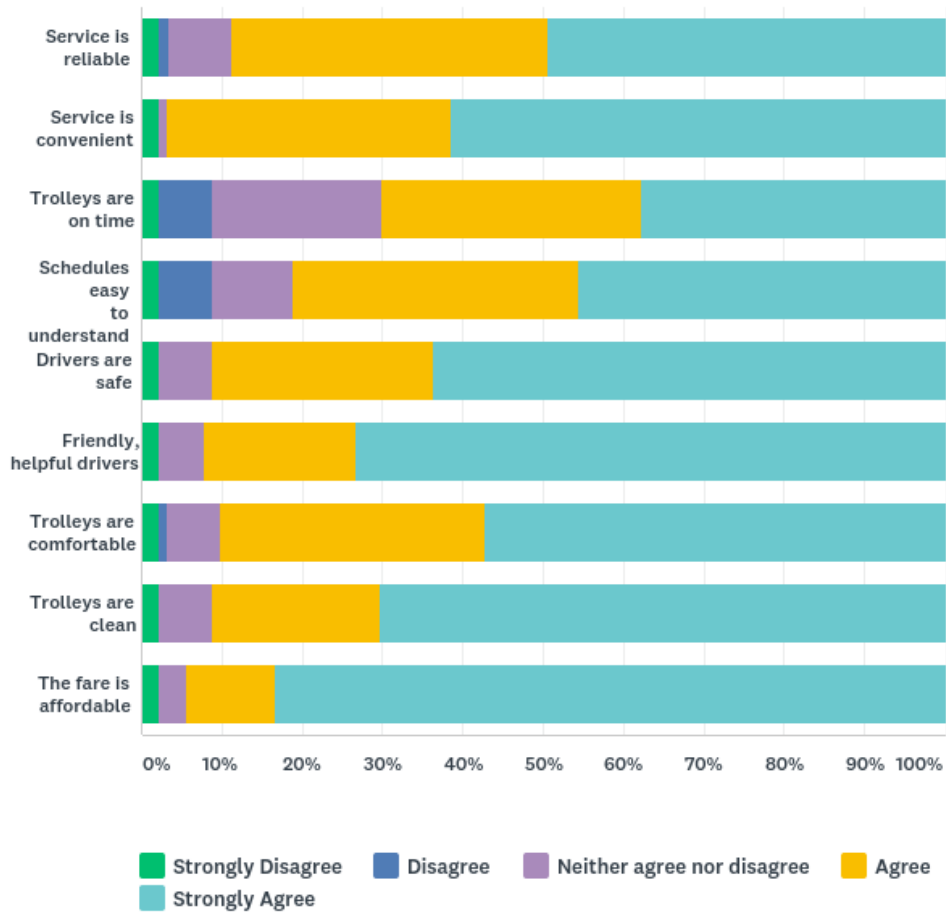


Figure 3-22: "What are the most important improvements you would make to the trolley?"

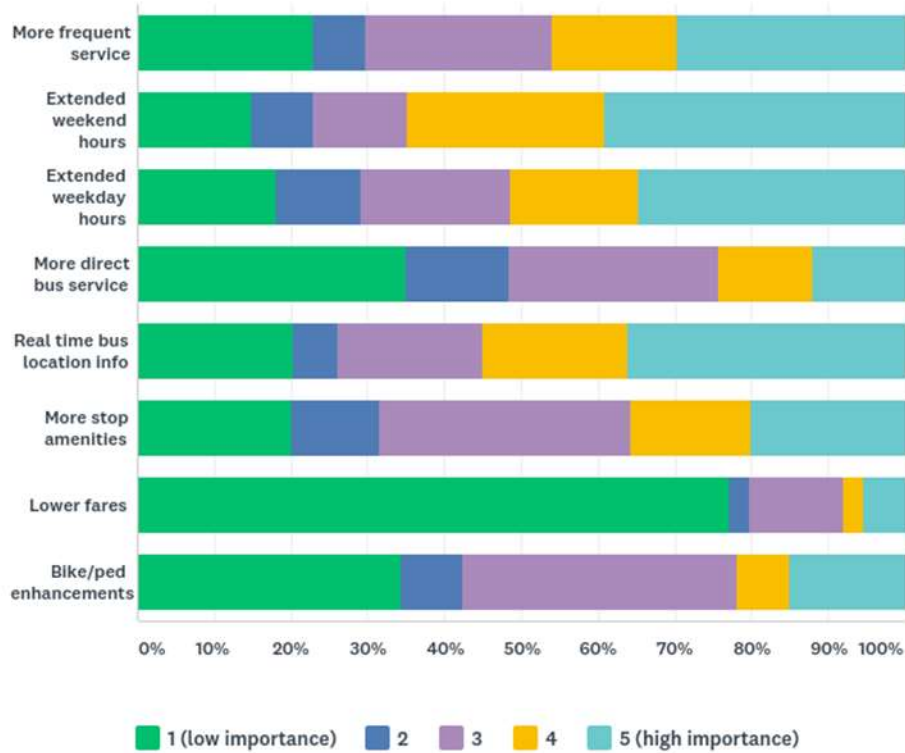


Figure 3-23: "Why don't you take the Pony Express trolley?"

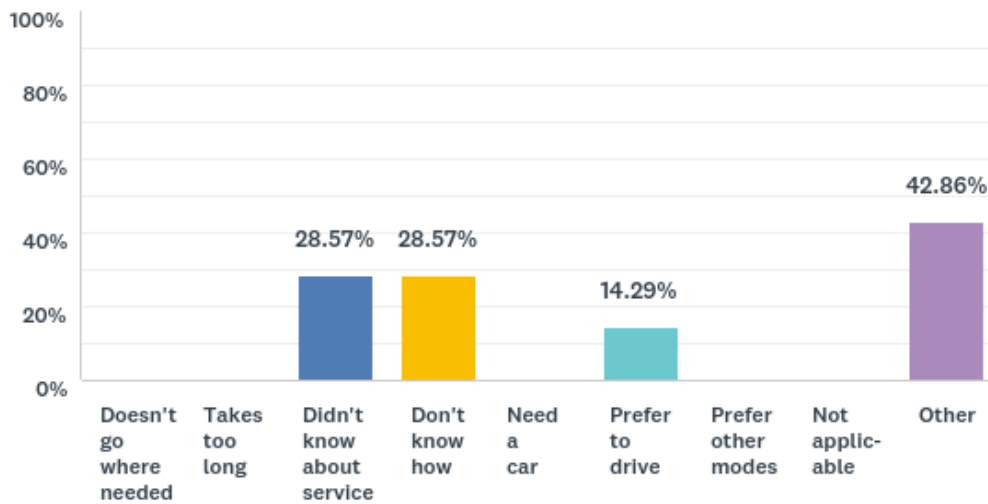


Figure 3-24: "Are you a resident or tourist/visitor?"

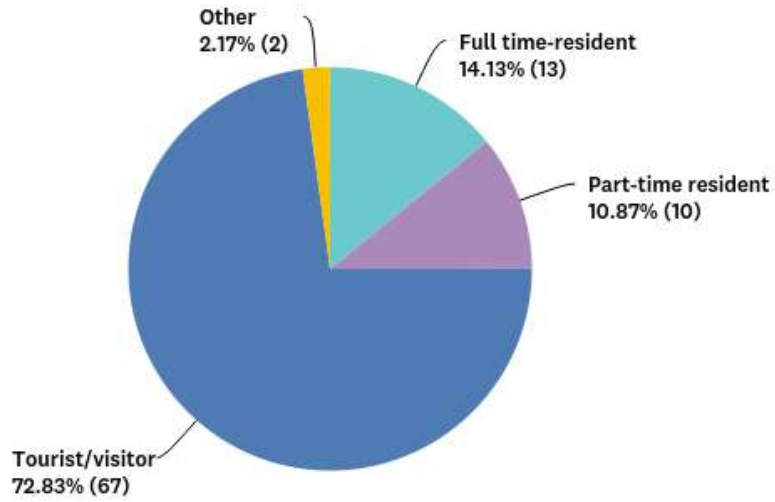


Figure 3-25: "What is your age?"

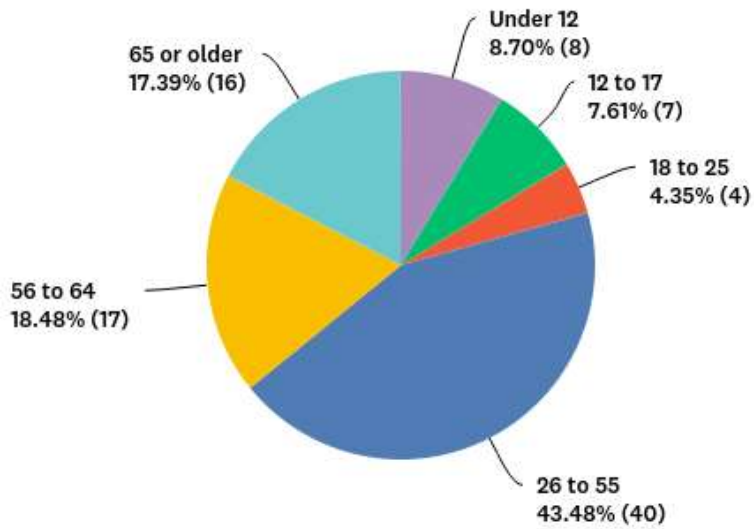


Figure 3-26: "How many vehicles are available to you here?"

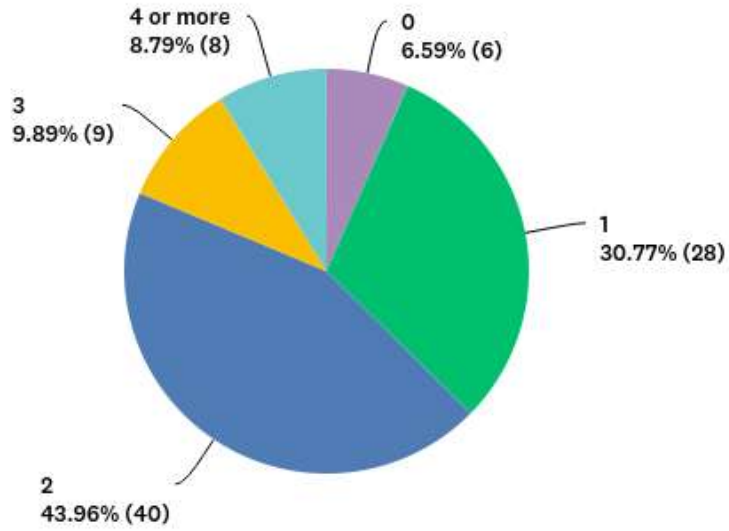


Figure 3-27: "What is your employment status?"

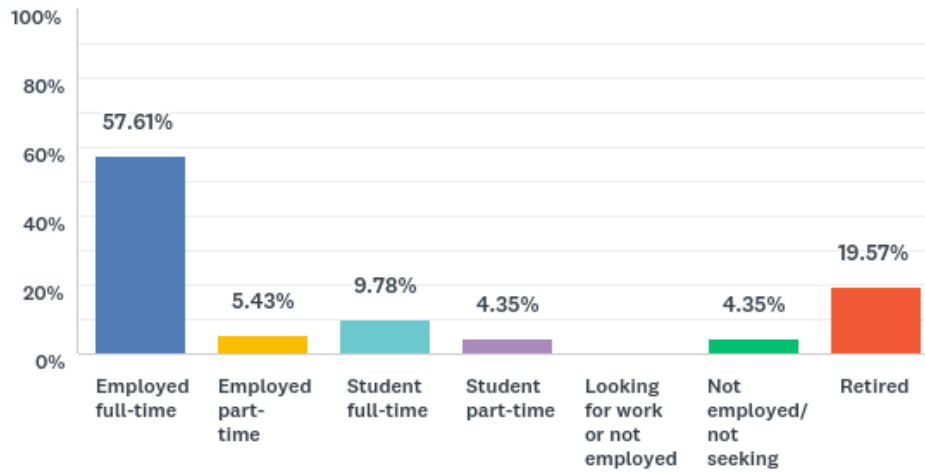


Figure 3-28: "What is your gender?"

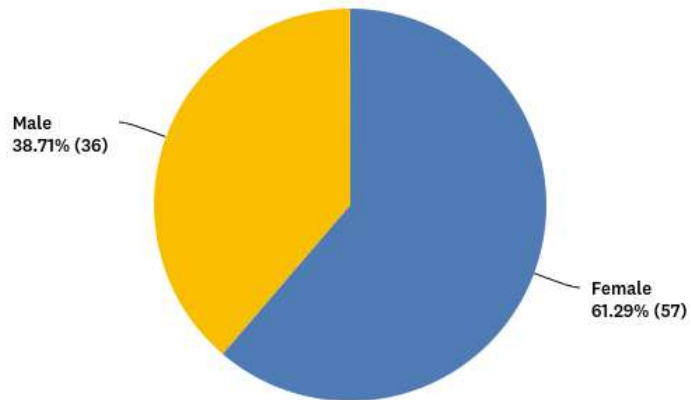


Figure 3-29: "What is your race/ethnicity?"

