

## The MED-COM Center: A Brief History

Although discussion started in 2002 about establishing a centralized medical communications center in Jackson, Hurricane Katrina brought the realization home. Evaluation of after-action reports from various medical emergencies and drills in the metro area revealed a marked deficiency in EMS (emergency management systems) and hospital emergency department communication.



Mississippi Emergency Responders

“Katrina really brought home the need for gathering and disseminating information concerning what medical resources are available during an emergency,” said Pamela Hemphill, emergency management coordinator.



Mobile Field Hospital with Advanced Communications Center

“It was the overall intention of the Medical Center to create an atmosphere conducive for preparing, training and responding to any event that requires medical attention in the state.”

Out of that mission sprang the Mississippi MED-COM Center, closely followed by this project, to integrate the msTraffic travel information system, which further enhances the ability of the center to provide safe and efficient emergency services.

Three primary missions of the MED-COM center include:

1. **Improving the efficiency** of transporting critical patients to emergency facilities and trauma centers, including assisting in out-of-state transfers (burns, etc),
2. **Increasing access** to the emergency management and disaster preparedness services, as well as field crews responding to special situations (HAZMAT, special trauma, etc).
3. **Improving communications** between emergency responders, hospitals and inter-hospital. This includes routine communications as well as disaster/emergency communications and notifications.

## MED-COM Center Functions Enhanced by MDOT Partnership

- Traffic updates on major intersections
- Assistance to the Mississippi Department of Health and Mississippi Emergency Management Agency as requested during disasters or other state wide emergencies
- Communication of critical weather information
- Medical and logistical support of area fire departments and EMS agencies, including patching between agencies at the request of both agencies in the event of a mutual aid event
- Communication support to area agencies as requested
- Communication and logistical support to the State Medical Assistance Team (SMAT)
- Communication of multi-casualty incidents to hospitals in the Jackson Metro area.
- Communication of Jackson Regional Hospital Diversion Status
- Assistance in contacting Med-Control via radio/phone
- Communication center for AirCare

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# The msTraffic MED-COM Project



## Project Overview

The purpose of the Mississippi Department of Transportation (MDOT) and Mississippi MED-COM Partnership Project was to integrate the rapidly expanding travel information network resources of the Mississippi state-wide



*msTraffic Surveillance Cameras*



*msTraffic camera images at the MED-COM Center*

Intelligent Transportation System (known as msTraffic) with a new state-wide medical emergency response system known as Mississippi MED-COM.

The Mississippi MED-COM Center serves as a statewide hub for emergency management information.

Through this unique project the MED-COM communications center has been directly integrated with the MDOT state-wide traffic management center so that medical response of all types throughout the state can benefit from msTraffic information. Live streaming video of major interstates and intersections in Mississippi are provided which allows MED-COM operators to assist and guide emergency service vehicles in reaching emergency scenes and subsequently, medical facilities.

The effectiveness of emergency medical services across the state is dependent upon the ability of first responders to efficiently and safely reach accident scenes, most of which requires travel on the state's major street network. The ability for the MED-COM center to have direct access to the most current travel information and control over MDOT's traffic camera surveillance system as needed allows for optimal safety and efficiency in delivering these critical emergency services.

## Why Connect the MED-COM Center to msTraffic: The MDOT Perspective

In the past decade the Mississippi Department of Transportation has invested heavily in the planning, design and deployment of its state-wide Intelligent Transportation System program. It is imperative to MDOT and ITS Program leadership to fully utilize the growing resources of this program for the benefit of Mississippi citizens, businesses and visitors, and engage in partnerships wherever possible to do so.

This Mississippi msTraffic/MED-COM project is one such example of how the transportation and public health and safety communities can work together for a common goal.

The MDOT ITS Mission Statement below describes MDOTs' purpose for providing the MED-COM Center direct access to the msTraffic network.

