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After the Storm: Optimizing Building Resilience Codes | Governance | Community

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Institute for Building Technology and Safety



IBTS is a 501(c)(3) nonprofit organization established to provide unbiased professional services, while enhancing the communities in which we work.

At IBTS, our mission is to deliver quality services to meet the challenges of governance at all levels while enhancing public safety, economic development, and the general welfare of the community.

public sector
accountability

private sector
flexibility



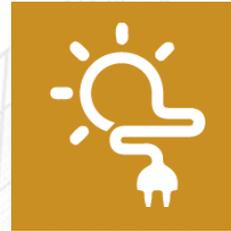
What We Do

State & Federal Programs



Technology Services

Local Government Solutions



Energy Solutions Leadership

Education & Training



Quality Assurance

Compliance Risk Management



Disaster Preparedness & Recovery



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Lessons from the Heart of America

IBTS has worked after the storm in dozens of communities across the country.

IBTS Assistance in HUD Funding Across States

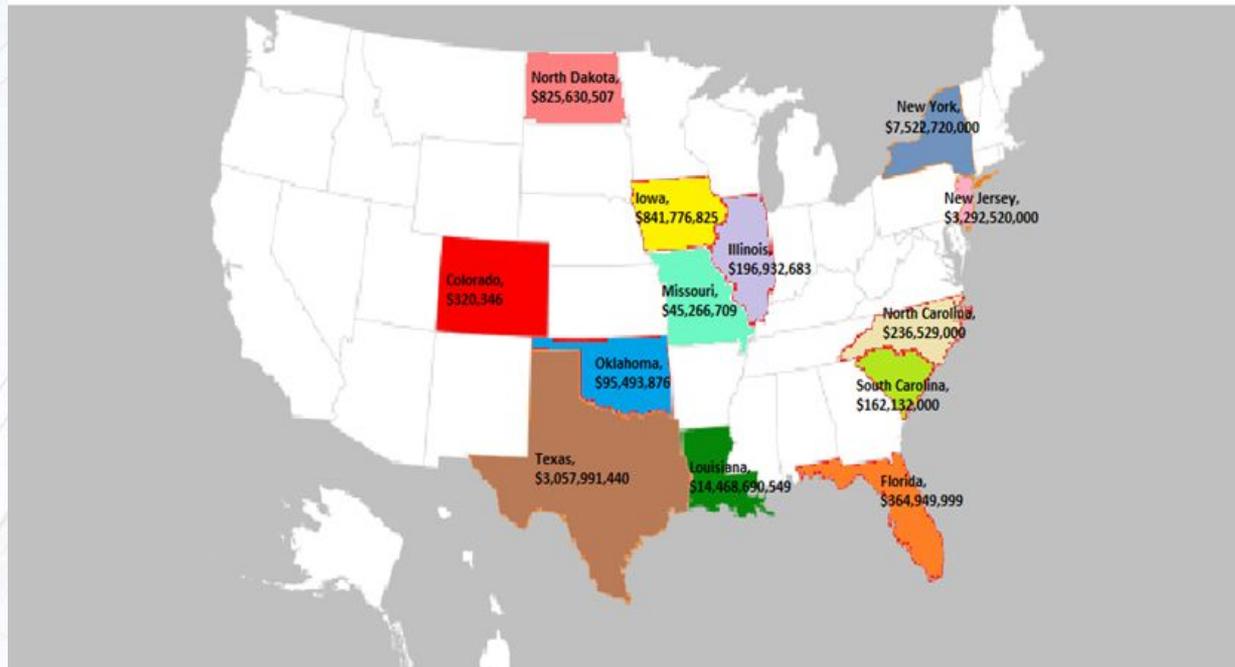


Figure IV.2 IBTS Disaster Recovery Services and HUD Funding by State

Municipal Service Focus

IBTS provides municipal services & disaster recovery assistance in 130+ small communities and is guided by a Board of Directors consisting of:



Leaders at the Core of Better Communities



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IBTS Resilience Approaches



- **Implementation & Management**

- Building Codes/Regulation
- Grants Research, Writing, Administration
- Community Engagement
- Hazard Mitigation
- Floodplain Management

