



Jimmy Carter National Historic Site

Transportation Assistance Group Report



Entrance to Plains High School

Source: National Park Service photographs (September 2016)

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Contents

Contents	ii
Report notes	iii
Acknowledgments.....	iv
Definitions.....	v
Introduction	1
Overview of Jimmy Carter NHS	3
Assessment of Limited Time Visits	8
Assessment of Pedestrian Safety when Crossing US 280	11
Assessment of Wayfinding Issues	15
Assessment of Issues related to Pedestrian Environment	22
Assessment of Bicycle and Recreational Issues.....	25
Assessment of Transit Options	31
Conclusion	44
Appendix A: Participant List	47
Appendix B: Agenda.....	49
Appendix C: Self-Guided Tour of Plains, Georgia Map	50
Appendix D: Kim Fuller’s Guide	51
Appendix E: Existing Park Map.....	52
Appendix F: Survey Questions.....	53
Appendix G: Proposed Bicycle Routes in Greenprint	55

Report notes

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The authors would also like to thank the participants of the stakeholder group for providing insight and feedback. A full list of participants is in Appendix A.

Definitions

The following terms are used in this report:

AADT	Annual Average Daily Traffic
DOT	Department of Transportation
FLAP	Federal Lands Access Program
FLTP	Federal Lands Transportation Program
GDOT	Georgia Department of Transportation
NHS	National Historic Site
NPS	National Park Service
O&M	Operations and Maintenance
RTCA	Rivers, Trails, and Conservation Assistance Program
RVRC	River Valley Regional Commission
STIP	State Transportation Improvement Program
TAG	Transportation Assistance Group
U.S. DOT	United States Department of Transportation

Introduction

The Jimmy Carter National Historic Site (NHS), a National Park Service (NPS) site, was established in 1987 in Plains, Georgia.¹ The Park currently comprises four distinct sites associated with former President Jimmy Carter: the Boyhood Farm where he was raised, located in Archery, the city neighboring Plains; the Plains Depot, which was the headquarters of his 1976 Presidential Campaign; the former Plains High School, where he attended grades one through 11; and the Carter Compound, the house where the former President currently resides. This last site is closed to the public as the Carters are in residence; the other three sites are open to the public. The four sites are located within 2.5 miles of each other across Plains and Archery, on separate parcels of land.

The disconnected nature of the three publicly accessible sites, which are integrated with the commercial and residential areas in Plains, makes facilitating visitor movement among them challenging. Furthermore, the sites sit on either side of US 280, a major road and US highway running through Georgia and Alabama. Navigation and safety for visitors are therefore major concerns for the Park.

The legislation that established the park included a clause requiring the NPS to consider “the economic feasibility and interpretive necessity of providing a transportation system for visitor use.”² The NPS Southeast Region convened a Transportation Assistance Group (TAG) to fulfill the requirements of the enabling legislation and discuss issues related to improving the ease and safety of moving among the park sites.

The TAG included representatives from the Southeast Region Office; the Jimmy Carter NHS staff; the River, Trails, and Conservation Assistance Program (RTCA), an NPS program dedicated to working with communities surrounding National Parks to develop plans for improved alternative transportation and recreation; and the U.S. Department of Transportation’s (U.S. DOT) Volpe Center.

On July 26, 2016, the TAG met with a group of stakeholders including the former President and First Lady, the Georgia Department of Transportation (GDOT) and the Georgia Department of Economic Development; representatives of Sumter County government; the River Valley Regional Commission (RVRC), the regional planning organization; and organizations from the City of Plains to discuss relevant issues and identify actions to address the mobility and safety challenges. Appendix A provides a full list of participants and Appendix B provides the agenda of the stakeholder meeting. The meeting participants discussed specific needs, constraints, and opportunities, and developed a list of next steps related to mobility and safety. The TAG met the following day to consolidate the ideas and next steps discussed at the stakeholder meeting.

Following an overview of the site, this report discusses the current conditions, provides relevant analysis, and synthesizes the recommendations and next steps identified during both these meetings for the following topics as they relate to mobility and safety:

- **Limited Time Visits: SAM Shortline and Motorcoach Tours:** The train layovers and motorcoach tours provide visitors with a limited time to visit the Park sites and local destinations.
- **Pedestrian Safety when Crossing US 280:** Pedestrians need to cross US 280 to access Plains High School from downtown Plains and vice versa, but the pedestrian conditions and lack of pedestrian infrastructure make crossing unsafe.
- **Wayfinding Issues:** Visitors have difficulty navigating among park sites and Plains attractions, even when they are within walking distance of one another.
- **Pedestrian Environment Issues:** Pedestrian facilities do not provide for a comfortable walking experience.

¹ 101 STAT. 1434, Public Law 100-206, published December 23, 1987.

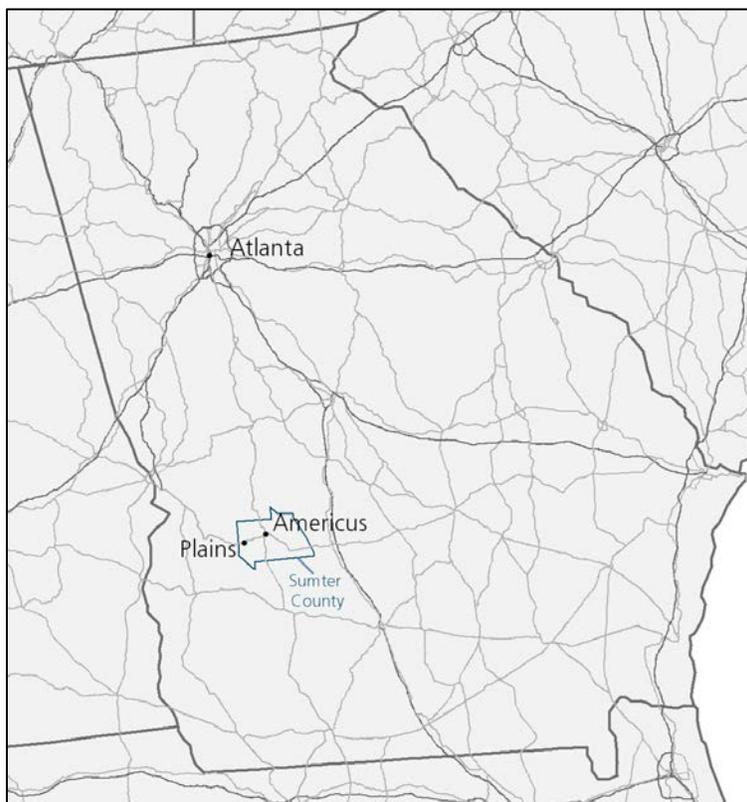
² 101 STAT. 1434, Public Law 100-206, published December 23, 1987.

- **Bicycle and Regional Recreation Issues:** The Plains area lacks bicycle infrastructure for residents and visitors alike.
- **Transit Options:** A variety of transit and/or motorized tour services and routes could improve mobility between sites, as well as the experience for Park visitors.

Overview of Jimmy Carter NHS

The Jimmy Carter NHS is in Plains, Georgia, a city located on the west side of Sumter County, approximately 150 miles southwest of Atlanta (Figure 1). Sumter County has a population of around 33,000 people, of which almost half live in Americus, the county seat located 10 miles east of Plains. Economically, the county relies largely on agricultural production of peanuts, cotton, and other crops. However, in more recent years, tourism has emerged as a contributor to the economy. The City of Plains has a population of around 700 people and is most well known for (1) being home to the former President and (2) its peanut production and processing industry.

Figure 1
Context Map



The Jimmy Carter NHS comprises four sites, three of which are open to the public. Each site features exhibits focusing on different time periods and aspects of the former President's life:

- **Plains High School** contains exhibits that tell the story of President Carter's life chronologically, from boyhood to the Presidency and post-Presidential years.
- **Boyhood Farm**, contains exhibits about the home and farm where the former President lived when he was a child in the 1930s.
- **Plains Depot** contains exhibits describing the successful presidential campaign in 1976.

Visitors to the Jimmy Carter NHS have the opportunity to learn about the community of Plains since the units of the site are woven through the town. As each Park site focuses on a different time period, visitors can gain perspective on how the town and region has changed over time. While the city's historic downtown and other points of interest are not part of the Park, they lie within the Jimmy Carter

Preservation District that was co-created with the National Historic Site. These sites enrich the visitor experience as they provide added context about the history of Plains.

Figure 2
Jimmy Carter NHS

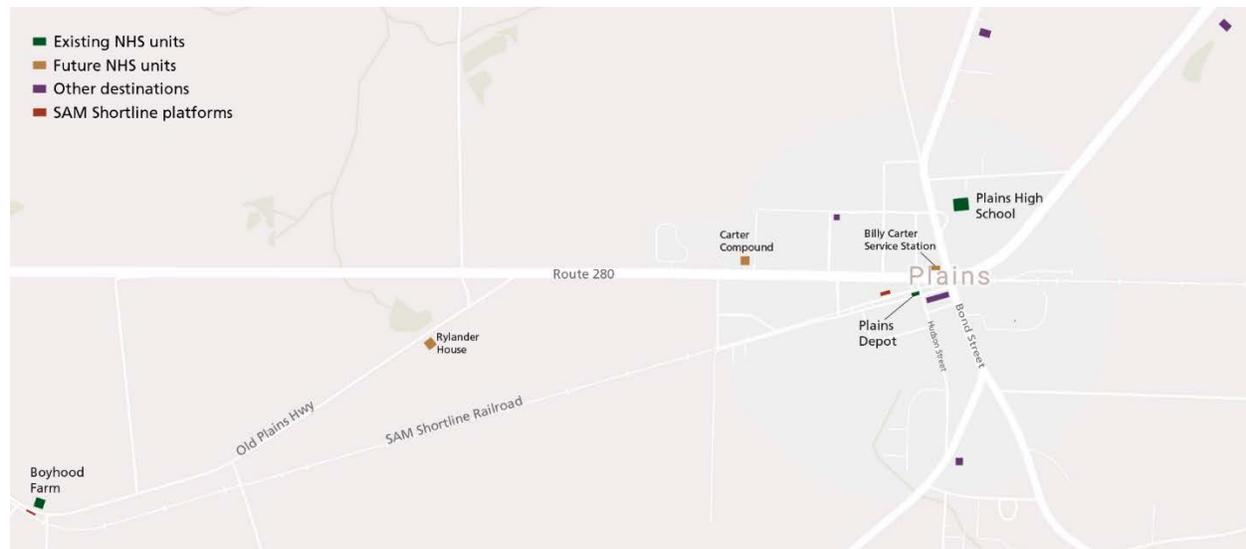


Figure 2 illustrates the locations of the Park sites open to the public. Plains High School, which serves as the Welcome Center for the park, is located north of US 280 on Bond Street. Plains Depot (located just south of the tracks on Main Street), the modern train platform (located north of the tracks in the Plains City Park), and the historic downtown are all south of US 280, about one quarter of a mile from Plains High School. The Boyhood Farm is located 2.7 miles southwest of Plains on Old Plains Highway.

Figure 2 also shows the locations of other points of interest. The modern train platform on the north side of the tracks serves passengers riding the SAM Shortline, an excursion train that runs across Sumter County. The historic downtown, also south of the tracks and east of the Plains Depot, features a hotel and block of shops that cater to Park visitors and tourists visiting the area,³ including a highly frequented shop selling peanuts, peanut paraphernalia, and peanut butter ice cream; a café; and a few shops selling political memorabilia, antiques, and merchandise. Plains has a number of other points of interest, such as the public housing unit where the former President and First Lady lived for a period of time and churches with historical significance. The Self-Guided Tour of Plains provides information about additional points of interest, including a total of 33 destinations (Appendix C). Finally, a Georgia State Welcome Center is located about a mile east of Plains on US 280. The Welcome Center provides maps and information to area tourists that help them orient to the region.

Finally, Figure 2 identifies two locations that the National Park Service may incorporate into the Park within the next 10 – 15 years, pending legislation to support park expansion:

- **The Rylander House**, where the Carters lived for a period of time; and
- **The Billy Carter Service Station**, which is currently the offices of the Plains Better Hometown Board, a local neighborhood organization represented at the stakeholder meeting.

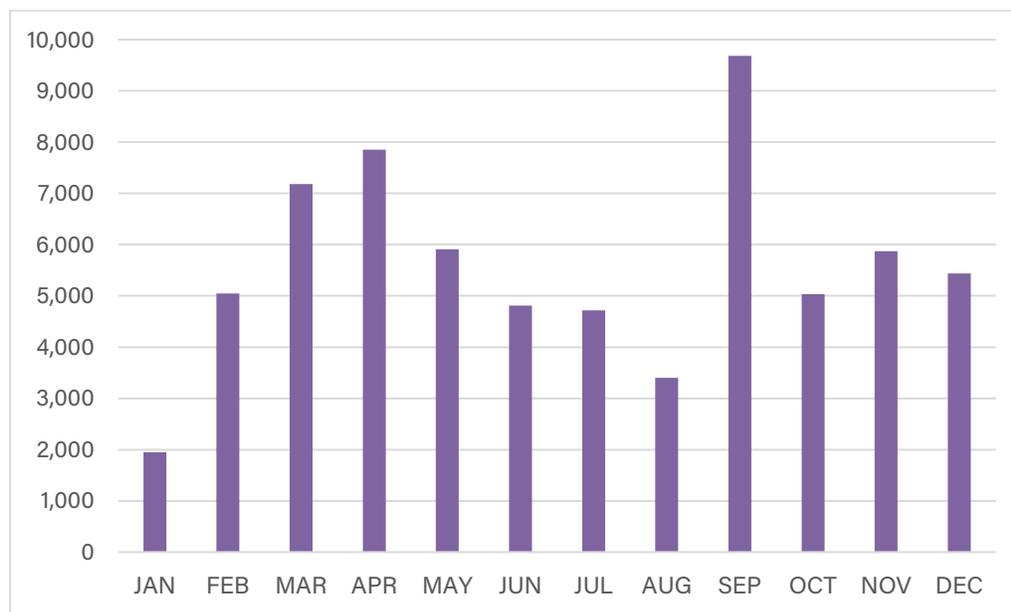
³ Some tourists visiting the area do not visit the Park sites. This report will refer to these visitors as “area tourists” and refer to people who visit the Park as “Park visitors.”

Additionally, the Park will manage the Carter Compound for public visitation in the future. The Compound, which does not have existing parking, is located approximately three-quarters of a mile from Plains High School and half a mile from the SAM Shortline platform. The Rylander House, which also has limited opportunity for parking, is located approximately one and a half miles from Plains High School and one and a third miles from the train platform. The Billy Carter Service Station, located on the north side of US 280 between Bond and Hudson Streets, is a four minute walk from Plains High School and a two minute walk from the SAM Shortline platform. Visitors coming from the SAM Shortline would need to cross US 280 to reach the site.

Visitation to the Jimmy Carter National Historic Site

Since 2009, between 60,000 and 70,000 people have visited the Jimmy Carter NHS each year. The majority of visitors are students on educational trips, older adults and retirees, families, and people on regional group tours. Visitation rates vary throughout the year due to weather, vacation patterns, and school trips. Figure 3 illustrates the average monthly visitation since 2009, showing that September and the spring months are the most popular for visitors. During January and the summer months, likely due to weather and the lack of school visits, the park has had lower visitation numbers.

