

Teamwork in Technology

ADVANCED TRAFFIC MANAGEMENT AND EMERGENCY OPERATIONS CENTER

Excerptions from publications by
 Ingolf Parteneheimer, P.E.
 ATM/EOC Facility Manager

The Greater Baton Rouge metropolitan area is exposed to many natural, technological, and man-made hazards, all of which have the potential to disrupt the community and cause damage and casualties. Additionally, the area is a major thoroughfare for Interstate highway, waterway, and other types of transportation, plus a major hurricane evacuation route for much of coastal southeast Louisiana, including New Orleans.

- To address these issues, East Baton Rouge Parish, in conjunction with the Louisiana Department of Transportation and Development (LA DOTD) and the Federal Highway Administration (FHWA), has built a state-of-the-art facility, which integrates traffic surveillance, incident detection, traffic control, motorist information, as well as emergency response into one management center. This state-of-the-art facility is called the **Advanced Traffic Management and Emergency Operation Center (ATM/EOC)** and is the first of its kind to bring together:
 - First-responders (Fire, Police, EMS)
 - Traffic Engineering and ITS (local and state)
 - Law Enforcement (local, state and federal)
 - Emergency Preparedness
 - Capital Transportation Corporation (CTC)
 - 911 Dispatcher

The Advanced Traffic Management Center is responsible for providing safe and efficient movement of traffic throughout the Parish through the optimal use and maintenance of the most appropriate traffic control devices and equipment. It is the goal of this Center to maximize use of the resources while streamlining the procedures providing for the safe and efficient movement of traffic.

This Advanced Traffic Management Center is Baton Rouge’s entry into the world of Intelligent Transportation Systems (ITS).

Presently the total number of maintained traffic signals is 441. Housed within this state-of-the-art facility is the network computer equipment and communications systems needed to communicate with not only the 107 traffic signals under direct computer control, but eight traffic surveillance cameras, one permanent counting station and 22 incident detectors. The incident detectors are side firing radar units capable of differentiating the speeds of vehicles in different lanes. Within the next year, these numbers are expected to double. Shortly, the operation of the Dynamic Message Signs (DMS) and the Highway Advisory Radio (HAR) systems as well as the Motorist Assistance Program (MAP) will



Advanced Traffic Management and Emergency Operations Center
 3773 Harding Boulevard, Baton Rouge

also be operated out to this facility.

Who is in the ATM / EOC?

- Baton Rouge City/Parish and LA DOTD Traffic Engineers
- East Baton Rouge Parish Office of Emergency Preparedness
- East Baton Rouge Parish EMS/ 911 Dispatch
- Baton Rouge Fire Department Communications Division
- Baton Rouge City Police Communications
- St. George Fire Department

Through the use of the Naztec Streetwise software and MIST (Management Information System for Transportation) incident detection software, Baton Rouge Traffic Engineers can stay on top of traffic-related issues and make decisions based on actual information from the traffic signal controller. It is our goal to detect an incident within two minutes of it occurring. Through the use of ITS equipment, the traffic controllers in addition to controlling the sequences of the traffic lights are also communicating any malfunctions as well as the number of cars, which have gone through each intersection.

These systems are monitored 12 hours per day with the system running autonomously for the remaining 12 hours. In the event of a problem during the unmanned hours, both of the traffic management systems will page the on duty operator. The on duty System Operator can log into the system via telephone modem and diagnose the problem before calling out the appropriate response to the problem. This allows for precise and cost effective management of the assets during times of emergency when time is critical.

ITS - What is it?

The Intelligent Transportation Systems (ITS) applies advanced technology, computers and telecommunications power to current freeway and traffic systems. This enables us to better manage traffic and improve safety, convenience and productivity of personal and commercial travel.

Communications has 76 employees housed at the ATM-EOC. The Communications District is charged with administering all aspects of 9-1-1 which includes financial matters, answering of all incoming 9-1-1 calls, and purchasing and maintaining all 9-1-1 equipment for three primary public safety answering points or (PSAP). This service includes taking vital information and providing first aid instructions to callers even before public safety units arrive on the scene.

This information is sent via the Computer Aided Dispatch (CAD) system which enables the 911 and dispatch organizations to coordinate efforts between available units in the field. Calls taken by 911 are input to the system and are then passed on to the responding agencies. Units in the field can pull up information relating to the call, the history of calls at that address, or previous related incidents. This system of response ensures that all agencies and units responding to a particular incident are made fully aware of all available information received by the dispatchers.

What Is Happening at the ATM/EOC?

- 911 dispatchers are using state-of-the-art equipment to decrease emergency response time.
- Closed circuit video cameras and speed detectors will be used to immediately detect traffic incidents on the Interstate and other major roads to improve response time.
- A 24 foot by 12 foot video wall displays real-time traffic conditions for use in improving traffic and incident management and providing current information to motorist.
- The timing and control of traffic signals will be modified to reflect real-time conditions.
- The ATM/EOC is operating 24 hours per day, 7 days a week.
- In the event of an emergency, the coordination for emergency response activities for all agencies will be from the Emergency Operations Center.
- Media briefing rooms are available for Public Information coordination.

In addition to the CAD system the facility is home to the Community Alert System, otherwise known as CAL. The CAL is a reverse 911 system, which means it has the ability to notify residences and businesses in a particular area of pending or possible dangers and can relay information such as instructions on shelter-in-place, evacuation, or general welfare messages.

History and Facts about the ATM/EOC

- Building size 55,000 square feet
- Construction Cost \$13.2 Million
- Equipment Cost \$3.7 Million
- 1995 Concept and planning of building initiated
- 1999 Construction began
- June 2001 Construction complete
- July 2001 Agencies begin moving in
- November 7, 2001 New 911 Center activated

For more information contact:

**City-Parish Planning Commission
1755 Florida Street, Third Floor
P.O. Box 1471**

Baton Rouge, LA 70821

Telephone: (225) 389-3144 Fax: (225) 389-5342

Office Hours: 8 a.m.—5 p.m. M-F

Email: planning@brgov.com

Web page: <http://www.brgov.com/dept/planning>