Hurricane Katrina & Hurricane Response in Louisiana

February 24, 2015
Louisiana August/September 2005
Hurricane Katrina/Rita
Pre-Katrina

• No State pre-event assisted transportation plan
• No State run General Population Shelters *(Superdome considered “last resort”)*
• Shelter Task Force coordinated sheltering parish shelters primarily above I-10
  - Citizens transported themselves to Information Points along the evacuation routes
  - Information Points provided shelter location info to evacuees
Pre-Katrina

• State was prepared to open several Medical Special Needs Shelters

• No pet plans or pet shelters

• Parishes provided shelters within their own jurisdictions citizens seeking safety from wind and/or water
Hurricane Katrina

- Overall area impacted - 108,456 square miles
- 80% of New Orleans submerged
- 1500+ Louisiana casualties
- 200,000+ Louisiana homes substantially damaged or destroyed
- 71,000+ Louisiana businesses impacted
- 300,000+ job losses in Louisiana
Lakeview (17th St. Canal), New Orleans
Understanding the Impact of Hurricane Katrina

- Casually: 500, 1,500, 1,000
- Homes Destroyed: 134,917, 352,930
- Homes Damaged: 2,000,000, 1,000,000
- Evacuated: 150,000
- Displaced: 300,000
- Homes Destroyed (2005 Dollars): $150 B
- Homes Damaged (2005 Dollars): $124 B
- Camille (Cat 5) 1969
- Andrew (Cat 4) 1992
- Ivan (Cat 3) 2004
- Katrina (Cat 3) 2005
- Katrina w/o New Orleans $124 B

Casualties:
- 1500
- 1000
- 500
- 250

Homes Destroyed:
- 352,930
- 310,098

Homes Damaged:
- 2,000,000
- 1,000,000

Evacuated:
- 150,000

Displaced:
- 300,000
Post-Katrina

• State begins growing shelter capacity with “mega-shelters” located in Central & North Louisiana
  • 1st State owned shelter built on LSU-A campus

• Post Katrina plans used during Hurricane Gustav were successful but improvements necessary, areas of focus included evacuee tracking & reentry
Louisiana August/September 2008
Hurricane Gustav/Ike
Hurricane Gustav

- Approximately 2 million people evacuated
- 1st time in State history mandatory evacuations called for entire coastal area of Louisiana
- 1st time State conducted dual contra flow for both Southwest & Southeast Louisiana
8/30/08 - 8/31/08

Transported 11,000 CTNS & MSN to in-state shelters by coach buses, school buses & para-transits

Transported 15,611 CTNS population to out-of-state shelters by coach buses

Total - 26,611
<table>
<thead>
<tr>
<th>Destination</th>
<th>Flights</th>
<th>Evacuees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ft Smith, AR</td>
<td>15</td>
<td>1,744</td>
</tr>
<tr>
<td>Knoxville, TN</td>
<td>10</td>
<td>1,163</td>
</tr>
<tr>
<td>Louisville, KY</td>
<td>8</td>
<td>1,038</td>
</tr>
<tr>
<td>Nashville, TN</td>
<td>13</td>
<td>1,105</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>46</strong></td>
<td><strong>5,050</strong></td>
</tr>
<tr>
<td>Support Personnel (i.e., FEMA, FAA, TSA, DOD, etc)</td>
<td>10</td>
<td>1,054</td>
</tr>
<tr>
<td><strong>Grand Total:</strong></td>
<td><strong>56</strong></td>
<td><strong>6,104</strong></td>
</tr>
</tbody>
</table>
Critical Transportation Needs Shelters

- Shreveport Hirsch 1,600
- Shreveport Jewella Building 2,400
- Shreveport Westpark Potential 1,500
- Shreveport Riverview Theater 500
- Homer Wade Correctional Ctr. 120
- Bastrop Former Wal-Mart 1,600
- Alexandria State Shelter 2,500
- Baton Rouge Undisclosed 60