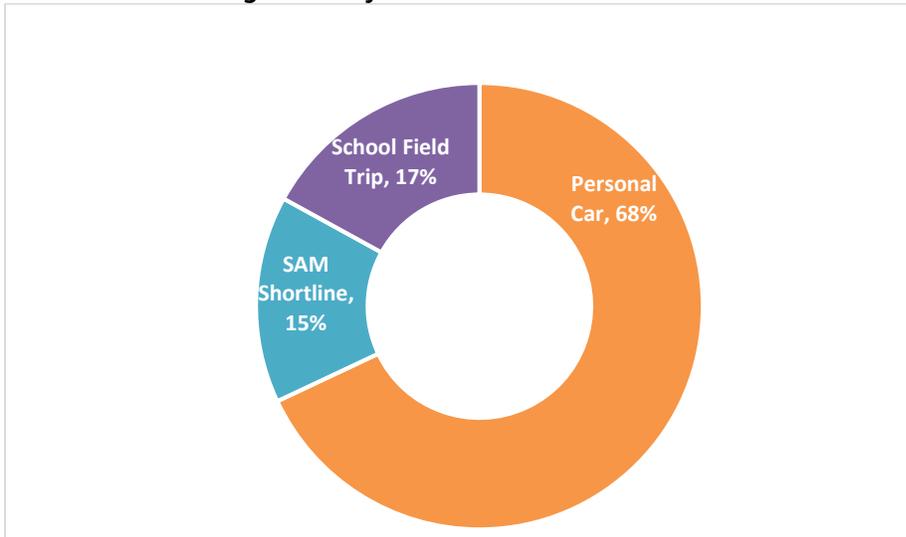
Figure 3
Average Monthly Visitation (2009 – 2015)



Visitors come to the Park and the City of Plains by personal vehicle, the SAM Shortline excursion train, motorcoach or school bus through group trips, or for special events (Figure 4).

The TAG and stakeholders estimate that the majority of visitors to the Park and Plains come from outside the South Georgia region. They discussed how many visitors come to the area from the northern part of Georgia or other parts of the Southeast and Florida on day or overnight trips. These people aim to visit a number of sights in the region during their stay or while on a tour. In some cases, visitors tour the region on motorcoach bus tours that have a set itinerary.

Figure 4
Methods of Arriving to Jimmy Carter NHS



Visitors Using Personal Vehicles

The majority (approximately 68%) of visitors arrive by personal vehicle. Visitors arriving by personal vehicle include elderly or retired people and families. Many elderly or retired people visit the Park on their way to or from spending the winter in the South. Plains High School provides ample parking, with a total of 45 spaces available for cars. Additionally, the historic downtown has parking available both in front and on the side of the block of shops. As discussed above, the future additional sites will have limited, if any, parking available, which highlights the need for exploring expanded options for moving among the current and future sites.

Visitors Using SAM Shortline Train

About 15% of visitors arrive on the SAM Shortline, an excursion train operated by the Georgia Department of Natural Resources State Parks and Historic Sites that runs from Cordele, a city to the east of Plains, to Plains or the Boyhood Farm on Fridays, Saturdays, and during select events.

SAM Shortline riders include older adults and retirees, families, and students on school field trips. The train runs different itineraries that each stop in multiple locations and have one or more layovers, where the train waits as riders disembark to explore the area. The trains typically leave Cordele between 9:30 and 10am and return between 3 and 4:30pm, thus operating 5 to 6 ½ hour long trips. The train runs seven itineraries, five of which include a layover in Plains and one of which includes a layover at the Boyhood Farm. The layovers in Plains are between one and two hours and the one at the Boyhood Farm is 45 minutes.

The train can carry up to 400 passengers and will adjust the number of rail cars on a trip depending on the number of passengers that reserve space using an online reservation system. In 2015, approximately 9,000 passengers visited Plains and 2,000 visited the Boyhood Farm using the SAM Shortline, meaning each train trip to Plains averaged 150 passengers and each trip to the Boyhood Farm (which also includes a layover in Plains) averaged 200 passengers.

SAM Shortline works with the Park staff and Plains to provide train service during special events. The train also distributes the schedule in advance so that the Park and other local businesses can prepare for the influx of visitors during a layover.

Visitors Arriving by Motorcoach

About 17% of visitors come to the Park during school field trips or group trips that arrive by motorcoach bus. In some cases, the schools or groups will be attending a multiday tour of the region organized by a motorcoach company or a tour company that has contracted a motorcoach bus. In other cases, the visitors will be on a day trip just to Plains or that visits both Plains and the nearby Andersonville NHS. Many of the school trips visit the Boyhood Farm because it provides school-aged children the opportunity to learn about farming and rural life in the early 20th century. The adult group tours sometimes solely provide in-vehicle only tours of the area, particularly when they only have a limited time to visit Plains before moving to the next destination.

The Plains High School parking lot contains four tandem spaces for buses. The Jimmy Carter NHS would like to restripe the parking area to increase the number of bus parking spaces by two for a total of six oversized vehicle spaces to better accommodate these tours.

Visitors Attending Special Events

The Jimmy Carter NHS and the City of Plains host a number of special events throughout the year which attract visitors. This report will not focus on transportation issues related to these events, but rather will focus on issues related to day to day operations.

Assessment of Limited Time Visits: SAM Shortline Layovers and Motorcoach Tours

The TAG and stakeholders discussed the challenges SAM Shortline passengers face visiting different destinations during the train layovers. After the meeting, Volpe followed up with other stakeholders to learn more about these issues and about the motorcoach tours that come through Plains. This report combines the discussion of these two topics because they present a similar issue related to the time visitors have to visit the Park and other destinations. The following sections discuss current conditions and next steps related to types of trips.

Current Conditions

The SAM Shortline and the regional motorcoach tours both involve a timing issue: visitors traveling to Plains using these services only have a limited time to spend at the Park and in the surrounding area. However, each service also presents particular challenges.

SAM Shortline Layovers

During SAM Shortline layovers in Plains, between 150 and 200 people exit the train to explore the city for between an hour and a half and two hours. The passengers spend their time either (1) eating at a local restaurant, (2) visiting Plains High School (about a quarter mile from the platform), or (3) buying peanut butter ice cream and visiting the local shops. The experience resembles the choice tourists on cruise ships make when stopped at destinations and ports and are unable to see all the attractions in a short visit. The challenge is in part unavoidable – passengers will need to make a choice about how to spend their time. The particular challenges related to timing and lack of information related to SAM Shortline layovers are as follows:

- Timing
 - Passengers are typically hungry when they arrive in Plains because the layover is during lunchtime. Passengers prioritize going to the local restaurants in Plains over visiting Park sites. SAM Shortline does not allow outside food and beverage on the train, but does offer Chick-Fil-A sandwiches in a café car. However, the train usually arrives in Plains around 11:30am and departs around 1pm, so it works well for passengers to eat during the layover. Even though the local restaurants are prepared for the influx of visitors because they are aware of the train schedule, it is time consuming to cook to order and serve that many people in a short amount of time.
 - Passengers are concerned they will not be able to walk to and from Plains High School in time to board the train before it leaves.
- Lack of information
 - Passengers do not realize the time it will take to eat at a restaurant and do not have time to visit the Park sites after eating.
 - Passengers do not know about all the destinations to see in Plains.

Currently, Kim Fuller, a representative of the Friends of the Jimmy Carter NHS, addresses the lack of information by distributing a handout (Appendix D) that details the walking time to Plains High School, the Carter Compound, and the historic downtown from the platform. The handout does not indicate a recommended amount of time for visiting each site, but it helps passengers determine whether they have time to walk to different destinations during the layover. However, the Park and local stakeholders can pursue the additional actions discussed in the next steps section to expand the options for visitors during these short layovers.

Motorcoach Tours

Day-long or multi-day motorcoach tours for school aged children and adults visit the Jimmy Carter NHS and other sites in the region. Much like the SAM Shortline layovers, these tours have long itineraries and

can therefore only spend a limited amount of time in Plains. Furthermore, the tour organizers might not be familiar with all of the destinations in Plains and might not allocate enough time to visit them.

Some of the motorcoach tours provide in-vehicle-only tours, or provide a limited time for passengers to visit one site (for example, the historic downtown, Plains High School, or Boyhood Farm). Some hire Jan Williams, a resident of Plains and owner of the Plains Inn and Antique Store, to provide a “step-aboard” 30- 45 minutes in-vehicle-only tour aboard the motorcoach. Jan’s tours do not include visits to NHS sites, but may start or end at one (such as Plains High School). The details of this tour are discussed in the “Assessment of Transit Options” section of this report. Jan advertises her tour through word-of-mouth, often contacting the motorcoach companies who operate the tours directly.

Next Steps

The following recommendations were developed based on discussions with stakeholders and the TAG. The Jimmy Carter NHS staff and other key stakeholders can pursue them to improve the ability of SAM Shortline passengers and motorcoach tourists to visit the Park and destinations in Plains. These stakeholders can pursue these initiatives within the next year, as they do not require long term planning to develop.

Send Information about Park Sites to Motorcoach Companies

Jan Williams recommended that the Jimmy Carter NHS staff contact and send information about the Park to the motorcoach companies that run the regional tours. Such information could include recommendations about how much time to allow tourists to spend at each site and what to do at the different locations. Even in the cases when the motorcoach companies do not provide the tour, but are contracted by a tour company, the motorcoach companies can provide this information to the tour companies.

Furthermore, the Park can coordinate with Jan Williams’ and other similar services to ensure these groups and Park visitors know about all of the options for spending time in and around Plains and the NHS.

Distribute Map and Information on Train

SAM Shortline could distribute Kim Fuller’s guide, the Park map, and/or a new brochure with information to interested passengers on the train so that they could prepare for how to spend time during the layover before arriving in Plains. Jimmy Carter NHS or the Friends of the Jimmy Carter NHS could develop a new brochure that clearly lays out the options for passengers so that they understand how much they can see in the time of the layover. They could provide the maps or brochure to the SAM Shortline for distribution. This initiative would address the lack of information passengers have about the different sites in Plains.

Lengthen the SAM Shortline Layovers

Time is the underlying issue related to the layovers. Expanding the layover time by 15 or 30 minutes for certain itineraries would allow passengers to visit more sights in Plains. At the stakeholder meeting, Terry Miller, Manager of the SAM Shortline, discussed how the current itineraries, which range from five to six and a half hours, are already the maximum length that an average passenger would like to spend. However, some of the itineraries are shorter than others. The SAM Shortline could test lengthening the “Watermelon Express,” which is currently five hours and 35 minutes or the “Plains Express,” which is currently five hours. Since both of these train rides are shorter than the longer itineraries, it would be feasible to add 15 or 30 minutes to the layover in Plains. However, SAM Shortline would need to identify how this initiative would impact staff costs to determine if it is feasible.

Offer Pre-Packaged Lunches to Passengers Exiting the Train

If passengers could immediately purchase a boxed lunch or pre-packaged sandwich from a local vendor, they could eat more quickly than if they wait for service in a restaurant. They would then have more time to visit other sites, such as the Plains High School or Depot.

To make the process even easier, local restaurants could work with SAM Shortline to allow passengers to pre-order lunches when they reserve train tickets. They would then know how many lunches to prepare, and could also prepare extras for those that did not pre-order, but might decide to make a purchase when they exit the train.

Logistically, this initiative would require permission from the City of Plains to sell these lunches in the Park where the SAM Shortline Platform is located and for restaurants to obtain a cooler or storage for the lunches. Alternatively, restaurants could offer the lunch pick up on their premises, where they have seating and air conditioning. Even if area tourists eat in the restaurant, allowing them to pre-order would reduce the amount of time spent waiting for food to be prepared, therefore giving them more time to explore Plains.

Table 1
Summary of SAM Shortline and Motorcoach Company Next Steps

	Key Players	Recommendation	Timeline	Funding Sources
Information for motorcoach companies	Jimmy Carter NHS staff/Friends of the Jimmy Carter NHS	Contact and send information about Park to the motorcoach companies	Within 1 year	Negligible funding needed, Park staff would compile
Distribute Information	Jimmy Carter NHS staff/Friends of the Jimmy Carter NHS, SAM Shortline	Distribute maps or a brochure to passengers on board the train	Within 1 year	Internal Park or organization funding
Longer Layovers	SAM Shortline	Pilot lengthening the layover in Plains for select itineraries	Within 1 year	Costs borne by SAM Shortline operations/passengers
Packaged Lunches	Local restaurants, SAM Shortline	Offer pre-packaged lunches to passengers exiting the train	Within 1 year	Costs borne by local restaurants

Assessment of Pedestrian Safety when Crossing US 280

The TAG and stakeholders discussed improving safety for pedestrians crossing US 280. Pedestrians must cross this road in order to walk between Plains High School and Plains Depot, the current train platform, and the historic downtown. Providing safe, comfortable conditions for crossing this route is therefore a priority for the Park.

The stakeholders and TAG identified crossing US 280 as a major barrier to connecting the Park sites and other destinations, citing the lack of adequate pedestrian facilities and the frequent truck and other traffic traveling on US 280 as contributing factors. Safety improvements that address these issues will help encourage visitors to walk between sites on either side of US 280.

Current Conditions

Downtown Plains has two intersections where pedestrians can cross US 280: Bond Street and Hudson Street (Figure 5). Neither intersection has a crosswalk across US 280 nor across Bond or Hudson Street. The intersection at Bond Street and US 280 has a flashing light for vehicle traffic and sidewalks along both sides of US 280 and on both sides of the northern portion of Bond Street. It does not have a sidewalk on either side of Bond Street on the south side of US 280. At both intersections, pedestrians must cross the railway tracks that run almost parallel to US 280. Additionally, the southwest side of the intersection at Bond Street presents a difficult maneuver for pedestrians, as they must cross the railroad tracks and the turn lane onto Main Street.

Figure 5
Pedestrian Crossings at US 280



Source: Volpe

US 280 has a speed limit of 35 mph in Plains and 55 mph outside the City.⁴ In 2013, GDOT traffic count stations along US 280 reported Annual Average Daily Traffic (AADT) between 2,800 and 3,000, with between 14 and 24% truck traffic. In addition, 2013 data reported between 1,210 and 1,320 AADT on Bond Street at the intersection with US 280, with between 7 and 10% truck traffic. During October and November, the peanut processing plant located on US 280 just east of the intersection with Bond Street is in operation. This means that trucks carrying peanuts to and from the plant use US 280 to access it, creating additional truck traffic.

Stakeholders from Plains discussed pedestrian concerns with crossing US 280 given the speeds and truck traffic. Elderly visitors to the Park and families have particular difficulty, as they require more time to cross.

Figure 6
Truck Crossing Intersection of US 280 and Bond Street



Source: Volpe

⁴ GDOT periodically reviews speed limits and sets the speed limit as the 85th percentile of the observed road speed.

