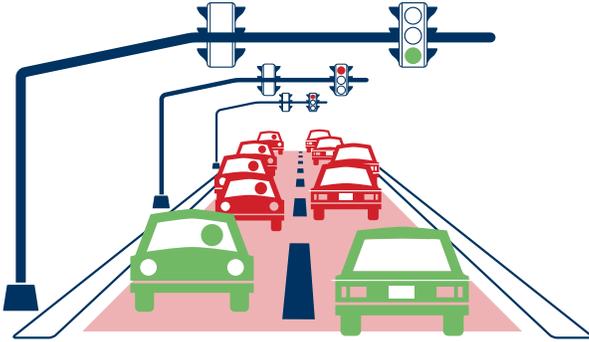


ADVANCED TRAFFIC SIGNAL TIMING

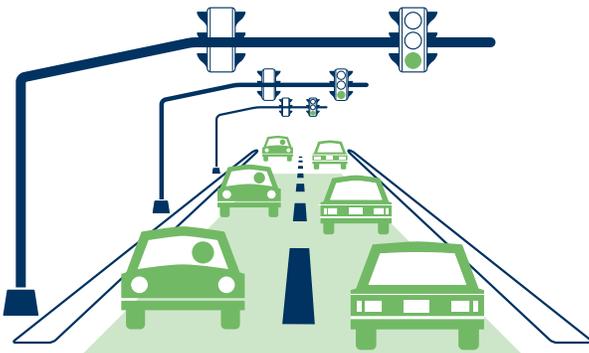


The City of Sandy Springs uses advanced signal timing programs to safely and efficiently move people through the City. Advanced signal timing programs depend upon vehicle and pedestrian volume information to determine the amount of time to provide for each traffic movement and how to best coordinate movements along a corridor. These advanced systems require regular maintenance and frequent monitoring by City staff to maintain the efficiency of the signal system.



Uncoordinated Signal Timings

Uncoordinated signal timings work using minimum and maximum timers and detection data to serve movements at a single intersection based on their current demand. This signal timing works well when volumes are low or the signal spacing is large, but the lack of coordination in urban environments can lead to increased stops, congestion, and driver frustration.



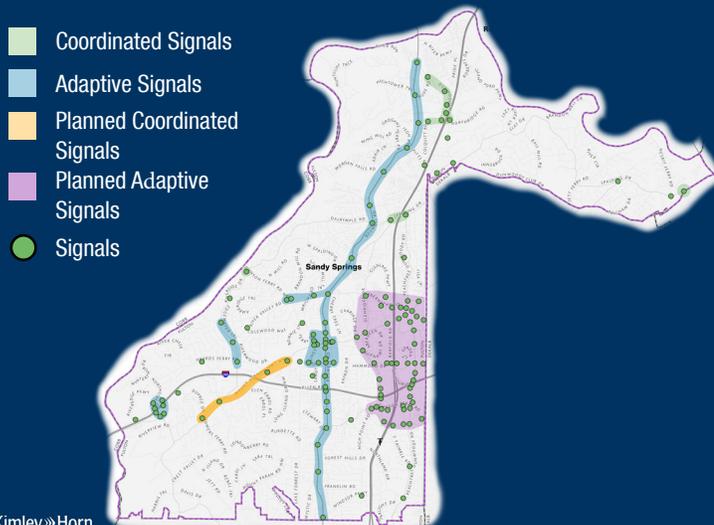
Coordinated Signal Timings

Advanced Signal Timings

Coordinated signal timings are timings which are programmed to coordinate different traffic patterns along the corridor throughout the day and week. The signal timing programs progress vehicles to reduce stops and delay to provide a safer and more reliable travel experience.

Adaptive Signal Timings

An additional advanced signal timing program is adaptive traffic signal control. The adaptive signal system uses the real-time data from detectors to evaluate information and make adjustment to the coordinated signal timings for each cycle. Adaptive signal control is used when traffic patterns are variable and unpredictable due to special events, construction, or incidents.



Coordinated Signal Timing Benefits

The U.S. Department of Transportation (USDOT) estimates that poor traffic signal timing is the cause of 5 percent of all traffic delay nationally. Traffic signal coordination has demonstrated benefits ranging from 17 to 62 times the capital investment (USDOT). The City of Sandy Springs understands that investing in traffic signal optimization makes sense - increases your safety, reduces vehicle emissions, and keeps you on the move.