

Chapter 7 – Transportation Element

Mobility and connectivity are integral to any community's quality of life. In order for its residents to have the ability to access the broader local and regional transportation networks, a Town's local network must be safe, efficient and serve various modes of transport. This element will survey and analyze the existing conditions of the Island's local transportation networks, transportation patterns and other key aspects that contribute to residents' movement within the Town and outside of it.

Transportation Roads

ROADS

As a barrier island, Sullivan's Island has two points of access by land. The first point of access to Sullivan's Island is through Mt. Pleasant via South Carolina Highway 703 (Coleman Boulevard/Ben Sawyer Boulevard) and the Ben Sawyer Bridge. The second point of access is through Isle of Palms across Breach Inlet on Jasper Boulevard.

There are over 24 miles of paved roads that traverse the Island, and nearly 22 of those road miles are maintained by the South Carolina Department of Transportation; the other 2.3 miles are maintained by the Town or by Charleston County. The only state highway on the island, Highway 703, includes Ben Sawyer Boulevard, Station 22 ½, and Jasper Boulevard, and it represents a key 2.6-mile segment of the Town's transportation infrastructure.

Sullivan's Island's road system is comprised of a loose grid network of low-intensity streets typical of a beach community. The road network on Sullivan's Island follows a pattern set forth originally by trolley lines between Sullivan's Island, Isle of Palms, and Mount Pleasant and ferry docks in Mount Pleasant that provided access to downtown Charleston. All of the roads on Sullivan's Island are designed for short, low-speed trips across the island.

BICYCLE AND PEDESTRIAN FACILITIES

Bicycle and Pedestrian Facilities

Bicycle

The Island is fortunate to be at the intersection of two major bicycle pathways, one regional and one national. The first major trail is the Battery 2 Beach (B2B) route - Created by local advocacy group Charleston Moves, the B2B route is approximately 32 miles of mixed-use paths, connecting downtown Charleston to three Charleston-area beaches (Folly Beach, Sullivan's Island, and Isle of Palms) and five local municipalities. The second major trail is the East Coast Greenway, which is a 2,600 mile long multi-use, urban spine trail system, extending from the northeast corner of Calais, Maine (Calais, Maine) to the southern Florida Keys. Local bicycle facilities include the Ben Sawyer Bikeway, which runs from Mt. Pleasant, over the causeway and into Sullivan's Island. Additionally, the Island's grid network lends itself to easy navigation for cyclists and pedestrians alike.



Source: Charleston Moves

Pedestrian

As mentioned in the previous section, the Town has an extensive and efficient grid network of local roads that stretches from each end of the island. This grid allows for easy navigation, a diversity of routes to traverse

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the island, and fosters a human-scaled built environment. Low-speed local roads and sidewalks also add to the pedestrian network environment throughout the Island, and opportunities to expand the sidewalk network, add crosswalks, and lower speed limits should be explored. Similar traits are reflected in the Town's commercial center—located along Middle Street, from Station 22 ½ to Station 20. The proximity of businesses, parks, residences and recreational opportunities all increase walkability within the commercial district, as well as provide character to the area.

Public Transportation

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PUBLIC TRANSPORTATION

The Island is not directly served by the Charleston Area Regional Transportation Authority (CARTA) through regular route service, but residents have access to the "flex-route" call-ahead bus service, Tel-A-Ride. Tel-A-Ride was set up to meet the Americans with Disabilities Act (ADA) mandated service levels. There are no restrictions on trip purposes and riders must have a specific impairment which restricts their mobility. However, the Town is working with CARTA to explore opportunities for returning mass transit services to the Island. The Town has recently finished exterior restorations on two historic pump houses that are located in the Jasper Boulevard right of way. Another opportunity the Town may explore would be the establishment of a ferry service between the Island and Downtown Charleston.

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Mobility Management

The BCDCOG implemented a regional mobility management program to address the transportation needs of the community. Mobility Management is a strategic approach to designing and delivering transportation services that starts and ends with the customer. It begins with a community vision in which the entire transportation network – public transit, private operators, bicycling and walking – works together with customers, planners, and stakeholders to deliver the transportation options that best meet the community's needs.

As part of the regional mobility management program, the BCDCOG also launched the Lowcountry Go commuter services program with South Carolina Department of Transportation (SCDOT), the Federal Highway Administration (FHWA) and employers and stakeholders in the Tri-County region. The program focuses on reducing traffic congestion and improving quality of life for the region by connecting people with mobility management solutions like carpools, vanpools, public transit, walking, biking, emergency ride home and many other programs that encourage behavior changes among commuters. In order to further this initiative, Lowcountry Go created a web application, Ride Low-Go, which provides an interactive dashboard for commuters to identify an improved commute. More information can be found at the program's website:

<http://www.lowcountrygo.com/>

Average Daily Traffic Volumes

AVERAGE DAILY TRAFFIC VOLUMES

As a coastal community, Sullivan's Island experiences higher traffic volumes in the summer months than any time of the year. Seasonal traffic volume data are no longer maintained, so Average Annual Daily Traffic (AADT), collected by SCDOT year-round, has been utilized. Sullivan's Island has four traffic counters which are depicted on the map and Figure 7.1.