Next Steps

The stakeholders and TAG discussed a number of options for improving the intersection at US 280 and Bond Street with the representatives from GDOT, such as installing a crosswalk or a High-Intensity Activated crossWalk (HAWK) signal (a traffic signal that activates for road traffic to stop when pedestrians push a button). The representatives from GDOT reviewed some of the benefits and drawbacks of the various options, including issues related to perceptions of safety and the liability concerns related to installing pedestrian facilities. For example, some pedestrian facilities, such as HAWK lights, can increase the perception of pedestrian safety to the point where pedestrians reduce their attention to safety. Furthermore, in cases where agencies implement new or unexpected pedestrian signaling, drivers may not comply since they are not expecting a signal at that location.

The GDOT representatives determined that they would discuss potential alternatives with the relevant internal departments and identify a feasible option within 60 days. Since the meeting, GDOT representatives identified the following solution: they will install a pedestrian crosswalk with a rectangular rapid flashing beacon at the intersection of US 280 and Bond Street (Figure 7). GDOT expects to program and build this project after January 2017.

Figure 7
Rectangular Rapid Flashing Beacon



Source: http://mutcd.fhwa.dot.gov/resources/interim_approval/ia11/stpetersburgpt/intro.htm

Table 2
Summary of Safety Next Steps

	Key Players	Recommendation	Timeline	Funding Sources
US 280 Pedestrian Crossing Improvement	GDOT	Identify and implement pedestrian safety improvement	60 day (alternatives) 1 – 2 year (implementation)	GDOT funding sources

Assessment of Wayfinding Issues

Two of the Jimmy Carter NHS destinations, Plains High School and Plains Depot, and additional points of interest in Plains are within walking distance of one another, as they are separated by less than a quarter mile. As can be seen in Figure 2, there are a number of local points of interest close to downtown in addition to the current and potential Park sites. The future Park site at the Carter Compound is within three quarters of a mile of the other sites, which could be a feasible distance for visitors that are able and interested in walking.⁵ Since this site will have limited parking, it will be important to consider alternative means of access including walking.

Despite the feasibility of walking between these sites, the stakeholders and TAG discussed how the lack of clear wayfinding between the locations presents difficulties for pedestrians. The group identified the key challenges and discussed short and long term next steps to improving navigation among the sites.

Current Conditions

This section discusses both vehicle-oriented and pedestrian-oriented wayfinding conditions for two reasons: (1) a coordinated solution to navigational issues for pedestrians and for drivers trying to locate the Park will produce a more uniform system of wayfinding and (2) many of the pedestrians needing improved wayfinding arrive by car. Figure 8 highlights existing signage and key barriers to wayfinding.

Figure 8
Existing Signage and Barriers to Navigation



Source: Volpe

⁵ The Visitor Survey, discussed in “Next Steps,” will gather more information about whether or not visitors find this a walkable distance.

Vehicle-Oriented Wayfinding

Vehicle signage begins as far as 40 miles away on all approaches to Sumter County, including State and Federal highways, and continues to the edge of town. Plains is prominently identified as the home of former President Jimmy Carter, including through a banner on the historic downtown buildings. Plains High School and the Boyhood Home have prominent NPS signage. However, wayfinding signage in and around the core of Plains is fragmentary or missing.

The TAG and stakeholders discussed how wayfinding lacks clarity and coherence in the core of Plains. The current mix of signage can be visually confusing and difficult to follow. Also, the existing signs do not provide thorough directions to visitors arriving from all directions. During the stakeholder meeting, Karen Barry, Chief of Administration at the Park, recalled a time she tried to use the highway signs to direct her to the site and was unable to do so.

Pedestrian-Oriented Wayfinding

Park visitors navigate between the separate park sites by following directions provided in person, using signage, and identifying points of interest that they can see from where they are. Signage and wayfinding within the City of Plains is sporadic and not designed to be useful to pedestrians.

Staff at Plains High School provide visitors with directions on how to walk to the Depot and downtown. As discussed in the previous section, Kim Fuller of the Friends of the Jimmy Carter NHS created a handout that she provides to visitors as they exit the SAM Shortline. Additionally, the SAM Shortline announces relevant directions over the intercom. Occasionally, a park ranger rides the train and provides interpretation prior to arrival in Plains and guidance to visitors as they exit the train.

However, a number of barriers prevent visitors from easily navigating between locations. Each of the following sites has particular issues:

- Plains High School:
 - Inability to clearly see the Plains High School from downtown and vice versa, due to historically significant trees blocking the view (Figure 8).
 - Inability to recognize that Plains High School is a Park building from downtown, south of US 280. Visitors can see the top of the High School from downtown, but might not know it is the Park Welcome Center because they are unable to see the signage.
- Plains Depot:
 - Lack of clear signage indicating that Plains Depot is an NPS Site (Figure 9).
 - Inability to see the entrance of the Plains Depot, located on the south side of the building, from the SAM Shortline platform on the north side of the tracks. The sightline and pedestrian route do not match as passengers must walk past the Depot to Hudson Street to cross the tracks (Figure 8). This is exacerbated when the SAM Shortline is stopped for a layover, because the train cars block the view to downtown from the platform.
- SAM Shortline Platform:
 - Lack of signage at or near the train platform directing visitors to Plains Depot, the High School, the historic downtown, or any other site of interest.

These factors make it difficult for visitors to easily comprehend the short distance and how to navigate between Plains High School, the downtown attractions, and the SAM Shortline Platform. While some of these issues, such as the trees blocking the view between the High School and downtown, are unavoidable because they are historically significant, improvements to other issues will address some of the difficulty surrounding navigation.

Figure 9
Plains Depot



Plains Depot lacks signage indicating it is part of the NPS Site. Source: Wayfinding Study

Resources

The TAG has identified the following resources it can use as a starting point to further investigate pedestrian- and vehicle-oriented wayfinding needs and recommendations:

- **Greenprint for City of Plains (December 2002):** A community-based bicycle and pedestrian plan developed by The Trust for Public Land that identifies recommendations for pedestrian and bicycle improvements.
- **Sumter County Wayfinding Charrette:** A study conducted by University of Georgia College of Environment and Design students to identify wayfinding and branding recommendations for Sumter County.
- **Park Sign Inventory:** An inventory of all the signs maintained by the Park.
- **The Self-Guided Tour of Plains, Georgia:** A brochure sold in the Plains High School gift store, marketed to visitors who would like take a self-guided tour of up to 33 destinations in the area. Each destination also has a sign in front indicating its number on the tour. However, some of these signs are in disrepair (Figure 10).
- **Case Studies:** The case studies on the following page illustrate examples of how other communities have improved wayfinding for pedestrians. The City of Plains, NPS, and their partners can use the examples to inspire solutions for Plains.

These resources provide valuable information to guide the proposed next steps.

Figure 10
Example of Extant Wayfinding Signage



The signage marking the sites on the Self-Guided Tour of Plains, Georgia is in disrepair.
Source: Wayfinding Study

Wayfinding Case Study: Signage in Glendale, California



The City of Glendale, California installed temporary signage around the downtown area that provides information about the local sights and attractions, as well as tips about the health benefits of walking. The program also includes a social media component, encouraging passersby to share photos with the hashtag #GlendaleWalks. Although the program is temporary, it will contribute to outreach for the city’s upcoming pedestrian master plan process.

<http://www.latimes.com/socal/glendale-news-press/news/tn-gnp-me-wayfinding-20160721-story.html>

Wayfinding Case Study: Freedom Trail in Boston



Visitors to Boston can learn about the city’s rich history by following the “Freedom Trail,” a 2.5 mile long route that leads to 16 historically significant sites. The route is marked by a trail imbedded in the sidewalk that is painted red or indicated through brickwork (see photo). Each site on the trail features signage discussing its significance and history. The Freedom Trail Foundation, a local non-profit, maintains the trail and offers a variety of walking tours featuring sites along the trail.

Imbedding a path or trail in the sidewalk provides visitors with a clear and easy tool to navigate the historic sites. It also allows for visitors and city dwellers to unintentionally happen upon the resource because the markers are clearly in the right of way.

https://commons.wikimedia.org/wiki/File%3ABoston_Freedom_Trail.jpg

Next Steps

The team discussed number of immediate steps that the NPS and its partners could take to alleviate wayfinding issues, as well as a longer term plan to comprehensively overhaul signage.

Short Term Recommendations

The team discussed four immediate steps that the Park Service and other stakeholders can take to improve wayfinding.

Create a new site map

The existing NPS site map available for visitors (Appendix E) does not clearly depict pedestrian routes and walking times between sites. It is projected at an angle, which makes it difficult for users to understand the distances between sites and it does not provide a close up view of downtown Plains.

Visitors could use a new map in a number of ways. For example, the Park and its partners, such as the SAM Shortline and Georgia State Welcome Center, could distribute a hard copy of the map at their respective sites. Second, the map could be available on the Park website so visitors could use it to plan their trips in advance. The Park could also make it available on the On Cell Park website, where visitors can download information to handheld devices. Finally, the map could be installed in the existing kiosk located at the exit of the SAM Shortline platform to show the locations of and walking distances to the Depot, Plains High School, the historic downtown, and other destinations.

Park staff and the Southeast Region Office can work with the NPS Harpers Ferry Center, which produces the maps, to develop a revised map. A revised map will benefit pedestrians' ability to navigate between the sites. Some particularly helpful revisions could include providing a name and legend, depicting the map in a 2-D plan view, providing an inset that zooms into downtown Plains, highlighting the non-NPS tourist destinations on the Self-Guided Tour or linking to that tour, and indicating recommended routes for navigating the area on foot. Furthermore, in the future, the map could reference bicycle routes discussed in the "Assessment of Bicycle and Recreational Issues." This initiative would be funded through the Park budget.⁶

Provide walking tours of downtown sites

Visitors to the Park and Plains would benefit from a tour that guided them through the key destinations in walking distance from Plains High School and downtown. Providing a tour would allow visitors to see the sights in a set amount of time and would resolve navigational issues.

A walking tour could be designed as a temporary program while the updated map with key destinations is in development, or it could run as an ongoing program. Alternatively, the tour could begin as a pilot and continue to run if it has sufficient popularity.

A local organization, such as Friends of the Jimmy Carter NHS, or commercial operator could develop multiple walking tours to cater to different visitors' needs and interests. For example, one tour could begin at Plains High School and focus on the former President's family history, another could focus on the history of Plains and the region (including discussion of peanut production), and another could begin at the SAM Shortline Platform to cater to train passengers. The organization that operates the tour could work with SAM Shortline to inform passengers of this option. The local organization or commercial interest could operate such a tour either for free or for a fee.

⁶ Please note, this initiative is not eligible for FLTP Category III funds.

Open the north side door of the Plains Depot and identify site as a NHS

Plains Depot is located at the intersection of Main and Hudson Streets, on the south side of the train tracks. The train platform where SAM Shortline passengers disembark is on the north side of the tracks in Maxine Reese Park, about 350 feet west of where the Depot is located (Figure 8). When passengers walk towards Hudson Street, they can see the Depot, but there are no signs on the north side of the building to indicate that it is part of the Jimmy Carter NHS (Figure 9). Currently, the signage is on the east side of the Depot, along Hudson Street, and on the door on the south side of the Depot, along Main Street. However, none of the existing signs indicate that the building is part of the Jimmy Carter National Historic Site, they only indicate that the site was the location of Jimmy Carter's campaign headquarters. Visually alerting visitors to the fact that the Depot is a national park may draw additional attention to it.

If the Park opens the Depot doors that are on the north side of the Depot and adds NPS signage, passengers alighting the SAM Shortline and visitors coming from the north will be better able to see that the building is an NPS facility that is open to the public as the train pulls into the SAM platform or as they approach. Currently, the exhibit in the Depot uses space on the inside of the existing sliding door. The Park would need to rearrange this exhibit to open the door. However, beyond this, no other barriers exist to opening up this side of the Depot.

Conduct a survey of visitor needs

The Jimmy Carter NHS is planning to conduct a visitor survey during 2017. The survey presents an opportunity for the Park to learn from visitors about their transportation needs and concerns related to moving between all four sites. It will focus on access to the Carter Compound, which is currently inaccessible to the public. The NPS will work with Volpe to include questions that address wayfinding and other relevant transportation needs. Appendix F provides a list possible questions, including a number of OMB approved questions pulled from the [Collaborative Visitor Transportation Survey Federal Land Management Agencies' Compendium of Questions](#).

The results of the survey can inform both the implementation of improved signage and development of an improved pedestrian environment (discussed in the following section).

Long Term Recommendation: Develop and Implement a Comprehensive Signage Plan

The stakeholders and TAG discussed how the existing signage is difficult to follow for both pedestrians coming from downtown Plains and drivers coming from any directions outside of Plains. The signage is not located at the most helpful points, can provide confusing directions, is sometimes difficult to read, and does not thoroughly cover the Park sites or other points of interest. Improvements to the signage at the different park locations and other key points will help visitors navigate to Plains High School and other relevant destinations.

A comprehensive signage plan for a uniform set of pedestrian and vehicle-oriented signs would help improve wayfinding in a cohesive, easy to follow manner. NPS and local partners, such as the City of Plains and Sumter County, can develop this type of plan and install new signage within the next one to three years. The TAG team identified the following key improvements related to signage and wayfinding that could be included in such a plan:

- Consider additional signage for Plains High School at the intersection of US 280 and Bond Street.
- Replace the existing varied signage along US 280 with a uniform set of signs.
- Consider installing signage and/or imbedding a trail on the sidewalks that demarcate pedestrian tour routes (See Case Study on the Freedom Trail and Glendale, California).

A thorough assessment of the existing signage scheme, using the Wayfinding Study and Inventory as resources, will reveal additional key improvements the NPS or other agencies can make to facilitate navigation.

While some signage improvements, particularly those to NPS sites, can happen with Park funds, implementation of the new holistic signage and wayfinding scheme will involve coordination with other partners that currently have signage installed, such as the City of Plains and Sumter County. These partner agencies may need to take the lead on identifying funding for and implementing projects that reach beyond NPS property, such as developing a trail on the sidewalk. Some potential funding sources include:

- **GDOT Grants:** The partners can work with GDOT to identify whether any grants are available that are similar to the grant that was used to improve the streetscape in front on Main Street in the historic downtown.
- **Georgia Department of Economic Development:** The Department supports tourism and business development initiatives and has a number of Community Partnership programs. NPS and local partners can discuss with the Department funding opportunities that might support these types of improvements.
- **Federal Land Access Program (FLAP):** FLAP is a grant program that funds transportation improvements to facilities that provide access to, are adjacent to, or are within Federal Lands. The grants supplements State and local resources and emphasize high-use recreation sites and economic generators. In Fiscal Year 2013- 2014, County governments received a number of FLAP grants in Georgia to support access to several U.S. Army Corps of Engineers and Fish and Wildlife sites. The Fish and Wildlife project included resurfacing and adding a bicycle lane to a road. FLAP grants can cover design and construction phases of a project.

The partners can also consider collaborating with RVRC, the regional planning agency with experience in pedestrian planning, to help plan the project and identify other grant funding opportunities.

