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Critical Need for Improved Construction Standards for Disaster Resilient Homes

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Workshop Session 5

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 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