

PREPTalks

New perspectives for emergency managers



CENTER FOR HOMELAND
DEFENSE AND SECURITY
NAVAL POSTGRADUATE SCHOOL

Using Codes and Standards to Build Resilient Communities

Stuart Tom

Agenda

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Introductions (5 minutes)

Watch the PrepTalks (20 minutes)

Discussion (30 minutes)

Introduction



- Stuart Tom is President of JAS Pacific. He retired as Fire Marshal for the City of Glendale, CA. Prior, he served for sixteen years as the city's Building Official and led the city's Building & Safety Division
- Tom's accomplishments include leadership roles with the California Building Officials and the California Fire Chiefs. He is the only person to have received the Building Official of the Year award from both organizations
- Tom currently serves on the International Code Council board of directors

Watch the PrepTalk

<https://www.fema.gov/blog/preptalks-stuart-tom-using-codes-and-standards-build-resilient-communities>

Topics

- The Value of Building Codes and the Process for Continuous Improvement
- State and Local Adoption and Enforcement
- Support for Improved Building Codes

Topic 1: The Value of Building Codes and the Process for Continuous Improvement

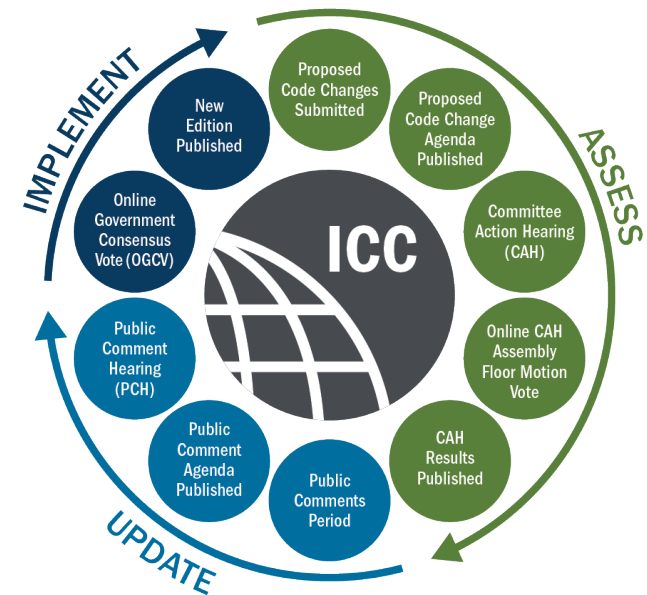
- Strong building codes and standards make a visible difference in disaster outcomes.
- Well-Constructed Buildings:
 - Suffer less damage during adverse events;
 - Are more likely to remain usable;
 - Result in less displacement, homelessness, and disruption of business; and
 - Save lives.

Location	Haiti, DR	Loma Prieta, CA	Northridge, CA
Date	January 12, 2010	October 17, 1989	January 17, 1994
Magnitude	7.0	6.9	6.7
Codes	No	Yes	Yes
Deaths	160,000	63	57

Topic 1: The Value of Building Codes and the Process for Continuous Improvement

The International Code Council (ICC) publishes updated model codes every three years using a consensus-based process.

- Changes proposed by any interested party.
- Discussion of proposed changes in open forum.
- Any interested party may submit a public comment to express their opinion.
- Final votes cast by governmental members who do not have a financial interest in any proposal.
- Results are compiled and constitute the next edition of the code.



“There are opportunities for all of us to be involved in code development and when we learn things from disasters, we can make the next generation of codes even that much better.”

— Stuart Tom

Topic 1: The Value of Building Codes and the Process for Continuous Improvement



1. Does your community have examples of building damage that was exacerbated because a structure was built to an outdated code, or examples of how building codes and standards reduced damage?
2. Who in your community monitors the ICC three-year cycle for International Building Code updates?
3. Has anyone in your community proposed changes to a code or provided comments on proposed codes?
4. After a disaster in your community, do you have a process to examine the damage and submit findings to the ICC?
5. Are there particular hazards that impact your community that would be especially helpful in code development and improvement?

Topic 2: State and Local Adoption and Enforcement

- Although ICC releases new building codes every three years, state and local jurisdictions must adopt the code.
- States have differing processes of adopting codes: amend the code and then adopt or adopt directly from ICC, as written.
- Currently only 33 percent of jurisdictions have adopted a current, updated disaster-resistant building code.
- Websites to find which codes, by year, have been adopted in your state/community:
 - <https://www.iccsafe.org/about/overview/international-code-adoptions/>
 - <https://inspecttoprotect.org>

Topic 2: State and Local Adoption and Enforcement

Updated codes must be adopted and enforced to be effective.

“Building codes are tools and just like any other tool, if you leave that tool in the tool chest, it is not put to good use.”

— Stuart Tom

CASE STUDY: Florida Building Code

- Florida consolidated building codes from more than 400 local jurisdictions and state agencies
- Adoption of the Florida Building Code in 1998 phased out local laws and regulations and replaced them with universal statewide building codes
- Today Florida has some of the strongest building codes in the country
- In the decade following Florida’s adoption of a statewide building code, **the code’s adoption and application reduced windstorm actual losses by as much as 72 percent.**

Topic 2: State and Local Adoption and Enforcement

- Existing Buildings:
 - Older buildings in a community will have been built to an earlier code standard.
 - Find year permit to build was issued from local building department.
 - Find archival copy of code in place at time of permit.
- Codes and Insurance:
 - The Building Code Effectiveness Grading Schedule rates communities on a scale of 1 (exemplary commitment to code enforcement) to 10.
 - Updated building codes and standards contribute to lower insurance rates.

Topic 2: State and Local Adoption and Enforcement



1. **Code Adoption:** What codes and standards has your state adopted and enforced, and what is its code adoption process? What codes have been adopted in your community?
2. **Code Enforcement:** How are building codes enforced in your community? What training is available for inspectors? What is the documentation process?
3. **Existing Buildings:** How old are the buildings in areas of high risk in your community? What were the building codes in effect when they were built? What can you do to improve the safety of those buildings? Do the people who live or work in those buildings understand their risk?
4. **Existing Buildings:** What building codes were in place when your Emergency Operations Center (EOC) was built? Can any building mitigation measures bring your EOC more in line with the requirements of current building codes?
5. **Codes and Insurance:** How does your community rate in the BCEGS report? Are efforts underway to improve the rating?

Topic 3: Support for Improved Building Codes

- Code development is a public process.
- Emergency managers should participate.
- Explain the value of building codes garners community support.
- The **Disaster Recovery Reform Act (DRRA) of 2018** includes several important sections that support jurisdictions with adopting and enforcing building codes:
 - Building code administration and enforcement are now directly eligible at the start of a declared disaster.
 - Building Code implementation, adoption, strengthening, administration, enforcement, and training are all eligible under the new Building Resilient Infrastructure and Communities program.

Topic 3: Support for Improved Building Codes



1. Does your community have code-focused public education efforts?
2. How can your organization support or suggest these efforts?
3. Are emergency managers and public officials aware of the new provisions in the DRRRA that support building codes?
4. Are you planning and preparing to apply for this assistance? Do you have Mission Ready Packages in place to be used for requesting this new assistance post-disaster?

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www.fema.gov/preptalks