Table 3
Summary of Wayfinding Next Steps

	Key Players	Recommendation	Timeline	Funding Sources
Site Map	Park Staff or SE Region, Harpers Ferry Center	Develop revised park map for visitors that improves legibility and better aids navigation	1 year	Internal Park funding
Pedestrian Routes/Tour	Friends of the Jimmy Carter NHS or other organization	Provide a walking tour(s) of key sites near Plains High School and the downtown, on an interim or ongoing basis.	1 year	Possible tour fee
Plains Depot Doors	Park Staff	Open north side door of Plains Depot and reorganize exhibit to accommodate this.	1 year	Internal Park funding
Visitor Survey	SE Region and Park Staff	Include questions related to wayfinding and transportation. Analyze responses to assess visitor needs.	Planned for 2017	NPS Unit Management Plan funding
Wayfinding Signage	City of Plains, Sumter County	Develop and implement the wayfinding and signage scheme for Plains and the surrounding area	1-3 years	Internal Park funding; GDOT; GA Department of Economic Dev.; Federal Lands Access Program (FLAP)

Assessment of Issues related to Pedestrian Environment

A key aspect of the quality of a pedestrian experience is the surroundings and streetscape. Stakeholders discussed how the pedestrian environment in the downtown Plains area is not designed for a comfortable, pedestrian-friendly experience. It lacks design features and amenities that can enhance pedestrian comfort and encourage Park visitors and area tourists to walk between the sites. The group identified key characteristics that contribute to the current conditions and next steps towards an improved pedestrian environment.

Current Conditions

Pedestrians use sidewalks to walk between and among the Park sites located within close proximity to downtown Plains. In 2013, the City of Plains received a grant from GDOT to improve the streetscape along Main Street in front on the historic downtown. The improvements included developing a sidewalk lined with manicured plants and benches between Main Street and US 280.

Figure 11
Existing Pedestrian Facilities



Source: Volpe

However, outside of this area of improvements, the existing sidewalk network presents a few notable gaps (Figure 11). Currently, the core of Plains has a number of points of interest and public sites that are in close proximity to each other, but, as discussed in the Assessments of Safety Issues section, visitors are dissuaded from walking among these sites because routes are not safe, inviting, and accessible to all visitors. Furthermore, residents and visitors alike value the health benefits of walking. The existing infrastructure and lack of amenities does not encourage Plains residents and Park visitors to go outside and walk.

Some of the particular problems related to the pedestrian environment are as follows:

- The sidewalk network is incomplete on Bond Street between US 280 and Main Street and on Hudson Street, posing safety and comfort issues.⁷
- Many sidewalks are not shaded, which makes for a particularly uncomfortable walk during summer months and in hot weather.
- None of the intersections at US 280 have crosswalks and the traffic travels quickly.
- The sidewalks are not wide enough to accommodate large walking groups, especially when a group includes someone with a mobility device.
- The sidewalks do not feature amenities, such as benches, that increase comfort for users.

Also, some concern was cited regarding the smoothness of existing sidewalks and lack of wheelchair ramps, particularly for those using mobility aids such as walkers or scooters.⁸ Addressing some of these deficiencies with the pedestrian facilities could create a better walking environment that facilitates and encourages visitors to walk between Plains High School, Plains Depot, downtown, and eventually the Carter Compound.

Resource

The TAG pointed to the Greenprint for the City of Plains (December 2002) as a valuable resource that can inform next steps. The Greenprint is a community-based bicycle and pedestrian plan developed by The Trust for Public Land that identifies recommendations for pedestrian and bicycle improvements.

Next Steps

Within the next three to five years, the City of Plains, Sumter County, and its partners could implement streetscape improvements to create a welcoming, navigable pedestrian environment.

The City of Plains and Sumter County would need to take the lead on defining and promoting streetscape improvement projects, as well as provide or identify funding sources, as the improvements do not fall within NPS jurisdiction. These agencies could take advantage of existing efforts and resources to further this initiative. For example, the County could include these improvements in the local Comprehensive Plan, a current County-wide planning effort that outlines projects and programs throughout Sumter County. While RVRC cannot fund such improvements, the organization could provide resources to assist in planning and developing any relevant grant applications for funding. The City and County could also coordinate with the Georgia Department of Economic Development on design, funding, and implementation.

The improvements would focus on enhancing the pedestrian experience within the core of Plains, connecting sites such as Plains High School, the Depot, SAM Shortline platform, historic downtown, other key sites within a half mile radius, and possibly the Carter Compound. Using the current issues identified in stakeholder meeting and the Greenprint, the City of Plains, Sumter County, and key partners could identify urban design improvements that would help create a cohesive look and feel for Park visitors, area tourists, and residents.

⁷ The TAG and stakeholders recognize that it is challenging to place sidewalks at railroad crossings. [TCRP 175: Guidebook on Pedestrian Crossings of Public Transit Rail Services \(2015\)](#) may provide some guidance.

⁸ The Americans with Disabilities Act (ADA) requires sidewalks adhere to a certain standard. As existing sidewalks are rebuilt, they will need to be ADA accessible.

During the meeting, the group identified the follow specific improvements:

- Plant trees to provide shade along Bond Street and other walking routes.
- Install crosswalks or other safety measures at intersections (as guided by GDOT).
- Complete and make accessible the sidewalk network between relevant sites.
- Widen sidewalks when/where possible to allow for larger groups to travel together.
- Add benches and other pedestrian-friendly amenities.
- Add public water fountains to provide access to water for visitors.

The City of Plains, Sumter County, RVRC, and/or other stakeholders could engage the public to help identify specific areas to prioritize, such as areas that are difficult to navigate for people with mobility devices. The partners could build on the design style used for the new improvements on Main Street to ensure the improvements blend well with the existing fabric. If the City and County decide to pursue grant funding for the improvements, the following resources may assist:

- [Federal Land Access Program \(FLAP\)](#): FLAP is a grant program that funds transportation improvements to facilities that provide access to, are adjacent to, or are within Federal Lands. The grants supplements State and local resources and emphasize high-use recreation sites and economic generators. In Fiscal Year 2013- 2014, County governments received a number of FLAP grants in Georgia to support access to several U.S. Army Corps of Engineers and Fish and Wildlife sites. The Fish and Wildlife project included resurfacing and adding a bicycle lane to a road. FLAP grants can cover design and construction phases of a project.
- NPS Challenge Cost Share Funds: These funds are provided to projects that directly benefit a NPS unit. Applications are accepted each year and have selective criteria based upon the directives and initiatives of NPS. The benefiting NPS unit must apply for the project and be the recipient of the funding.

Table 4
Summary of Pedestrian Environment Next Steps

	Key Players	Recommendation	Timeline	Funding Sources
Streetscape Improvements	City of Plains, Sumter County, RVRC	Design and implement streetscape improvements	3-5 years	County Transportation Funds; FLAP; Other grant funding

Assessment of Bicycle and Recreational Issues

The Jimmy Carter Boyhood Farm and the Rylander House are not within walking distance of downtown. Additionally, the Georgia State Welcome Center is located about a mile east of downtown Plains on US 280 and provides area tourists with orientation to the region. Other destinations of note are located around Plains, but not within easy walking distance. Accessing these sites without a vehicle is difficult for Park visitors due to lack of alternative transportation infrastructure. Furthermore, residents of Plains appreciate and value the health benefits of bicycling, as well as walking and hiking. At the stakeholder meeting, Plains residents expressed an interest in improved bicycle networks and improved accommodations for individual mobility devices or golf carts, in order to expand recreational and mobility opportunities for residents and visitors. The TAG and Stakeholder group discussed current challenges and identified next steps for improving the alternative transportation network.

Current Conditions

In terms of infrastructure, there are no sidewalks or other off-road paved routes east of Bond Street or outside of the boundaries of the City of Plains to facilitate recreational biking or walking (Figure 11).⁹ Plains and the surrounding area currently lack dedicated bicycle lanes and alternative transportation facilities, such as shared bicycle and pedestrian paths or trails, connecting distant Park sites and other destinations to the downtown area. Bicycle parking exists at Plains High School and the Billy Carter Service Station.

In terms of bicycle routes connecting Park sites, visitors aiming to travel from Plains High School or downtown Plains to the Boyhood Farm likely travel West along US 280 and turn left at Old Plains Highway.¹⁰ Currently, local residents use this route to travel by bicycle between the Boyhood Farm and Plains, as well as around the city. At the stakeholder meeting, President Carter discussed how US 280 feels unsafe, given the lack of bicycle facilities and the presence of high speed traffic and large trucks.

Alternatively, bicyclists can avoid US 280 by heading south on Bond Street, turning left on Botsford Road, and turning right on Carter Fishpond Road to access Old Plains Highway (Figure 12). However, this route is approximately five miles, two miles longer than using US 280. Using this route might double the time it would take to bicycle between the sites compared to using US 280. The stakeholders confirmed that it would be best to pursue a bicycle route along US 280 and Old Plains Highway to the Boyhood Farm.

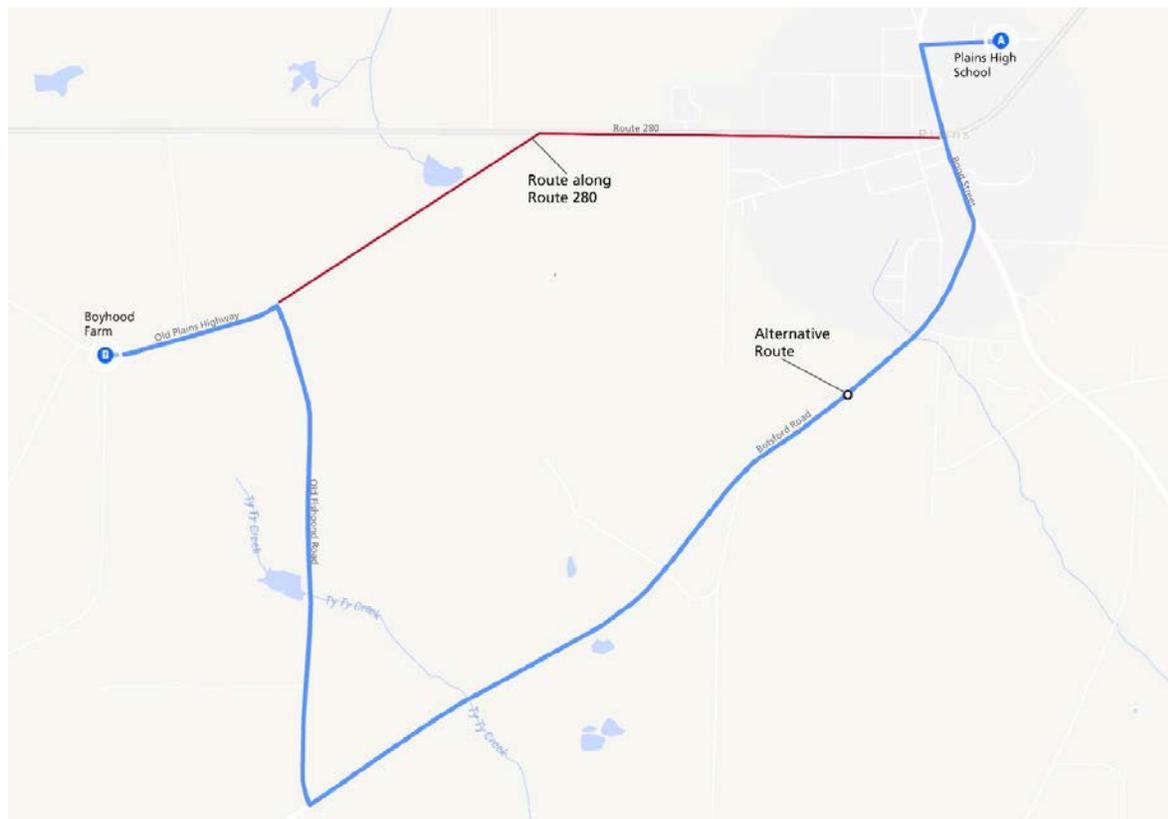
Regarding bicycle programming, the Park has previously hosted a bicycle tour around the Park sites and other destinations on Saturday mornings. Participants would bring their own bicycles to the tour. However, the tour was not popular enough to continue running. Park staff suggested that if bicycles were provided, it might have been more popular.

RVRC partners with Sumter Cycling, a local bicycling advocacy non-profit, to conduct “Prison to Peanuts,” an annual day-long bicycle tour that visits both National Parks in the region: Andersonville NHS and the Jimmy Carter NHS. Additionally, Jimmy Carter NHS, RVRC and Sumter Cycling hosted a two-day Centennial Bike Ride in September, 2016 to commemorate the National Park Service Centennial. The event included a visit to the Jimmy Carter NHS.

⁹ Bond Street, Hudson Street, U.S 280 between Bond and the Sumter County Retirement Village, and Main Street east of the train depot are the only streets that have sidewalks in Plains and the surrounding area.

¹⁰ In the future, visitors will also need to use US 280 to access the Carter Compound.

Figure 12
Alternative Bicycle Route between Plains High School and the Boyhood Farm



Source: Volpe

No data was available detailing the number of people using bicycles to travel between sites or the number who would like to use bicycles. The Park recognizes that not all visitors will choose to travel between the sites by bicycle, even if bicycles were readily available and infrastructure were more inviting. However, the Park expects that some types of visitors, including families would be interested in using bicycles to navigate from downtown to attractions that are further afield like the Boyhood Farm. Also, SAM Shortline passengers, who are permitted to bring bicycles on the train, could use a bicycle network to access sites more quickly than walking. Furthermore, the TAG and stakeholders discussed how improved bicycle facilities might encourage increased tourism to the area from people who are using regional bicycle infrastructure. In general, bicycling is a growing pastime in Georgia and tours along rural routes are increasingly popular.

Participants in the TAG also expressed interest in opportunities to expand use of low speed vehicles, such as golf carts, on city streets and potentially on a dedicated route along US 280 that would be separated from regular motor vehicle traffic. The Pedestrian Environment section of this report addresses some of the needs for users of low speed vehicles in the downtown area and the case study highlighting Peach Tree City illustrates how these vehicles can be accommodated on multi-use paths.

Finally, the Georgia State Welcome Center, located about a mile east of downtown Plains on US 280, provides information to tourists, has parking, and has a large open field and manicured butterfly garden open to visitors. However, participants in the TAG discussed how it is difficult to ride a bicycle between the Welcome Center and downtown Plains because riders feel unsafe along US 280. The participants

expressed interest in bolstering the bicycling connections between the Welcome Center and Plains by providing a safe, inviting path between the two locations.

Resources

The TAG and stakeholders identified a number of resources that they can use to guide and inform the next steps for expanding bicycle connections between the Park sites and in the surrounding area.

- **Greenprint for City of Plains (December 2002):** A community-based bicycle and pedestrian plan developed by The Trust for Public Land that identifies recommendations for pedestrian and bicycle improvements. The plan outlines two options for bicycle routes: along US 280 and following the existing train tracks (Appendix G).
- **RVRC Regional Bicycle and Pedestrian Plan:** In 2010, the RVRC published this plan, which provides analysis of the existing and proposed bicycle network. The proposed network includes facilities along US 280 through Plains.
- **Availability of Bicycles:** Sumter County Tourism Department has extra bicycles available in Americus that it would be willing to provide to the City of Plains or a local non-profit organization.
- **Case Studies:** The case studies provide examples of how communities have successfully developed bicycle improvements and infrastructure.

