A Better & Safer
US Highway 90
along the
Mississippi Gulf Coast

By
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To make travel along US Highway 90 more efficient and safer for the citizens and visitors of the Gulf Coast by deploying integrated Intelligent Transportation Systems along the entire corridor.
ITS Systems

- Traveler Information Systems
- Transit Management Systems
- Incident Management
- Freeway Management Systems
- Toll Collection
- Emergency Management
- Traffic Signal Control
- Electronic Fare Payment
- Highway-Rail Intersections

ITS Systems
• Six local jurisdictions and two counties along the corridor
• Inter-connect 54 intersections
• Funding – ER vs. State match
• Communications infrastructure
• Rapid research and review of technology
• Rapid design development process
• Available and qualified contractors
• Overall project divided into five phases
- Inter-connected signal controllers
- Wireless broadband communications network
- Traffic monitoring cameras (CCTV)
- Video detection sensors
- Construction monitoring cameras
• Exceeds NEMA TS-1 & TS-2 standards
• Built in ethernet port
• Removable hand-held front panel display
• Built in infrared port
• 8 MB of flash memory is used to retain all timing and control parameters during power outages.
• Allows Signal Engineers to view parameters and control any connected intersection
• Provides for dynamic intersection grouping
• Provides priority preemption for emergency vehicles
• Hand-held PDA local controller tool that allows users to upload/download controller data and monitor the status of intersections
Benefits of a Broadband Wireless Network

- Faster to deploy
- Easier to scale
- More flexibility
- Multipath redundancy
- Reduced cost-per-mile of coverage
• Licensed 100 Mbps, full duplex, point to point backbone network
• Unlicensed (900 Mhz) & licensed (4.9 Ghz) point-to-Multi-point distribution base stations
• Unlicensed 1.5 Mbps to local intersections
• Central collection point for data and video
• Automatic redundancy for backbone network
• 12 new traffic cameras on corridor
• MPEG-4 video feeds sent to MSTraffic.com website for traveler information
• Video sharing with media and local municipalities
• Advanced sensors – in-ground loops
• Left turn lanes and side street detection
• Detection on Hurricane Evacuation Routes
• MSTraffic Data Collection and Reporting Tool
• Streaming video at stop bar
MSTraffic Data Collection & Reporting Tool
• High-definition, wide-angle shot every 15 minutes
• Images are archived and are accessible by users
• FTP images can be directly sent to multiple web-servers
• Provides weather conditions for construction site
• Time-lapse movie of construction project
Questions?

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