Total 10,100
Total 120
Total 60

CTNS
- Sex Offenders
- Unaccompanied Minors

DOTD in coordination with contractor & DOE
Medical Special Needs

Federal Medical Stations

Bossier City
Bossier Civic Center
90

Hammond
SLU-Kinesiology Bldg.
200

Lafayette
Heymann Center
160

FMS - Monroe ULM
Ewing Coliseum
150

FMS- Baton Rouge
Field House
500

Lake Charles
McNeese Recreation Complex
150

Baton Rouge
LSU Maravich Ctr.
300

FMS-Grambling
Intramural Sports Center
200

FMS-Alexandria
River Center
250

Hammond - SLU
Kinesiology Bldg.
200

FMS-Alexandria
LSU-A State Shelter
200 FMS / 200 MSNS

Lafayette
Nicholls State Ayo Hall
200

MSNS Total 1,450
FMS Total 1,150
State of Louisiana
Hurricane Scenario
H-120
- GOHSEP Crisis Action Team (CAT) activated - situation monitored
- Initiate State Unified Command conference call
- Prepare State Emergency Declaration

H-102
- Develop & request Presidential Emergency Declaration
- Activate contracts for commercial transportation for Assisted Transportation Plan
- Activate contracts for trucks - Pet Transportation Plan
- Activate Transportation Staging Areas

Scenario based on previous or likely storm tracks derived from Hurrevac
H-96 Anticipated Shortfalls

- Shelter Management Teams
- Medical personnel for Amtrack Mission (currently an EMAC agreement)

H-96

- CAT plus – partial EOC activation
- Unified Command recommends State Declaration of Emergency
- Task Force (SW, SE. Shelter & partner states) conference calls begin - initiate emergency declaration & evacuation discussions
- SITREPs for Governor, Cabinet, Parish EOCs State ESFs, & FEMA Region VI
- Review contracts for deliverables, fuel, Port-A-Lets, etc.
- Feds begin work on AMTRAK & air carriers for potential evacuation
- Request FEMA Region VI forward deploy FEMA Liaison to State EOC
Scenario based on previous or likely storm tracks derived from Hurrevac

- Feds activate Incident Management Assistance Teams (IMAT)
- Prepare to support Special Needs Shelters & Medical Evacuation
- Prepare to support Phased Evacuation Plan & prison population evacuation
- Transportation Staging Areas operational
- Feds notifies air charter aircraft to assemble fleet

Anticipated Storm Track: Cone of Uncertainty

- H-120
- H-96
- H-72
- H-50
- H-40
- H-30
- H-20

Scenario based on previous or likely storm tracks derived from Hurrevac
State EOC at Level III or II depending on threat
Setup to support Contra-Flow
Parishes initiate Declarations of Emergency
Submit pre-scripted ARFs to FEMA
JOC activated
Joint Information Center (JIC) opens
Launch host state LNOs

H-72 Anticipated Shortfalls
✓ Paratransit / Ambulances
✓ Hospital Spaces
✓ Aviation Support

GULF OF MEXICO
H-72
- Initiate setup of Special Needs Shelters
- Initiate dissemination of public information on early evacuation & shelter operations
- Initiate prison population evacuations
- Establish Regional Staging Area (RSA) operations

H-66
- Request 300 school buses (if required)

H-54
- Assisted evacuation begins
H-50

- GOHSEP EOC at Level II or Level I based on threat
- Phase 1 evacuation begins
- Pet truck convoy moves with buses
- Begin setup of Contra-Flow
- Request closure of public schools
- Execute LANG Security Anti-Looting Plan
- State EOC at Level I (if not already at this level)
- Begin evacuation of the Phase II area
- Begin movement of commodities forward
H-30

- Begin evacuation of the Phase III area
- Support Phase III Contra-Flow
- Contra-Flow coordination with Mississippi

Scenario based on previous or likely storm tracks derived from Hurrevac
H-20
• State Assisted Evacuation completed
• Registration/tracking/reporting of those evacuated
• Discontinue Contra-Flow
• Prepare for re-entry
• Prepare for post storm damage assessment
• EAS messages & public information continues

H-12
• Feds conclude bus & rail operations

H+
• Smart SAR operations begin

H+ Anticipated Shortfalls
✓ MHE (Material Handling Equipment – Forklifts; Pallet Jacks, etc.)