Peachtree City Multi-use Trail Network

Peachtree City created a 100-mile network of multi-use paths for pedestrians, cyclists, and golf carts. Residents use the network to travel between neighborhoods, shopping centers, schools, and parks. The wooded scenery creates an enjoyable experience for residents and makes the network a unique, popular recreation and transportation amenity.

<http://www.peachtree-city.org/index.aspx?NID=216>

Alpharetta's Bike Share

Many cities across the country now have bike share systems that enable residents and visitors to rent bicycles on a short term basis from established, unstaffed locations. While many systems require installation of special locking facilities, Alpharetta, Georgia has a system that uses regular bicycle locks. Users download the Zagstar app or use text messaging to obtain the code for a lock box containing the bicycle lock's key. The system offers hourly and annual membership deals and have five bicycle locations throughout the city. The system's website (<http://bike.zagster.com/alpharetta/>) provides additional information about the service.

Next Steps

The TAG and stakeholder discussed how to use the relevant resources and existing facilities to pursue short and long term next steps that will help improve alternative transportation options and related tourism opportunities in the greater Plains region.

Short Term Recommendations

Improving the bicycle infrastructure will require a long term effort. However, the TAG and stakeholder team identified a number of next steps that can occur in the short term, as a larger effort develops.

Make bicycles or other electric mobility devices available for rent or loan in downtown Plains

The City of Plains, Plains Better Hometown, or the Friends of the Jimmy Carter could coordinate with the Sumter County Tourism Department and the City of Americus to obtain the extra bicycles available in Americus. The County has approximately six bicycles that it could provide for Plains. Plains might need additional bicycles for running a bicycle rental or loan system, however, a pilot could begin with six.

Whoever operates the service could also obtain individual electric mobility devices, such as scooters, to rent or loan. A single scooter costs between \$1,000 and \$2,000. Purchasing a few of these devices and making them available for rent could provide mobility services to individuals who cannot use bicycles or easily walk between destinations in Plains.

The City of Plains or the organization running the service would need to determine how to distribute the bicycles and mobility devices. A number of options exist:

- Collaborate with one of the stores in the Historic downtown to make the bicycles available for rent from the store.
 - Advantages: Stores are already staffed so the program would not require extra staffing.
 - Disadvantages: The stores might not agree to host the bicycles or have space to store them.
- Provide bicycles for rent or loan from the Friends of the Jimmy Carter National Historic Site offices, currently at the Billy Carter Service Station.
 - Advantages: The service would be operated within the organization and does not require extra coordination with a store or another organization.
 - Disadvantages: The offices would need to ensure the availability of staff or volunteers to manage the bicycles.
- Rent them from a stand-alone facility.
 - Advantages: Such as facility would not need staff to operate it.
 - Disadvantages: Installation and maintenance might be costly.

The City of Plains or another organization would need to assess the liability associated with this service. If the City of Plains or another organization can successfully work with one of the businesses in the historic downtown to rent the bicycles, the pilot could begin within the next year. The other courses of action might take longer to organize. The City may also need additional bicycle racks or parking at destinations to accommodate cyclists, which present an additional small cost (starting at less than \$100).

Boondocking at the Georgia State Welcome Center

The TAG and stakeholders discussed the opportunity to make boondocking, free camping without amenities, available at the Georgia State Welcome Center. If boondocking were available, people using RVs and campers could park overnight at the Welcome Center and have easier access to the destinations in Plains. Promotion of the Welcome Center as a camping location could parallel regional tourism initiatives and increase visitation to Plains. This could also help to develop demand for improved bicycle and pedestrian facilities, as RV visitors may find it easier to experience Plains on foot or by bicycle,

without their large vehicles. This initiative only requires the Georgia Department of Economic Development to permit this service and advertise it to potential campers.

Furthermore, developing this relationship with the Department of Economic Development could lead to additional projects and initiatives at the Welcome Center. For example, the State Tourism representatives at the stakeholder meeting discussed the possibility of expanding operations at the Welcome Center to include camping or other events, as well as opportunities to enhance its connection with downtown Plains.

Figure 13
Georgia State Welcome Center



Source: Volpe

Long Term Recommendation: Plan and Implement an Area wide Bicycle and Trail Network

Over the course of the next three to five years, the City of Plains, the County, and RVRC can work together to refine and implement existing plans for a bicycle and/or trail network in Plains and the surrounding area. Where the pedestrian streetscape improvements described in the previous section would focus on the immediate downtown area, these improvements would reach from the Boyhood Farm to the Georgia State Welcome Center. As this area reaches beyond the boundaries of Plains, the City would need to collaborate with the County and/or RVRC on this initiative. These partners can use the Greenprint, the Regional Bicycle and Pedestrian Plan, and the connections with the Georgia Department of Economic Development and GDOT established at the stakeholder meeting to shape and push forward relevant projects.

An early step in this process is to reevaluate the Greenprint and the Regional Bicycle and Pedestrian Plan to ensure that the proposed bicycle and trail networks work well together and, more importantly, are still relevant. The Greenprint outlines a number of network options that need to be evaluated, including on road bicycle facilities and off-road shared use trails (Appendix G). Additional route options may also be viable. The Regional Plan also illustrates the region-wide vision for a bicycle network. It will be helpful to keep the region-wide vision in mind when discussing the Plains-specific network in order to ensure they align. The partners can invite RTCA or hire a transportation consultant to work with them and the

community to determine the feasibility and relevance of the plans for Plains and the surrounding area, as well as estimate costs and identify funding opportunities. Furthermore, the partners could ensure their projects are incorporated into RVRC’s greater regional plans. Through this process, the partners can identify their goals for improving bicycle and trail infrastructure and determine the best bicycle and/or trail routes to move forward.

The partners could also consider strengthening connections with tourism initiatives in the area. For example, the bicycle and/or trail network could better establish a connection between Plains and the Georgia State Welcome Center. The Welcome Center could in turn enhance its accommodations for campers who could use the bicycle facilities to reach Plains. The partners can draw inspiration from other cities in the Georgia that have successfully developed a multi-use trail network, as illustrated in the Peachtree City example described in the case studies.

Developing bicycle facilities will require overcoming challenges. First, US 280 clearly links downtown Plains with the Boyhood Farm and the Welcome Center. However, stakeholders discussed that the road is not ideal for bicyclists, particularly people traveling with children or people who are uncomfortable biking, due to the speed of traffic and number of trucks. Although alternate routes could exist, such as one built as a separate path adjacent to US 280 or along the railroad tracks, these options might require more time to develop and implement in coordination with GDOT and other relevant stakeholders.

The group has a number of resources for the planning and implementing bicycle and trail improvements.

- **RTCA Technical Assistance:** The RTCA facilitates the development of plans by working with communities to develop goals and projects and identify implementation steps. RTCA must be invited to work with a community by the community itself. Please note, RTCA does not fund the implementation of projects. RTCA also can help develop a funding strategy that would be implemented within the plan.
- **NPS Challenge Cost Share Funds:** These funds are provided to projects that directly benefit a NPS unit. Applications are accepted each year and have selective criteria based upon the directives and initiatives of NPS. The benefiting NPS unit must apply for the project and be the recipient of the funding.
- **Federal Land Access Program (FLAP):** FLAP is a grant program that funds transportation improvements to facilities that provide access to, are adjacent to, or are within Federal Lands. The grants supplement State and local resources and emphasize high-use recreation sites and economic generators. . In Fiscal Year 2013- 2014, County governments received a number of FLAP grants in Georgia to support access to several U.S. Army Corps of Engineers and Fish and Wildlife sites. The Fish and Wildlife project included resurfacing and adding a bicycle lane to a road. FLAP grants can cover design and construction phases of a project.

Table 5
Summary of Assessment of Bicycle and Regional Issues Next Steps

	Key Players	Recommendation	Timeline	Funding Sources
Bicycles in downtown Plains	City of Plains or local non-profit	Rent bicycles in downtown Plains for visitors and recreation	1 year	City of Plains/Sumter County/Other
Boondocking	Georgia Department of Economic Development	Allow campers to camp for free in the parking lot of the Georgia State Welcome Center	1 year	GA Department of Economic Development
Bicycle and Trail Network	City of Plains, Sumter County	Develop and implement a bicycle and trail network	1 year	NPS Challenge Cost Share Funds; FLAP

Assessment of Transit Options

NPS convened the TAG in order to review the need for and feasibility of transit at the Jimmy Carter NHS. The following section analyzes the different transit and motorized tour options for providing transportation between Park sites and other destinations around Plains. Discussion of these options fulfills legislative requirements discussed in the introduction that stipulate that the NPS must consider transit on the site.

In sum, this report finds that the Jimmy Carter NHS is not currently in the position to operate a transit service because it does not meet NPS criteria for operating such a service. However, a commercial operator could work with the Park to obtain a Commercial Use Authorization to provide transit services. The remainder of this section reviews current conditions and the criteria for providing transit in National Parks, provides examples of how and when NPS has used transit, identifies appropriate transit and motorized tour options that address transportation issues at the Jimmy Carter NHS, and discusses the estimated costs associated with them.

Current conditions

The Jimmy Carter NHS currently does not offer any transit services for its visitors and public transit is not available in the surrounding area.

However, one relevant tour service does exist. As discussed previously, Jan Williams, a resident of Plains and manager of the Plains Inn & Antique Mall, provides a “step-aboard” tour for visitors. She charges a flat-rate fee for an in-vehicle tour that focuses on the destinations in Plains that are important to Jimmy Carter’s life. Her tour does not reach beyond city limits or stop at NPS sites. Tour length is between 30 and 45 minutes, depending on the number of questions participants have. Since she charges a flat rate, her audience is largely motorcoach tours and school visits. Occasionally, she will provide a tour to passengers in a private vehicle. Williams said that she does not operate the tours using her own vehicle because insurance would make it cost prohibitive. However, she suggested that there is demand for that type of service among Park visitors and area tourists. The examples on the following pages provides details about the similar services offered at several National Parks.

During the stakeholder meeting, the participants discussed relevant transportation needs and how transit could serve to alleviate them. First, a transit service would benefit those arriving by SAM Shortline, as it would provide service to people with limited mobility and access to sites beyond walking distance. Second, a transit service would enable the Park to provide access to any current or future sites with limited parking. However, transit services are often not cost effective and difficult to maintain. The following section discusses NPS criteria for providing such services and describes instances of their use.

Transit and Tour Services in National Parks

NPS only considers transit service where it fills a specific need in a cost effective manner. NPS currently has criteria it uses to determine if it will consider owning and operating transit services or contracting a concessioner or service provider. The key criteria are as follows:

1. **Feasibility Assessment:** The Park must demonstrate a problem with congestion and parking to warrant transit services. If the Park demonstrates this need, a feasibility study must demonstrate that provision of such a service is economically viable. Currently, the Jimmy Carter NHS does not have parking or congestion issues that warrant provision of transit services.
2. **Demonstrated Need:** The Park must demonstrate a need to provide access or mobility to Park visitors without personal transportation. If the Park demonstrates this need, a feasibility study must demonstrate that provision of a mobility service is economically viable. Currently, the Jimmy Carter NHS does not demonstrate this need.

For Parks that do not meet this criteria, private entities seeking to provide a transportation service can apply for a Commercial Use Authorization, a permit that allows operation of services on Park land. Alternatively, a non-profit or local government partner could operate a transit service to NPS units through a cooperative agreement.

A number of National Parks that meet this criteria provide transit services either with park staff and vehicles or through contracted services. However, others have piloted programs and found that they are unsustainable for the Park. Finally, some Parks do not provide transit options, but provide step-a-board tour options through Commercial Use Authorizations. The examples in this section discuss several services and describe the reasons why some of the services have been successful and others have not. They explain how these Parks have circumstances that differ from the circumstances at the Jimmy Carter NHS, which does not have sufficient visitation or need for such a transit service at this time.

Adams National Historic Park – Historic Trolley

Adams National Historic Park (NHP) provides a trolley tour to connect disparate sites that each have limited parking available for visitors. The Park sites are all within a three and one quarter mile loop, each located between one half and one and a half miles apart. The Park is in Quincy, Massachusetts, a suburb of Boston, which has fairly dense development and is well served by existing transit connecting to Boston. Since 1993, Adams NHP has offered visitors a free trolley service between the Welcome Center and the three historic houses. The service operates during the peak season from April to November in order to improve access to the sites and reduce congestion in Quincy. At each stop, visitors on the trolley receive a tour of the site, meaning they stay on a single trolley for the course of the route. The service runs every 30 minutes and the duration of the tour is two and a half hours. The Park owns the trolleys, but contracts with a commercial provider for maintenance and operations. The drivers are not Park staff and do not need to provide interpretive services since visitors receive such information from Park staff while visiting the specific sites.

The tour service at Adams NHP is deemed necessary because, unlike at Jimmy Carter NHS, off-street parking is only available near the Welcome Center and on-street parking adjacent to the sites is limited and metered. The Park's Welcome Center is next to a stop on Boston's Red line branch of the subway. Unlike the SAM Shortline, which drops its passengers in Plains all at once for a limited amount of time, the Red line runs regularly throughout the day, providing a steady stream of visitors. The result is that Adams NHP does not need to provide transit and tour services to a large number of visitors within a particular timeframe and a higher proportion of visitors likely arrive at Adams NHP without their own vehicle. Additionally, the Adams NHP has significantly higher visitation than Jimmy Carter NHS, receiving approximately 300,000 visitors per year, of which approximately 60,000 use the trolley service, the equivalent of all visitors to Jimmy Carter NHS. Furthermore, by providing this service, Adams NHP can limit the number of visitors to each site at one time, ensuring that the historic resources in the sites are protected. In order to pay for the tour service, a \$10 entrance fee is collected from all visitors 16 and older.

Home of Franklin D. Roosevelt National Historic Site – Roosevelt Ride

The Home of Franklin D. Roosevelt National Historic Site (NHS) provides a free shuttle service to connect disparate sites in order to provide mobility for visitors without vehicles and to limit the number of visitors to tour-only sites at one time. In 2001, after the Park acquired the Top Cottage site, it piloted the Roosevelt Ride, a shuttle service between the Park entrance at the Wallace Center and Top Cottage, through a commercial provider (Figure 14). The shuttle service provides exclusive access to Top Cottage and enables NPS to manage crowds as well as minimize traffic impacts for a residential housing development that was already established between the Wallace Center and Top Cottage. The only other way to access Top Cottage is a steep one and a half mile hike. This ensures that the site would preserve the intimacy of a small-group setting that President Roosevelt had valued. Over the years, the Park expanded the service to provide access to two nearby NPS sites, the Vanderbilt Mansion and Eleanor Roosevelt National Historic Site. The shuttle also has a route to the nearby Poughkeepsie Train Station on the Metro-North Hudson commuter line, in order to serve visitors coming from New York City without

vehicles. In 2009, NPS did not renew the contracted service, but elected to purchase a 28-passenger hybrid vehicle and operate it with Park staff. Park staff operating the shuttle are able to provide interpretive information during the route, although it is not a programmed activity. The service, which runs as a circulator, operates daily from May to October and coordinates with the Metro-North Schedule.