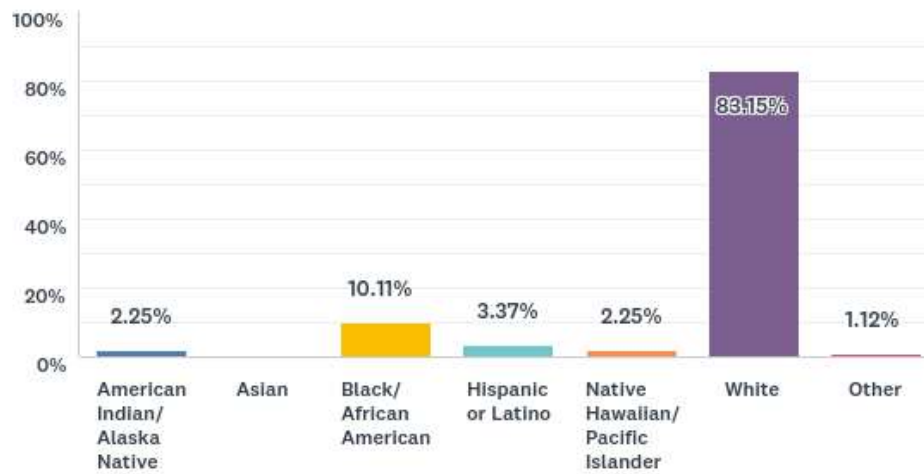
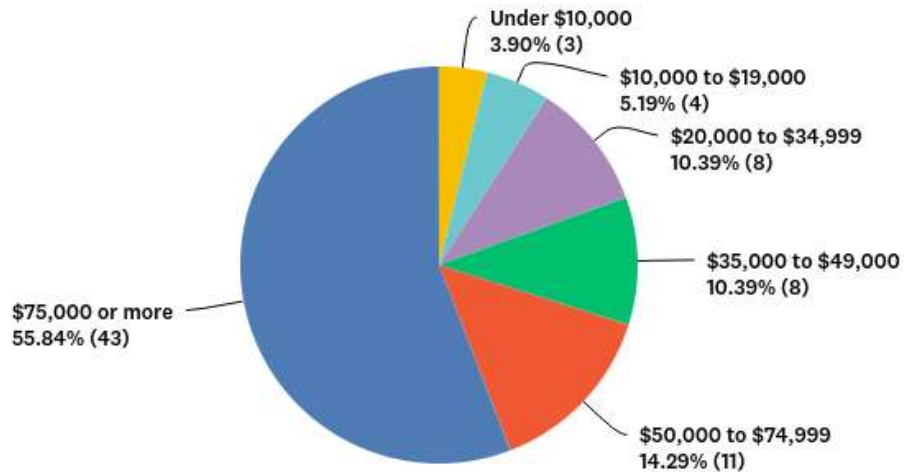


Figure 3-30: “What is your household’s approximate total annual income?”



3.4.3. Stakeholder Interviews

Stakeholder interviews were conducted in person on Friday August 2nd, 2019 at the Chincoteague Municipal Complex. Attendees included members of the following organizations: Chincoteague Emergency Service, Town Council, Chamber of Commerce, and Chincoteague Police Department. Throughout the discussion with stakeholders, several themes emerged as important topics for consideration. It is important to note that not all perspectives were unanimous. A summary of these themes follows:

Trolley Ridership

- The trolley ridership is largely visitor based because it’s an enjoyable means to get around the island.
- Many people (visitors and locals alike) ride the trolley for the big events that are held on the island. The Pony Penning draws large crowds and parking is limited, so people take the trolley to avoid the hassle of finding parking. Many other special events are held on the island, and Chincoteague relies on the trolley as a critical component for moving people around during these events.

Local Ridership

- Most of the locals use personal vehicles for mobility on the island. The trolley takes a long time to go places and isn’t offered all day, so the locals have other means of transportation. Many locals use the service for special events though, when parking isn’t available. There are many events throughout the year that happen when the trolley is out of service, however, which may present an opportunity for growth. The trolley could run on special event weekends to aid in moving large crowds around the island. Some events include: death by chocolate, the homes tours, and search for shamrocks.

Span of Service

- There isn’t much demand early in the day. A large percentage of visitors are at the beach during the day.
- Later service might help riders get home after staying out late at restaurants and bars.

Seasonal Service

- The town has been running the trolley for a long time, and the season starts and ends when it should.
- The seasonal schedule of the trolley makes sense, but the trolley could take advantage of special events on weekends that happen in the off season. The trolley could perhaps have service on weekends all year long. The Virginia Visitors Centers annual meeting is in Chincoteague and trolley service would be great to run during the days the meetings take place. The trolley could run over Thanksgiving weekend for the tourists that visit during this time.

Trolley Marketing/Visibility

- Most of the visitors know about the trolley because they see it go by when they're out. Many of the visitors hear about the trolley from the hotels/restaurants/stores in town. Some hotels hand out information about the trolley for big events.
- The trolley map and schedule should be updated. The stop locations aren't clear on the map, and the schedule is hard to read. A list of every stop should be included on the map so people know where they need to go to be picked up.
- Most people don't know about the flag stop system. The flag stops are good, the problem is that not many people know about how that works. If the flag stop system was made clear on the map, then maybe more people would know about it and feel comfortable using it.

Technology

- If there was a smart phone app that enabled real time location information, that would encourage more trips because people would see exactly where the trolley is.

Route Alignment

- Some people don't use the trolley because it isn't quick enough. If the route was more direct, it wouldn't take as long and maybe more locals would ride it. Making the routes shorter would perhaps make it faster.
- Curtis Merritt Harbor of Refuge is not served, but if the trolley went there it could be successful.
- Maybe go to the beach – this should be approached cautiously though. The trolleys are kept in excellent condition and are always clean. Providing access to the beach would create significant additional wear and tear on the vehicles, with the salt, sand, and water.

Service to the Mainland

- The mainland doesn't really need to be served. STAR transit goes to the mainland, and ridership is low because there isn't a big need to go there.
- There might be demand for service to the NASA Wallops Visitors Center. Wallops might have its own shuttle though, so they might not need service. The NASA rocket launches are a huge draw so taking advantages of these events would be very beneficial.

Bus Stops

- All the bus stop locations are justifiable and all should be retained. If anything about bus stops are changed, the stop signs themselves could be updated so they're more visible. In addition to the bus stop signs themselves, there could be additional signage to show where people should walk to catch the trolley.

Fares

- There is disagreement on the price of the trolley. Some stakeholders feel like raising fares from \$0.25 to \$1 would be fine, others say that raising the fares would dissuade some visitors from taking their families on the trolley. Families is an important market of the trolley.
- One solution could be to charge \$1.00 per adult, and let kids ride free.

3.5. Opportunities for Improvement

A close look at the existing Chincoteague transit system revealed some areas that could be improved. Below is a list of these opportunities, which completes the chapter on service and system evaluation. The following chapter will delve into potential service and capital improvements that would address the existing gaps in service in detail.

1. Improve the visibility of the trolley with up to date information on the services provided. Currently, many bus stops are not easily seen or need repair. The bus stops themselves offer valuable advertising of the service and should be maintained, clearly marked, and noticeable. In addition, the bus stops in the ground should correspond exactly with the system map online. A mismatch of physical stops and cartographic stops may cause confusion for potential passengers. An updated map with clearly marked stop locations would reduce the barrier of entry to the transit system, and potentially yield greater patronage of the system.
2. Increase the use of technology to make riders aware of the location of the trolley. Currently, the trolley operates on 15-minute headways but oftentimes gets behind schedule late into the day. The schedule therefore sometimes becomes less reliable, resulting in passengers not knowing when the next trolley will arrive. Location-based technology paired with a smartphone application would enable riders to see the real time location of bus routes and give them the estimated time of bus arrival. This would alleviate concerns from passengers about when the bus will come and enable them to enjoy more of their time in the businesses and restaurants rather than waiting at the bus stop.
3. Shift to a headway-based schedule. The OTP for the trolley was poor over the three-day study period and resulted in passengers rating the schedule-adherence relatively low on the survey. In addition to using technology to give the real-time location of the trolley to the public, shifting to a headway-based schedule may alleviate some concerns about the trolley not arriving at the times posted on the schedule.
4. Expand the span of service to early in the day and later in the night. The current span of service is from 5:02 PM until 10:25 PM. Operating earlier in the day or later in the night would give passengers greater flexibility in taking trips and enable them to stay out later without worry of missing the last bus.
5. Utilize the trolley for more special events throughout the year. Currently, the trolley operates from May until October. As noted in the stakeholder interviews, there are several additional special events that occur outside of this season. Operating the trolley on these days could be a valuable source for growth and a new way to introduce more people to the trolley.
6. Increase the frequency of the trolley. As noted in the survey, passenger would appreciate shorter wait times. Increasing the frequency of the service would reduce the time passengers must wait for the next trolley to arrive. Shorter wait times would offer a better overall experience for passenger, and potentially lead to more passenger trips.
7. Expand service to areas with high ridership potential. The trolley currently serves nearly all major destinations on the island except for the beach and the harbor. Both locations were requested on the

passenger survey and in stakeholder interviews. As the island continues to develop and evolve, Chincoteague should continue to consider service to new destinations.

4. Service and Capital Improvement Plan

Chapter 4 of the TDP lists and prioritizes projects designed to address the unmet needs of the transit system. The first section, Service Improvements and Needs Identification, defines a list of seven potential projects of service changes to the system. The second section, Service and Needs Prioritization, assigns timeframes to the projects that have the greatest prospect of implementation. It is in this section that each project is given a priority level of high, medium, or low, depending on how well they address the identified needs of the transit system. Associated operating and capital costs are included in this section as well, which also aid in the prioritization process. This chapter of the TDP concludes with the Service Development section, which reveals the incremental and cumulative service requirements needed to operate the improvements in terms of revenue hours and revenue miles. It is important to note here, that while this chapter assigns specific years and statistics for service improvements, the improvements and resulting service impacts are subject to change over time.

4.1. Service Improvements and Needs Identification

This section defines and details service improvements that address the needs of the transit system. The list of projects is a result of ongoing discussions with the Town of Chincoteague, stakeholder meetings, and the survey effort discussed in Chapter Three. The list is intended to serve as a resource to aid in the planning and implementation of service improvements over the TDP lifecycle. Projects identified and analyzed in this list, however, would need to undergo further consideration before implementation and are subject to change as existing conditions and funding availability changes over time.

In this section, service improvements are grouped into numbered projects regardless of priority. Each project is organized into two sections: a project description and a project assessment. The project description includes general information on what the project would entail regarding the operational changes. The project assessment includes commentary on how the project would fulfill (or not fulfill) the needs of the transit system. For the purposes of this study, the needs are assumed to be efforts that address the opportunities for improvement from Chapter 3, shown below. Please refer to this section for additional information on the needs of the transit system.

1. Improve visibility of the trolley
2. Increase the use of technology to make riders aware
3. Shift to headway-based schedule
4. Expand the span of service
5. Utilize the trolley for more revenue service on special events throughout the year
6. Increase the frequency of the trolley
7. Expand service to areas with high-ridership potential

Some projects include variations to illustrate the requirements for multiple scenarios of a single service improvement. Where multiple options for a single project are identified, they are given letters (e.g. Project 1A, 1B, and 1C). In cases where changes in service requirements are made, they are detailed in operating statistics tables. The daily trips, annual revenue hours and miles, estimated ridership, and costs (O&M and capital) are shown to display the additional resources that Chincoteague would need to secure to begin operating the service change. Projects that can be implemented without additional resources are noted in the description without the need for operating statistics to be summarized into a table.

Estimated ridership impacts resulting from the service change are provided as a range from low to high. Ridership is calculated based on actual 2018 ridership statistics (8.55 riders per revenue hour). Because increases/decreases in revenue hours do not result in a perfect one-to-one ratio of increases/decrease in ridership, elasticities are applied. The elasticities utilized here are based on previous studies described in Traveler Response to Transportation System Changes Handbook, Third Edition: Chapter 9, Transit Scheduling and Frequency and adapted to more accurately reflect local conditions.

Operations and maintenance (O&M) and capital costs are also estimated for each project. O&M costs were calculated based on the Pony Express Trolley’s 2018 fully-allocated unit cost per revenue hour of \$52.58, which was subsequently inflated to 2019 dollars of \$53.53 using an annual inflation rate of 1.79%. Capital costs are based on recent bus acquisition costs of \$165,000 per vehicle. All costs in the project list are in 2019 dollars. For cost summaries inflated to year of expenditure, please refer to Chapter 6.

4.1.1. Project 1 – Headway Improvement on Existing Alignment

Project Description

This project would provide an additional vehicle on the existing alignment of the Red and Green Routes, thereby improving service from the existing 15-minute headways to 10-minute headways. Table 4-1 below shows the operating requirements for this service improvement, with three options for deployment. Project 1A would operate the same schedule and service hours as the existing Green Route while Project 1B would operate the same schedule and service hours as the existing Red Route. Because the Green Route operates more annual service days than the Red Route (112 days compared to 79 days) as well as more daily revenue hours (5.5 compared to 4.4), the operating service that mirrors the Green Route results in higher O&M costs. Moreover, as annual revenue hours vary so do ridership estimates, leading to greater ridership on the service operating on the Green Route schedule. A third option, Project 1C, operates the additional vehicle in the months that typically observe the highest ridership: July and August. All options require the purchase of one additional trolley, estimated to cost \$165,000.

