

2020 Commuter Survey Results

The 2020 Commuter Survey was prepared and administered to all students, faculty, and staff on Wednesday, January 15, 2020 by the Center for Sustainable Development. Approximately 900 respondents completed the survey. As seen from Figure 1, more than half of the respondents were undergraduate and graduate students with faculty and staff representing the remaining number of respondents. This survey was developed to assess the College’s greenhouse gas emissions related to commuting. In addition, this survey provides unique insights into the campus population’s commuting habits and attitudes toward alternative modes of transportation. Student and employee commuting represents 20% of the greenhouse gas emissions generated annually by the College. Alternative forms of transportation assist in decreasing those emissions and move our campus closer to our goal of carbon neutrality. The last College of Charleston commuter survey was administered in 2011.

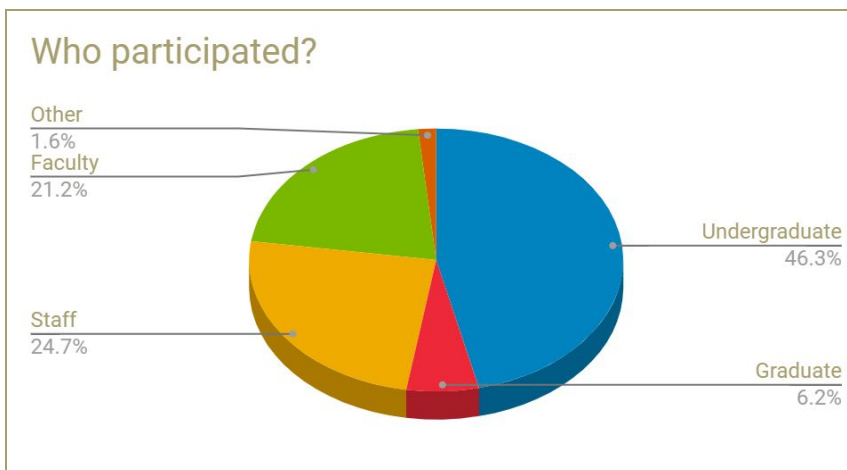


Figure 1: Responses to ‘What is your primary role at the College of Charleston?’

Who responded to the survey?

There was a 4% response rate from undergraduate students, a 6% response rate from graduate students, an 18% response rate from staff, and a 22% response rate from faculty members. When looking at a more detailed breakdown of student participants, upperclass students were more likely to respond to the survey than underclass students. Seniors represent 33% of student survey respondents, whereas freshman students only represent 13% of student respondents (Figure 2). Lastly, the majority of students who responded (76%) considered themselves campus residents.

How do they get from there to here?

Most respondents (94%) travel to the main campus for school or work. Driving alone is the most common mode