Like Adams NHP, this site features particular circumstances that speak to the need for transit. The Roosevelt Ride provides exclusive vehicle access to Top Cottage, which enables the Park to limit the number of people in the site at one time in order to protect historic resources. None of the current Jimmy Carter NHS sites limit access for private vehicles, however, limited vehicle access could be a consideration if the Park develops the Carter Compound. Similar to Adams NHP, the site is near regular train service, providing a steady flow of visitors without vehicles. Finally, the Park collects entrance fees from all visitors, a portion of which is a transportation fee dedicated to funding the operations of the shuttle service.¹¹ Jimmy Carter NHS is not authorized to charge an entrance fee or a transportation fee.

Figure 14
Roosevelt Ride Bus



Source: Sandra Foyt (<http://albanykid.com/2013/05/10/hyde-park-ny/>)

Cumberland Island

Cumberland Island National Seashore in Georgia is only accessible by ferry, meaning visitors can only explore the island on foot. The Park previously provided a shuttle service to visitors seeking to access historic sites but, after finding the shuttle too costly to maintain, transferred the operation to a private provider that operates the ferry. Cumberland Island contains an historic site on the northern end of the island, opposite where the ferry docks. In order to ensure visitors could access this site, Congress mandated that the Park provide transit service between the ferry site and the historic site. NPS bought a few 15-passenger vans and implemented a fee-based service to provide transportation. The Park staffed

¹¹ A park must apply for approval from the National Park Service to collect a dedicated transportation fee, which are typically collected as part of an entrance fee.

the service with seasonal employees. However, the Park found it difficult to support the service, particularly to train seasonal employees to drive the buses. In order to maintain provision of a shuttle, the Park incorporated the service into the contract of the concessioner that runs the ferry service to the Island. The shuttle service is therefore currently run by the same concessioner that provides the ferry service.

This example illustrates the difficulty of maintaining a Park operated service. Jimmy Carter NHS also has a small staff and would have difficulty training and maintaining a staff that could operate transit vehicles. Cumberland Island also demonstrates unique circumstances that justify the contract provision of transit service. First, Congress mandated that the Park provide transit service since it is not accessible by vehicle. Legislation mandates that Jimmy Carter NHS consider and assess the need for transit, but does not mandate provision of transit. Furthermore, all the Jimmy Carter NHS units are accessible by vehicle. Finally, Cumberland Island charged a fee for the transit service when it provided one. Jimmy Carter NHS is not authorized to charge any fees.

Gettysburg National Park – Battlefield Guides

Gettysburg National Military Park does not offer transit service, but does provide step-aboard services similar to Jan's service in Plains. Licensed Battlefield Guides offer personalized tours to visitors traveling through the site in their own vehicle. These tour guides, which operate as a concession, are trained, tested and authorized to conduct tours of the site. This structure ensures the information provided in the tour is accurate. The tours are two hours long and run on a first come first serve basis every day. Visitors are able, but not required to make tour reservations in advance. The tour fees are as follows:

- 1-6 people per vehicle= \$65.00
- 7-15 people per vehicle= \$90.00
- 16+ people per vehicle= \$135.00

A commercial provider could consider providing this type of service at the Jimmy Carter NHS.

Assessment of Transit Options for Jimmy Carter NHS

At the stakeholder meeting, participants discussed the different options for providing transit at the Jimmy Carter NHS. These included conducting **interpretive bus tours** and offering a **shuttle service**. These two services are distinct. The **tours** would operate at specific times and include interpretation for attendees. Tours would likely appeal to visitors arriving by private vehicle and by SAM Shortline who would like an overview of the Plains vicinity. In many cases, the vehicle might stop by the side of the road while the tour provider gives interpretation. Benefits of this service include additional interpretation and removing the need for individual visitors to navigate to sites. However, tours require visitors to commit a specific amount of time. This may be feasible for visitors who plan to attend a tour ahead of time, but difficult for visitors who do not. Additionally, SAM Shortline passengers might not have enough time for a tour.

A **shuttle service** would provide Park visitors with transportation for moving among sites, but would not include interpretation. A shuttle would operate as a continuous service for a set period of the day. It could run on specified days of the week or daily and adjusted throughout the year based on visitation. This service would best serve visitors who do not have access to transportation, such as the SAM Shortline passengers, visitors who are not comfortable navigating the Plains vicinity, or who prefer to circulate among sites flexibly, including some walking. In the future, it could serve visitors accessing sites with limited or no parking available, such as the Carter Compound.

The Jimmy Carter NHS and the City of Plains offer visitors a rich history and variety of destinations. Tours and shuttle services could provide visitors with the means to see these sites, while eliminating the need for developing parking at all the Park sites and other relevant destinations. However, providing transit services is a costly endeavor. The visitation rate to the Park (around 65,000 per year) does not warrant frequent daily tours or shuttle service. At the same time, transporting the influx of visitors on the

SAM Shortline once or twice per week within the time of the layover creates a demand for a high capacity transportation system at these particular times. As a result of this combination of visitation patterns, a shuttle service, which can provide for a high number of passengers, would likely only function well during the SAM Shortline layovers. Tour services, which provide for fewer passengers, would work well for other select times of the week when visitation peaks. An operator would need to determine whether such a combination would be financially viable.

The balance of this section provides initial analysis of five tour and shuttle route options that an interested commercial provider could use to inform its market analysis and potential service planning. A commercial operator could work with the Park to obtain a Commercial Use Authorization to provide either a shuttle service, tour service, or both and conduct further market analysis to determine service viability.

Table 6 outlines the stops/points of interest on each of the route options, as well as the different travel times. Discussion of each route option and a table summarizing the costs at different frequencies follows. The discussions outline the potential audiences for each route run as a tour and/or shuttle service, the benefits and drawbacks of different types of services based on the estimated costs and potential demand, and the next steps for determining feasibility.¹² The tables outline these costs at different frequencies and identify the number of trips and maximum number of passengers served at each of these frequencies, to provide insight into the percentage of visitors and/or SAM Shortline passengers that would be able to take advantage of such a service. The costs assume service 52 weeks per year, but an operator could choose to limit service to fewer weeks per year and calculate corresponding costs. The tables provide the rough costs and benefits of pursuing different types of services so an operator can determine which are feasible given passenger demand and resource constraints.¹³

The costs per year for the tour services are fairly comparable and vary mostly by the labor costs relative to the length of the tour. An operator could provide a variety of tours on a set, published schedule, so that visitors could attend the tour that best serves their interests.

For the shuttle service during SAM Shortline layovers, a variety of options and variations of service exist that could serve passenger needs. While Route E, which stops only at the platform and Plains High School, is the most cost effective option for a shuttle service and has the potential to serve nearly all the SAM Shortline passengers, one must consider the actual need and benefit of such a service and passengers' willingness to pay for a relatively short ride. Route D serves the current Park sites, which are generally already accessible from the SAM Shortline and have adequate adjacent parking for visitors who drive to Plains. If the park were to expand to the additional sites served by Route C, it could solve both the limited parking availability at those sites as well as provide access to them for visitors arriving by SAM Shortline, which does not have a stop near either. For example, if an operator decided to run a shuttle service during the SAM Shortline layover for the train that stops at both Plains and the Boyhood Farm, it could time it so passengers would alight the train in Plains and board again at the Boyhood Farm, after taking the shuttle between Plains and the Farm. A visitor survey could provide some insight into the level of interest in such a service.

¹² The costs are estimates derived from the Department of the Interior's Bus and Ferry Lifecycle Cost Model (<https://www.volpe.dot.gov/transportation-planning/public-lands/departement-interior-bus-and-ferry-lifecycle-cost-modeling>). They include static costs, such as the vehicle, start up, and marketing costs. These costs might vary depending on the business model pursued. They also include the average Operations and Maintenance (O&M) costs per trip over ten years based on mileage and service hours, in order to incorporate the increase in maintenance and operations costs over time. O & M costs factor in the number of vehicles, vehicle miles, vehicle hours, driver costs, fuel costs, and maintenance costs.

¹³ The costs cited are estimates and do not account for insurance. An operator would need to verify these costs, determine the type of insurance needed, and do their own analysis of demand for their potential service. Also, please note the use of "Pax" in place of passengers in the tables.

Table 6
Summary of Tour and/or Shuttle Stops and Lengths

Bus Stops/Points on Tour	Approx. Time at Destination (min)	Route A: Comprehensive	Route B: Highlights	Route C: Current and Future Park Sites	Route D: Current Park Sites Only	Route E: Plains HS to SAM Shortline Platform
<i>Distance (miles)</i>		<i>9.5</i>	<i>9.5</i>	<i>5.5</i>	<i>5.5</i>	<i>0.3</i>
<i>Round Trip Travel Time</i>		<i>20 minutes</i>	<i>20 minutes</i>	<i>14 minutes</i>	<i>14 minutes</i>	<i>3 minutes</i>
<i>Boarding and Alighting (Shuttle)</i>		<i>25 minutes</i>	<i>12 minutes</i>	<i>6 minutes</i>	<i>3 minutes</i>	<i>2 minutes</i>
<i>Total Shuttle Travel Time*</i>		<i>45 minutes</i>	<i>30 minutes</i>	<i>20 minutes</i>	<i>15 minutes</i>	<i>5 minutes</i>
<i>Total Tour Travel Time (w/ interpretation)</i>		<i>60 minutes</i>	<i>30 - 45 minutes</i>	<i>30 minutes</i>	<i>n/a</i>	<i>n/a</i>
Plains High School	45	x	x	x	x	x
Lillian Gordy Carter Nursing Center	5	x				
Apartment 9A - Public Housing	15	x	x			
Plains Methodist Church	10	x				
Jimmy and Rosalynn Carter Home and Secret Service Compound	5	x	x	x		
Billy Carter Home	5	x				
The Haunted House/Rylander House	5	x	x	x		
Jimmy Carter Boyhood Farm	45	x	x	x	x	
Lebanon Cemetery	15	x	x			
World War Airstrip	15	x				
The Pond House	5	x				
Lebanon Baptist Church	10	x	x			
Rosalynn Smith Carter's Childhood Home	5	x				
Historic Downtown and Carter's Peanut Warehouse	5	x	x			
Plains Depot	20	x	x	x	x	
SAM Shortline Platform	0			x	x	x

Bus Stops/Points on Tour	Approx. Time at Destination (min)	Route A: Comprehensive	Route B: Highlights	Route C: Current and Future Park Sites	Route D: Current Park Sites Only	Route E: Plains HS to SAM Shortline Platform
Lillian & Earl Carter Home	5	x				
Billy Carter's Service Station	10	x	x	x		
Smiling Peanut	10	x	x			
Maranatha Baptist Church	5	x	x			
Plains Baptist Church	5	x				
St. Andrews Lutheran Church	5	x				

*Assumes one minute for boarding and alighting at each stop (two seconds per passenger boarding and two seconds per passenger alighting) for a 15-passenger vehicle.

Route A: Comprehensive

This route covers 21 sites, gathered from the 33 sites in the Self-guided Tour of Plains. It works best as a tour, rather than a shuttle, because many of the sites on the Route could be fully experienced in less time than it would take for the shuttle to return (45 minutes round trip). While the travel time to visit these sites is around 20 minutes when taking the most efficient route, the tour provider might want to reorder the tour stops to be able to tell a more seamless story. The tour would therefore take an estimated time of an hour or more to visit all 21 sites, including interpretation, pausing at certain stops, and time for questions.

The audience for this tour route would be visitors arriving in private vehicles who are interested in a more extensive, guided visit of the area. These visitors would likely plan to take the tour in advance of arriving and would set aside enough time on their visit to take the tour. SAM Shortline passengers who were interested in seeing all of these sites and had time available during the layover could feasibly take this tour if it were scheduled to align with the train layover. This would likely appeal more to SAM Shortline passengers who were not taking the train that also stopped at the Boyhood Farm, since the tour covers the Boyhood Farm. Assuming one 15-passenger van is in operation, the tour would only accommodate a limited number of the approximately 150 train passengers, so reservations might need to be made in advance. An operator could work with SAM Shortline to provide an option to reserve a space when buying the train ticket. Furthermore, due to the limited overall layover, an operator may consider including a boxed lunch as part of the tour.

Table 7 outlines the different costs and number of passengers served for different tour and shuttle frequencies. The table shows that the average annual cost is proportionally smaller the higher the frequency, since the static costs are distributed over more trips. It outlines the tour options for two to six trips per week over only two or three days of the week, since the Park data reports that it receives more visitors on weekends. Six trips per week would serve between 5 and 10% of the approximately 60,000 visitors the Park receives each year. An operator could do a market analysis to determine the level of interest in a tour service that provides a comprehensive view of the area and build a corresponding schedule. Ticket costs would need to cover the costs of operating the service, broken down by passenger in the last column of Table 7. Such an analysis would identify customers' willingness to pay so an operator could see if it could provide a profitable service.

Table 7
Summary of Frequency Options and Costs for Route A

Type of Service	Frequency	Vehicle and Start Up Costs	Annual Marketing Costs	Average O & M Cost per Trip over 10 years	Trips per year	Total Costs over 10 Years	Average Annual Total Cost	Max Pax per Year	Cost per Pax per Trip
Tour (60 minutes)	Two Trips/Week (1x/day, 2 days/week)	\$41,500	\$5,500	\$60.17	104	\$159,077	\$15,908	1,560	\$10.20
	Four Trips/week (2x/day, 2 days/ week)	\$41,500	\$5,500	\$60.17	208	\$221,654	\$22,165	3,120	\$7.10
	Six Trips/week (2x/day, 3 days/ week)	\$41,500	\$5,500	\$60.17	312	\$284,230	\$28,423	4,680	\$6.07
Continuous Shuttle Service (45 minutes)	10am-3pm (6 trips/day), 2 days/ week	\$41,500	\$5,500	\$51.57	624	\$418,297	\$41,830	9,360	\$4.47
	10am-3pm (6 trips/day), 3 days/ week	\$41,500	\$5,500	\$51.57	936	\$579,195	\$57,920	14,040	\$4.13

Route B: Highlights

This route covers 12 sites in the Plains area, visiting the highlights of the Comprehensive route. The route would work well as a tour, rather than a shuttle, because many of the sites on the route could be fully experienced in less time than it would take for the shuttle to return (30 minutes round trip). However, if an operator were to run the route as a shuttle, it would provide service to a higher number of visitors because it would run more trips within the same time frame. The travel time between sites is 18 minutes, so a tour would take up to 45 minutes including interpretation, pausing at certain stops, and time for questions.

Like Route A, the audience for a tour on this route would be visitors arriving in private vehicles who are interested in learning about the key sites in the area. These visitors would likely plan to take the tour in advance of arriving and set aside enough time on their visit to take the tour. Since the tour is shorter, this Route would work better than Route A for visitors who have a limited time in Plains or shorter attention spans. SAM Shortline passengers could also take this tour if scheduled during the layover, as it would fit within the time of any of the layovers in Plains. Like Route A, this would likely appeal more to SAM Shortline passengers that were not taking the train that also stopped at the Boyhood Farm, since the tour covers the Boyhood Farm. Like Route A, the tour would only accommodate 15 train passengers on one van, and so reservations might need to be made in advance for tours occurring during train layovers.