Table 4-1: Operating Statistics for Proposed Headway Improvement

Project Code	Description	Daily Trips	Annual Revenue Hours	Annual Revenue Miles	Annual Passengers		Annual O&M Cost	Capital Cost
					Low	High		
1A	Headway Improvement (Green Route Schedule)	11	616	11,445	2,100	3,200	\$33,000	\$165,000
1B	Headway Improvement (Red Route Schedule)	9	348	6,605	1,200	2,800	\$18,600	\$165,000
1C	Headway Improvement (July & August)	11	341	6,336	1,200	1,700	\$18,300	\$165,000

1. Annual statistics represent the incremental change over existing

Project Assessment

- The existing service operates with two vehicles, yielding 15-minute headways. With the addition of one more vehicle to the Pony Express fleet, headways can be improved to 10 minutes. This would address the need for more frequent service, which was identified through the passenger survey.

- This project keeps the existing, productive alignment of the Green and Red Routes intact, supplementing service that has already shown strong ridership. Maintaining the existing alignments keeps the system simple to understand, which is highly desirable considering the high proportion of riders that are visitors and less likely to learn a new alignment.
- Research on passenger behavior shows that riders tend to disregard schedules when service is offered at headways of 10 minutes or less. Increasing the service from 15 minutes to 10 minutes would alleviate some of the concern around maintaining schedules presented in Chapter 3.
- This project would trigger the need for another vehicle, thereby requiring time to secure the funding for an additional trolley.

4.1.2. Project 2 – Proposed Route on Maddox Boulevard and Main Street

Project Description

This project calls for a new route that operates bidirectional service along Maddox Boulevard and Main Street. Figure 4-1 shows the alignment of the proposed route along with the existing alignments of the Green and Red Routes. The proposed route would use the existing turnaround location on the Beach Access Road Bridge on the eastern side of the alignment, and use Bunting Road, Willow Street, and Davis Street to turnaround on the western end. The route would travel along the two most active corridors on Chincoteague, serving hotels, restaurants, and commercial establishments.

Table 4-2 reveals the additional service required to operate the new route with two different schedules. Project 2A mirrors the Green Route schedule, with 112 days of service and 5.5 daily revenue hours, while Project 2B mirrors the Red Route schedule, with 79 days of service and 4.4 daily revenue hours. The resulting costs for the additional route are \$33,000 for the more extensive schedule and \$18,600 for the less extensive service. Both options necessitate the purchase of an additional trolley vehicle, with a capital cost of \$165,000. Project 2A results in greater ridership, as a direct result of the additional service hours in this option.

Table 4-2: Operating Statistics for Proposed Route on Maddox Boulevard and Main Street

Project Code	Description	Daily Trips	Annual Revenue Hours	Annual Revenue Miles	Annual Passengers		Annual O&M Cost	Capital Cost
					Low	High		
2A	Maddox/Main Route (Green Route Schedule)	11	616	7,874	2,100	3,200	\$33,000	\$165,000
2B	Maddox/Main Route (Red Route Schedule)	9	348	4,544	1,200	1,800	\$18,600	\$165,000

1. Annual statistics represent the incremental change over existing

Project Assessment

- The most productive segments of the Pony Express are along Maddox Boulevard and Main Street. Approximately 70% of ridership occurs on stops along these corridors. Implementing the Maddox Boulevard and Main Street Route would focus service additions in the areas with the greatest demand and address the need to increase the frequency on these corridors.
- This route would introduce bidirectional service to the Pony Express. With bidirectional service, passengers would have the option to travel back and forth between Maddox Boulevard and Main Street with much shorter travel-times than otherwise. The large one-way loop that the existing route operates creates a short

trip in one direction and a long circuitous trip in the other direction for most passengers. Adding bidirectional service would alleviate this concern.

- Because most passengers are visitors, the implementation of a new pattern would likely require Chincoteague to continuously advertise and educate passengers of the different route patterns.

Figure 4-1: Alignment of Existing Green and Red Routes and Proposed Maddox Boulevard/Main Street Route



4.1.3. Project 3 – Curtis Merritt Harbor Extension

Project Description

This project would extend the Green Route alignment along Main Street to the southwestern end of the island, adding service to Curtis Merritt Harbor, shown in Figure 4-2. The majority of the existing route alignment would remain intact, operating primarily along Main Street, Ridge Road, East Side Road, Maddox Boulevard, and Deep Hole Road. However, instead of turning on Beebe Road from Main Street, the route would continue on Main Street approximately one additional mile to serve Curtis Merritt Harbor Drive. Another modification on the Green Route would occur on Deep Valley Road, where the Route would not serve the Pinegrove Campground. The modified route would be 10.5 miles for one round trip, compared to 9.29 miles for the existing alignment, creating an additional 1.21 in revenue miles per trip. Another option for this service would be to operate the extension as an on-call zone, where passengers would need to contact dispatch in advance for the trolley to pick them up. Drop-offs could occur however, per request by passengers onboard the trolley.

A summary of operating statistics is shown in shown in Table 4-3. The extension would add about 1,491 miles over the course of the year. The O&M and capital costs would remain unchanged, and ridership would likely remain unchanged as well. The operating statistics shown here reflect service to the harbor on every trip. A reduction in annual revenue miles would likely occur if the extension operates as an on-call zone only.

Table 4-3: Operating Statistics for Curtis Merritt Harbor Extension

Project Code	Description	Daily Trips	Annual Revenue Hours	Annual Revenue Miles	Annual Passengers		Annual O&M Cost	Capital Cost
					Low	High		
3	Curtis Merritt Harbor extension	11	0	1,491	0	0	\$0	\$0

1. Annual statistics represent the incremental change over existing

Project Assessment

- This project adds coverage to the system but increases the headways at the Pinegrove Campground. This is an important tradeoff that will need to be considered if and when this change may occur.
- Land parcels on the southern end of the island have recently been purchased with the intent of developing the property. With the possibility of development in an area without existing transit services, there has been interest in gaining an understanding of the best way to serve this area. Continuing the route alignment south along Main Street offers a logical extension of the current service without much disruption to the existing service.

Figure 4-2: Alignment of Proposed Curtis Merritt Harbor Extension



4.1.4. Project 4 – Proposed Route to Beach Access

Project Description

This project would add service to the beach via a new route called the “Beach Express”. The Beach Express would operate along Main Street and Maddox Boulevard and continue across the bridge onto Beach Access Road. The route would continue to the Chincoteague National Wildlife Refuge, and finally to the turnaround at the beach at

the end of Beach Access Road. The total round trip of the new route would be 12.39 miles long and could operate 30-minute headways with a single vehicle. Service could operate any given number of hours per day but would likely start by offering about five hours of service during the middle of the day, potentially from 10 AM to 3 PM.

Table 4-4 reveals the operating statistics for the additional service requirements to run the Beach Express. As in other projects, there are several options shown for consideration. Project 4A operates on the same seasonal schedule as the Green Route, while Project 4B operates the same reduced seasonal schedule as the Red Route. Project 4C operates during the high season months of July and August only. Annual O&M costs vary based on the revenue hours specified for each option, with the Green Route schedule service representing the greatest service and costs.

Capital costs are somewhat uncertain for this route, as Chincoteague may need to purchase a different vehicle type to operate this route because of the harsh conditions at the beach. While this service does not overlap with the existing service of the Pony Express, and therefore would not require an additional vehicle for operational reasons, the town may choose to purchase another vehicle regardless. This is because the wear and tear of a transit vehicle carrying riders going to and from the beach would likely be significantly greater than on a typical transit route. The condition of the trolleys therefore, would likely deteriorate more quickly if they were used for service to the beach. It is likely in the town’s best interest to invest in a separate vehicle that is better suited for beach service with greater durability and specialized equipment for handling passengers with beach paraphernalia.

Table 4-4: Operating Statistics for Proposed Beach Express Route

Project Code	Description	Daily Trips	Annual Revenue Hours	Annual Revenue Miles	Annual Passengers		Annual O&M Cost	Capital Cost
					Low	High		
4A	Beach Express Route (Green Route Schedule)	10	560	13,874	1,900	4,300	\$30,000	\$165,000
4B	Beach Express Route (Red Route Schedule)	10	395	9,786	1,700	3,400	\$21,100	\$165,000
4C	Beach Express Route (July & August)	10	310	7,680	1,600	2,900	\$16,600	\$165,000

1. Annual statistics represent the incremental change over existing

Project Assessment

- The Beach Express route would provide service to one of the most desirable destinations on the island, the beach, as evidenced by the survey. This would therefore address the need to expand service to areas with high ridership potential.
- Currently, the KOA Resort has a shuttle that provides service to the beach from 10 AM – 6 PM on Saturdays and Sundays. This service, however, is only available to patrons of the resort. Adding public transport to the beach would offer a more inclusive service to the beach, giving access to more people.
- There is a per-vehicle toll to cross the bridge to access the beach, creating a financial incentive for those destined to the beach to use alternative transport options. Implementing a transit route that provides access to the beach would likely be a highly desirable option.
- Purchasing and maintaining an additional vehicle type would require additional funding and training to operate and complete light maintenance.

Figure 4-3: Alignment of Existing Green and Red Routes and Proposed Beach Express Route



4.1.5. Project 5 – Span of Service Expansion

Project Description

This project would increase the number of daily service hours offered. Currently, the Green Route operates from about 5:00 PM – 10:30 PM, and the Red Route operates from about 5:15 PM – 9:40 PM. This project would add service at the beginning of the day so that service could start earlier. Table 4-5 shows the annual impacts of adding service in one-hour increments up to five hours. Thus, Project 5A, 5B, 5C, 5D, and 5E show the impacts of adding 1, 2, 3, 4, and 5 hours to the span of service, respectively. Because the number of operating days vary between the

Green and Red Routes, Table 4-5 also shows the impacts of adding service hours to each individually as well as collectively. For instance, Project 5A reveals that adding one hour to the span of service to the Green Route would add about \$6,000 in annual O&M costs but adding the same one hour of service to the Red Route would add \$4,200. Adding one hour of service to both routes totals \$10,200 in O&M annually. Project 5E, which would enable a service start time of 12 PM, shows that adding five hours of service to the Green and Red Routes would lead to an additional \$51,100 annually.

Project Assessment

- The survey showed that riders would utilize the service if it was offered earlier in the day. Although extending the service later into the evening is also an option, the ridership survey indicated that there is less of a demand at night. Field work corroborated this finding, which showed that island activity decreases rapidly by 10 PM. The Island Creamery on Maddox Boulevard, the greatest driver of passenger activity throughout the day and especially into the evening, closes at 9 PM Sunday through Thursday and at 10 PM on Fridays and Saturdays. This project would address the need to increase the span of service.
- Although increasing the span of service on all days would offer passengers greater flexibility in how they travel around the island, it may be more effective to run earlier service on select days only, such as weekends. Project 6 – All-Day Weekend Service discusses the option of operating an expanded span of service on weekends only.
- This project is attractive from the standpoint of adding service without the need for additional capital funding.

Table 4-5: Operating Statistics for Span of Service Expansion

Project Code	Description	Daily Trips	Annual Revenue Hours	Annual Revenue Miles	Annual Passengers		Annual O&M Cost	Capital Cost
					Low	High		
5A	Span Expansion 1 Hour (Green Route Schedule)	2	112	2,081	400	600	\$6,000	\$0
	Span Expansion 1 Hour (Red Route Schedule)	2	79	1,468	300	400	\$4,200	\$0
	Total	4	191	3,549	700	1,000	\$10,200	\$0
5B	Span Expansion 2 Hour (Green Route Schedule)	4	224	4,162	800	1,100	\$12,000	\$0
	Span Expansion 2 Hour (Red Route Schedule)	4	158	2,936	500	800	\$8,500	\$0
	Total	8	382	7,098	1,300	1,900	\$20,500	\$0
5C	Span Expansion 3 Hour (Green Route Schedule)	6	336	6,243	1,100	1,700	\$18,000	\$0
	Span Expansion 3 Hour (Red Route Schedule)	6	237	4,403	800	1,200	\$12,700	\$0
	Total	12	573	10,646	1,900	2,900	\$30,700	\$0
5D	Span Expansion 4 Hour (Green Route Schedule)	8	448	8,324	1,500	2,300	\$24,000	\$0
	Span Expansion 4 Hour (Red Route Schedule)	8	316	5,871	1,100	1,600	\$16,900	\$0
	Total	16	764	14,195	2,600	3,900	\$40,900	\$0
5E	Span Expansion 5 Hour (Green Route Schedule)	10	560	10,405	1,900	2,900	\$30,000	\$0
	Span Expansion 5 Hour (Red Route Schedule)	10	395	7,339	1,400	2,000	\$21,100	\$0
	Total	20	955	17,744	3,300	4,900	\$51,100	\$0

1. Annual statistics represent the incremental change over existing

4.1.6. Project 6 – All-Day Weekend Service

Project Description

This project would increase the span of service on weekends only, starting service at 10 AM for 16 Fridays, 16 Saturdays, and 16 Sundays during the scheduled service for the Green Route. This project would operate with a single vehicle, offering 30-minute headways from 10 AM until the existing schedule beings at 5 PM, and at 15-minute headways thereafter. This project is split into four options shown in Table 4-6: Friday-only service (Project 6A), Saturday-only service (Project 6B), Sunday-service only (Project 6C), and three-day weekend total (Project 6D). Each of the options for individual days would be about \$6,000 in O&M costs annually, while the three-day weekend service would be about \$36,000. There would not be additional capital costs with this project, because the service could be operated with the number of vehicles in the existing fleet.

