

**Project:** *City of Middleburg Heights, City Wide Signal Upgrade Project  
CUY-42-5.46 (PID 12728)*

**Owner:** City of Middleburg Heights, Ohio

**Contact:** Mayor Gary Star  
City of Middleburg Heights  
15700 Bagley Road  
Middleburg Heights, Ohio 44130  
Tel: (440) 234-8811

**Construction Value:** \$2.1 million

**Description:** This project was the modernization and coordination of traffic signals at 39 intersections along the corridors of Pearl Road (US 42), Engle Road (SR 291), Bagley Road (CR 27), Smith Road (CR 64), and other various locations. The project included the upgrade of traffic signal hardware including vehicular signal heads, mast arm signal supports, pedestrian signals, traffic controllers, vehicular and pedestrian detectors and emergency vehicle preemption. The preemption system was designed to be integrated with adjacent communities to provide access to the City hospital. The project also included the installation of a "closed loop" traffic responsive computer system and hard wire communication cable. A 6 pair shielded copper cable was specified for communication between master and local controllers.

This construction project was an efficiency project funded with a Federal grant under the CMAQ (Congestion Mitigation, Air Quality) program at a cost of \$2.1 million.

This project coordinated the timing of traffic signals in four (4) arterial streets systems to provide efficient traffic flows, reduce congestion and add to the improvement in air quality for the region. The computerized signal system measures traffic volumes, congestion and speeds and makes automatic commands to implement signal timing.