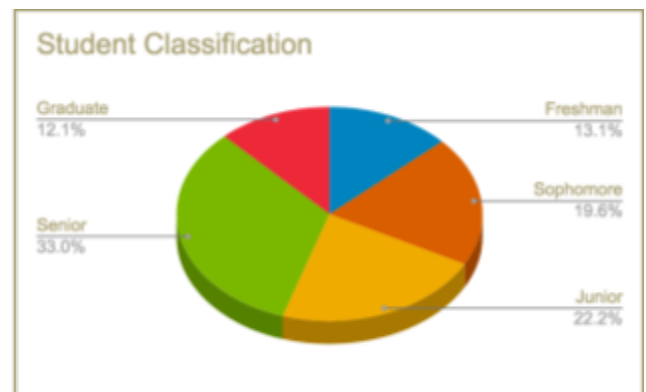


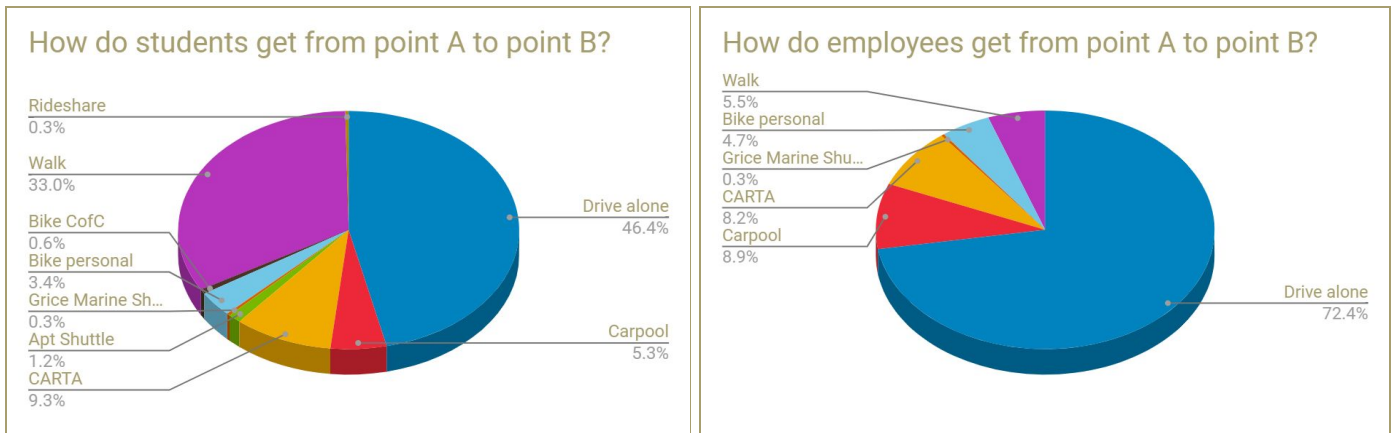
Figure 2: Responses to ‘What year are you?’

of transportation used by both students and employees to get from home to campus. Fifty-eight percent of total respondents drive alone as their main mode of transportation. This is an increase from the 2011 Commuting Report in which 44% of all respondents drove alone as their main mode of transportation. However, when looking at the populations of students and employees separately, there is a significant difference between commuting mode shares. Forty-six percent of student respondents drive alone compared to 72% of

“ *Fifty-eight percent of all respondents drive alone to and from campus.* ”

employees. Thirty-three percent of student respondents walk as their main mode of transportation, with only 5% of employees. This stark difference between driving alone

and walking can be attributed to the student’s proximity to campus, especially those who live in on-campus housing. Carpooling is higher with employees at 9% compared to students at only 5%. CARTA bus ridership is similar among both respondent groups hovering around 9%, with biking being one of the least used modes by both populations (Figures 3 & 4).



Figures 3 & 4: Responses to ‘On your most typical commute to the campus, which mode of transportation do you use?’

For those respondents who drive alone, a car is the most common vehicle used, followed by SUVs and trucks. There are minimal low emission vehicles driven to campus, with only three respondents actually driving plug-in electric vehicles, as seen in Figure 5. The average commuting distance for carpoolers and those who drive alone was between five and twenty miles, with bikers averaging between one and two miles commuting distance.

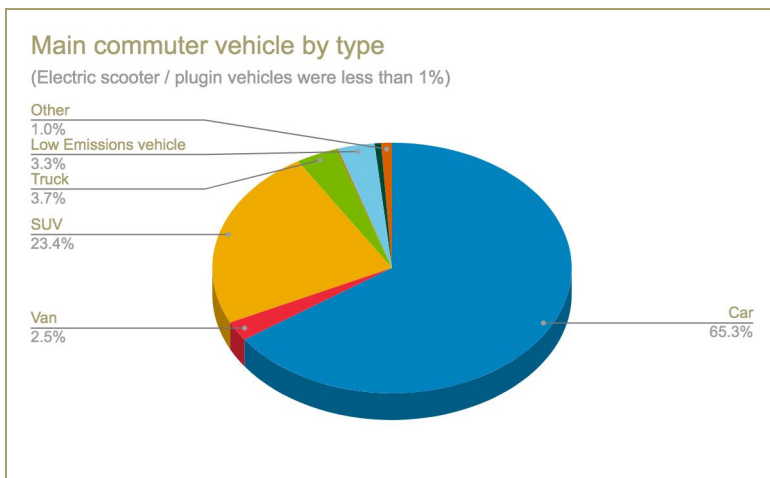


Figure 5: Responses to ‘What is your main commuter vehicle when you drive to campus?’

Why drive alone?

