Estero Parkway

Sustainability Audit Final Report

Estero Parkway

Estero is the Spanish word for estuary, which is where multiple rivers and/or streams connect with the ocean; so, where fresh water meets sea water. The area got its name due to its proximity to the Estero Creek, now known as the Estero River (Estero Village Council Members, 2017). The Village of Estero is approximately 25 square miles, a few years ago this piece of land was a remote area, mostly undeveloped and sparsely populated compared to what it is today. According to the United States Census Bureau, it is estimated that in 2017, a total of 33,048 people reside in the Village of Estero. Real estate data from multiple listing service (MLS)- a platform where real estate transactions take place and data are recorded-shows a strong rise in the number of residents; both permanent and seasonal. Using the 2010 Census, it was found that about 94 percent of Estero Village’s population is White. About two percent of the population is Black or African American and about five percent of the population is Hispanic or Latino. The rest of the races noted were all less than one percent. Lastly, it was found that more than 80 percent of Estero Village’s population is over the age of 21 and about 50 percent of the population is over the age of 62. The most common way these people who are living or visiting Estero interact with each other is by sharing the roads together and Estero Parkway is a strong focal point and common use by all citizens throughout many modes of transportation.

Our walking audit took place on Estero Parkway, in Estero, Florida. Estero Parkway serves as the driveway for many residents, travelers, college students, business people, freight delivery drivers, churchgoers, and tourists. It links US 41 and Ben Hill Griffin. It is split by Three Oaks Parkway and connects many communities with the rest of the area via small streets and is about three miles in length. In the last 5-10 years, the landscape of Estero has changed substantially and a wide range of new constructions have developed in a short amount of time. Now, there are many new apartment buildings, single family homes, condos, gas stations, and all type of businesses.

At the west end of the parkway is a new Walmart on the corner of US 41 and Estero Parkway, which is very accessible to the community. According to Haley Peterson (2016) of the Business Insider, the average Walmart shopper is a 50-year-old white female, with an annual income of about $50k. Walmart typically caters to the middle economic class, considering most
of their shoppers have an annual income between $25k and $49.9k (Peterson, 2016). To the east, Estero Parkway intersects with Ben Hill Griffin Boulevard, which is main road to and from Florida Gulf Coast University (FGCU). FGCU has a population of 14,957 students and 1,379 faculty and staff. The businesses in the area tend to be known franchises/chains; however, there are a few locally owned businesses, such as a gym, a nail salon, and a restaurant.

Although there are no schools directly on Estero Parkway, there are schools that are close by. The closest elementary school is Three Oaks Elementary School, which is less than a mile away. The closest middle school is Three Oaks Middle School, which is about two miles away. The closest high school is Estero High School, which is about three miles away. In addition to these public school are countless daycares within the vicinity.

Estero seems to have a good community structure; its infrastructure is suitable to the residence who live and work in the area for the most part. However, with a consistently growing community, there is always room for improvement to help the community function in the best possible way for all residents.
What We Found

As part of our group’s initiative to help turn Estero Parkway into a safe and complete street, several important aspects needed to be considered. According to Smart Growth America, “When streets are designed only for cars, they deny people the opportunity to choose more active ways to get around, such as walking and biking. Even where sidewalks exist, large intersections and speeding traffic may make walking unpleasant or even unsafe - discouraging any non-motorized travel.” This is exactly what our group has witnessed as we traveled the streets of Estero Parkway.

Sidewalks:

Sidewalks are a vital factor in creating a complete street in Estero Parkway. A report created by the National Conference of State Legislators discovered that the most effective policy avenue for encouraging bicycling and walking is incorporating sidewalks and bike lanes into community design. Most of the sidewalks along Estero Parkway are 5ft wide, just large enough for two people to walk side by side, but there are points within the sidewalk path that the sidewalks abruptly ends and the sidewalk just turns into grass. This particular sidewalk is older than the other portions; it has minor cracks in it and does not run parallel with the road. This can be potentially hazardous for pedestrians getting closer and closer to traffic as they walk. This also is potentially hazardous for cars driving because if a biker is riding on this sidewalk, it may look to the car as if the biker might be swerving into the road, which could cause a car to swerve resulting in an accident.
Here is another photo demonstrating how the sidewalks abruptly end in more than one location. This can be hazardous to people using the pathways because they may choose to use the street instead of walking through grass, which puts them closer to fast moving vehicles.