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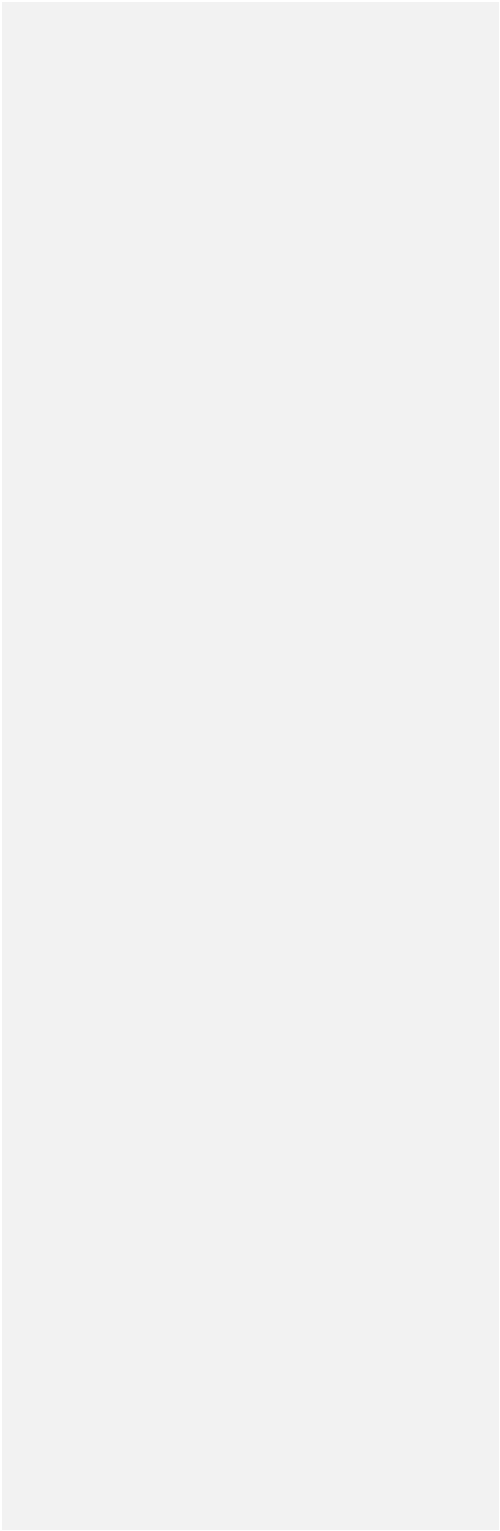
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Figure 7.1 shows that AADT is fairly constant between 2007 and 2016 on the Island, had remained fairly constant in the years prior to the Pandemic, but the Pandemic brought about a sharp drop between the 2019 and 2020 traffic counts on the Island. However, the traffic on the Island has since rebounded, and the counts show that traffic has increased relatively significantly from the pre-Pandemic levels: the 2022 AADT for the 4 counter locations on Sullivan's Island is 8.8% higher than it was in 2019, representing an increase of 3000 cars per day traversing the Island. The greatest increase has occurred on Middle Street just to the west of the Commercial District, where the count has gone up 25% between 2019 and 2022. This does not take into account seasonal traffic congestion where peaks may vary vastly from off season times. Although it should be noted that seasonal traffic patterns are included in the annual numbers. Table 7.1 shows the numbers that were used to derive Figure 7.1.

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Sullivan's Island Resident's Transportation Patterns



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FIGURE 7.1: AADT COUNTS FOR SULLIVAN'S ISLAND