The next set of questions on the survey were aimed at better understanding why respondents typically drive alone. This question was only asked to those respondents who indicated driving alone was their main commuting mode. Respondents were asked to only select their top choice. Students indicated their top reason for driving alone was their irregular school schedules (Figure 6). However, students also indicated a lack of a carpooling partner as another top reason they drive alone as well. This suggests there may be an opportunity for programming to support carpooling for students. Employees indicated their top reason for driving alone was the need for flexibility in their commute. Employees also indicated irregular work schedules and the need for a car in case of emergencies as two important factors in their decision to drive alone. Most of the reasons selected by the respondents can be addressed with incentives and programs, some of which the College already offers. Through a partnership with [Ride Low Go](#), the College participates in a program that offers emergency rides home up to three times annually to those individuals who primarily take alternative transportation to work. These types of programs can be built upon to solve these credible concerns.

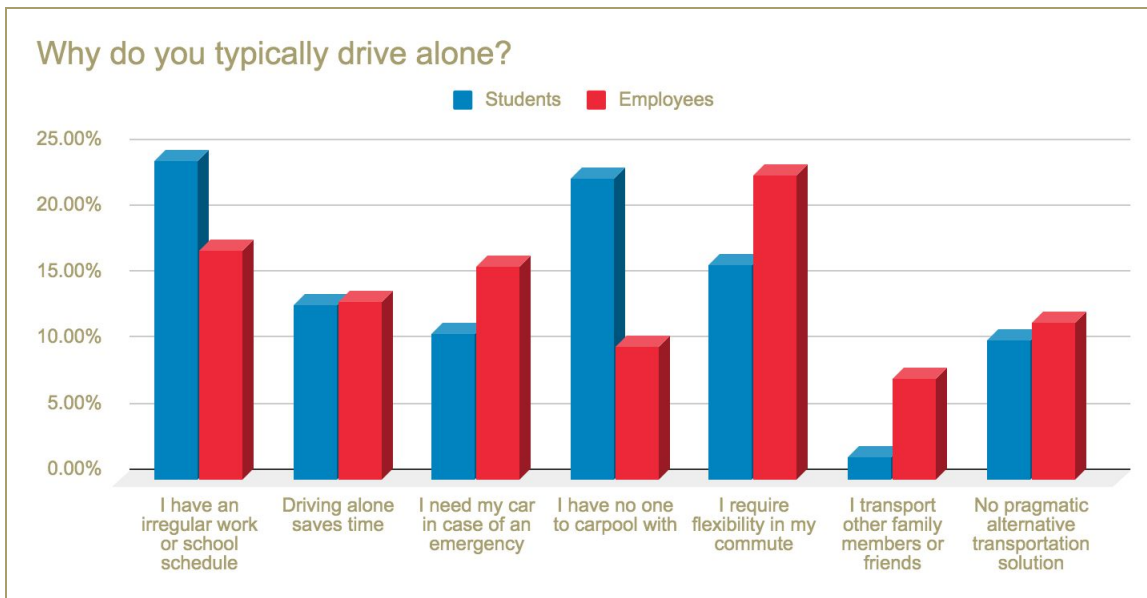


Figure 6: Responses to ‘Select up to three reasons why you typically drive alone when commuting to campus.’

Barriers to alternative transportation

The commuting survey was also designed to better understand the barriers to using the bus or biking to campus. Both students and employees indicated the largest obstacle to commuting to campus via bus is the lack of a nearby bus stop to their home, as seen by Figure 7. Another large obstacle for both groups is the inconsistent arrival of buses at the stops. It is interesting to note that students indicated the feeling of “safety” while using public transportation as a higher priority than employees and were also more interested in improved real-time technology for bus arrivals and departures. Employees indicated their need for a ride home for emergencies and more express bus stops as other incentives to their use of bus commuting.