Table 4-6: Operating Statistics for All-Day Weekend Service

Project Code	Description	Daily Trips	Annual Revenue Hours	Annual Revenue Miles	Annual Passengers		Annual O&M Cost	Capital Cost
					Low	High		
6A	All Day Friday Service (10 AM start Green Route Schedule)	14	112	2,081	400	600	\$6,000	\$0
6B	All Day Saturday Service (10 AM start Green Route Schedule)	14	112	2,081	400	600	\$6,000	\$0
6C	All Day Sunday Service (10 AM start Green Route Schedule)	14	112	2,081	400	600	\$6,000	\$0
6D	Total		336	6,243	1,200	1,800	\$18,000	\$0

1. Annual statistics represent the incremental change over existing

Project Assessment

- Based on current ridership, increasing the span of service by several hours for the entire week may be too aggressive. Weekend service for the Green Route only may be a less costly option that could generate ridership relatively quickly. This project also addresses the need to increase the span of service.
- Due to the high proportion of ridership generated by tourists, weekend service may be a logical starting point for span of service increases. In addition, it would be advisable to increase service hours gradually and build ridership slowly to avoid overspending.

4.1.7. Project 7 – Extend Service Calendar to New Year’s Day

Project Description

This project would extend the service calendar to operate until New Year’s Day. To provide this service, this project would add 81 days of service to the Green Route and add 130 days of service to the Red Route. Table 4-7 shows the additional service requirements for the calendar extension on the Green Route in Project 7A, the Red Route in

Project 7B, and for both in Project 7C. The annual O&M cost for adding year-round service to both routes would amount to approximately \$54,400. For each option, the existing span of service would remain unchanged from the current schedule.

Table 4-7: Operating Statistics for Extension of Service Calendar to New Year’s Day

Project Code	Description	Daily Trips	Annual Revenue Hours	Annual Revenue Miles	Annual Passengers		Annual O&M Cost	Capital Cost
					Low	High		
7A	Calendar Extension (Green Route)	11	446	8,277	400	1,100	\$23,800	\$0
7B	Calendar Extension (Red Route)	9	572	10,869	500	1,500	\$30,600	\$0
7C	Total	20	1,018	19,147	900	2,600	\$54,400	\$0

1. Annual statistics represent the incremental change over existing

Project Assessment

- The tourism demand decreases into the Fall but remains present until after the new year. Offering transit service through the end of the year would fill a gap in service for both residents and visitors.
- This project addresses the need to increase the number of special events that the trolley services.

4.1.8. Additional Service Considerations

The final item of the Service Improvement and Needs Identification section includes service changes that could be considered in addition to the projects described above. The service changes could be implemented as stand alone changes, or in combination with one or more of the projects from the project list. The first two service considerations, combining the Green and Red Routes and shifting to a headway-based schedule, should be considered only if there is no difference between the alignment of the Green and Red Routes. The final service consideration, operating bidirectional service, would be successful if service was increased by two or more vehicles. Descriptions of each service consideration are provided below.

Combine Green and Red Routes

The current alignments of the Green Route and Red Route are identical. When service on Ridge Road (south of Beebe Road) was discontinued, the Green Route and the Red Route began operating the same alignment. Without differences in alignment, the Green Route and Red Route could easily be combined to form one route with 15-minute headways. There would not be O&M cost increases with this change but there would be minor capital costs, including the cost of updating online and printed material. If the alignments do not change in the near future, combining the Green Route and the Red Route together should be strongly considered.

Shift to Headway-Based Schedule

An analysis of on-time performance in Chapter 3 showed that the trolleys struggle to maintain the schedule throughout a large portion of the service. As a result, of the questions asked in the passenger survey, passengers

agreed least with the statement “Trolleys are on time”. Eliminating the scheduled times would also eliminate the expectation of trolleys arriving at a certain time. Instead, a headway-based schedule would focus on keeping consistent spacing between trolleys, leading to average wait times of only 7.5 minutes on the existing 15-minute headway.

Currently, the Pony Express operates on a standard schedule for each route that shows specific times that passengers should expect the trolley to arrive. Shifting to a headway-based schedule would disregard the times at each timepoint and instead focus on creating and adhering to 15-minute spacing between each vehicle. Posted schedules of the service would include information about how often the trolleys visit each stop, as well as the hours the trolleys are in service.

Although this change would not require any additional O&M funding, there would be some capital cost associated because printed schedules and online materials would need to be updated. Furthermore, shifting to a headway-based schedule would dovetail well with a real-time vehicle location application. Installing an AVL system that syncs to a smart phone application would enable passengers to see exactly where each trolley vehicle is at any time, thereby reducing the wait time spent at bus stops. Further discussion on this topic is located in the Chapter 5: Implementation Plan.

Create Bidirectional Service

Industry standard in route design is to avoid unidirectional service, or loops, whenever possible. Unidirectional service oftentimes creates a direct trip in one direction but a long and winding trip in the opposite direction. Conversely, bidirectional service can provide direct service along the route alignment in both directions. This project would create bidirectional service along the entire route, and therefore trip length would be reduced. This comes at the cost of increasing wait times for passengers at bus stops.

In order to create bidirectional service, one of the two routes would change to serve in the opposite direction it currently serves. The existing service operates in a counterclockwise loop pattern around the island, with both busses running in the same direction. The change would create service in both directions, leading to shorter travel times for nearly all passenger trips. The trade-off, however, would be that headways would be degraded from 15 minutes to 30 minutes, leading to longer wait times at bus stops. This project could be operated without reallocating O&M resources, and therefore no operating statistics are provided. Also, there would not be capital costs associated with this project, except for any costs associated with changes to online and printed schedules and materials.

Although travel time savings is oftentimes a valuable goal for transit, the passenger survey in Chincoteague showed that travel times were not a high priority. It is likely that the tradeoff of eliminating 15-minute headways (and shorter wait times at bus stops) for bidirectional service (and shorter travel times) would not be well received. The benefits the Pony Express provides in terms of passenger enjoyment of the trolley likely outweigh the benefits of shorter travel times. Therefore, introducing bidirectional service is not a high priority. It is possible that bidirectional service may become a higher priority if more resources are available to have both frequent and bidirectional service in the distant future.

4.2. Service and Needs Prioritization

The projects identified in the Service Improvements section were created to address the identified transit needs of the Town of Chincoteague. The Service and Needs Prioritization section builds on that work by prioritizing the projects and placing them into timeframes, shown in Table 4-8. The summary table includes information on service

(revenue hours and revenue miles), ridership estimates, and costs. It should be noted here, that Table 4-8 shows the annual statistics increase for each project individually rather than cumulatively. When multiple projects are implemented together the costs become multiplicative, rather than simply additive. The next section in this Chapter, Service Development, will take into account how combinations of projects will influence the service requirements and costs of implementation over the next ten years.

Timeframe summaries are provided below. Not all projects presented in the project list are assigned a timeframe however. This is because, with limited funding, not every transit project will reasonably be implemented. Only projects that could be implemented under a financially constrained plan are assigned a timeframe. The remainder of this section examines the short-term, mid-term, and long-term timeframes, revealing which projects fall into each category and why. This process will help Chincoteague plan and prepare for the O&M and capital costs associated with the identified service improvements.

4.2.1. Short-Term Horizon

The short-term horizon includes FY20, FY21, and FY22, and is focused on projects that could be implemented relatively quickly. Project 3 has the ability to increase the service coverage at no additional O&M costs. The project would, however, require changes to online and printed schedules. The extension of the Green Route received a priority level of "high" because it expands service to a new area with ridership potential.

4.2.2. Mid-Term Horizon

The mid-term horizon includes several, more ambitious projects that would require additional O&M and capital funding. The first project in this timeframe would likely be Project 1C, which calls for the addition of one vehicle to operate during July and August. The capital costs associated with this project would be about \$165,000, which would enable Chincoteague to purchase an additional vintage style trolley. O&M costs would increase as well to operate the additional vehicle for two months. The next service improvement would be Project 1A, which calls for an additional vehicle to operate for the entire Green Route schedule. This service improvement would replace Project 1C, rather than adding yet another vehicle to the service, keeping peak service at three vehicles. Both projects received priority levels of "high" because increasing the number of vehicles from two to three would lower headways from 15 minutes to 10 minutes, thereby creating a dramatic improvement in service and addressing the need to increase frequency.

Also part of the mid-term horizon would be increasing the span of service. Project 5 increases the number of daily revenue hours the Pony Express operates. Increasing the service of one and two hours (Projects 5A and 5B) are both given medium priority because they address the need for expanded span of service, but would not have the same impact as making the changes outlined in the short-term horizon. This project would cost about \$10,200 to operate both the Green and Red routes one additional hour of service daily. Depending on the number of vehicles in operation and the number of hours of additional service, this project has the potential to become very costly. The remaining alternatives in Project 5 received a low priority, because increasing the daily revenue hours would likely have diminishing returns. The expanding of service

4.2.3. Long-Term Horizon

Outside of the 10-year TDP timeframe, the long-term horizon includes the addition of the Beach Express Route. This project would likely be introduced during the high season of July and August only, with additional service added after successful implementation later on. This project addresses the need for expansion of service to areas with potentially high ridership demand. However, the need for diversification of a very small fleet makes this project less ready for implementation compared to the projects in the short-term and mid-term timeframes, and thus is included

in the long-term projects. It would cost about \$16,600 annually to operate the new route during July and August but could become more expensive depending on the number of hours operated annually.

Table 4-8: Prioritization of Potential Service Improvements

Project Code	Description	Annual Revenue Hours	Annual Revenue Miles	Annual Passengers		Annual O&M Cost	Capital Cost	Needs Fulfillment	Priority	Timeframe
				Low	High					
1A	Headway Improvement (Green Route Schedule)	616	11,445	2,100	3,200	\$33,000	\$165,000	Increase frequency	High	Mid
1B	Headway Improvement (Red Route Schedule)	348	6,605	1,200	1,800	\$18,600	\$165,000	Increase frequency	High	-
1C	Headway Improvement (July & August)	341	6,336	1,200	1,700	\$18,300	\$165,000	Increase frequency	High	Mid
2A	Maddox/Main Route (Green Route Schedule)	616	7,874	2,100	3,200	\$33,000	\$165,000	Increase frequency	Low	-
2B	Maddox/Main Route (Red Route Schedule)	348	4,544	1,200	1,800	\$18,600	\$165,000	Increase frequency	Low	-
3	Curtis Merritt Harbor extension to Green Route	0	1,491	0	0	\$0	\$0	Expand service area	High	-
4A	Beach Express Route (Green Route Schedule)	560	13,874	1,900	4,300	\$30,000	\$165,000	Expand service area	Medium	-
4B	Beach Express Route (Red Route Schedule)	395	9,786	1,700	3,400	\$21,100	\$165,000	Expand service area	Medium	-
4C	Beach Express Route (July & August)	310	7,680	1,600	2,900	\$16,600	\$165,000	Expand service area	Medium	Long
5A	Span Expansion 1 Hour (Green Route Schedule)	112	2,081	400	600	\$6,000	\$0	Expand span of service	Medium	-
	Span Expansion 1 Hour (Red Route Schedule)	79	1,468	300	400	\$4,200	\$0	Expand span of service	Medium	-
	Total	191	3,549	700	1,000	\$10,200	\$0	Expand span of service	Medium	Mid
5B	Span Expansion 2 Hour (Green Route Schedule)	224	4,162	800	1,100	\$12,000	\$0	Expand span of service	Medium	-
	Span Expansion 2 Hour (Red Route Schedule)	158	2,936	500	800	\$8,500	\$0	Expand span of service	Medium	-
	Total	382	7,098	1,300	2,000	\$20,400	\$0	Expand span of service	Medium	Mid
5C	Span Expansion 3 Hour (Green Route Schedule)	336	6,243	1,100	1,700	\$18,000	\$0	Expand span of service	Low	-
	Span Expansion 3 Hour (Red Route Schedule)	237	4,403	800	1,200	\$12,700	\$0	Expand span of service	Low	-
	Total	573	10,646	2,000	2,900	\$30,700	\$0	Expand span of service	Low	-
5D	Span Expansion 4 Hour (Green Route Schedule)	448	8,324	1,500	2,300	\$24,000	\$0	Expand span of service	Low	-
	Span Expansion 4 Hour (Red Route Schedule)	316	5,871	1,100	1,600	\$16,900	\$0	Expand span of service	Low	-
	Total	764	14,195	2,600	3,900	\$40,900	\$0	Expand span of service	Low	-
5E	Span Expansion 5 Hour (Green Route Schedule)	560	10,405	1,900	2,900	\$30,000	\$0	Expand span of service	Low	-
	Span Expansion 5 Hour (Red Route Schedule)	395	7,339	1,400	2,000	\$21,100	\$0	Expand span of service	Low	-
	Total	955	17,744	3,300	4,900	\$51,100	\$0	Expand span of service	Low	-
6A	All Day Friday Service (10 AM start Green Route Schedule)	112	2,081	400	600	\$6,000	\$0	Expand span of service	Medium	-
6B	All Day Saturday Service (10 AM start Green Route Schedule)	112	2,081	400	600	\$6,000	\$0	Expand span of service	Medium	-
6C	All Day Sunday Service (10 AM start Green Route Schedule)	112	2,081	400	600	\$6,000	\$0	Expand span of service	Medium	-
6D	Total	336	6,243	1,100	1,700	\$18,000	\$0	Expand span of service	Medium	-
7A	Calendar Extension (Green Route)	446	8,277	400	1,100	\$23,800	\$0	Service on more special events	Low	-
7B	Calendar Extension (Red Route)	572	10,869	500	1,500	\$30,600	\$0	Service on more special events	Low	-
7C	Total	1,018	19,147	900	2,600	\$54,500	\$0	Service on more special events	Low	-

