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Critical Need for Improved Construction Standards for Disaster Resilient Homes

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Time of Session: 1:30-3:00 PM

Session Title: University Education & Outreach—Building Resilient Communities

A. Critical Need for Improved Construction Standards for Disaster Resilient Homes

   Speaker: Vijaya (VJ) Gopu, The University of New Orleans

B. A Resilience Success Story: How Significant Losses were avoided during Hurricane Isaac

   Speaker: John E. Bourdeau, FEMA

Room: 250

Head Count: 12

Note Taker: Carrie Beth Lasley
Katrina

- Katrina damage was extensive, but winds in NOLA were not high.
- Greatest depth of flooding occurred where there were not gates keeping water from entering the city in canals.
- Post-storm assessment indicated damage was worst where building codes were not followed. Why?
  - Lack of builder knowledge about load path or wind resistance
  - Lack of design codes
  - Lax enforcement

Types of design failure

- Improper/Inadequate sheathing attachments
- Inadequate anchorage of roof to wall or wall to foundation; failure to include hurricane straps or clips
- Inadequate nailing
- Inadequate wind resistance in roofing material
- Improper anchorage of gable-end walls
- Absence of impact-resistant glazing or impact-resistant covering of glazing
- Inadequate ties to veneer or unreinforced block walls

Status of Codes

- Pre-K
  - LA: Large cities adopted codes, but enforcement was lax
  - MS: Weak codes in coastal areas, last to adopt IBC
  - AL: IBC on state structures and public areas only, no residential. Attempts to adopt codes failed.
- Post-K
  - LA: 1 impacted parishes adopt IBC immediately; state in 2007
  - MS: Adopted IBC only in 5 coastal Parishes, with grandfathering
  - AL: No state code