- **Assessments & Planning**

- CRAFT (Assessment; Project Prioritization; Action Planning)
- Resilience Governance
- Energy Efficiency, Solar QA

Research

- OnHAND
- Policy & Communications
- Floodplain Management



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Optimizing for Resilience Lessons Learned



1. Stronger Building Codes Translate to Significant Risk Mitigation
2. High-Performance Construction in Federal Appropriations
3. Post Disaster Stresses New Construction Permit System
4. Success Requires More than Regulation





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Resilient Building Administration

- Specification/Damage Assessment / Estimate / Scope
- Information gathering
- Project development
- Grants administration
- Project oversight
- Focus efforts on future PRE-Covery



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Resilient Code Best Practice



1. Management, operational, and service delivery systems
2. Relationships and enforcement with builders and contractors
3. Training building department staff, contractors, builders and homeowners



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Resilient Code Outcomes

- Homes built to new code 65% less likely to sustain hurricane damage
- Community Rating System 3% residential, 7% commercial insurance premium reduction
- Points for Insurance Institute for Business & Home Safety's Rate the States



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Resilience Optimization: Community



- Historic context
- Green infrastructure
- Engagement
- Action Planning



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Puerto Rico Recovery

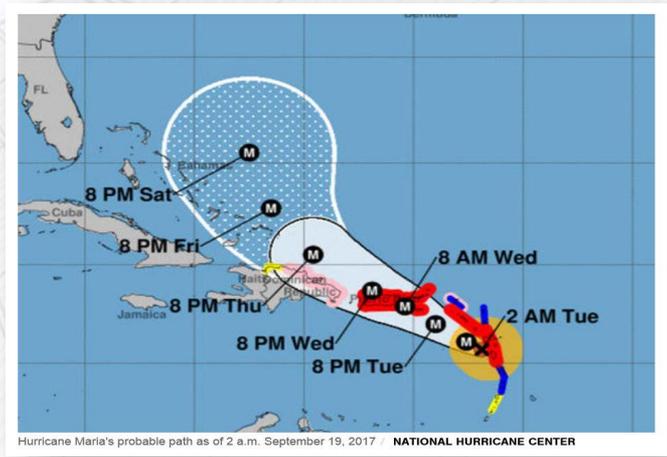


TRANSFORMATION AND INNOVATION IN THE WAKE OF DEVASTATION

AN ECONOMIC AND DISASTER RECOVERY PLAN FOR PUERTO RICO



COR
RICARDO ROSSELLO NEVARES
GOVERNOR OF PUERTO RICO





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Resilience Optimization: Governance



- Planning
- Public works/infrastructure
- Community participation
- Finance
- Human resources
- Security
- Schools
- Technology

ICMA

Leaders at the Core of Better Communities



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Resilience Optimization: Pre-Event Agreements

- Disaster recovery services
- GOVmotus
- Disaster planning
- Plan activation
- Initial disaster response
- Post-disaster services
- Recovery administration
- Resilience planning





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OnHand Tips, Tools, Links



www.ibtsonhand.org

IBTS ONHAND: ONLINE HELP & ADVICE FOR NATURAL DISASTERS

EXPERTISE TO HELP YOUR COMMUNITY

CUSTOMIZE YOUR CONTENT

Customized, actionable content at your fingertips.
Find information by peril, stakeholder group, location and more.

- BEFORE A DISASTER**
 - ANY
 - BEFORE A DISASTER
 - DURING A DISASTER
 - AFTER A DISASTER
- HURRICANE**
 - FLOOD
 - ANY
 - EARTHQUAKE
 - FLOOD
 - HAIL
 - HURRICANE
 - TORNADO
 - WILDFIRE
 - WIND
 - OTHER
- EMERGENCY MANAGEMENT (INCIDENT COMMAND)**
 - CITY MANAGER
 - FEDERAL AGENCY
 - LOCAL GOVERNMENT
 - ACCOUNTING/FINANCE
 - BUILDING AND SAFETY
 - CASE MANAGER
 - CHIEF ELECTED OFFICIAL
 - CITY MANAGER
 - COUNTY ADMINISTRATOR
 - ECONOMIC DEVELOPMENT
 - EMERGENCY MANAGEMENT
- CALIFORNIA**
 - COLORADO
 - CONNECTICUT
 - DELAWARE
 - FLORIDA
 - GEORGIA
 - HAWAII
 - IDAHO
 - ILLINOIS
 - INDIANA



