



Georgia Department of Transportation

Congestion Relief - One Light at a Time

How many cycles of this traffic light am I going to have to sit through? Why can't they get these signals coordinated? Why is this green light so short?

Every irritated driver mutters questions like these while creeping through Metropolitan Atlanta's congested commuter routes and jammed shopping areas.

Their frustration is well-founded. Issues with our traffic signals create delays that waste nearly 300,000,000 vehicle-hours nationwide every year. That's a lot of lost time, lost fuel, lost productivity and lost air quality, not to mention lost quality of life.

So, why **can't** someone get these signals coordinated? Much of the difficulty can be traced not so much to who is responsible, but to how many? Traditionally, traffic signals are not managed by a single entity; rather, they are the responsibility of the various cities and counties across the area. In Metro Atlanta, that equates to 37 different jurisdictions (15 counties and 22 cities) maintaining and operating their own traffic signals. Drivers crossing city and county borders must contend with a patchwork of differently timed stop lights that aren't necessarily programmed to enhance mobility outside their own jurisdictions.

The Georgia Department of Transportation has introduced a new program, though, that promises to solve the problem by providing centralized, comprehensive management of traffic signals throughout the area. It represents a new level of partnership between DOT and local governments and is new ground for the Department, which historically has not been responsible for signal management. But with improved technology and a growing focus on addressing congestion at a regional level, the plan makes perfect sense.

Core to this effort is the concept of active management. That means signals aren't simply set to change at regular intervals. They instead adjust to demand as it changes over the course of a day; are better synchronized throughout a corridor; and are able to be manually adjusted to manage incidents. This is made possible by technologies that provide visual monitoring of intersections at key locations and also the ability to control traffic signals remotely. Active management of signals allows for quicker identification and repair of equipment malfunctions. In addition, an improved preventative maintenance program helps ensure more reliable, accurate performance throughout the region.

With some 8,000 signalized intersections in Georgia – more than half of them in Metro Atlanta – the program will take time. But it's off to a good start. Rollout thus far has resulted in:

- Timing improvements at more than 400 intersections;
- Upgrades of more than 230 vehicle detection systems;
- Repairs of more than 200 crosswalk pushbuttons;
- Installation of more than 30 surveillance cameras, and;
- More than 30 new, state-of-the-art intersection traffic signal computers.

The current emphasis is on major arterial routes like Cobb Parkway, Holcomb Bridge Road, Piedmont Road, US-78, Tara Boulevard and others. Other major corridors already have been improved and the next tier of projects is being developed.

The program has garnered a prestigious national technology award and is a model for other states seeking to better manage congestion. It is an innovative approach to addressing an old problem, and just another example of how the Georgia DOT is committed to improving our state's transportation infrastructure.

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