Implosion Exposition: Using ITS to Facilitate Temporary Traffic Control Management
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Topics to be covered (under the guise of a case study):

- Concept of “Short Term” TTC(M)
- Security vs. Traffic Management
- Communications issues
- Bringing it all together with ITS
Project Timeline

2005 – 06 University Medical Center site proposed in downtown New Orleans

- New Medical Complex to replace old Charity Hospital and VA Medical Centers damaged in Hurricane Katrina
- Will link with existing University Hospital and LSU School of Applied Sciences
Implosion Exposition:
Using ITS to Facilitate Temporary Traffic Control Management

MUTCD Part 6 - Temporary Traffic Control applies to:

- Construction Zones
- Incident Management Areas
- And by association, Traffic Control for Planned Special Events
- So which one do we have here?
Points to Ponder

MUTCD Part 6 -
• All work zones should have a Temporary Traffic Control Plan
• Allowances are made for duration, type of work, engineering judgment
• Tradeoff between time to set up traffic control vs. time to do work
• For Incident Management Areas, emergency vehicles may substitute for “traffic control” for up to ... ?
Points to Ponder

MUTCD Part 6 -

• All work zones should have a Traffic Control Plan
• Allowances are made for duration, type of work, engineering judgment
• Tradeoff between time to set up traffic control vs. time to do work
• For Incident Management Areas, emergency vehicles may substitute for “traffic control” for up to 30 minutes
University Medical Center Site
University Medical Center Site
2008-2011 Site Clearance
2008-2011 Site Clearance

- 22 story Pallas Hotel last major structure remaining
- Effects of work on access to I-10 / Canal Street offramp
- Decision made to remove by implosion
2008-2011 Site Clearance
Coordination of Planning

- Street Closure Plan coordinated by City of New Orleans - Security
- Highway Closure Plan Coordinated by LA DOTD and State Police
- Distinctions between interests of the Security and Transportation aspects
- LADOTD / LSP permits required to proceed with plans
- Organization / Implementation under Incident Command System (ICS)
Pitfalls of Planning

- Initial planning for event focused on local street closures only, using ICS techniques without regard for TTC requirements
- Demo contractor believed a very short closure window was possible, did not account for need to inspect and clean bridge structure
- Incident Command System (ICS) did not account for dealing with active traffic beyond the project site
- Emphasis on project requirements, not road user needs, was a recurring pitfall
Different Interests, Outcomes

Security
- Safely evacuate residents and businesses
- Ensure public health and safety
- Control crowds of onlookers
- Inspect site for stability post-blast

Traffic Management
- Detour traffic
- Minimize disruptions to through traffic
- Ensure safe restoration of operations
- Inspect/repair damage to infrastructure
City of New Orleans
Interstate 10 Traffic Closure
Pallas Implosion

MANDATORY EVACUATION:
Johnson St to Villere St
Tulane Ave to Bienville St

INTERSTATE CLOSURE:
Eastbound I-10 Traffic: Forced to Exit at Loyola
Westbound I-10 Traffic: Forced to Exit at Orleans

Legend
- Restricted Area
- Road Block
- Traffic

F-10E Slidell Exit @ I-10 / US90 Split BLOCKED
Claiborne Exit BLOCKED
F-10E On-Ramp from Claiborne BLOCKED
F-10E Slidell Exit & Claiborne Exit BLOCKED

Orleans Parish
Louis Armstrong Park
New Orleans City Map

Office of Homeland Security and Emergency Preparedness
City of New Orleans, LA

750
1,500
Metairie

N

New Orleans Parish
Evolution of Traffic Control Plan

Timeline - October - November 2011

• Initial submittal involved using police units and Message Signs to block I-10 at I-610 for short duration

• Rejected in favor of a detailed plan using exits closer to the job site

• Loyola Avenue used as primary detour route

• Target date mid December 2011
Evolution of Traffic Control Plan
Downtown Detour Routes
Evolution of Traffic Control Plan

Timeline - December 2011 - June 2012
• Delays in scheduling implosion due to holiday/ Mardi Gras/ Final Four special events
• Misunderstandings regarding permits required by LSP and DOTD
• Loyola Avenue detour route affected by new streetcar construction project
• New target date July 22, 2012
• Commitment to use Traffic Control contractor not affirmed until July 16!
Major operational features provided by DOTD for I-Day

- Motorist Assistance Patrol (MAP)
- Limited CCTV Camera Coverage
- Changeable Message Signs (CMS)
- Traffic detectors to monitor backups
- Bridge inspection crews to assess any damage to infrastructure
- RTMC operators to issue notices, update Twitter and 511
Major operational features provided by State Police for I-Day

- LSP Officer at RTMC to dispatch road units
- Presence at end of traffic queues
- State Police radios to monitor coordinated channels
- Rolling roadblock on US 90B for actual implosion time to discourage onlookers
- Liaison with NOPD, Incident Command Post, field units
Implosion day
Implosion day
Implosion day
Before / After
Before / After
QUESTIONS?

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