4.3. Service Development

This section summarizes planned service improvements over the TDP lifespan, showing the incremental and cumulative progression of service requirements and costs. From FY20 to FY29, should Chincoteague implement the recommended projects, the annual service requirements would increase by 1,222 revenue hours and 24,738 revenue miles. Outside of the 10-year TDP timeframe, an additional 310 revenue hours and 7,680 revenue miles would be added. Projects are intentionally spread out to avoid adding service too quickly without growing ridership in tandem. Furthermore, the plans do not call for any back-to-back years with additions in revenue hours/miles. Table 4-9 summarizes the service additions year-by-year in terms of service provided and associated costs.

Table 4-9: Service Requirements of Planned Service Improvements

Time Frame	Fiscal Year	Project Code	Description	Additional Revenue Hours		Additional Revenue Miles		Additional O&M Costs		Capital Costs
				Incremental	Cumulative	Incremental	Cumulative	Incremental	Cumulative	
Short-Term	2020	-	-	-	-	-	-	-	-	-
	2021	3	Curtis Merritt Harbor extension to Green Route	0	0	1,491	1,491	\$0	\$0	\$0
	2022	-	-	-	-	-	-	-	\$0	-
Mid-Term	2023	1C	Additional Vehicle (July & August)	341	341	6,336	7,827	\$18,300	\$18,300	\$165,000
	2024	-	-	-	-	-	-	-	-	-
	2025	1A	Additional vehicle (Green Route Schedule)	275	616	6,600	14,427	\$14,700	\$33,000	\$0
	2026	-	-	-	-	-	-	-	-	-
	2027	5A	Span Expansion 1 Hour	303	919	4,410	18,837	\$16,200	\$49,200	\$0
	2028	-	-	-	-	-	-	-	-	-
	2029	5B	Span Expansion 2 Hour	303	1,222	5,901	24,738	\$16,200	\$65,400	\$0
Long-Term	Beyond 2029	4C	Beach Express (July & August)	310	1,532	7,680	32,418	\$16,600	\$82,000	\$165,000

FY21

The first year with changes would be FY21, where Project 3 (extending the Green Route to Curtis Merritt Harbor) would take effect. There would not be any increases of revenue hours, but revenue miles would increase by about 1,491 annually, which would carry over into future years as well.

FY23

The mid-term plan calls for additions in revenue hours and revenue miles due to the service improvement described in Project 1, the addition of another vehicle on the existing alignment. Initially, in FY23 the project increases service in July and August only, which in terms of ridership are typically the two most productive months of the year. The new service leads to an increase in 341 revenue hours and 6,336 revenue miles, equating to \$18,300 in annual O&M costs. There would be the need for about \$165,000 in capital costs for the additional vehicle.

FY25

Two years later, the service improvement would be expanded to run the same schedule and number of hours as the existing Green Route, which would necessitate an increase of another 275 revenue hours and 5,5510 revenue miles. The total service requirement for running the additional vehicle at this point would be 616 hours and 14,427 miles. The cost to operate this service would be about \$14,700 annually but would not require additional capital funding.

FY27

The next set of service improvements would come in the form of increases in the span of service. Project 5A would be implemented in FY27, which calls for one additional hour of service. This project is assumed to apply to all three routes (considering the fleet expansion in FY23). This increase in service equates to 303 additional revenue hours and 5,630 additional revenue miles. This increase in service would amount to approximately \$16,200 annually in O&M costs. There would not however, be any capital costs associated with operating the additional service.

FY29

After the successful implementation of one hour of additional service, the span could be increase again in FY29. A total of two hours of scheduled service brings the cumulative service additions to 1,222 hours and 24,738 miles. This would result in \$16,200 in annual O&M costs, and \$0 in capital costs.

Beyond FY29

The long-term horizon includes implementation of the Beach Express. This service would be introduced by offering service during July and August only. The new service would require 310 revenue hours and 7,680 revenue miles annually. The cumulative requirements add to 1,532 revenue hours and 32,418 revenue miles. The operating costs to run the additional route would be about \$16,600 annually and would require \$165,000 in capital funding to purchase an additional vehicle.

5. Implementation Plan

The implementation plan chapter of this TDP describes the steps necessary to maintain current service and implement service recommendations from the previous chapter on system improvements. It is recommended that over the next ten years, the Town of Chincoteague replace or upgrade rolling stock, passenger amenities, technology, and marketing efforts. This chapter provides cost estimates for implementing the improvement plan based on data provided by the Town, research on similar transit systems, and reasonable assumptions where necessary. Unless otherwise noted, all costs included in this chapter have been inflated and are therefore in year of expenditure dollars (YOE\$). It should be noted that the Town of Chincoteague participates in the Transit Asset Management Plan (TAMP) Group Plan, developed by DRPT for Tier II providers in Virginia and readily available as an additional resource online.

Capital improvements must be planned in tandem with operating plans. This chapter begins by showing a summary of the existing system operating requirements as well as service additions operating requirements from the previous chapter. The remainder of this chapter will focus on the total capital improvements required to maintain the existing services as well as increase service in accordance with the service development from Chapter 4.

5.1. Service Changes Impacting Capital Costs

The service changes outlined in the previous chapter show increases in service in FY23, FY25, FY27, and FY29. Table 5-1 shows the existing revenue hours and operating costs. The operating costs are expected to increase at a 3% annual inflation rate throughout the lifespan of the TDP. Inflation alone is therefore anticipated to increase the total operating costs from \$90,068 to \$117,518 over the ten-year period. Service additions from Chapter 4 are also increased at a 3% inflation rate and shown in Table 5-1 in YOE\$. The capital components that support the improvement plan are detailed in the following sections of this chapter.

Table 5-1: Operating and Maintenance Revenues Service Additions Summary

	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29
Existing System										
Revenue Hours	1,414	1,414	1,414	1,414	1,414	1,414	1,414	1,414	1,414	1,414
Operating Costs	\$90,068	\$92,770	\$95,553	\$98,420	\$101,372	\$104,413	\$107,546	\$110,772	\$114,095	\$117,518
Service Additions										
Annual Revenue Hours				341		275		303		303
Annual Operating Cost				\$19,997		\$17,041		\$19,924		\$21,137
Cumulative Revenue Hours				341	341	616	616	919	919	1,222
Cumulative Operating Cost	\$0	\$0	\$0	\$19,997	\$19,997	\$37,038	\$37,038	\$56,962	\$56,962	\$78,100
Totals										
Revenue Hours	1,414	1,414	1,414	1,755	1,755	2,030	2,030	2,333	2,333	2,636
Operating Cost	\$90,068	\$92,770	\$95,553	\$118,417	\$121,369	\$141,452	\$144,584	\$167,734	\$171,058	\$195,618

1. Existing system FY20 revenue hours are from FY20 TDP update. FY21-29 assume to remain constant.
2. Existing system FY20 operating costs from FY20 TDP update. FY21-29 assume a 3% annual inflation rate.
3. Service additions are from Chapter 4 of TDP.
4. All costs are in year of expenditure dollars.

5.2. Rolling Stock Utilization

The existing vehicle fleet is discussed in Section 1.6, including a fleet inventory in Table 1-7. The Town of Chincoteague owns four vehicles for transit service, all of which are revenue vehicles. The three vehicles used for fixed-route services are Ford vintage-style trolleys, while the lone paratransit vehicle is a Dodge Caravan. The Town plans to replace rolling stock using the same (or very similar) vehicles in terms of make and model.

The replacement of existing vehicles is based on DRPT’s Useful Life Benchmark (ULB). For rubber-tired vintage trolleys the ULB is 7 years. For vans the ULB is 8 years. Table 5-2 shows the manufactured years of each of the existing vehicles and the associated replacement year. Two of the Pony Express trolleys have already passed the ULB, and the third trolley will reach it in 2022.

Table 5-2: Existing Fleet Replacement Schedule

Vehicle Type	Manufactured Year	ULB	Projected Replacement Year
Van	2016	8	2024
Rubber Tired Vintage Trolley	2012	7	2019
Rubber Tired Vintage Trolley	2012	7	2019
Rubber Tired Vintage Trolley	2015	7	2022

1. Due to operating conditions the useful life might be shorter

Chapter 4 details the recommended service changes over the short-term, mid-term, and long-term timeframes. Service changes that elicit the need for an additional vehicle occur in FY23 and over the long-term (beyond 2029). Table 5-3 combines the replacement schedule above with the expansion plan in Chapter 4 to show the total rolling stock capital needs over the life of the TDP. Costs for each vehicle type were obtained from the Town of Chincoteague, shown in FY20 at \$165,000 for the Ford vintage-style trolley bus and \$36,000 for the paratransit van. Also shown in Table 5-3 are the approximate unit costs inflated to future years in the TDP using an inflation factor of 4% per year. Although two of the three trolleys have already met their useful life benchmark of seven years, Chincoteague plans on deferring replacement until FY21. To avoid large capital costs in a single year, Chincoteague would likely replace vehicles in FY22 and FY24 (vehicle expansion is planned in FY23). By FY28, Chincoteague will likely need to start replacing the vehicles purchased in the next few years.

Table 5-3: Rolling Stock Capital Needs (YOE\$)

Vehicles	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29
Unit Cost										
Trolley Bus	\$165,000	\$171,600	\$178,464	\$185,603	\$193,027	\$200,748	\$208,778	\$217,129	\$225,814	\$234,846
Van	\$36,000	\$37,440	\$38,938	\$40,495	\$42,115	\$43,800	\$45,551	\$47,374	\$49,268	\$51,239
Quantity										
Trolley Bus		1	1	1	1				1	1
Van					1					
Total Costs										
Trolley Bus	\$0	\$171,600	\$178,464	\$185,603	\$193,027	\$0	\$0	\$0	\$225,814	\$234,846
Van	\$0	\$0	\$0	\$0	\$42,115	\$0	\$0	\$0	\$0	\$0
Total	\$0	\$171,600	\$178,464	\$185,603	\$235,142	\$0	\$0	\$0	\$225,814	\$234,846

1. FY20 costs collected from Town of Chincoteague and are subject to change
2. FY21-FY29 costs assume a 4% annual escalation rate
3. FY23 vehicle is for expansion
4. FY21, FY22, FY24, FY28 and FY29 vehicles are for replacement

5.3. Major System Maintenance and Operations Facilities

The Pony Express is operated out of the Town’s Municipal Complex at 6150 Community Drive. Although light maintenance is performed on site, major maintenance is completed offsite and therefore does not necessitate additional facilities. The Town does not plan to build additional facilities for transit over the TDP timeframe.

5.4. Passenger Amenities

Chincoteague plans to bolster the passenger amenities over the short-term horizon. In FY20, the Town anticipates adding two bus stop shelters and benches similar to the existing shelters and benches. Bus stop shelters are estimated to cost \$10,000 each, while benches are approximately \$800 each. The total cost in FY20 would be \$21,600. In FY22, Chincoteague plans to replace all 20 bus stop signs to improve the visibility of the system. The cost for this improvement would come to about \$4,200.

Table 5-4: Passenger Amenities Capital Needs (YOE\$)

Passenger Amenities	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29
Unit Cost										
Bus Stop Replacement	\$200	\$206	\$212	\$219	\$225	\$232	\$239	\$246	\$253	\$261
Bus Stop Shelter	\$10,000	\$10,300	\$10,609	\$10,927	\$11,255	\$11,593	\$11,941	\$12,299	\$12,668	\$13,048
Bus Stop Bench	\$800	\$824	\$849	\$874	\$900	\$927	\$955	\$984	\$1,013	\$1,044
Quantity										
Bus Stop Replacement			20							
Bus Stop Shelter	2									
Bus Stop Bench	2									
Total Costs										
Bus Stop Replacement	\$0	\$0	\$4,244	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Bus Stop Shelter	\$20,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Bus Stop Bench	\$1,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Costs	\$21,600	\$0	\$4,244	\$0	\$0	\$0	\$0	\$0	\$0	\$0

1. FY20 costs are industry estimates and subject to change
2. FY21-FY29 costs assume a 3% annual escalation rate

5.5. Technology Systems

The desire for real-time vehicle location information became evident through the stakeholder meetings and surveying effort in Chapter 3. Chincoteague is interested in addressing this by potentially investing in the technology and support necessary in implementing such a system. Such a system would give passengers the ability to view the location of each Pony Express vehicle on a map in real time by using a smart phone application. The application would also give the estimated time of arrival, and therefore give passengers the information necessary to minimize the wait time at bus stops.