“ *The largest obstacle to taking the bus is lack of proximity to a bus stop.* ”

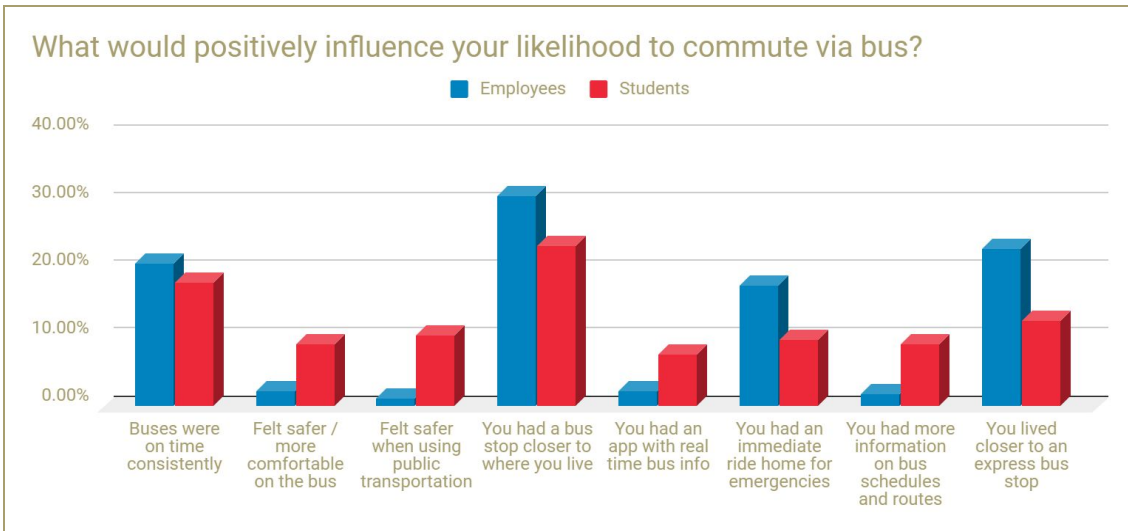


Figure 7: Responses to ‘What would positively influence your likelihood to take a CARTA bus as your main commuting mode?’

Proximity to campus is by far the largest obstacle to students and employees commuting by bike. As seen in Figure 8, almost 80% of all respondents are more likely to bike if they lived closer to campus. About one fifth of each respondent group indicated they would be more likely to bike if it was safer and they knew the proper “rules of the road.” While we can’t change where a person lives, we can advocate for safer, legal ways to bike to campus for those that do live closer.

The College is currently ranked as a Bronze member of the League of American Bicyclists’ [Bicycle Friendly University](#) awards program, but there are many opportunities to move the College to silver or gold status while improving biking infrastructure. In addition, the City of Charleston identifies reducing dependence on single-occupancy vehicles and the expansion of bicycle and pedestrian options as top transportation actions in their [Green Plan](#). Collaboration between the College and our community partners could allow for more students and employees to feel safer biking from home to campus.

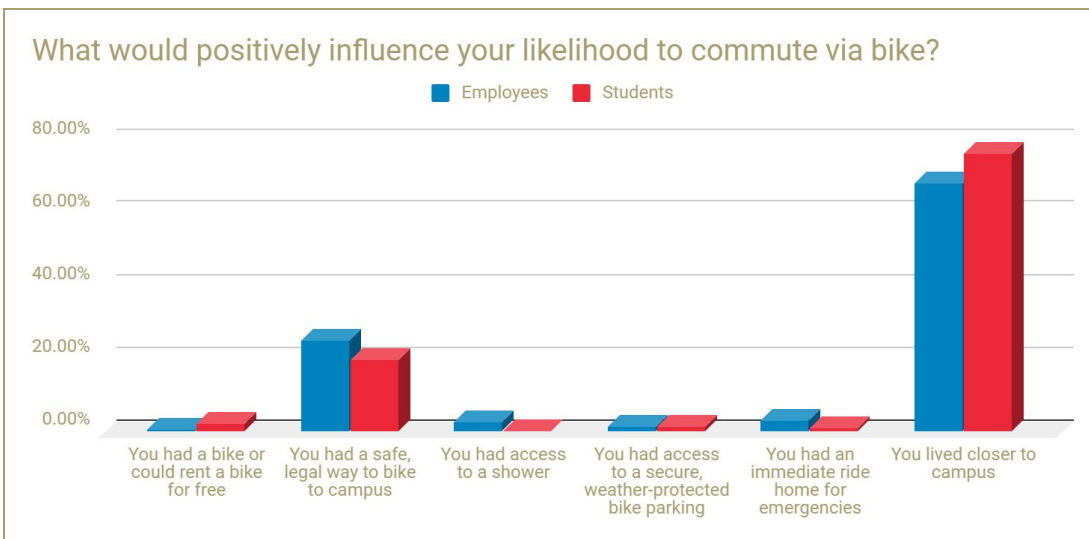


Figure 8: Responses to ‘What would positively influence your likelihood to ride a bike as your main commuting mode?’

