



# HURRICANE KATRINA

An analysis of the response and relief efforts

Did the organizational  
structure of FEMA affect  
its ability to respond?



# THE FACTS



- Hurricane Katrina hit on August 23<sup>rd</sup> 2005 peaking at a level 5 Hurricane
- Katrina killed 1,836 people from Louisiana, Mississippi, and Alabama
- 90,000 square miles of land and 15 million people were affected
- The damages surpass 150 Billion dollars in destruction



# HURRICANE PAM SIMULATION

- FEMA conducted a study in 2004 where they simulated a hurricane that could completely devastate the area around New Orleans, the project was named Hurricane Pam.
- FEMA concluded that New Orleans did not have a safe or rapid enough evacuation plan and would not be able to survive a storm so devastating





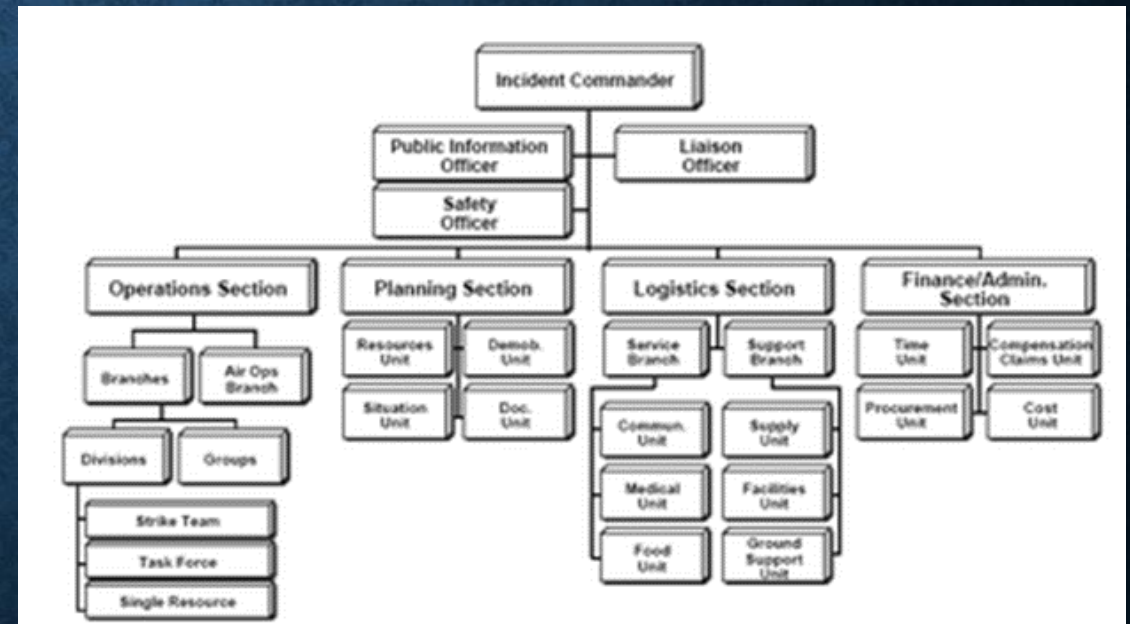
# LEVEE BREAKS



- 53 levee breaks accounted for more than 2/3 of the damage
- Levees built by the United States Army Corp of Engineers as a result of a government mandate
- Flood Control Act of 1965 mandates updates to be completed 10-15 years
- 24 hours of Hurricane Katrina hitting New Orleans 70% of the city was under water
- The Industrial canal saw the largest breach, affecting the lower ninth ward

# FEMA'S ORGANIZATIONAL STRUCTURE

- FEMA falls underneath the department of Homeland Security.
- Within FEMA there is a linear bureaucratic structure at the top sits the director or “incident commander,” then Michel Brown.
- The organization is then broken up into four main section with three head executives between the director and the organization branches





# FEMA'S RESPONSE



- Michael Brown, director of FEMA, was hired with less than reliable credentials
- Communication infrastructure went down with the storm and it took FEMA's response team more than 72 hours
- FEMA upholds a 72 hour window to respond to disasters, public opinion does not agree
- Watershed planning documents implementation



# SHELTER AND SUPPLIES

- FEMA had committed to serving 15,000 people food and water for three days, but they under delivered and more than 50,000 people were in need of shelter and resources
- Two thirds of total deaths that resulted from Hurricane Katrina were related to basic needs of survival that were left unmet first 72 hours after the storm
- Superdome designed to hold only 800 people yet more than 30,000 people came for shelter there





# AMERICAN RED CROSS



- largest relief effort in its more than 120 years
- first two weeks following the storm more than 74,000 volunteers were deployed
- provided shelters for more than 160,000 evacuees and provided more than 7 million hot meals to victims
- hundreds of training classes across the United States and called for 40,000 new volunteers to replace initial volunteers in early September
- raised more than 1 billion dollars in cash donations and donation pledges in their relief effort
- spent more than 2 Billion dollars in relief efforts which FEMA only pledged to reimburse 100 million dollars of



# OTHER IMPORTANT CONTRIBUTORS

- Amateur radio operators
- The United Methodist Church
- The Salvation Army
- Operation Blessing
- America's second harvest
- The ASPCA
- United Nations
- National Guard





# RELIEF EFFORT TODAY



- Rebuilding and relief efforts are still happening today more than 8 years after the storm
- Major players include: Habitat for Humanity, Camp Hope, and the St. Bernard Project
- the U.S. Army Corps of Engineers put into action the "Blue Roof Program"
- More than 2/3 of the population has been restored



# ANALYSIS

- Mission statement: “to support our citizens and first responders to ensure that as a nation we work together to build, sustain, and improve our capability to prepare for, protect against, respond to, recover from, and mitigate all hazards.”
- Linear structure provides for miscommunication
- Lack of communication, preparedness, and an overabundance of adherence to principle regulation within FEMA
- FEMA as an overseer





## RECOMMENDATIONS

- Clear communication between branches
- Removing blame and competition between branches
- Positive reinforcement should be used to encourage branches of the organization to work together toward a common goal and should be rewarded with raises, promotions, and public recognition
- Strategic agenda setting: policy formation, implementation and analytical review
- Proactive prevention in areas that have been reviewed as needing more attention: active rather than passive response





Questions?