The parts of the sidewalks that are undisturbed are whole and intact; they do not have any poles, light or utility signs blocking their path; however, there are telephone and electrical poles off to the side of the sidewalks, but do not block any movement. There is a larger sized barrier of grass between the sidewalk and road, which provides an extra safety precaution for those traveling on foot or any other transportation method using a sidewalk. This natural barrier between the sidewalk and street also provides a space for water to run off during heavy rain and storms to prevent excess build up in the streets, while also providing protection to pedestrians. There is a ditch next to the sidewalk that is available and ready to catch excess water and flooding to prevent water from sitting in the road and flooding the sidewalks.
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**Street Features:**

In addition to the lack of suitable sidewalks, we noted an absence of benches for sitting and resting, 7-11 on the corner of Three Oak Blvd. and Estero Parkway is the only place that provides these amenities. Within the 3 mile stretch, there is no shade to block the rays from the sun for any pedestrians or bikers that need a break from biking, running, walking, rollerblading, or skateboarding. Throughout our pathway, there is no street lighting that we noticed on both undeveloped areas and outside of developed communities. Access to street lighting at night is vital to the safety of all kinds of pedestrians. Whether walking, jogging, biking, rollerblading, skateboarding, or simply walking a dog, street lights make the pedestrian more visible to traffic and other pedestrians, and significantly decreases criminal or negative activity in the community at night.

According to the Environmental Protection Agency, or EPA, green or open space “provides recreational areas for residents and helps to enhance the beauty and environmental quality of neighborhoods,” (2017). On Estero Parkway, there is a lot of underdeveloped land, with grass and trees. In regard to the area’s environmental quality, the air quality is very good. However, we did notice that there was over 20 pieces of trash scattered throughout the road and the green space. We also observed a lack of trash and recycle bins, which is the likely reason for the scattered trash.
**Bike lanes**

From Three Oaks Blvd. to US 41 there are no bike lanes available for bikers to use. This leaves the bikers two options: they can ride on the sidewalk (when available), which causes a hazard and inconvenience for walkers, skateboarders, and rollerbladers, or they can ride alongside the cars traveling on the road where the speed limit is 45 MPH. Even when they choose to share the road, the edge of the roadway is quite small and uneven for bikers to ride on. It was noted that drivers seem more concerned merging and switching lanes on Estero Parkway than about the bikers sharing the road. Our overall consensus is that the area feels safe to walk only during the day and only if the sidewalks are available because the speed on the road is incredibly high due to speeding and there are no bike lanes.
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**Vehicle Speed**

The most important aspect we noticed during this project was how flat, wide, and straight Estero Parkway is. This encourages drivers to speed up rather than slow down because it is easy to see further down the road, notice cops, and become zoned out or more distracted while driving. Due to the dangerous nature of speeding vehicles, finding simple ways to reduce the speed on Estero Parkway should be a top priority. One way we propose to slow the speed would be to add canopy shade trees. Not only does this provide shade for pedestrians and increase biodiversity, but it creates a more narrow perspective of the road which would subconsciously make cars drive slower because the road would feel smaller. In addition, we suggest placing a yellow yield light outside of the communities that would give pedestrians a safe place to cross the road. The flashing yellow lights would help drivers bring attention to the speed they are driving, knowing they may have to stop for a person. Lastly, as a long term solution, implementing an extra stop light leaving the communities could be crucial to permanently controlling the speed of vehicles on Estero Parkway. Timing the lights with sensors for when people leave the communities would slow traffic on Estero Parkway as people come and go from their homes all day.
Intersections (Estero Parkway and US 41)

