

## **METRO TRAFFIC SIGNAL SYSTEM AND OPERATIONS**

Louisville Metro currently operates and maintains approximately 650 traffic signals within Jefferson County. The majority of these traffic signals fall within the Urban Services District. In 1993, a project was initiated to completely upgrade and modernize the old system. This project, called the Citywide Signal System project, was a joint effort between the City of Louisville, the Kentucky Transportation Cabinet, and the Federal Highway Administration. The new system includes 595 traffic signals.

The Signal System's control center, which houses the central equipment for the system, is located in the lower level of City Hall. It provides a convenient location and the means to measure traffic conditions and automatically control the signal equipment. The system can analyze traffic information, display real-time traffic conditions and report any problems with the signal equipment. The data collected provides the Traffic Engineering Staff with the ability to continuously monitor traffic conditions and make signal timing adjustments.

A network of computers is the heart of the centrally controlled system. It uses custom designed traffic application software to determine which signal timing plans it implements, based both on time-of-day and monitored traffic conditions. The computer provides direct control to all 595 system intersections through a modern communications network and on-street control equipment. An additional function of the control center is to provide a location where the public may view the operation of the system. The control center is equipped with an observation window, (2) 6-foot diagonal screens, and color computer-generated display maps, which provide a real-time display of the traffic system. The graphics display also permits the viewing of individual sections of the system or individual intersections. The system also identifies and notifies the operator of locations that may have suffered equipment failures.

The system provides numerous timing plans which operators utilize to accommodate various traffic patterns at different times throughout the day. The traffic responsive capability of the network involves the continual processing of traffic data, which enables the computer to select the best signal timing pattern for current traffic situations.

The traffic signal system also includes (6) cameras at busy downtown intersections. These cameras are located at the following locations

9<sup>th</sup> and Market  
2<sup>nd</sup> and Main  
2<sup>nd</sup> and Market  
Brook and Jefferson  
Brook and Broadway  
2<sup>nd</sup> and Broadway

These cameras may be viewed at.....