Familiarity with alternative transportation programs

The College, City of Charleston, and Charleston County already offer an array of alternative transportation programs, however, many of our student and employee population are just not aware they exist. Figure 9 displays both student and employee respondents' familiarity with these programs. The student and employee responses were very similar across almost all programs. Other than the free CARTA / DASH bus ride program, there is limited use and knowledge of these alternative transportation programs by both populations. And, students overall had slightly less awareness of the free CARTA / DASH service with a College ID than employees. When looking at the two bike share programs on campus (Holy Spokes and the CofC free bike share), awareness of the programs are high, but the use is fairly minimal. There seems to be an opportunity here to move students and employees from the knowledge of these programs to the use of these programs. Lastly, there were very few respondents who had used or who were aware of the carpool parking permit, Ride Low Go, or the Enterprise CarShare option. There is tremendous opportunity here to engage our population around these alternative transportation options.

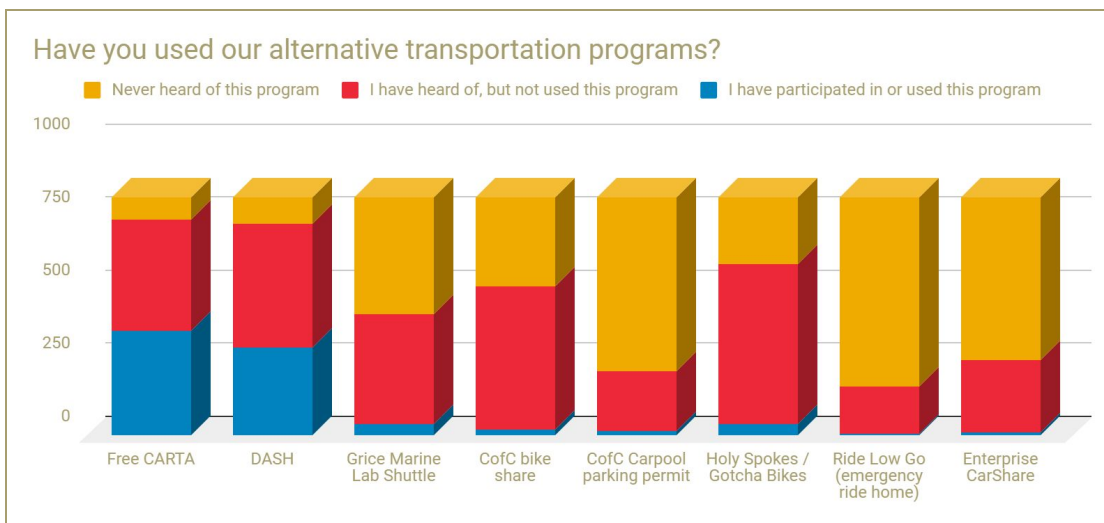


Figure 9: Responses to 'What is your familiarity with the programs offered to College of Charleston employees and students?'

Electric vehicle support at CofC

The last set of questions were designed to better understand support for electric vehicle charging stations on campus, along with prioritizing or subsidizing parking for those individuals who drive low or zero emission vehicles to campus. According to [Project Drawdown](#), an international climate solutions program, electric cars are a recommended greenhouse gas reduction tactic that could reduce greenhouse gas emissions by up to 15 gigatons by 2050. These survey questions gauged the support for charging stations, but also the

incentivization of electric vehicles on campus through parking solutions.