*MDOT will use ITS technologies to improve the quality of life for State residents and visitors by providing more reliable, informative, safer, and flexible passenger and freight multi-modal transportation services.*

Key to this statement in regards to the msTraffic/MED-COM partnership project are the words "ITS technologies", "improving the quality of life" and "safer . . . transportation services", as this project provides just that and more. This project provides a safer transportation system which not only benefits the quality of life for residents and visitors of the state, but also has great potential to be the mechanism for saving many lives.

## Project Results

Before this project was completed there was no travel and traffic condition information available to the medical dispatchers beyond what was available to the public through normal news channels. This project now provides the MED-COM Center interactive access to all the travel information available through the msTraffic system. The medical emergency activity that now benefits from this information includes:

- The number of transfer calls from outside hospitals requesting a transfer through MED-COM (October 1, 2008 - February 7, 2009): 3100+ transfer requests.
- Mississippi MED-COM has had a call volume since that same time more than 40,000 calls.
- Mississippi MED-COM coordinates and communicates with an average of 43 ambulance transports into the University of Mississippi Hospitals and Clinics on a daily basis.

The MDOT and MED-COM Partnership Project provides:

- Live streaming video of major interstates and intersections in Mississippi
- Direct access to the most current travel information and control over MDOT's traffic camera surveillance system as needed
- The ability to assist and guide emergency service vehicles in reaching emergency scenes and subsequently, medical facilities
- For optimal safety and efficiency in delivering critical emergency services
- For early assessment of incidents to facilitate the appropriate response
- A new dimension of performance not possible without a collaborative, interagency approach to serving the citizens of Mississippi



*Mississippi Traffic Crash Emergency Scene*

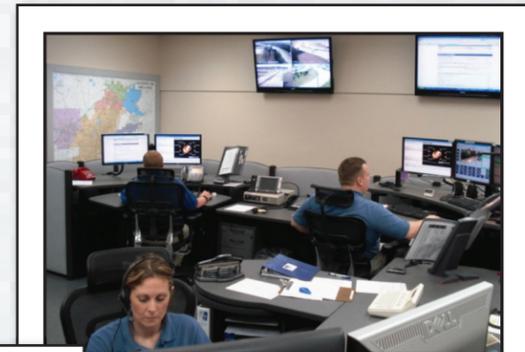
Jonathan Wilson, clinical director of emergency services at the University of Mississippi Medical Center, said the center is the lifeblood of all emergency communication between health care facilities throughout the state.

In emergency medicine, the first sixty minutes after the occurrence of multi-system trauma is commonly known as the "golden hour". A victim's chances of survival are considered to be greatest if they receive definitive care in the operating room within the first hour after a severe injury. Having the best and most current travel information as provided by msTraffic is an important contributor to this rapid response.

## What is the Mississippi MED-COM Center?

The Mississippi MED-COM center is an advanced communication technology center located at the University of Mississippi Medical Center in Jackson, Mississippi. MED-COM is staffed twenty-four hours a day, seven days a week with experienced paramedics and emergency medical technicians who are ready to assist emergency responders and medical facilities.

The MED-COM Center supports and coordinates emergency response on three levels:



*Mississippi MED-COM Center*



*The MED-Com Center located in Jackson, MS and the University of Mississippi Medical Center*

- **Local operations** – Paramedics communicate patient condition and treatment information to the center. Center staff contact receiving ERs, manage diversion plans and schedule diversion rotations. The center provides access to AirCare, including in-flight tracking and dispatch.

- **Regional operations** – The center is part of regional response efforts for all hazardous events and works in conjunction with local emergency management agencies to provide accurate, timely information. All inbound aircraft or ambulances contact the center, which notifies hospitals of basic patient information, triage classification and hospital destination.
- **Statewide operations** – During national disasters or mass casualty incidents, the center assists with the coordination of victim transfers into Jackson-area hospitals. The center is part of the state's response efforts for all large-scale emergencies, providing current information for emergency preparedness needs to state agencies.