H+12 Anticipated Shortfalls
✓ Post Certified Law Enforcement Personnel w/standard equipment load (with recommended vaccinations)
✓ Public Works Infrastructure Assessment Teams
✓ Aviation Support
✓ Incident Management Teams

H+24 Anticipated Shortfalls
✓ Disaster Food Stamp Program Personnel
✓ Pumps (Sewer & Water)
Louisiana Hurricane Response Story Board 2011 (Pre-Landfall)

H-120
- GOHSEP CAT Activated (H-120)
- RRCC at Level 3 (H-120)
- Deploy FEMA State LNO to State EOC (if requested) (H-120)
- DCO Request TRANSCOM Conduct "Market Survey" (H-120)
- Fort Worth Log Center (H-120)
- Activate Bus Contracts (600 Coach Buses) (H-102)
- Activate State School Bus Contracts (300 School Buses) (H-102)
- Activate Para-Transit Contract (600 Ambulances) (H-102)
- Activate Transportation Staging Areas (H-102)

H-96
- Activate advance elements of ICP, TSA, and FAMS support staff (H-96)
- IMAT & DCE Operational at State EOC & Establishes IOF (H-120)
- MERS Deploys IRV to MSY (H-96)
- MERS Deploys MEOV to State EOC (H-96)
- MERS IRV arrives at MSY West Ramp NLT (H-72)
- MERS MEOV arrives at State EOC NLT (H-72)
- State EOC at Level 2 (H-72)
- State EOC at Level 3 (H-96)
- State Decision To Evacuate CTN's (H-72)
- MSY ICP Operational (H-74)
- MSY ICP Operational (H-74)
- State Executes Medevac Plan (H-72)
- RRCC at Level 2 (H-72)
- TSA Screening Facility Operational (H-72)

H-84
- Gov Request Pre-Disaster Presidential Declaration (Between H-102 to H-84)
- Transcom issues "Request for Proposal" (H-80)
- Transcom Conducts Fed Evac Conf Call (H-74)
- State EOC at Level 2 (H-72)
- State EOC at Level 3 (H-96)
- DHHS Conducts Fed Evac Conf Call (H-74)
- Fort Worth Log Center (H-102)
- Deploy Teams and establish Federal ISB (H-96)
- Pre-stage commodities and Equipment for GenPop Evac (H-96)
- MERS Deploys MEOV to State EOC (H-96)
- MERS MEOV arrives at State EOC NLT (H-72)

H-72
- State EOC at Level 2 (H-72)
- LA Conducts Evac Conf Call Identifies AMPs (H-72)
- Activate State School Bus Contracts (300 School Buses) (H-102)
- Activate Bus Contracts (600 Coach Buses) (H-102)
- Activate Para-Transit Contract (600 Ambulances) (H-102)
- Commodify
- DDHSS Conducts Fed Evac Conf Call (H-74)
- State Executes Medevac Plan (H-72)
Louisiana Hurricane Response Story Board 2011 (Pre-Landfall)

**H-60**
- Shutdown Waterford 3 Pressurized Water Nuclear Reactor (H-60)
- DoD Medevac Forces In Place (H-56)
- FEMA Div Supervisors Arrive at IOF (H-50)
- RRCC at Level 1 (H-54)
- DoD Prepared to Bridge First Responders Radios at MSY (H-60)

**H-48**
- LA Bus Evac For Gen Pop Begins (H-54)
- 1st DoD AE Aircraft Arrives at AMP(s) (H-50)
- Stage 2 Pallets of Water and Meals at Sherwood Forrest (Contingency Stock) (H-48)
- 1st DoD General Population Aircraft Arrives at MSY (H-50)
- USACE Deploy Generator PRTs (H-48)
- FEMA Div Supervisors Arrive at IOF (H-50)
- RRCC at Level 1 (H-54)

**H-24**
- LA Has Approx 54 hrs to Evac 44K by Bus
- Begin Phase I Contra-Flow Areas South of Interoastal Waterways (H-50)
- Begin Phase II Contra-Flow Areas South of the Mississippi River (H-40)
- Begin Phase III Contra-Flow of East Bank of the Mississippi River in the New Orleans area (H-30)
- 1st DoD General Population Aircraft Arrives at MSY (H-50)
- USACE Deploy Generator PRTs (H-48)
- FEMA Div Supervisors Arrive at IOF (H-50)

**H-Hr**
- Bus Evac Ends (H-12)
- LA Conducs Final Evac Conf Call (H-18)
- Recall Ambulances (H-12)
- Support Per Evac Ends (H-12)
- Support Per Evacuation to DFW Ends (H-12)
- Verify All Fed Forces Sheltered (H-8)

- Approx 30 Hrs to Aero-Medical Evacuate (AE)
- Approx 30 Hrs to Air Evacuate CTN's
Contraflow Process
Phase 1 Evacuation

Phase 1

- Portable Variable Message Sign
- Permanent Variable Message Sign
Phase 2 Evacuation