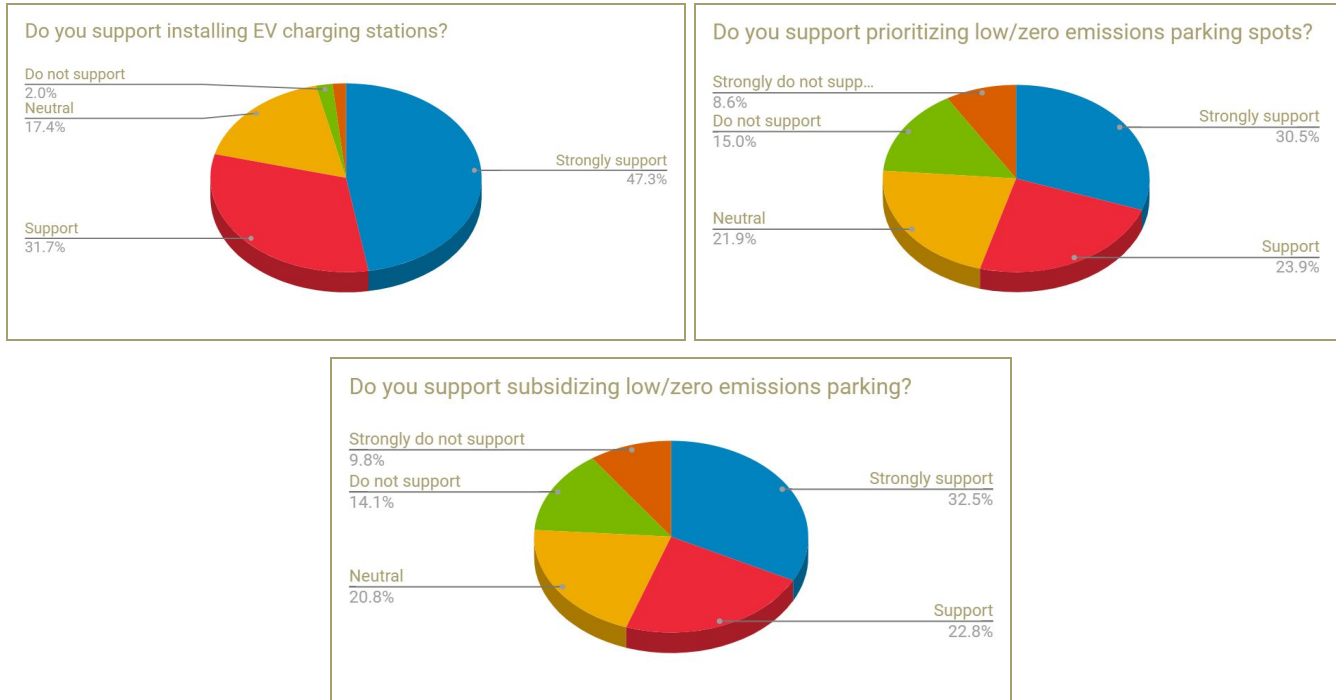


I support the idea of charging stations on campus, but special permits or parking spots for those vehicles privileges those employees who make enough money to buy expensive cars.

There is overwhelming support for electric vehicle charging stations on campus with close to 80% of respondents supporting or strongly supporting the

initiative. Support for prioritizing or subsidizing low emission vehicle parking spots was not as high, but still more than 50% of the respondents supported or strongly supported both initiatives. However, these questions elicited a wide range of written responses worth discussing. More than 25 respondents indicated that the cost

of an electric vehicle is a barrier to the average employee or student. There were also many responses indicating an increase in inequalities among the campus population if we incentivized parking for those employees or students who could afford an electric vehicle versus those who could not. This is valuable feedback as future decisions are made around incentivizing parking spots.



Figures 10, 11, 12: Student and employee support for electric vehicle infrastructure and low/zero emission vehicle parking

The down low

We received more than 100 written responses in the comment box at the end of the survey. Students and employees were very excited to provide their feedback about commuting and alternative transportation. Thirty percent of the written comments



More affordable and accessible rideshare options would be a great addition to the College.

were in support of the expansion and enhancement of public and alternate forms of transportation to and from the College’s campus. From bike infrastructure to more bus routes, members of our campus community desire broad alternative transportation solutions. Buses were the most frequent topic, including calls to add bus routes to Johns and James Island, increase the frequency of bus arrivals and departures and to add express buses that run during the middle of the day. Additional comment topics that were consistent among respondents included more affordable parking options on campus and to investigate other incentives for environmentally friendly alternative transportation modes outside of just electric vehicles.

Recommendations

Education about alternative transportation options

There are great programs offered by the College, City, and County that support alternative transportation, but most members of our campus community either don’t know about them or have never used them. Continued education around these programs is vital to their use and success. Targeted education specific to staff, faculty,

and students is also important. Some recommendations for educational opportunities moving forward include: new employee orientation, social media “ride along” on CARTA for a day, peer-to-peer student education, and partnering with the CofC farmers market to have an educational table about alternative transportation.