Table 8 outlines the different costs and number of passengers served for different tour and shuttle frequencies. The average annual costs per year are less than the costs for Route A because the route takes less time to finish, reducing the labor and maintenance costs. The table outlines the same frequencies and corresponding number of passengers as Table 7 (Route A). Overall, the service and costs are similar to

Route A, expect that Route B would provide a more abbreviated visit. An operator could conduct a market analysis to determine potential demand and customers' willingness to pay and how to shape its service, whether that would entail only providing one of the tour options or providing a combination of both.

Table 8
Summary of Frequency Options and Costs for Route B

Type of Service	Frequency	Vehicle and Start Up Costs	Annual Marketing Costs	Average O & M Cost per Trip over 10 years	Trips per year	Total Costs over 10 Years	Average Annual Total Cost	Max Pax per Year	Cost per Pax per Trip
Tour (30 – 45 minutes)	Two Trips/Week (1x/day, 2 days/week)	\$41,500	\$5,500	\$46.98	104	\$145,359	\$14,536	1,560	\$9.32
	Four Trips/week (2x/day, 2 days/ week)	\$41,500	\$5,500	\$46.98	208	\$194,218	\$19,422	3,120	\$6.22
	Six Trips/week (2x/day, 3 days/ week)	\$41,500	\$5,500	\$46.98	312	\$243,078	\$24,308	4,680	\$5.19
Continuous Shuttle Service (30 minutes)	10am-3pm (10 trips/day), 2 days/ week	\$41,500	\$5,500	\$44.12	1040	\$555,348	\$55,535	15,600	\$3.56
	10am-3pm (10 trips/day), 3 days/ week	\$41,500	\$5,500	\$44.12	1560	\$784,772	\$78,477	23,400	\$3.35

Route C: Current and Future Park Sites

This route covers the three existing publicly accessible sites and three future sites, as well as the SAM Shortline train platform. This route is designed for future operation, when the Park incorporates the future sites into the unit and makes them open to the public.

The route could be operated as a shuttle service or designed to incorporate interpretation. The operator could run the route as a shuttle regularly and offer a tour along the route less frequently or for special occasions. The total travel time for the shuttle would be 20 minutes, 14 minutes of travel time and 6 minutes for boarding and alighting. The total travel time for the tour is flexible, depending on whether the passengers would get off the bus or van at the stops. It could range from 30 minutes for an in-vehicle only tour to an hour or more for a tour that allow passengers to get out of the vehicle at the destinations. The extended tour time would affect labor costs, but not affect other costs.

The tour and the shuttle service options would serve different audiences. Like Routes A and B, the tour would service visitors arriving in a private vehicle and SAM Shortline passengers who are interested in a guided, abbreviated experience that provides an overview of the Park sites. These passengers would likely plan to attend such a tour in advance. Table 9 shows that the tour option would serve the same number of

visitors as the tour options for Route A and Route B at corresponding frequencies, at a slightly lower average annual cost due to the shorter time required to complete the tour and shorter distance traveled.

The shuttle would serve passengers, either arriving in private vehicles or by the train, who are interested in visiting one or two specific sites on their own. In terms of frequency, the operator could run the service daily or just on weekends. For visitors arriving in private vehicles, a shuttle would eliminate the need to navigate on their own and/or would provide access to sites that might not have parking available, such as the Carter Compound and the Rylander House. These passengers might plan to use the shuttle in advance or decide to use it when they arrive.

Route C would address the difficulty SAM Shortline visitors face accessing the Park sites in the limited time available during the layover. The shuttle could make six 20-minute trips during a two hour layover, but passengers would only be able to take the first five of those to visit park sites, since taking the final trip would leave them without a return shuttle. For a hypothetical layover between noon and 2 pm, a passenger could take the noon shuttle to the Carter Compound, spend 20 minutes there, take the following shuttle to the Boyhood Farm, spend 20 minutes there, and take the following shuttle to return to the platform by 1pm.

Five 15-passenger shuttles could serve up to 75 passengers, which is approximately half of the average number of SAM Shortline passengers (150) on the train. Although this service could not serve all the passengers, it would likely be able to serve a large portion that are interested and/or need mobility assistance. Alternatively, an operator could create a hybrid with Route E, which provides a shuttle service between the train platform and Plains High School or remove the Boyhood Farm from the Route during the SAM Shortline layovers in order to serve more passengers and reduce the headway between trips.

An operator would need to conduct a market analysis study to determine the most feasible, profitable combination for tour and/or shuttle services. The analysis would assess customers' willingness to pay for either tour or shuttle services. Table 9 shows that the tour at different frequencies breaks down to higher costs per passenger than the shuttle. However, a study might find that visitors would be more willing to pay a slightly higher price for a tour than a lower price for shuttle services. Furthermore, an operator and the Park could work with SAM Shortline to create an option on the SAM Shortline online reservation system to reserve a spot on the shuttle. Finally, this service could parallel initiatives that encourage SAM Shortline passengers to walk to this sites within walking distance.

Table 9
Summary of Frequency Options and Costs for Route C

Type of Service	Frequency	Vehicle and Start Up Costs	Annual Marketing Costs	Average O & M Cost per Trip over 10 years	Trips per year	Total Costs over 10 Years	Average Annual Total Cost*	Max Pax per Year	Cost per Pax per Trip
Tour (30 minutes)	Two Trips/Week (1x/day, 2 days/week)	\$41,500	\$5,500	\$32.12	104	\$129,905	\$12,990	1,560	\$8.33
	Four Trips/week (2x/day, 2 days/ week)	\$41,500	\$5,500	\$32.12	208	\$163,310	\$16,331	3,120	\$5.23

	Six Trips/ week (2x/day, 3 days/ week)	\$41,500	\$5,500	\$32.12	312	\$196,714	\$19,671	4,680	\$4.20
Continuous Shuttle Service (20 minutes)	10am-3pm (15 trips/day), 2 days/ week	\$41,500	\$5,500	\$26.39	1560	\$508,184	\$50,818	23,400	\$2.17
	10am-3pm (15 trips/day), 3 days/ week	\$41,500	\$5,500	\$26.39	2340	\$714,026	\$71,403	35,100	\$2.03
	Approx. 2 hour Layover (6 trips/ layover)	\$41,500	\$5,500	\$26.39	360	\$191,504	\$19,150	5,400	\$3.55

* This cost assumes service 52 weeks per year for all but the last frequency, for which it assumes service on average 6 times a month for 10 months a year (to align with SAM Shortline service). The provider could choose to limit service to fewer weeks per year.

Route D: Current Park Sites

This Route is similar to Route C, but only covers the three existing publicly accessible parks sites and the SAM Shortline Platform. It could work as a shuttle or tour, depending on demand.

Route D would appeal to the same audiences as Route C. As a tour service, it would provide visitors arriving either by private vehicle or SAM Shortline an opportunity to have a guided experience of the Park sites. The tour costs and capacity are the same as Route C for corresponding frequencies (Table 10). However, the tour would provide access to fewer sites. Given that it has fewer sites, an operator could design an expanded tour service that allow passengers to alight the vehicle and visit each site over the course of an hour or more. An operator would need to conduct a market analysis to determine which tour option visitors would prefer once the future sites are open to the public. Alternatively, an operator might provide service to the current sites first and expand to provide service to the additional sites once they open to the public.

As a shuttle, it would provide transit for visitors to see multiple sites, beginning from either Plains High School or the SAM Shortline. However, since it does not provide access to the future park sites, that might not have parking available, it would be less likely to appeal to visitors arriving by private vehicle who would need alternative access to Park sites. Furthermore, although the Route can provide more trips within a two hour layover timeframe than Route C, it does not provide additional access to the park for SAM Shortline passengers. SAM Shortline passengers interested in the Boyhood Farm will likely take the train that has a layover there. Where Route C provides access to additional sites that are outside walking distance, Route D would only provide access to the other two Park sites that are within walking distance of the train platform. An operator would likely better serve Park visitors and SAM Shortline passengers by running a tour on Route C once the future Park sites are open to the public.

Table 10
Summary of Frequency Options and Costs for Route D

Type of Service	Frequency	Vehicle and Start Up Costs	Annual Marketing Costs	Average O & M Cost per Trip over 10 years	Trips per year	Total Costs over 10 Years	Average Annual Total Cost*	Max Pax per Year	Cost per Pax per Trip
Tour (30 minutes)	Two Trips/Week (1x/day, 2 days/week)	\$41,500	\$5,500	\$32.12	104	\$129,905	\$12,990	1,560	\$8.33
	Four Trips/week (2x/day, 2 days/ week)	\$41,500	\$5,500	\$32.12	208	\$163,310	\$16,331	3,120	\$5.23
	Six Trips/week (2x/day, 3 days/ week)	\$41,500	\$5,500	\$32.12	312	\$196,714	\$19,671	4,680	\$4.20
Continuous Shuttle Service (15 minutes)	10am-3pm (20 trips/day), 2 days/ week	\$41,500	\$5,500	\$23.52	2080	\$585,716	\$58,572	31,200	\$1.88
	10am-3pm (20 trips/day), 3 days/ week	\$41,500	\$5,500	\$23.52	3120	\$830,324	\$83,032	46,800	\$1.77
	Approx. 2 hour Layover (8 trips/ layover)	\$41,500	\$5,500	\$26.39	480	\$209,940	\$20,940	7,200	\$2.91

* This cost assumes service 52 weeks per year for all but the last frequency, for which it assumes service on average 6 times a month for 10 months a year (to align with SAM Shortline service). The provider could choose to limit service to fewer weeks per year.

Route E: SAM Shortline and Plains High School

This route would provide transportation between the SAM Shortline and Plains High School. The target audience would be train passengers. Although the distance between stops is less than half a mile, some passengers need mobility assistance and other have trouble navigating to the site. The route does not include the Depot or historic downtown, because those destinations are in close proximity of the train platform. Furthermore, it does not include the Boyhood Farm because there is a SAM Shortline itinerary that has a layover both in Plains and at the Boyhood Farm for visitors who would like to visit both sites. The total round trip travel time would be around five minutes.

An operator could use a 15-passenger van to transport visitors between the train platform and Plains High School. Like Routes C and D, the operator and Park could work with SAM Shortline to create an option

on the SAM Shortline online reservation system to reserve a spot. Since the route is only 5 minutes round trip, the operator could provide multiple trips during the layover. Using one 15-passenger van, the shuttle could serve up to 75 people, approximately half the average number of passengers per trip, in the first 30 minutes (5 trips) and up to 150 in an hour (10 trips). During a 2 hour layover, one vehicle could potentially provide access to Plains High School and a return trip back to the Platform to the majority of passengers.

Although this service would provide for a high number of passengers, it focuses on the limited time of the SAM Shortline layover. While limiting service to these times extends the life of the vehicle, it limits the opportunity for revenue generation and profitability. As mentioned in the discussion of Route C, this service would work well as a hybrid with a tour and/or shuttle service along Route C during other times of the day outside of the layovers. An operator would need to determine the most appropriate balance of service depending on demand. Furthermore, an operator would need to determine if SAM Shortline passengers were willing to pay at least \$2 for the shuttle services.

Alternatively, as discussed on the previous section, an operator could provide an individual electric mobility device or other low speed vehicle permissible on the sidewalks available for rent. Golf carts and other multi-passenger low speed vehicles are often not roadworthy due to safety issues; an operator would need to work with the local jurisdictions to determine regulations and restrictions for using them in Plains. However, an operator could rent individual devices and/or bicycles at the SAM Shortline platform. Since these devices would be operated by the individuals using them, the operating costs of such a business plan are significantly lower than providing transit. As with the other options, an operator would need to conduct a feasibility analysis to determine the demand for different types of services to identify the most appropriate course of action.

Table 11
Summary of Frequency Options and Costs for Route E

Frequency	Vehicle (15 pax van) and Start Up Costs	Annual Marketing Costs	Average O & M Cost per Trip over 10 years	Trips per year	Total Costs over 10 Years	Average Annual Total Cost*	Max Pax per Year	Cost per Pax per Trip
Approx. 2 hour Layover (24 trips/layover)	\$41,500	\$5,500	\$23.52	1440	\$435,188	\$43,518.80	21,600	\$2.01

*This cost assumes service on average 6 times a month for 10 months a year.

Conclusion

This report discusses a variety of short and long term recommendations that address the topics discussed during the stakeholder meeting in July, 2016. The Jimmy Carter NHS, the NPS Southeast Region Office, and local and regional stakeholders have a number of options for moving forward. Table 12 summarizes the recommendation for all topics except the transit options. The conditions at Jimmy Carter NHS do not currently warrant providing park owned and operated transit services because transit demand is too intermittent to provide a good value within limited Federal Park operating funds. Currently, Park managers can invest Federal funds more effectively by supporting the other recommendations identified in the report. However, the Park managers are aware that new visitation and funding scenarios will emerge and will seek to update this assessment in future years. Meanwhile, a commercial provider might be interested in operating one of these routes or a hybrid of multiple, depending on its business model.¹⁴

Table 12 highlights the next steps that this report recommends the Park and stakeholders prioritize. However, the stakeholders and Park can reassess this prioritization based on their needs and resources. The recommendations highlighted in orange are those conducted by the Park and in blue are those led by other stakeholders.

For the Park, providing additional information to motorcoach companies and opening the north side doors of the Plains Depot involve little to no funding and are relatively simple recommendations. The visitor survey is also prioritized because it is already in the midst of development. Finally, the site map is prioritized because it could have a significant, lasting impact of visitor navigation and would not introduce recurring costs.

For the other stakeholders, the next steps are prioritized based on a balance of level of effort and outcomes. First, the packaged lunch recommendation is relatively simple, but could significantly expand the amount of time SAM Shortline passengers have to visit sites. Second, the safety related next steps would result in important safety improvements for Park visitors. The pedestrian tours could build on the current in-vehicle tours Jan Williams provides and offer a valuable service to park visitors who would like to learn more about the City of Plains. Finally, the signage and streetscape improvements require a longer timeline for implementation, but would provide key improvements to the Visitor experience and facilitate movement among the sites. This would be particularly important if a commercial operator does not pursue a transit service and if parking is not available or limited at future site locations.

¹⁴ To pursue this option, an operator would first need to prepare a market analysis to assess all cost associated with a shuttle and/or tour service to evaluate the affordability of the system. Because the system would not be addressing traffic congestion or overcrowded parking problems, none of the alternatives or studies would be eligible for ATP-CAT III funding. This report recommends pairing any potential service with pedestrian enhancements to encourage walking among SAM Shortline passengers who are willing and able. The Park can use the Visitor Survey as an opportunity to ask visitors about their level of interest and willingness to pay for tours and other forms of transportation.