Alternate Route

Contraflow Segment

Portable Variable Message Sign

Permanent Variable Message Sign

Contraflow

Segment

LSU
Phase 3 Evacuation

Portable Variable Message Sign
Permanent Variable Message Sign

Alternate Route
Contraflow Segment

LSU
Contraflow

I-55 North Contraflow
I-12 to Mississippi Milepost 31 - 63 miles
Hammond to Lincoln County MS
1 Loading Point - I-12

I-10 West Contraflow
Clearview to US 51 - 17 miles
Metairie to LaPlace
4 Loading Points - Clearview (2 points), Veterans & Williams

I-59 North Contraflow
I-10 to Mississippi Milepost 21 - 32 miles
Slidell to Pearl River County MS
1 Loading Point - I-10

I-10 East
3 Lanes EB from I-510 to I-12
21 miles

Causeway/US 190 North
2 Lanes NB from I-10 to I-12
30 miles
Citizens Assisted Evacuation Plan
City of New Orleans Citizens Assisted Evacuation Plan

Goal 1: Create & maintain an environment where the decision to evacuate becomes more desirable than remaining behind

• In conjunction with state officials, enhance the sheltering plan to make it more “user friendly”

• Provide more information early in the season to enable citizens to better formulate their own evacuation plans
Goal 2: Provide greater support to citizens who need special assistance

• Medical “special needs” citizens.
• Elderly, hospital cases
• No self evacuation transportation available
Goal 3: Implement measures to greatly enhance the security of city resources

• To include:
  – Accounting for and providing safety measures to city employees
  – Comprehensive plans to protect vehicles and other equipment items
  – Anti-looting plan
New Orleans City Assisted Evacuation Plan Model Timeline
June 1, 2007

Note: This is only to be used as a guideline. It is thought to be a reasonable timeline; however, in practice, there may be more or less time available depending on the circumstances of the actual event.
Evacuation Pick-Up Locations

SENIOR CENTER LOCATIONS
1. Arthur Mondy Center
   1111 Newton Avenue, Algiers
2. Kingsley House
   1650 Constance Street, Lower Garden District
3. Central City Senior Center
   2620 Philip Street, Central City
4. Mater Dolorosa
   1228 S. Carrollton Ave, Carrollton

GENERAL POPULATION
5. Smith Library Bus Stop
   6300 Canal Blvd., Lakeview
6. Palmer Park
   S. Claiborne and S. Carrollton, West Carrollton
7. McMain High School
   5712 S. Claiborne Ave, Broadmoor
8. Lyons Community Center
   824 Louisiana Ave., Irish Channel
9. Dryades YMCA
   1924 Philip Street, Central City
10. Warren Easton High School
    3019 Canal Street, Treme
11. Municipal Auditorium
    801 N. Rampart, 7th Ward
12. O. Perry Walker High School
    2832 General Meyer, Algiers
13. Stallings Community Center
    4300 St. Claude, Bywater
14. Sanchez Center
    Caffin & N. Claiborne, Lower 9th Ward
15. Gentilly Mall Parking Lot
    Chef Menteur & Press Dr., Gentilly
16. Walgreen’s
    Lake Forest & Read Blvd, NO East
17. Mary Queen of Vietnam
    14001 Dwyer, New Orleans East

CITY OF NEW ORLEANS
City Assisted Evacuation Plan

[Map showing locations with numbers and names]
**Critical Transportation Needs Shelters**

- **Shreveport**
  - Hirsch: 1,600
  - Jewella Building: 2,400
  - Westpark Potential: 1,500

- **Bastrop**
  - Former Wal-Mart: 1,600

- **Alexandria**
  - State Shelter: 2,500

- **Baton Rouge**
  - Wade Correctional Ctr.: 120
  - Undisclosed: 60

**CTNS**
- Total 10,100

**Sex Offender**
- Total 120

**Unaccompanied Minors**
- Total 60

DOTD in coordination with contractor & DOE
Declaration Process

PRESIDENTIAL
Authorizes use of Federal Resources

STATE
Authorizes use of State Resources

PARISH
Authorizes use of Local Resources
The Emergency Management Process

LEGEND
- Status Feedback
- Request for Support

- Parish EOC
- Business EOC
- State Operations
- Federal Assistance
- ESF Contracts Rents etc.
- EMAC State To State Assets
- Parish Assets
- Contracts Rents etc.