Research carpooler connection programs

From the survey results, it seems as if students are interested in carpooling if there was a way to connect with others that live nearby. Research other schools that have carpooler connection programs in place to better understand the feasibility of implementing something similar at the College. [Champlain College](#) in Vermont offers programs like Wheeli, ZimRide, and a closed Facebook group where students, faculty, and staff can find carpooling partners. And, the [University of Louisville](#) has created their own program called CARpool, which incentivizes carpooling through carpool designated parking spots and occasional use parking permits.

Grow partnerships

Alternative transportation is a team effort, and the College should engage in growing their partnerships with CARTA, GotchaBikes!, Charleston Moves, Enterprise, and other organizations and companies working in this space. There is clearly an interest among our student and employee population in enhancing what alternative transportation options we currently offer. There is also valuable information within this survey to share with our partners and begin conversations around how to move forward.

Make public transportation “cool”

Many students identified their comfortability taking public transportation as a barrier. Figuring out the bus routes and bus timeliness are additional issues that may add to the public transportation uneasiness. Through partnership with CARTA, perhaps assistance could be offered to students and employees who want to ride the bus but aren’t sure which route to take or what time they need to be at the bus stop. In addition, the promotion of the Transit App that provides real-time data on CARTA buses can be easily promoted to the College population. The College could also develop route guides to assist students in taking the bus to nearby points of interest like the grocery store or movie theatre.

Make bike safety and amenities a priority

Safety while bicycling is extremely important, however, it is not easily achieved while biking in Charleston. The College should be active in working with partners like the City, County, and nonprofits like Charleston Moves to make biking a priority mode of transportation. With the new pedestrian bridge connecting the peninsula to West Ashley, this is a prime opportunity for the College to engage in these discussions and promote safe accessibility for walkers and bikers to our campus. In addition to bike safety, amenities for those that bike should also be investigated and promoted. Access to showers, lockers, and safe and secure parking are also important criteria to increasing bike commuters to campus.

Continue to offer telecommuting as an alternative transportation mode

More than 500,000 commuting miles were avoided over five weeks during the spring 2020 stay-at-home COVID19 pandemic. These were extreme circumstances, but show the impact telecommuting has on the amount of greenhouse gas emissions avoided when staff and faculty can work from home. While telecommuting was a relatively new mode of alternative transportation on the College’s campus prior to the pandemic, it is worth continuing to investigate once the campus returns to normal operations as an option for those staff members who can work from home.

Investigate incentives for alternative transporters

Many respondents were interested in incentives for those who choose not to drive alone. If the College truly wants to reduce the greenhouse gas emissions associated with the commutes of its students and employees, investigating incentive opportunities should be a top priority. Some of the most consistent feedback from the survey is that a person's commute is not consistent from day to day - based on schedules, emergencies, family needs and more. Recognizing that many employees and students need some flexibility in their commute is an important piece of the puzzle, and this can be honored through incentives. For example, Loyola Marymount University offers a "[rainy day pass](#)" for bikers who prefer not to bike in the pouring rain. Another program is an "[Occasional Use Parking Permit](#)" program that could be modeled after similar programs at MUSC and Emory University. Emory University provides a permit for 12 days a semester allowing for those flex days where an employee or student just needs their car.

The Center for Sustainable Development would like to offer special thanks to the following individuals who supported the 2020 Commuter Survey:

- Frances C. Welch, Interim Provost
- Divya Bhati, Associate Vice President, Institutional Effectiveness
- Xiushan Jiang, Director of Statistical Planning and Accreditation Research
- Amy Orr, Director of Business & Auxiliary Services
- Ashleigh Parr, Deputy Director, Business & Auxiliary Services
- Sonya Allen, Parking Manager
- Mya Belden, Spring 2020 Zero Waste Event and Climate Support Intern
- Sofia Troya, Spring 2020 Climate Innovation Intern
- Eliza Bower, former Office of Sustainability Bike Share Manager
- Morgan Hughey, Assistant Professor, Health and Human Performance
- Caroline Donahue, Summer 2020 Climate Innovation Intern