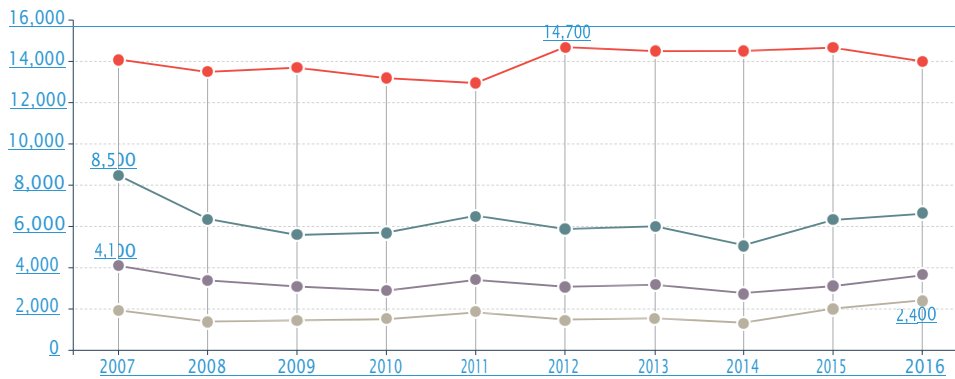


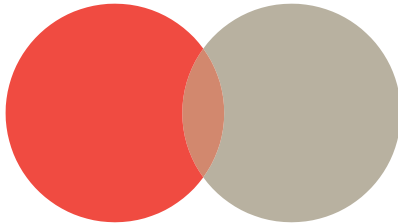
TABLE 7.1: AVERAGE ANNUAL DAILY TRAFFIC COUNTS

TRAFFIC COUNTER #	LOCATION	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
273	Before Ben Sawyer Bridge (Mt. P side)	14,100	13,500	13,700	13,200	12,900	14,700	14,500	14,500	14,700	14,100
274	Before Breach Inlet (SI Side)	8,500	6,400	5,600	5,700	6,500	5,900	6,000	5,100	6,300	6,600
304	Middle St - East of Commercial Area	1,950	1,400	1,450	1,500	1,850	1,500	1,550	1,350	2,000	2,400
305	Middle St - Near Commercial District	4,100	3,400	3,100	2,900	3,400	3,100	3,200	2,800	3,100	3,600



SULLIVAN'S ISLAND RESIDENT'S TRANSPORTATION PATTERNS

FIGURE 7.2: INFLOW/OUTFLOW JOB COUNTS IN 2015



- 672: Employed in Selection Area - Live Outside
- 747: Live in Selection Area - Employed Outside
- 60: Employed and Live in Selection Area

Source: Census on the Map

Where Residents Live and Work

According to Census On The Map (Figure 7.2), an estimated 747,636 workers who live on the Island commute out of the Town to their place of work, 672,546 workers commute to Sullivan's Island daily for their jobs and only 6045 workers live and are employed in the Town. All of these totals are significantly lower than the 2015 counts that were in the 2018 Comprehensive Plan.

Transportation to Work

The primary mode of transportation for Sullivan's Island residents is the automobile. This mode comprises 84.3% of the population. Of the residents who drive to work, 80.7% drive alone and 3.5% carpool. For workers 16 years or older, 15.2% of drivers have one (1) vehicle, 45.4% have two (2) vehicles and 39.4% have three (3) or more vehicles available. These numbers are represented from the ACS 2022 summary data, and they show a shift since 2017, when the largest segment of the population had two vehicles, and now the largest segment has three or more vehicles.

Concerning alternative modes of transportation, 0.5% of the Town's population used public transportation, 0.6% walked, 0.4% rode their bicycles, 2.1% used taxi services and 12.1

10.2% worked from home. Alternative modes of transportation are encouraged and supported by increasing installation of new bike racks and golf cart parking spaces at beach paths and throughout the Commercial District. It is of interest that the bike share rose by 700% from 2017 and the population that works from home actually dropped by nearly 10%.

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FIGURE 7.3: PRIMARY MODES OF TRANSPORTATION TO WORK BY RESIDENTS OF SULLIVAN'S ISLAND

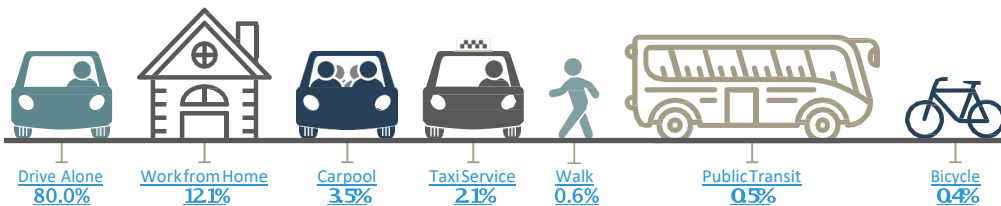
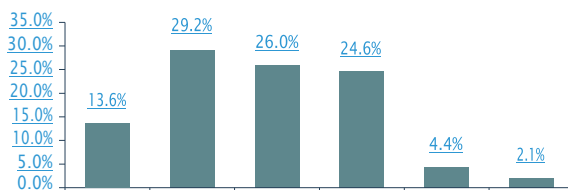


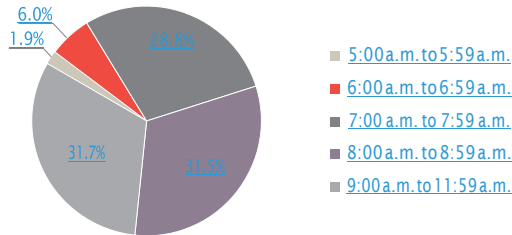
FIGURE 7.4: TRAVEL TIME TO WORK



[Less than 10 minutes](#) [10to19 minutes](#) [20to29 minutes](#) [30to44 minutes](#) [45to59 minutes](#) [One hour or more](#)