The availability of real-time vehicle location information has increased drastically in recent years as the technology has become more affordable. Table 5-5 summarizes the estimated unit costs year-by-year for installing and maintaining a real-time vehicle location information system. Current costs are shown for FY20, which are subsequently inflated by 3% annually for future years. The initial purchase and installation is planned for FY24, which would require a total of approximately \$17,400 in YOES. An ongoing annual service fee would be required to maintain the software for every year afterwards. Additional hardware installations would be needed when vehicles are replaced, in FY28 and FY29.

Table 5-5: Technology Systems Capital Needs (YOES)

Real-Time Passenger Information System	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29
Unit Cost										
One-Time Set-Up Fee	\$1,500	\$1,545	\$1,591	\$1,639	\$1,688	\$1,739	\$1,791	\$1,845	\$1,900	\$1,957
Equipment	\$850	\$876	\$902	\$929	\$957	\$985	\$1,015	\$1,045	\$1,077	\$1,109
Installation	\$250	\$258	\$265	\$273	\$281	\$290	\$299	\$307	\$317	\$326
Vendor Travel & Expenses	\$6,000	\$6,180	\$6,365	\$6,556	\$6,753	\$6,956	\$7,164	\$7,379	\$7,601	\$7,829
Annual Service Fee	\$3,600	\$3,708	\$3,819	\$3,934	\$4,052	\$4,173	\$4,299	\$4,428	\$4,560	\$4,697
Quantity										
One-Time Set-Up Fee					1					
Equipment					4					
Installation					4				1	1
Vendor Travel & Expenses					1					
Annual Service Fee					1	1	1	1	1	1
Total Costs										
One-Time Set-Up Fee	\$0	\$0	\$0	\$0	\$1,688	\$0	\$0	\$0	\$0	\$0
Equipment	\$0	\$0	\$0	\$0	\$3,827	\$0	\$0	\$0	\$0	\$0
Installation	\$0	\$0	\$0	\$0	\$1,126	\$0	\$0	\$0	\$317	\$326
Vendor Travel & Expenses	\$0	\$0	\$0	\$0	\$6,753	\$0	\$0	\$0	\$0	\$0
Annual Service Fee	\$0	\$0	\$0	\$0	\$4,052	\$4,173	\$4,299	\$4,428	\$4,560	\$4,697
Total	\$0	\$0	\$0	\$0	\$17,445	\$4,173	\$4,299	\$4,428	\$4,877	\$5,023

1. FY20 costs are industry estimates and subject to change
2. FY21-FY29 costs assume a 3% annual escalation rate

5.6. Marketing

As discussed in Chapter 3, one of the recurring suggestions from the surveying effort and stakeholder interviews was to create clearer online and printed materials. This could be addressed by setting aside funding for marketing efforts. Table 5-6 shows line items for this marketing effort: a new system map, a schedule brochure, and printing. These items could take place in FY21, coinciding with the additional service to Kurtis Merritt Harbor. Additional updates to the schedule brochure would occur every other year afterwards, in FY23, FY25, FY27, and FY29.

Table 5-6: Marketing Capital Needs (YOE\$)

Marketing	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29
Unit Costs										
System Map	\$100	\$103	\$106	\$109	\$113	\$116	\$119	\$123	\$127	\$130
Schedule Brochure	\$100	\$103	\$106	\$109	\$113	\$116	\$119	\$123	\$127	\$130
Printing	\$500	\$515	\$530	\$546	\$563	\$580	\$597	\$615	\$633	\$652
Quantity										
System Map (labor hours)		40								
Schedule Brochure (labor hours)		40		16		16		16		16
Printing		1		1		1		1		1
Total Costs										
System Map	\$0	\$4,120	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Schedule Brochure	\$0	\$4,120	\$0	\$1,748	\$0	\$1,855	\$0	\$1,968	\$0	\$2,088
Printing	\$0	\$515	\$0	\$546	\$0	\$580	\$0	\$615	\$0	\$652
Total	\$0	\$8,755	\$0	\$2,295	\$0	\$2,434	\$0	\$2,583	\$0	\$2,740

1. FY20 costs are industry estimates and subject to change
2. FY21-FY29 costs assume a 3% annual escalation rate

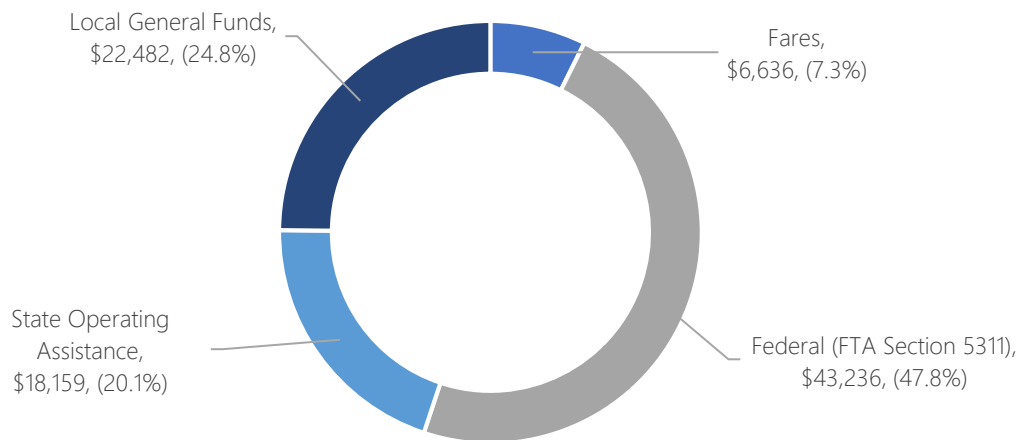
6. Financial Plan

The financial plan chapter of the TDP projects the anticipated revenues and expenditures for capital and service requirements presented in the previous chapters over the next ten years. The financial plan is organized into two sections: 6.1 Operating and Maintenance Costs and Funding Sources, and 6.2 Capital Costs and Funding Sources. The operating and maintenance section shows how much funding is anticipated year-by-year via each of the four funding sources (farebox, federal, state, and local). This section details the assumptions utilized in calculating the funding by source as well. The capital section is grouped into descriptions for vehicles, facility and amenities, technology and ITS, and marketing. A summary of all categories is provided as well. A snapshot of previous funding revenues and expenditures can be found in APPENDIX B: Six-Year Retrospective of Finances, providing historical context.

6.1. Operating and Maintenance Costs and Funding Sources

This section provides detail on the expenditures and revenues dedicated to operating and maintaining the Pony Express over the next ten years. To gain a better understanding of future finances, Figure 6-1 summarizes revenues from FY19, the most recent and complete annual dataset available. Expenditures for operating and maintenance in FY19 totaled \$90,513. Federal funding accounted for 47.8% of the total revenues needed, which made up the largest portion of funds. The second and third greatest contributors were local general funds and state operating assistance, which made up 24.8% and 20.1% of the total, respectively. The remaining 7.3% of revenue came from the farebox.

Figure 6-1: FY19 Operating and Maintenance Revenues



The remainder of this section focuses on projections of expenditures and revenues over the course of the TDP (FY20-FY29). Each revenue source funding amount is projected based on assumptions, which are explained in more detail below. After assumptions are established, there are sections on two service scenarios: No Service Changes Scenario and Service Changes Scenario, each of which describe how revenues and expenditures are expected to change over time.

6.1.1. Assumptions

The Pony Express receives revenue that falls into one of four separate categories: farebox, federal, state, and local funding. Each funding source was considered individually, and projected into the future using assumptions, as described below.

Farebox Revenue

Fares are expected to increase slightly from FY19 because of a planned fare increase that begins in FY20. The Pony Express has historically charged \$0.25 per passenger, which will increase to \$0.50 in FY20. This is expected to result in only a slight increase in fare revenue, from \$6,636 in FY19 to about \$8,000. After FY20, farebox revenue is expected to remain at a constant \$8,000, except where service is being increased. Where service is being increased, ridership estimates from chapter 3 are used to calculate farebox revenue increases. It should also be noted that FY20 will be the first full year where the Chincoteague History Tour is no longer operated by the Town of Chincoteague and therefore will no longer generate fares from this service. It is yet to be determined the degree to which this will impact fares. Overall, the fare increase is expected to overcome the loss of revenue that was generated by the History Tour.

Federal Funding

Federal funding for operations comes from FTA Section 5311. Chincoteague has received between 41%-48% of operating revenues from federal funding every year for the past six years, as shown in APPENDIX B: Six-Year Retrospective of Finances. The most recent DRPT SYIP (FY20) estimates that Chincoteague will receive 45.6% of funding from federal sources. Future year projections maintain this percentage of funding from federal sources.

State Funding

The FY20 SYIP was referenced to obtain the latest estimate in state operating assistance. Future years were calculated based on the overall funding estimated to be available to all agencies in the Commonwealth receiving funding. Table 6-1 shows the percent change in total state operating assistance for FY20-FY25 from the SYIP, which were then applied to the funding assistance estimate for Chincoteague in FY20 to calculate the projected state operating assistance. For FY26-29, the average percent change from FY20-25 of 1.17% was applied.

Table 6-1: State Operating Assistance Anticipated Rate Change

Year	Percent Change from Previous Year
FY20 to FY21	-0.94%
FY21 to FY22	2.48%
FY22 to FY23	1.45%
FY23 to FY24	1.44%
FY24 to FY25	1.41%

1. Operating Assistance data are from FY20 SYIP

Although this provides Chincoteague with a reasonable estimate of future state operating assistance, the actual amount is likely to change because of recent changes in state transit funding allocation methodology. In 2018, the Virginia General Assembly passed a statute that requires transit grant funding to be based on performance (Section 33.2-1526.1 of the Code of Virginia). Previously, state funding had been based on the proportion of each agencies operating costs relative to the operating costs of all other agencies receiving funding. Performance based funding, however, relies on both sizing and performance metrics to calculate funding amounts. The sizing metric is initially

applied based on operating cost, ridership, and revenue vehicle hours. The sizing allocating is then adjusted using a three-year performance trend of the agency, based on passengers per revenue hour, passengers per revenue mile, operating cost per revenue hour, operating cost per revenue mile, and operating cost per passenger. To reduce the immediate impacts of the funding allocation changes, a transition year is in place in FY20 that places greater emphasis on operating cost and less on emphasis on ridership. The first year the performance funding is fully implemented is FY21. Table 6-2 shows the proportion of each performance metric for the transition year (FY20) and beyond (FY21 and future years).

Table 6-2: State Sizing Metric

Performance Metric	FY20 (Transition Year)	FY21 and Future Years
Operating Cost	60%	50%
Ridership	20%	30%
Revenue Vehicle Hours	10%	10%
Revenue Vehicle Miles	10%	10%

Local Funding

Local general funds are expected to cover any remaining costs after the previous three funding sources (fares, federal, and state) are accounted for.

6.1.2. No Service Changes Scenario

The no service changes scenario assumes that the Town of Chincoteague makes no service changes over the next ten years resulting in no additional revenue hours. The operating costs, anticipated revenues by source, and assumptions for this scenario are shown in Table 6-3. FY20 operating and maintenance cost estimates are from the SYIP and used here as a baseline. Future years are projected using the baseline over the course of the TDP. For reference, FY19 data is included as well. It should be noted that the FY19 revenue hours were greater because this was the last full year that the Town ran the History tour.

Total operating costs are expected to increase from \$90,068 to \$117,518 over the course of the TDP, representing a \$27,450 increase due to inflation alone. Without any planned changes to the fares after FY20, the fare revenues are expected to be constant over this timeframe. The federal, state, and local revenues, however, are expected to increase over time because of the increase in operating cost. The local general funds are expected to increase to \$34,756 by FY29, representing an increase of \$12,754 over FY20.

6.1.3. Service Changes Scenario

The service changes scenario represents the costs and revenues if the service changes described in Chapter 4 take place. Table 6-4 shows the associated operating costs, revenues by source, and the assumptions utilized to create future year projections. The FY20 baseline year matches the no service changes scenario, assuming no immediate changes to the revenue hours or costs. FY21-29 use the same set of assumptions as the no service changes scenario, which enables a fair comparison between the two scenarios. The fare revenue is expected to increase in the service changes scenario as a function of an anticipated increase in ridership in years that plan for more service.

Overall, if the service changes from Chapter 4 take place, the revenue hours would increase from 1,414 in FY20 to 2,636 in FY29, representing an increase of 1,222 hours. The resulting operating and maintenance costs would be \$195,618 annually in FY29. It is important to note that \$27,450 is due to inflation alone, with the remaining amount

of \$78,100 due to increasing revenue hours. The local portion of the revenues would increase from \$22,002 in FY20 to \$67,341, which equates to \$45,339 in additional funding needed from the Town of Chincoteague.

