FOCUS ON Our Traffic Control Center: The science of a smarter commute

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No one likes traffic, especially not Tom Sever, but while he may not like gridlock on the roads, he does like playing with traffic signals. Sever heads up the Traffic Control Center, which is at the center of the Intelligent Transportation Systems that keep traffic moving safer and more efficiently throughout Gwinnett County. You probably haven't seen them, but the men and women of the TCC have seen your commute, and they're working to make it better.



Tom Sever (right) looks on as TCC signal engineers Angie Bastian (left) and Ken Keena (center) monitor traffic signals throughout Gwinnett County

The TCC is the largest entity within the Gwinnett County
Department of Transportation's Traffic Engineering and Planning

Division. Chuck Bailey is the director of that division, which handles everything from residential traffic calming and street lighting to countywide traffic studies and analysis, traffic signal motoring, and Intelligent Transportation Systems. The TCC was started in 1996 to aid traffic flow and reduce commute times and delays during the Olympics. In 2001, the Department of Transportation first received SPLOST funding for traffic signal enhancements including Intelligent Transportation Systems and Advanced Transportation Management Systems. At that time, the center itself was just a small office with one



The TCC uses modern technology to make traffic signal adjustments that previously took hours in a matter of minutes.

workstation in a corner of the DOT. In 2007, the TCC moved into its new home off Winder Highway in the DOT Central Facility, which has allowed it to gradually expand its traffic monitoring capabilities ever since.

Three engineers and 18 technicians work in the TCC, all of them possessing years of experience and a desire to serve their communities. Bailey describes their work as "problem solving." He adds that its part of their greater goal to eliminate as many accidents and crashes as possible and help people make their commutes easier. Their work also saves the county considerable time and money as compared to the alternative of widening every congested roadway. The

problem solving that takes place at the TCC helps the County get the most out of the existing roadway infrastructure, putting your tax dollars to the best use possible. Bailey was quick to mention that "residents have influenced their future commutes by approval of SPLOST sales tax programs, which have made many of these improvements possible."

If anyone at the TCC notices a traffic incident, they will quickly diagnose the source of the problem, whether it's due to a technical issue or just a high volume of cars. The TCC then works to ease traffic, either by repairing broken equipment or by adjusting the timing of traffic signals at nearby intersections. Recently, when the Pleasant Hill Road bridge over I-85 was closed for the Diverging Diamond Interchange crossover, the TCC team helped facilitate the detour route and kept traffic moving on nearby Steve Reynolds Boulevard despite the drastic increase in the number of cars using that road. Now the TCC observes the Diverging Diamond Interchange on a daily basis to ensure that traffic continues to flow properly as part of the regular monitoring activities for the dozen major roads across the County that are connected directly to the TCC.

In addition to managing traffic signals and master plans, the Engineering and Planning Division's work also includes empowering motorists to prevent traffic congestion. As Bailey says, "It's all about disseminating the information." Motorists can visit the GC Smart Commute webpage and view a live rotation of more than a dozen traffic cameras to help them plan their commutes. Live footage also airs on TVgwinnett during rush hour from 6:30am to 8:30am and from 4:00pm to 6:00 pm.

Even with all they are currently able to do, the TCC is still looking at ways to improve in the future. The County currently has 160 traffic monitoring cameras, and that number should grow to more than 200 within the next six months. The TCC staff is currently completing a project to improve their integration with the Georgia DOT's GA Navigator program in an effort to help emergency responders navigate traffic and arrive at their destinations quicker. The GC Smart Commute website is also slated for upgrades which will allow motorists to view a still photograph of any camera in the county that's updated



Chuck Bailey talks about GC Smart Commute, Gwinnett County's advanced traveler information system

approximately every two minutes. As Sever says about the future, "We'll keep trying our best to make traffic move as efficiently as it can, while still maintaining safety for all using the roadway—pedestrians and automobiles alike."

For more information about GC Smart Commute or the Traffic Control Center, please visit their website at www.gcsmartcommute.com. For more about TVgwinnett, including air times for live traffic video from GC Smart Commute, visit www.tvgwinnett.com.