



ALLISON BRUEGGER - GIS ANALYST

Allison Bruegger is part of a team that uses GIS (graphic information systems) to record even such minutia as the location of all of the approximately 5,000 Stop signs in Plantation. She presented her system recently to a county wide GIS group.

GIS Mapping bring new insights to Plantation employees and citizens.

When the U.S. Department of Transportation mandated that every city in the nation evaluate each of its street signs for their “retroreflective quality,” – how well a sign reflects light so it can be read in the dark -- the City of Plantation knew it had a daunting task on its hands. The city didn’t have the technology or the manpower to inspect, repair and/or replace its more than 5,000 signs. The project remained on the back burner for years.

Plantation Department of Public Works staff member Allison Bruegger had an idea. Why not use the cutting-edge tools of GIS to chart the path to a solution?

GIS – short for geographic information systems – is a powerful software mapping system that’s changing how location-based work gets done. A cousin of the GPS on your smart phone, it incorporates complex, customized data that keeps ongoing work organized and provides insights, real-time information and updates on a project’s progress.

Bruegger, a GIS Analyst, put together a plan to attack the problem using a GIS-generated map. She partnered with Paul Gallagher, hired in 2021 as a GIS Collector, who went into the streets of Plantation armed with a GIS-equipped iPad, charting the location of each sign and noting what work needed to be done. That technology linked up with Plantation’s sign shop, which documented repair and replacement in real time.

Sign by sign, street by street, the “impossible” job is getting done. Bruegger recently presented the results of her team’s successful effort to the Broward County GIS Users Group, a quarterly meeting of public and private-sector users engaged with the technology.

“It was a really good example to share,” she said, noting that other cities are dealing with similar street sign issues. “I’m glad I have colleagues I can reach out to. Broward County is doing a lot of work with GIS.”

GIS maps can put fast answers into both employees’ and residents’ fingertips. When am I scheduled for bulk pickup? Four clicks on plantation.org will give you the answer, Bruegger said. And if someone calls the city with an issue on, say, a waterway, GIS can help determine who oversees that waterway (there are several districts in Plantation) and staff can forward the problem to the right people.

It’s also a critical tool for public safety. A dark stretch of sidewalk on NW 46 Avenue near the Jim Ward Community Center created hazardous conditions for pedestrians using the center at night. Solving that problem involved multiple departments, including street-level photos of street lights and the sidewalk by Public Works, and drone photos of trees taken by the Parks Department. Consolidating the information on GIS, the city was able to zero in on which trees came between the light and the sidewalk, and take action on tree pruning and removal to ensure the light could get through.

Bruegger, a Florida State University graduate who has worked with GIS since 2014, learned about the technology from her supervisor at an internship with the National Park Service. Intrigued by the technology, she went back to FSU for a Masters in GIS. After several other jobs, she came to work for Plantation, where she’s a resident and a big fan of its parks and public spaces.

“I love that Plantation is aesthetically pleasing,” she said. “I’m proud to not only work here, but to live here.”