Table 6-3: Operating and Maintenance Revenues without Service Changes

	FY19 (Actual)	FY20 (Baseline)	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29
Revenue Hours	1,758	1,414	1,414	1,414	1,414	1,414	1,414	1,414	1,414	1,414	1,414
Total Operating Cost	\$90,513	\$90,068	\$92,770	\$95,553	\$98,420	\$101,372	\$104,413	\$107,546	\$110,772	\$114,095	\$117,518
Expected Revenue Source											
Fares	\$6,636	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000
Federal (FTA Section 5311)	\$43,236	\$41,534	\$42,780	\$44,063	\$45,385	\$46,747	\$48,149	\$49,594	\$51,082	\$52,614	\$54,192
State Operating Assistance	\$18,159	\$18,532	\$18,359	\$18,814	\$19,087	\$19,363	\$19,635	\$19,865	\$20,097	\$20,332	\$20,570
Local General Funds	\$22,482	\$22,002	\$23,631	\$24,676	\$25,947	\$27,263	\$28,629	\$30,087	\$31,594	\$33,149	\$34,756

1. FY19 revenue hours are actual. FY20 are from FY20 TDP update. FY21-29 assumed to remain constant.
2. FY19 operating costs are actuals. FY20 are from FY20 SYIP. FY21-FY29 assume a 3% inflation rate.
3. FY19 fare revenues are actuals. FY20 are estimates from Chincoteague. FY21-FY29 assumed to remain constant with FY20.
4. FY19 federal funding is actual. FY20 is from SYIP. FY21-29 is assumed to remain consistent in terms of percentage of overall operating assistance (45.6%).
5. FY19 state operating assistance is actual. FY20 is from FY20 SYIP. FY21-FY25 values are based on overall state funding changes. FY26-29 values are based on average of FY21-25 changes.
6. FY19-29 local general funds capture remaining amount of funds required.

Table 6-4: Operating and Maintenance Revenues with Service Changes

	FY19 (Actual)	FY20 (Baseline)	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29
Revenue Hours	1,758	1,414	1,414	1,414	1,755	1,755	2,030	2,030	2,333	2,333	2,636
Total Operating Cost	\$90,513	\$90,068	\$92,770	\$95,553	\$118,417	\$121,369	\$141,452	\$144,584	\$167,734	\$171,058	\$195,618
Expected Revenue Source											
Fares	\$6,636	\$8,000	\$8,000	\$8,000	\$8,600	\$9,200	\$10,250	\$11,300	\$12,700	\$14,100	\$15,800
Federal (FTA Section 5311)	\$43,236	\$41,534	\$42,780	\$44,063	\$54,607	\$55,968	\$65,229	\$66,674	\$77,349	\$78,882	\$90,207
State Operating Assistance	\$18,159	\$18,532	\$18,359	\$18,814	\$19,087	\$19,363	\$19,635	\$19,865	\$20,097	\$20,332	\$20,570
Local General Funds	\$22,482	\$22,002	\$23,631	\$24,676	\$36,123	\$36,838	\$46,338	\$46,746	\$57,588	\$57,744	\$69,041

1. FY19 revenue hours are actual. FY20 are from FY20 TDP update. FY21-FY29 are consistent with service changes in Chapter 4.
2. FY19 operating costs are actual. FY20 are from FY20 SYIP. FY21-FY29 are consistent with service changes from Chapter 3 inflated by 3% annually.
3. FY20 fare revenues are estimates from Chincoteague. FY21-FY29 fare revenue increase based on a \$0.5 fare per passenger using ridership estimates from Chapter 4.
4. FY20 federal funding is from SYIP. FY21-29 is assumed to remain consistent in terms of percentage of overall operating assistance (45.6%).
5. FY19 state operating assistance is actual. FY20 is from FY20 SYIP. FY21-FY25 values are based on overall state funding changes. FY26-29 values are based on average of FY21-25 changes.
6. FY19-29 local general funds capture remaining amount of funds required.

6.2. Capital Costs and Funding Sources

Capital costs presented in this section are driven by the implementation plan presented in Chapter 5, which assume service changes are implemented. Capital costs are grouped into categories of vehicles, passenger amenities, technology, and marketing. Additional information on each of these categories, including assumptions and unit costs, can be found in Chapter 5. This section focuses on the funding sources and amounts, beginning with the assumptions utilized. A series of tables reveal the estimated totals for each category, which concludes the financial chapter of the TDP.

6.2.1. Assumptions

Funding for capital projects are anticipated to come from three different sources: federal, state and local. The funding amounts expected from each of the sources is calculated based on percentages:

- Federal: 80%
- State: 16%
- Local: 4%

6.2.2. Funding Plan

Table 6-5 shows a summary of all capital costs over the ten-year TDP timeframe grouped into categories for vehicles, passenger amenities, technology, and marketing. For illustrative purposes, Table 6-6 shows the capital costs necessary for to replace vehicles only. This version of the funding plan reveals the costs the town can anticipate without any upgrades to the existing infrastructure. Table 6-7 through Table 6-10 show more details information on each of the capital cost categories for the service changes scenario. Overall, vehicles are expected to compose the majority of capital costs throughout the TDP timeframe. Vehicle acquisitions occur via expansion of service in FY23 and replacement of aging vehicles in FY21, FY22, FY24, FY28, and FY29. The greatest need for capital funding is likely to occur in FY24 with the replacement of one trolley and one van, with a total estimated cost of \$235,142 and a local cost of \$9,406.

The most immediate capital funding needs come from passenger amenity improvements in FY20, of which about \$864 is likely needed from local funding. An additional need for bus stop replacement is shown in FY22 where local funds will need to cover \$170 of the \$4,244 required. Technology upgrades in the form of a real-time passenger information system has the greatest need in the year of implementation in FY 24 of \$17,445, requiring about \$698 of local funding. After the initial installation, an ongoing annual service fee should be expected to keep the system operating. Finally, marketing is budgeted to account for a redesigned system map and ongoing updates to the schedule, with costs of \$350 or less needed from local sources in any given year.

Lastly, Table 6-11 shows a summary of local funding requirements only. This table includes both the existing system, as well as the additional costs triggered by the service changes from Chapter 4. Overall, local costs are estimated to increase regardless of implementing service changes. Table 6-11 shows however, that the service changes increase the annual local funding requirements by as much as \$34,595, shown in FY29.

Table 6-5: Service Changes Scenario Capital Funding Plan Summary

	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29
Costs										
Vehicles	\$0	\$171,600	\$178,464	\$185,603	\$235,142	\$0	\$0	\$0	\$225,814	\$234,846
Passenger Amenities	\$21,600	\$0	\$4,244	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Technology	\$0	\$0	\$0	\$0	\$17,445	\$4,173	\$4,299	\$4,428	\$4,877	\$5,023
Marketing	\$0	\$8,755	\$0	\$2,295	\$0	\$2,434	\$0	\$2,583	\$0	\$2,740
Total	\$21,600	\$180,355	\$182,708	\$187,897	\$252,587	\$6,608	\$4,299	\$7,010	\$230,691	\$242,610
Anticipated Funding Sources										
Federal	\$17,280	\$144,284	\$146,166	\$150,318	\$202,070	\$5,286	\$3,439	\$5,608	\$184,553	\$194,088
State	\$3,456	\$28,857	\$29,233	\$30,064	\$40,414	\$1,057	\$688	\$1,122	\$36,911	\$38,818
Local	\$864	\$7,214	\$7,308	\$7,516	\$10,103	\$264	\$172	\$280	\$9,228	\$9,704

1. Capital costs identified in Chapter 5 of TDP
2. Capital purchases assume 80% funding through FTA, 16% funding from State, and the remaining 4% funding from local government.
3. All costs are in year of expenditure dollars.

Table 6-6: No Service Changes Scenario Capital Funding Plan Summary

	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29
Costs										
Vehicles	\$0	\$171,600	\$178,464	\$0	\$235,142	\$0	\$0	\$0	\$225,814	\$234,846
Passenger Amenities	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Technology	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Marketing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$0	\$171,600	\$178,464	\$0	\$235,142	\$0	\$0	\$0	\$225,814	\$234,846
Anticipated Funding Sources										
Federal	\$0	\$137,280	\$142,771	\$0	\$188,113	\$0	\$0	\$0	\$180,651	\$187,877
State	\$0	\$27,456	\$28,554	\$0	\$37,623	\$0	\$0	\$0	\$36,130	\$37,575
Local	\$0	\$6,864	\$7,139	\$0	\$9,406	\$0	\$0	\$0	\$9,033	\$9,394

1. Capital costs identified in Chapter 5 of TDP
2. Capital purchases assume 80% funding through FTA, 16% funding from State, and the remaining 4% funding from local government.
3. All costs are in year of expenditure dollars.

Table 6-7: Vehicle Funding Plan Summary

	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29
Costs										
Trolley Bus	\$0	\$171,600	\$178,464	\$185,603	\$193,027	\$0	\$0	\$0	\$225,814	\$234,846
Van	\$0	\$0	\$0	\$0	\$42,115	\$0	\$0	\$0	\$0	\$0
Total	\$0	\$171,600	\$178,464	\$185,603	\$235,142	\$0	\$0	\$0	\$225,814	\$234,846
Anticipated Funding Sources										
Federal	\$0	\$137,280	\$142,771	\$148,482	\$188,113	\$0	\$0	\$0	\$180,651	\$187,877
State	\$0	\$27,456	\$28,554	\$29,696	\$37,623	\$0	\$0	\$0	\$36,130	\$37,575
Local	\$0	\$6,864	\$7,139	\$7,424	\$9,406	\$0	\$0	\$0	\$9,033	\$9,394

1. Vehicle costs identified in Chapter 5 of TDP
2. Vehicle purchases assume 80% funding through FTA, 16% funding from State, and the remaining 4% funding from local government.
3. All costs are in year of expenditure dollars.

Table 6-8: Facility and Amenity Funding Plan Summary

	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29
Costs										
Bus Stop Replacement	\$0	\$0	\$4,244	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Bus Stop Shelter	\$20,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Bus Stop Bench	\$1,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$21,600	\$0	\$4,244	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Anticipated Funding Sources										
Federal	\$17,280	\$0	\$3,395	\$0	\$0	\$0	\$0	\$0	\$0	\$0
State	\$3,456	\$0	\$679	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Local	\$864	\$0	\$170	\$0	\$0	\$0	\$0	\$0	\$0	\$0

1. Passenger amenity costs identified in Chapter 5 of TDP
2. Passenger amenity purchases assume 80% funding through FTA, 16% funding from State, and the remaining 4% funding from local government.
3. All costs are in year of expenditure dollars.

Table 6-9: Technology and ITS Funding Plan Summary

	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29
Total Costs										
One-Time Set-Up Fee	\$0	\$0	\$0	\$0	\$1,688	\$0	\$0	\$0	\$0	\$0
Equipment	\$0	\$0	\$0	\$0	\$3,827	\$0	\$0	\$0	\$0	\$0
Installation	\$0	\$0	\$0	\$0	\$1,126	\$0	\$597	\$0	\$0	\$326
Vendor Travel & Expenses	\$0	\$0	\$0	\$0	\$6,753	\$0	\$0	\$0	\$0	\$0
Annual Service Fee	\$0	\$0	\$0	\$0	\$4,052	\$4,173	\$4,299	\$4,428	\$4,560	\$4,697
Total	\$0	\$0	\$0	\$0	\$17,445	\$4,173	\$4,896	\$4,428	\$4,560	\$5,023
Anticipated Funding Sources										
Federal	\$0	\$0	\$0	\$0	\$13,956	\$3,339	\$3,916	\$3,542	\$3,648	\$4,019
State	\$0	\$0	\$0	\$0	\$2,791	\$668	\$783	\$708	\$730	\$804
Local	\$0	\$0	\$0	\$0	\$698	\$167	\$196	\$177	\$182	\$201

1. Technology system costs identified in Chapter 5 of TDP
2. Technology system purchases assume 80% funding through FTA, 16% funding from State, and the remaining 4% funding from local government.
3. All costs are in year of expenditure dollars.

Table 6-10: Marketing Funding Plan Summary

	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29
Costs										
System Map	\$0	\$4,120	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Schedule Brochure	\$0	\$4,120	\$0	\$1,748	\$0	\$1,855	\$0	\$1,968	\$0	\$2,088
Printing	\$0	\$515	\$0	\$546	\$0	\$580	\$0	\$615	\$0	\$652
Total	\$0	\$8,755	\$0	\$2,295	\$0	\$2,434	\$0	\$2,583	\$0	\$2,740
Anticipated Funding Sources										
Federal	\$0	\$7,004	\$0	\$1,836	\$0	\$1,948	\$0	\$2,066	\$0	\$2,192
State	\$0	\$1,401	\$0	\$367	\$0	\$390	\$0	\$413	\$0	\$438
Local	\$0	\$350	\$0	\$92	\$0	\$97	\$0	\$103	\$0	\$110

1. Marketing costs identified in Chapter 5 of TDP
2. Marketing purchases assume 80% funding through FTA, 16% funding from State, and the remaining 4% funding from local government.
3. All costs are in year of expenditure dollars.