Table 12
Summary of Next Steps

<i>Type</i>	Recommendation	Key Players	Description	Timeline	Funding Sources
<i>SAM Shortline Layover</i>	Information for motorcoach companies	Jimmy Carter NHS staff/Friends of the Jimmy Carter NHS	Contact and send information about Park to the motorcoach companies	Within 1 year	Negligible funding needed. Park staff would compile
<i>SAM Shortline Layover</i>	Distribute Information	Jimmy Carter NHS staff/Friends of the Jimmy Carter NHS, SAM Shortline	Distribute maps or a brochure to passengers on board the train	Within 1 year	Internal Park or organization funding
<i>SAM Shortline Layover</i>	Longer Layovers	SAM Shortline	Pilot lengthening the layover in Plains for select itineraries	Within 1 year	Costs borne by SAM Shortline operations/passengers
<i>SAM Shortline Layover</i>	Packaged Lunches	Local restaurants, SAM Shortline	Offer pre-packaged lunches to passengers exiting the train	Within 1 year	Costs borne by local restaurants
<i>Safety</i>	US 280 Pedestrian Crossing Improvement	GDOT	Identify and implement pedestrian safety improvement	60 day (alternatives) 1 – 2 year (implementation)	State DOT funding sources
<i>Wayfinding Issues</i>	Site Map	Park Staff or SE Region; Harpers Ferry Center	Develop revised park map for visitors that improves legibility and better aids navigation	1 year	Internal Park funding
<i>Wayfinding Issues</i>	Pedestrian Routes/Tour	Friends of the Jimmy Carter NHS or other organization	Provide a walking tour(s) of key sites near Plains High School and the downtown, on an interim or ongoing basis.	1 year	Possible tour fee
<i>Wayfinding Issues</i>	Plains Depot Doors	Park Staff	Open north side door of Plains Depot and reorganize exhibit to accommodate this.	1 year	Internal Park funding
<i>Wayfinding Issues</i>	Visitor Survey	SE Region and Park Staff	Include questions related to wayfinding and transportation. Analyze responses to assess visitor needs.	Planned for 2017	NPS Unit Management Plan funding
<i>Wayfinding Issues</i>	Wayfinding Signage	City of Plains, Sumter County	Develop and implement the wayfinding and signage scheme for Plains and the surrounding area	1-3 years	Internal Park Funding; GDOT; GA Department of Economic Dev.; Federal Lands Access Program (FLAP)
<i>Pedestrian Environment</i>	Streetscape Improvements	City of Plains, Sumter County RVRC	Design and implement streetscape improvements	3-5 years	FLAP; County Transportation Funds; Other grant funding

<i>Type</i>	Recommendation	Key Players	Description	Timeline	Funding Sources
<i>Bicycle Issues</i>	Bicycles in downtown Plains	City of Plains or local non-profit	Rent bicycles in downtown Plains for visitors and recreation	1 year	City of Plains/Sumter County/Other
<i>Bicycle Issues</i>	Boondocking	Georgia Department of Economic Development	Allow campers to camp for free in the parking lot of the Georgia State Welcome Center	1 year	GA Department of Economic Development
<i>Bicycle Issues</i>	Bicycle and Trail Network	City of Plains, Sumter County	Develop and implement a bicycle and trail network	1 year	NPS Challenge Cost Share Funds; FLAP

Appendix A: Participant List

Internal Team

Name	Title	Organization
Barbara Judy	Superintendent	Jimmy Carter NHS
Beth Wright	Chief of Interpretation & Resource Management	Jimmy Carter NHS
Karen Barry	Chief of Administration	Jimmy Carter NHS
Lee Edwards	Alternative Transportation Program Manager	NPS Southeast Region Office
Ben West	Planning and Compliance Division Chief	NPS Southeast Region Office
Deirdre Hewitt	Southeast Region Program Manager	RTCA
Joshua Moore	Georgia State Program Coordinator	RTCA
Frances Fisher	Operations Research Analyst	U.S. DOT Volpe Center
Alexandra Markiewicz	Community Planner	U.S. DOT Volpe Center

Invited Stakeholders

Name	Title	Organization
Jimmy Carter	Former President	
Rosalynn Carter	Former First Lady	
Mills Simmons	Chair	Plains Better Hometown Board
Ruth M Sanders	Coordinator	Plains Better Hometown Board
Kim Fuller	Executive Director	Friends of Jimmy Carter National Historic Site
Bill Twomey	County Administrator	Sumter County
Barbara Groggin	Executive Director	Sumter County Chamber of Commerce & Payroll Development Authority
Mary Alice Applegate	Archway Professional	UGA Archway Partnership Public Service and Outreach (sponsor of Wayfinding study for Sumter County)
Mary Beth Bass	Executive Director	OneSumter Economic Development Foundation
Nicole Thurston	Tourism Director	Americus & Sumter County Government
Katelyn DiGioia	State Bicycle & Pedestrian Engineer	Georgia Department Of Transportation
Michael Presley	District 3 Engineer	Georgia Department Of Transportation
Jack Reed	District Planning And Programming Coordinator	Georgia Department Of Transportation
Dex Woods		Georgia Department Of Transportation
Julio A. Portillo, M.P.A	Community & Bicycle-Pedestrian Planner	River Valley Regional Commission Regional
Kevin Ellis	Marketing Manager/Assistant Planner	River Valley Regional Commission Regional

Britney Gray	Director of Georgia Visitor Information Centers	Georgia Department of Economic Development
Chris Cannon	Assistant Director of Tourism Product Development	Georgia Department of Economic Development
Terry Miller	Manager	SAM Shortline Excursion Train, Georgia State Parks
Randy Howard	Chair	Sumter County Board of Commissioners

Appendix B: Agenda

Jimmy Carter National Historic Site (NPS) Interagency Transportation Assistance Group Stakeholder Meeting Agenda

Tuesday, July 26, 1:00 PM – 4:30 PM

- 1:00 – 1:30 Opening Address from former President Jimmy Carter

- 1:30 – 2:00 Welcome and Introductions

- 2:00 – 2:15 Connectivity for visitors arriving by SAM Shortline Excursion Train

- 2:15 – 2:55 Transit Service

- 2:55 – 3:05 *Break*

- 3:05 – 3:40 Safety and Pedestrian Issues

- 3:40 – 4:15 Non-motorized transportation network

- 4:15 – 4:30 Wrap Up

Appendix D: Kim Fuller's Guide

Kim Fuller distributes handout to passenger alighting the SAM Shortline with the following text:

The Friends of Jimmy Carter National Historic Site welcomes you to Plains and hopes that you enjoy your stay with us...

Some of your options while here in Plains!

- **5 Minute Walk...** Go to the caution light (only one in town); turn left onto Bond Street... you'll see the school on the left.

Make sure that you visit **Plains High School** while you're here... Have your picture taken behind the "Oval Office Desk" and see President Carter's bronze Nobel Peace Prize after you walk through the halls of the school where both President and Mrs. Carter graduated in the 11th grade and now gives you a glimpse into the Carter legacy.

- **8 Minute Walk...**

Turn left out of the **City Park** and 2 blocks down on your right is the **Carter Compound**... You can't get 'real' close, but you can see the grounds from the road!

- **The Depot is right in front of you as you exit the train...** This is where President Carter launched his campaign for the Presidency back in the '70's.
- Visit **Plains Pharmacy** and our very own **Dollar General**... Browse through the stores downtown, **Plains Antique Mall**, **Indigo Planet**, and **The Trading Post**... eat at the **Buffalo Café** on Main Street or **The Cafeteria** (straight through the caution light to your left)... and you've got to have some of Mr. Bobby's peanut butter ice cream at **Plain Peanuts**.
- **Cross over the highway** and directly across from the railroad tracks is Billy Carter's Service Station... Now the **Billy Carter Museum**. Make sure you stop in there.

And again... Welcome to Plains!

Kim C. Fuller/ FJCNHS Executive Director\

Executive Director/ FJCNHS

Appendix F: Survey Questions

Potential Survey Questions for Survey from OMB Approved List:

TINFO26: On this trip, were the signs directing you and your personal group to [site] adequate? Please mark only one response for each.

NOTE: This questions should be filtered on visitors/users who traveled by vehicle or a non-motorized mode

Signs on interstates	<input type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> Did not see or notice signs
Signs on state highways	<input type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> Did not see or notice signs
Signs in communities	<input type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> Did not see or notice signs
[add other relevant responses, as needed]			

TINFO27: IF NO, Please explain any issues or problems you had with the signs. Please be as specific as possible. (Open-ended)

TINFO28: Did you see the highway message signs on State Route [#]?

- Yes, an electronic message was on the sign
- Yes, saw the sign, but sign was blank
- Do not recall seeing highway message sign

TPLAN4: When planning for your most recent visit to [X], which mode(s) of transportation did you plan to use? (Please check ALL that apply)

- Vehicle (e.g., car, RV, motorcycle, etc.)
- Visitor shuttle
- Bicycle
- Walking
- Group tour bus
- Other (please specify) _____

TACT9: Were there any activities that you and your personal group expected to see or do on this visit to [X] that you were not able to?

- Yes
- No

If YES: What was it? _____ (open-ended)

Why weren't you able to see or do what you wanted? (open-ended)

TDEST13: We would like to get an idea of the route you took through the [site] and the places that you stopped inside the [site]. We would like you to do each of the following:

- a) Using the map to the right, please draw arrows showing the route you took through the [site].
- b) Using the map to the right, please mark an "X" in the boxes next to the places that you stopped while in the [site]

TRANUSE18: This question asks about your use of transportation modes inside [site] and has three parts.

- a) First, please identify whether or not you and your personal group used each of the following modes of transportation during your visit to [site/area]. Mark (•) yes or no for each item.
- b) Next, for only transportation modes that you and your personal group used, please use the 1-5 scale to rate how important it is for you to be able to use this mode inside [site/area].
- c) Finally, for only those transportation modes that you and your personal group used, please use the 1-5 scale to rate your satisfaction with the convenience of using that mode in the [site/area].*

a) Mode of Transportation Used?	YES	NO	b) If used, how important to be able to use? 1= Not at all important 2= Slightly important 3= Moderately important 4= Very important 5= Extremely important					c) If used, how satisfied with convenience? 1=Very dissatisfied 2=Dissatisfied 3= Neither satisfied nor dissatisfied 4=Satisfied 5=Very Satisfied						
[area-specific list of transportation modes (e.g. personal vehicle, bicycle, shuttle)]	0	0	1	2	3	4	5		1	2	3	4	5	

EVAL5: What transportation related issues or problems have you faced when traveling on or through Federal public lands? (Open-ended)

EVAL6: Do you have any suggestions for how travel or transportation to or through Federal public lands can be improved? (Open-ended)

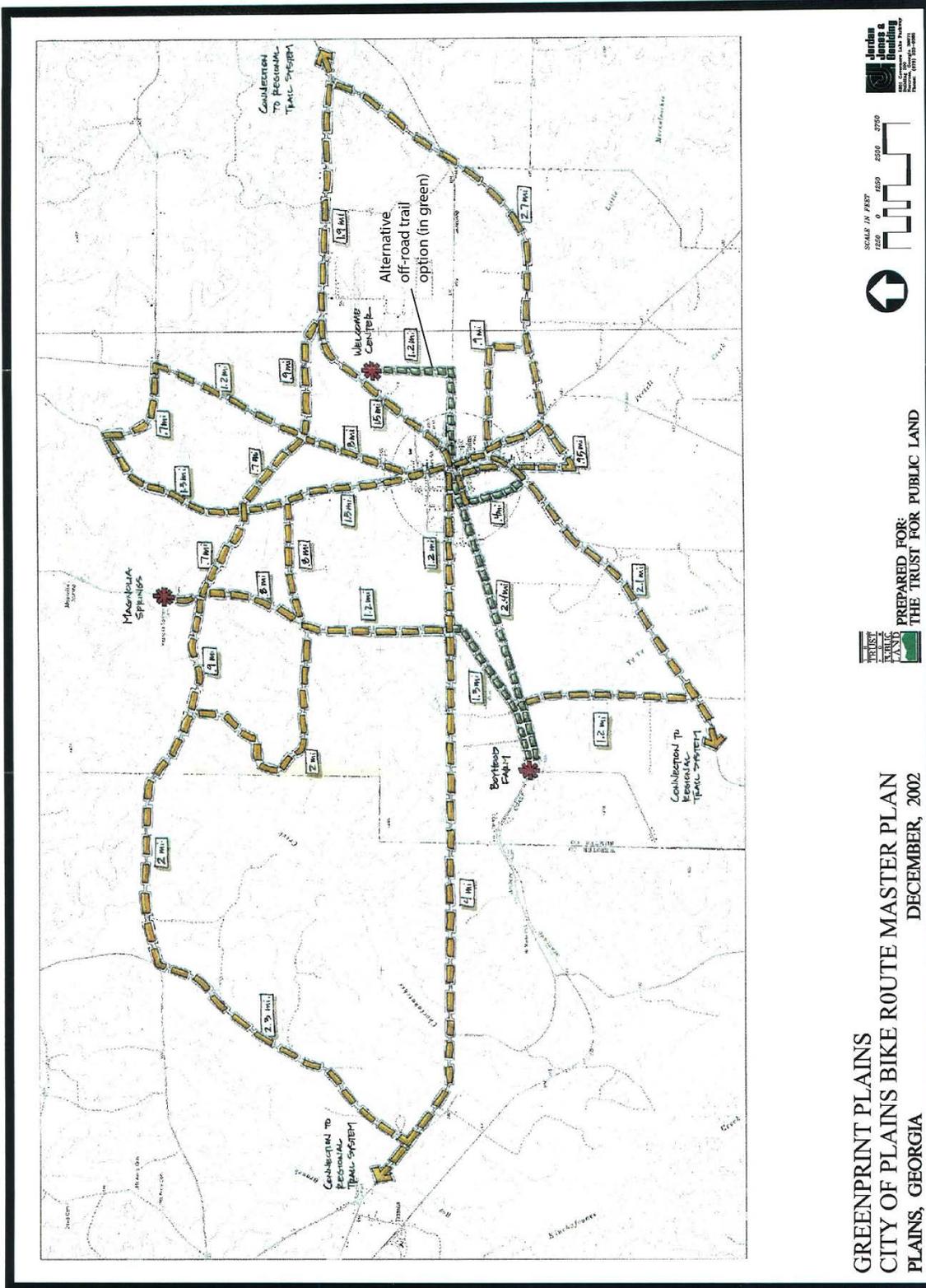
SHPREF3: If you were to visit [site] in the future, if a transit (bus) service existed, with service to the [site/area's] major destinations, how likely would it be that you would use such a service? (check only one)

- Not at all Likely
- Slightly likely
- Moderately Likely
- Very Likely
- Extremely Likely
- Undecided

Other Potential Questions to Include:

- 1.) Would you be willing to walk ¾ of a mile from Plains High School to the Carter Compound? This walk would take approximately 15 minutes.
- 2.) If bicycles were available for rent, would you be interested in bicycling from downtown Plains to the Boyhood Farm (3 miles, about 20 – 30 minutes)?
- 3.) Do you feel safe crossing US 280 (with a map)?

Appendix G: Proposed Bicycle Routes in Greenprint



REPORT DOCUMENTATION PAGE

*Form Approved
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As the nation's principal conservation agency, the Department of the Interior has the responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our parks and historic places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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