

CartêGraph, FEMA, and You

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Since 1998, Clay County, Florida has utilized the capability of CartêGraph applications to aid its infrastructure maintenance efforts. With a combined suite of modules—including SIGNview, SIGNALview, PAVEMENTview, BRIDGEview, and WORKdirector—Clay County has implemented and maintained a firm and prudent approach to work, asset, and infrastructure management. This year-round dedication to infrastructure takes on a heightened meaning in the months of June through November. During this six-month span, Clay County—along with countless other communities in the southern United States—finds itself susceptible to the litany of damage and safety concerns that are inherent to hurricanes, tropical storms, and other associated weather events. Because these instances demand as speedy a recovery as possible, Clay County has creatively and successfully customized its CartêGraph applications to better assist them in these efforts. The ability to customize the data capture and reporting capabilities within CartêGraph has enabled the County to expedite and enhance their response, especially during those instances that require assistance and reimbursement from the Federal Emergency Management Agency (FEMA).

For many years, Clay County, Florida had managed to avoid much of the damage that is so common with



large scale weather events. “The situation hadn’t ever arisen that we needed to concern ourselves with FEMA reimbursement until a couple of years ago,” recalls Patricia Gilliard, Clay County’s longtime CartêGraph Program Manager. That situation arrived at the conclusion of the 2004 hurricane season, one that is widely regarded as the fiercest in Florida history. In the wake of consecutive hurricanes and tropical storms, the County found itself dealing with an aftermath comprised of, among other things, downed power lines, widespread flooding and badly damaged roadways. With the entire state of Florida declared a major disaster area, FEMA was quickly dispatched to assess the damage and make aid available to those communities in need. It was then that Gilliard found herself charged with the task of coordinating the County’s effort to seek FEMA assistance.

When she first embarked on the FEMA submission process, Gilliard was simply directed to a downloadable

set of FEMA guidelines and an empty spreadsheet. With very little instruction beyond those materials, Gilliard undertook a process that ended up being far bigger than imagined. “I nearly lost my eyesight!” she joked, reflecting on the experience.

By all accounts, Gilliard spent literally hundreds of hours pulling the relevant data and figures—such as locations, labor and equipment hours, and associated rates—from her daily reports, and manually populating it, cell by cell, into the FEMA spreadsheet. In the midst of the process, something occurred to Gilliard. “Why should I have to manually justify something that is already there?” she questioned, referring to the wealth of data that was already being managed in her CartêGraph database. It was just a matter of bringing this fact to FEMA’s attention. So, whenever the opportunity arose, Gilliard made FEMA representatives aware that, because of the data capture and reporting capabilities of her CartêGraph applications, the County already possessed a packaged version of the information that they required.

“This is already in our CartêGraph system;” she would remind them, “I don’t understand why I have to do this when I already have a program here that will generate reports and provide you all of this information.”

Finally, near the conclusion of Clay County’s first bid for assistance, a local FEMA representative relented and took a look at one of the County’s standard, CartêGraph-generated reports. After a brief study of the document, the representative confirmed that the report did, indeed, have all the information that FEMA needed. It was further conceded that Clay County could feel free to

utilize these reporting capabilities for future events that required the assistance of FEMA.

To prepare for those future events, Gilliard utilized CartêGraph’s customizable features to proactively enhance all of Clay County’s work and asset management applications. By adding fields and assigning codes directly within all of the County’s asset management modules, Gilliard was able to create a data management template that effectively anticipated the nuances of the FEMA submission process. For example, based on FEMA’s own established criteria, Gilliard adjusted and assigned the County equipment rates to match the FEMA-specified standard. This same type of detailed consideration was given with regard to labor and material rates, as well. Gilliard then established a protocol for the ‘Notes’ section within each record. In doing so, users would augment the information specified in each appointed field with other FEMA required information, such as weather event category, relevant dates, location, and unique details of specific repairs.

“I learned the hard way,” said Gilliard, referring to the trial and error involved with early FEMA submissions. “There is a lot of verbiage that FEMA doesn’t like to recognize. By clarifying our statements within the “Notes” field, we can ensure that we will be reimbursed.”

As an example, Gilliard discussed the County’s use of PAVEMENTview during weather-related road repairs. “Obviously, during a hurricane, or heavy storm, you get a lot of water,” she explained, “Now, what happens when you get too much water is it gets under the sub-base of your pavement and it pops it up, creating these huge

potholes. If your records tell FEMA that you're repairing potholes, they will not pay for that. As far as they're concerned, that's just poor pavement management. But, by simply adding a note that explains 'repair due to sub-grade failure because of Category B weather event' you can almost guarantee that you'll get paid."

With her ever expanding wealth of experience, Gilliard has continued to gain efficiency by refining the way that Clay County operates within its own system. As an illustration of this creativity and refinement, the County modified its *WORKdirector* application to employ a unique and useful approach to work order management. "In advance of a weather event, we issue one work order number," Gilliard explained, "and all work activity that stems from that weather event is done under that assigned work order. Now, every action—from ditch repair to grading—is under that number, but it can still be filtered by area, location, and even time frame. And believe me, when it comes to FEMA, this ability to

extrapolate particular pieces of information is very, very important."

With Gilliard's combined data capture process in play, Clay County is happily able to expedite the drawn-out process that can potentially arise when seeking Federal aid. Gilliard estimates that with the help of CartêGraph applications, a submission process that once took weeks and months can now be completed in terms of hours and days. "Thankfully, it's only happened twice, but now I can just print out my normal report and give it to them. They write up all the stuff, I sign it, and that's it!"

When it comes to advising other communities whose circumstances are similar to those of Clay County, Gilliard's opinion is clear. "Areas that are subject to certain weather events—such as hurricanes, tornadoes, and floods—should really consider CartêGraph. It not only allows you to work better, but it allows you to do more with what you already have available to you."