Table 6-11: Local Funding Requirements Summary

Scenario	Local Funding Requirements	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29
Existing System	O&M	\$22,002	\$23,631	\$24,676	\$25,947	\$27,263	\$28,629	\$30,087	\$31,594	\$33,149	\$34,756
	Capital	\$0	\$6,864	\$7,139	\$0	\$9,406	\$0	\$0	\$0	\$9,033	\$9,394
	Total	\$22,002	\$30,495	\$31,814	\$25,947	\$36,668	\$28,629	\$30,087	\$31,594	\$42,182	\$44,150
Service Changes	O&M	\$22,002	\$23,631	\$24,676	\$36,123	\$36,838	\$46,338	\$46,746	\$57,588	\$57,744	\$69,041
	Capital	\$864	\$7,214	\$7,308	\$7,516	\$10,103	\$264	\$172	\$280	\$9,228	\$9,704
	Total	\$22,866	\$30,846	\$31,984	\$43,638	\$46,942	\$46,602	\$46,918	\$57,869	\$66,972	\$78,745
Service Changes Increase over Existing	O&M	\$0	\$0	\$0	\$10,176	\$9,576	\$17,708	\$16,658	\$25,995	\$24,595	\$34,285
	Capital	\$864	\$350	\$170	\$7,516	\$698	\$264	\$172	\$280	\$195	\$311
	Total	\$864	\$350	\$170	\$17,691	\$10,273	\$17,973	\$16,830	\$26,275	\$24,790	\$34,595

1. O&M costs identified in Chapter 4 of TDP
2. Capital costs identified in Chapter 5 of TDP
3. Capital purchases assume 80% funding through FTA, 16% funding from State, and the remaining 4% funding from local government.
4. All costs are in year of expenditure dollars.

APPENDIX A: Additional Survey Responses

Q3 Where did you begin your trip? Please indicate the street address, intersection, building, or landmark.

RESPONSE	COUNT
Tom's Cove Campground	9
Chamber of Commerce	6
Don's Restaurant	6
Comfort Suites	4
Funland	4
Main at Church	4
Memorial Park	4
Chincoteague inn	3
Chincoteague Museum	3
Community Center	3
Creamery	3
Pine Grove Campground	3
Wayne at Ridge	3
Beebe Rd at Ridge Rd	2
Hampton Inn & Suites	2
hotel	2
The Village	2
Waterside	2
at the park	1
Beebe Rd	1
Bick Shop	1
carnival grounds	1
Church St	1
Church St Stop	1
Cropper at Main	1
Deep Hole Road, campground	1
Highland Park Dr	1
Ice Cream Shop	1
Main St at Cleveland St	1
Main St Fire Department	1
Main st near a hotel	1
Marriott on Main	1
Movie area	1
My home on Main Street at waters edge drive	1
Park on east side drive	1
Proper at Main	1
Refuge Inn	1

Refuge Inn, Museum of Chincoteague	1
School	1
Taylor	1
Taylor and Main	1
Veteran's Memorial Park	1
Wayne at Chicken City Rd	1
Yes	1
Grand Total	91

Q4 Where did you end your trip? Please indicate the street address, intersection, building, or landmark.

RESPONSES	COUNT
No destination (sightseeing / riding trolley for fun)	19
Memorial Park	7
Island Creamery	5
Main St at Church St	4
Ropewalk	4
Surfside minigolf	4
Mr. Whippy	3
Carnival Grounds	3
Bills PRIME Seafood and Steaks	2
Chamber of Commerce	2
Chincoteague Inn	2
East Side Drive	2
Maria's Restaurant	2
Chincoteague Museum	2
Downtown	2
7075 bond street	1
AJ's	1
AJs, Ettas and sometimes just to ride the trolley	1
Bills - Main Street	1
BYOC	1
Carnival	1
Carnival or Island Creamery	1
Community Center	1
Deephole	1
Don's Restaurant	1
Ettas	1
Ice Cream Shop	1
Maddox	1
Main Street	1
McD's - Maddox	1
Movie area	1
Pico Taco's	1
School	1
Steamers	1
Taylor and Main	1
The Brant	1
Tom's Cove	1
Town	1
Grand Total	86

Q13 Please suggest a location that the trolley should serve, but currently does not.

RESPONSES	COUNT
Beach	5
Curtis Merritt Harbor	5
Assateague Island	1
Beach, refuge visitor center	1
Church Street, Further North & South, Ridge Road	1
Church Street, Ridge Road	1
Come consistently to Pine Grove, sometimes over an hour or more and no trolley, a real problem during carnival this summer	1
I don't know, maybe some family restaurants	1
My house	1
None	1
North Main St north of the school	1
Op shop	1
Ridge Road	1
I don't know where it serves	1
Marina Bay Hotel & Suites	1
Na	1
Grand Total	24

Q15 What could Chincoteague do to attract you to ride the trolley?

#	RESPONSES
1	Advertise it more
2	Does it offer an island tour?
3	Extend the time it's available in September to include daytime hours.
4	Offer disabled people more convenient pick up points
5	promote the trolley better. i don't know where it picks up or where it stops or when it runs or what it costs
6	Start before 5 PM

Q17 Please tell us about the places in Chincoteague you go most frequently. Please indicate street address, intersection, building, or landmark.

Type	Percent	Count
Home/hotel	54%	37
Work	6%	4
School	6%	4
Shopping	52%	36
Social/Recreation	51%	35
Healthcare/Social Services	0%	0
Other	20%	14

Q17 Please tell us about the places in Chincoteague you go most frequently. Please indicate street address, intersection, building, or landmark.

#	Home/hotel	Work	School	Shopping	Social/Recreation	Healthcare/ Social Services	Other
1				yes	yes		
2	Refuge/Best Western		Downtown				
3					yes		
4	Hampton Inn			Here And There			Events
5				yes	yes		
6				yes	yes		
7				downtown	maddox		
8				yes	yes		church
9				yes	yes		church
10				yes	yes		
11							I frequent most all businesses since I live here
12		Wallops	Chincoteague high				
13	Hampton Inn			Downtown	Daisy Boat Tour		
14					Everywhere		
15				Down town			
16	5321 Cedar Drive			Church St Produce	mini golf courses, CNWR		Pico Taqueria, Mr. Whippy
17				Main Street	Memorial Park, Robert Reed Park		
18				Maddox	Beach		
19	East side drive				Main Street		Beach
20	Quillen Drive			Main Street	Libertino Lanes		
21	Choice Comfort Suites			All over the town	Aesetique and Chincoteague		
22	Marina suites				Park		
23	Waters edge drive			Main St/ Maddox, Ace hardware	Ettas, AJs, Dons, Bills, Ropewalk		
24	Hampton Inn						

25	north main	deep hole rd					
26				Main Street	Carnival		
27	Inlet View Campground			Island Valu, Dollar General, Creamery	Curtis Meritt Harbor		
28				Main St, Maddox Blvd			
29	Days Inn Chincoteague			Pony Tails, The Brant, Main Street Mall, Sunations, Captain Steve's Bait and Tackle, Sundial Books, The Blue Crab	Church St farmer's market		
30				Brant, Events (Blueberry Festival)	Carnival, Creamery, Memorial Park, Downtown		
31	Island Getaways			Brant			
32	friends house next to the park			Sundial books, island creamery	beach, bike rental		
33							just ride
34	Memorial Park			Pony tails, whippy, BYOC			
35	Memorial Park			Island Grocery Store	Mini golf		
36	Waterside (vacation)						
37				dollar general / family dollar			
38	Condo Stay Bay						
39	Condo Bay Sunset						
40	Dove Winds			The Brant	The Park (Downtown)		
41	Dove Winds			The Brant,downtown			
42				Brant	AJ's - Steamers		
43					Mr Whippy's		Toms Cove
44	Comfort Suites						
45	Comfort Suites						

46							the beach
47				The dollar store, lowes, Ace			
48							food
49							Restaurants - Bills Prime, Creamery
50	NY	None	high school				
51	Comfort Suites	None/Mo unt Sinai NYC					
52	Refugee Hotel				Beach, restaurants		
53					Creamery, Pico Taco, Whippie, Ropewalk		
54					Creamery, Pico, Ropewalk area		
55	Myrtle Lane				Restaurants, beach		
56	Vacation house						
57				all shopping			
58			Athena Middle School	Sunsations			
59				All stores			
60	Tom's Cove						
61	Toms Cove				Mini golf		food, mr whippies
62	Tom's Cove				Mini golf		
63	Toms Cove Park			Brant, Island time pony trails	beach, assateague island		
64	Tom's Cove			all shopping areas			
65	Hampton						
66	Hampton Inn						
67							Nature walks
68				Main Street	Golf		beach
69	Oyster Bay						

Q25 Please provide any additional thoughts or recommendations you have about the trolley.

#	Responses
1	KOA trolley seems to run often and more routes. Not pet friendly, sad. Go Double Deck.
2	Have the trolley run all day throughout the summer season
3	Extend to Harbor
4	The trolley is a fantastic way to get around the island. It is great for sightseeing and helps to eliminate street congestion during the summer months. The drivers have all been very friendly and helpful. We have been vacationing on Chincoteague for many years and ride the trolley each time. Thank you for this wonderful service!
5	Love this place and visit 3 or 4 times a year
6	Would like to have trolley schedule and stop locations. W.T.Lore, 2049 Pennsylvania Ave., St. Albans, WV 25177
7	During carnival nights this summer, often times the trolley would never show up at Pine Grove after 7pm. Very inconsistent between 7 and 9pm. My guess is if someone wasn't getting off at Pine Grove, they didn't come for pick up. This created many stressful times for my daughter who doesn't drive and relies on the trolley. Also, it comes roughly on the hour and 15 after the hour at Pine Grove -maybe spread it out a little more. Thank you!
8	Never change. We love it.
9	Narrated route with microphone, daytime service, trolley service to beach.
10	We like it
11	Great service, friendly drivers, fun family experience!
12	trolleys are too cold.
13	:)
14	Nice trolley. Well Maintained. More stops. More frequent.
15	More frequent stops, increase hours. otherwise excellent service.
16	Dezzy is my favorite trolley driver, however they are all very kind. I don't have any recommendations. Everything goes smoothly.
17	The trolley drivers are very kind and informative. Dezzy is our favorite though! He is informative and encourages us to attend college and get a job :)
18	I think it's very clean, inexpensive and drivers are very friendly and accommodating.
19	Love the trolley!
20	Loved the ride
21	Every driver is friendly, polite, informative, pleasant. Great service, meets all needs!! Love it
22	It's perfect the way it is. It's awesome :)
23	A Trolley to the beach
24	Trolley to the beach
25	Trolley to the beach.
26	keep up the good trolleys, keep improving and always keep the trolleys good.
27	Maybe the driver could point out some of the historical sites along the route.

28 The trolley is fun

29 We take the trolley for fun

30 Actual trolley timing does not consistently match posted schedule, which can make it a bit frustrating to wait at trolley stops not knowing when it will arrive.

31 We love the trolley and we are happy the town offers his service.

32 Good Job

33 Thank you :)

34 Super easy to use and reliable

35 Thanks for a great ride!

36 I took the trolley for pleasure. It was a little too cold. Driver was friendly.

37 Driver very friendly. Trolley is beautiful! Two routes is confusing. All was fine but Church St stop marker was kind of incognito with a 1027 schedule stapled to it. A/C was a tad too cold.

38 Really enjoyed the ride

39 Part of our visit for the past 6 years the kids take the ride.

40 Driver was very friendly

APPENDIX B: Six-Year Retrospective of Finances

Six-Year Retrospective of Operating Revenues

Fiscal Year	Farebox Revenue	Federal	State	Local	Other	Total
FY14	\$5,965	\$31,923	\$15,052	\$21,198	\$0	\$74,138
FY15	\$7,586	\$37,249	\$15,391	\$30,377	\$0	\$90,603
FY16	\$8,302	\$34,573	\$13,998	\$21,877	\$0	\$78,750
FY17	\$6,985	\$40,696	\$19,541	\$21,155	\$0	\$88,377
FY18	\$7,586	\$37,249	\$15,391	\$30,377	\$0	\$90,603
FY19	\$6,636	\$43,237	\$18,159	\$22,482	\$0	\$90,514

1. FY14-18 data collected from National Transit Database
2. FY19 data from FY20 TDP update

Six-Year Retrospective of Capital Revenues

Fiscal Year	Farebox Revenue	Federal	State	Local	Other	Total
FY14	\$0	\$0	\$0	\$0	\$0	\$0
FY15	\$0	\$0	\$0	\$0	\$0	\$0
FY16	\$0	\$50,761	\$24,680	\$13,950	\$0	\$89,391
FY17	\$0	\$0	\$0	\$0	\$0	\$0
FY18	\$0	\$0	\$0	\$0	\$0	\$0
FY19	\$0	\$0	\$0	\$0	\$0	\$0

1. FY14-18 data collected from National Transit Database
2. FY19 data from FY20 TDP update



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