FIGURE 7.5: TIME LEAVING HOME FROM WORK



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Travel Time to Work

The mean commute time to work for residents is 22.219 minutes. The most common commute time for residents is 20 to 24 minutes; in 2017 it was 10 to 19 minutes. Only a small percentage of commuters travel an hour or more to work. ~~Concerning when~~ When workers leave for their work destination, this greatly varies. The largest percentage of work commutes (31.728.9%) began in the range of 9:00 a.m. and 11:59 a.m., with the second largest time window (31.520.6%) being from 8:00 a.m. to 8:59 a.m. After a comparison of 2009 to 2021 travel times, it reflects there is an increase in some commuter travel reveals that commute times for residents are slightly shorter on the average, and a decrease in others. More study would be needed to render a determination the time that residents leave for work has become earlier and more spread-out across the morning hours.

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Parking Management

PARKING MANAGEMENT

In April 2017, a new parking plan was put into effect and enforced in order to improve public safety throughout the Island. - Even though 1,700 parking spots were eliminated, parking facilities still exceed demand during peak season. The Town previously allowed day visitors to park on both sides of the street, but now, only one side will be available for parking in order to allow for emergency vehicles to easily access the beach or residences.

Even though 1,700 parking spots were eliminated, there are over 3000 public parking spaces along the edges of the right of ways across the Island and in designated parking facilities, which still exceeds the parking demand during peak season. The Town previously allowed day visitors to park on both sides of the street, but now, only one side will be available for parking in order to allow for emergency vehicles to easily access the beach or residences.

The Town amended the zoning ordinance in 2012 to create a special exception opportunity in the Commercial District for short-term private parking lots; the first private parking lot to utilize the new section of the ordinance came online in 2020, and a second private parking lot is currently being discussed.

Additional sites in the commercial district Commercial District should be identified as potential parking management projects. One such site includes parking along Middle Street from Station 22 to Town Hall. Both residents and Residents,



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visitors alike, and local workers are currently parking in the parallel parking stalls along this section of Middle Street for extended periods of time and occupying spaces, thus depleting the parking stall inventory during peak hours—such as lunch or the summer season. Potential management for this would be an enforceable two-hour only free parking period. Similar management has been enforced along the Battery, adjacent to White Point Gardens in downtown Charleston.

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Commercial District Transportation Improvements

In addition to parking issues in the Commercial District, the district has lacked significant public investment for years, despite the Town hiring a consultant and producing the Sullivan’s Island Community Commercial District Master Plan in 2010. While the plan did provide some good ideas for improvements in the District, it has not been incorporated into the Town’s budget through any capital improvement plans, and fourteen years later the plan needs to be rejuvenated and reconsidered before any strategies are implemented. The perpendicular parking spaces which straddle the property lines on the south side of Middle Street between Station 22 and Station 22.5 are of particular concern: larger vehicles do not fit into the spaces and end up obstructing the travel lanes; there is no clear sidewalk on the southside of Middle Street, and vehicles often encroach into the area where pedestrians move about, between the right of way and the buildings; and vehicles que in the travel lanes either waiting for a space to open or for a vehicle to back out into traffic from a parking space.

While parking is a primary concern, any plan to revise the parking situation along Middle Street through the District needs to place paramount importance upon through access for emergency vehicles. One concept that has been floated (Figure XX.X) shows a concept to remove parking from the through lanes on Middle Street and create a parking lane that parallels the through lanes. Another concept that should be explored is the creation of designated pick up and drop off locations for rideshare vehicles; a common complaint from residents is the loading or unloading of rideshare passengers in the middle of the travel lanes.

The Town recently worked with SCDOT to improve the conditions at the entrance to the Commercial District, where Ben Sawyer Boulevard turns into Station 22.5 and intersects Jasper Boulevard then Middle Street. The improvements limit turn movements at the intersections with Jasper Boulevard and with Middle Street, however the signage approaching these intersections has not been updated, and it leaves little time for drivers to assess where they would best benefit from turning. Signage directing drivers toward certain beach accesses or landmarks would help eliminate confusion for those who are unfamiliar with directions on the Island.

*New “No Parking” signs implemented in the Town.
(Source: Grace Beahm, Post & Courier)*

1. Findlay, Prentiss. 2017. “Sullivan’s rolls out new parking rules for visitors.” *The Post & Courier*. https://www.postandcourier.com/news/sullivan-s-rolls-out-new-parking-rules-for-visitors/article_8a60a3e8-fe8d-11e6-ae32-d35ca9fb78ca.html



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