While walking through Estero Parkway, there were a myriad of findings. As we got to the intersection of Estero Parkway and S. Tamiami Trail, we saw there was a push-to-walk signal for pedestrians that was in working conditions. We pushed the button and found out the wait time was one minute and forty-three seconds before the signal allowed us to walk down the intersection. All four corners had the push-to-walk signal and we used two of them to see the difference in time allotted to walk from one side to another. Thirty-eight seconds was the allotted time to cross any side of the intersection. For the two sides that were smaller, we thought that was a reasonable amount of time but for the two sides that are wider we thought that 38 seconds was not enough time to cross safely. Especially if this community caters to the elderly, 38 seconds would not be enough time for a person in a wheelchair or with a cane to walk down a road with four or more lanes like S. Tamiami Trail. This is the intersection of Estero Parkway and S. Tamiami Trail. Though they had push-to-walk signals and safely constructed curb ramps at the crossings, they did not have any crosswalk signs at the intersection. The curb ramps had textured surfaces and were facing the correct direction but there were no roadside signs that tell the drivers there is a crosswalk ahead. This could be the reason why the drivers do not stop behind the crosswalk bars at the red signal light. We noticed that all the drivers who wanted to make an immediate right did not stop at all where their line to stop was, they even passed the entire pedestrian walking space and sped up as if they needed to be further up to see before they made their right turn.
Moving Forward

As the Village of Estero Council presents project plans for the improvement of Estero Parkway, our group created suggestions that should be regarded as the project moves forward. We have organized these suggestions by short-term, mid-range, and long-term goals.

**Short-term**

- Extend time given to cross the intersection of US 41 at Estero Parkway
- Require a “no turn on red” at US 41 and Estero Parkway
- Decrease the width of driving lanes
- Provide trash/recycling containers between sidewalks and business

**Mid-range**

- Close gaps between sidewalks and repair any present damage
- Add landscaping and proper signage to reduce speed limit
- Establish shade along walking and biking lanes
- Create buffered bike lanes (minimum of 4ft in width)
- Provide areas for pedestrians to sit and rest along pathways

**Long-term**

- Incorporate the use of low impact development for drainage and creating sense of place
- Install crosswalks (north to south) with flashing lighting at major neighborhoods
- Install lighting along entire stretch of roadway

**Additional Suggestions**

A portion of the Estero Parkway Improvement Plan highlights the importance of filling in the missing areas of the sidewalk, but also includes the potential of increasing the width of the sidewalk and including a separate bike lane. Our suggestion would be to use pervious paver (to allow rainwater to pass through) or ash concrete. As part of our Colloquium class at Florida Gulf Coast University, we visited the Waste-to-Energy Lee County Resource Facility in Fort Myers. We learned that all the low value waste in Lee and Hendry County is brought to this facility, and with their mass-burn combustion system, they are able to convert our waste into electrical energy. Once the waste is combusted, all that is left is ash, which then disposed of in landfills. Solid waste incineration ash has been recycled for roadbed, asphalt paving, and concrete products in many European and Asian countries. Our group suggests that if sidewalk improvements will ultimately be made, the Village of Estero should consider partnering up with the Resource Facility, and use the ash created as resource building material for the parkway. Not only would this decrease economic cost because the material is locally sourced; it would allow
for an environmentally sustainable way to decrease the amount of waste in our landfill and to use recycled material to improve Estero Parkway.

**Final Remarks**

Overall, we learned the importance of getting to know our area. As young adults who live in this community, these are issues that were brought to light by our own audits that in other ways had slipped our eyes before. Factors of traveling such as safety and the importance of sharing the road are concepts we need to speak about more. A goal we had for this project was to bring to light some basic, but necessary opportunities of change for an extremely well known, well-traveled, and popular road within our community. This area has so much potential in becoming a nice and safe area for pedestrians to reach their destinations. There is still so much to improve, but through these small improvements, it can make the life of a pedestrian enjoyable, and most importantly, safer.
References