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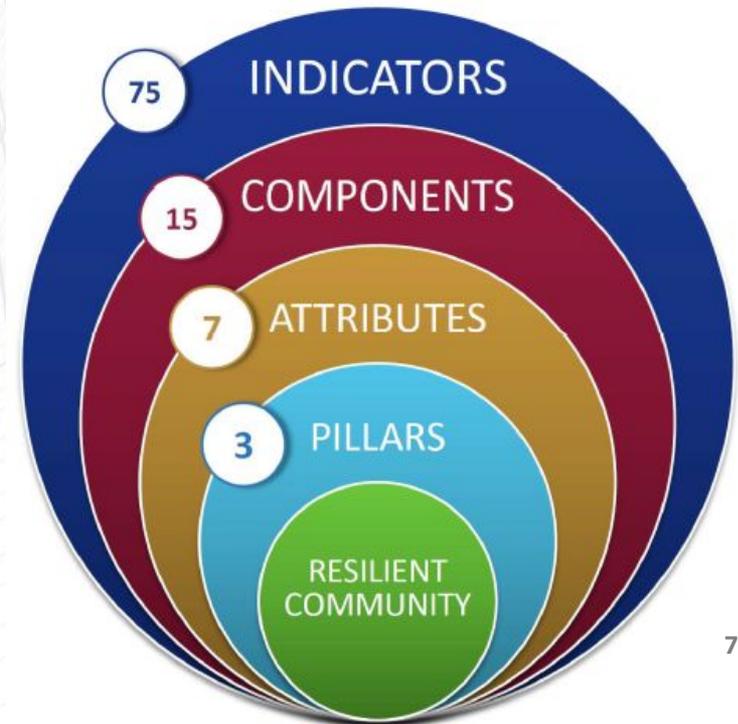
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Creating Community Resilience Action Plans



- Survey enabled
 - Informs community resilience decision-making
 - Increase awareness of strengths and vulnerabilities
 - Create common vision and strategy
 - Provide actionable recommendations
- **Community Resilience Assessment Framework & Tools**



Resilience: Building Owners and Managers Scorecard



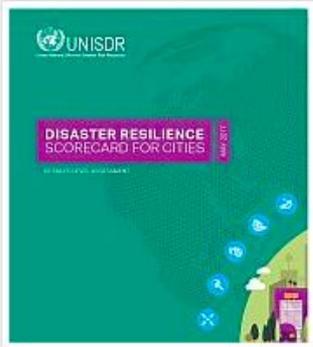
The screenshot shows the UNISDR website header with the logo and navigation menu. The main content area is titled "Disaster resilience scorecard for cities". It features a green cover image of the scorecard and a list of two assessment levels. Below the list are two download links: "Preliminary assessment" and "Detailed assessment tool". A "Screenshot" callout box is positioned over the bottom right of the page content.

UNISDR
United Nations Office for Disaster Risk Reduction

WHO WE ARE ▾ WHAT WE DO ▾ WHERE WE WORK ▾ WHO WE WORK WITH ▾

HOME WHAT WE DO WE INFORM UNISDR PUBLICATIONS

Disaster resilience scorecard for cities



The Scorecard provides a set of assessments that will allow local governments to monitor and review progress and challenges in the implementation of the Sendai Framework for Disaster Risk Reduction: 2015-2030, and assess their disaster resilience. It is structured around UNISDR's Ten Essentials for Making Cities Resilient. It offers the potential for scoring at two levels:

- Level 1: Preliminary level, responding to key Sendai Framework targets and indicators, and with some critical sub-questions. This approach is suggested for use in a 1 to 2 day city multi-stakeholder workshop. In total there are 47 questions indicators, each with a 0 – 3 score;
- Level 2: Detailed assessment. This approach is a multi-stakeholder exercise that may take 1 –4 months and can be a basis for a detailed city resilience action plan. The detailed assessment includes 117 indicator criteria, each with a score of 0 – 5.

↓ Preliminary assessment

↓ Detailed assessment tool

Screenshot



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