

# Functional Recovery

## What is it and Why are we here?

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ICC/CALBO SEISMIC WORKSHOP

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# What is it?

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A 60+ year conversation among design professionals and occasionally their clients about when a properly designed and constructed building will be able to return to service.

- Began with an expectation of no damage in the 30's
- Evolved to a public safety focus in the 50's
- Declared usability after moderate earthquakes in the 60's
- Expanded to include usable essential facilities in the 70's and beyond
- Performance Based Design introduced in the 90's
  - VISION 2000's Operational level = Functional Recovery

# Why are we here?

Katrina showed us in 2005 that we also need to consider and design for community recovery.



*From the 2016 NIST Community Resilience Planning Guide*

ICC /CALBO Seismic Roundtable

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# Functional Recovery

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Functional Recovery is best defined as a contributor to Community Resilience not just a measure of the resilience of individual buildings.

- Community Resilience is about quick social and economic recovery
- Functional Recovery of buildings and supporting lifeline infrastructure is part of the process
- Fully functional building performance is ideal by not practical
- Focus should be on designing for just-in-time recovery

# Going forward

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Adapt what we are all doing with our new building design criteria in a way that generates common public understanding and looks forward to Community Resilience Programs.

- Use common hazard levels
- Define and declare performance levels that include expected time needed for re-occupancy and functional recovery.
- Respect and support all efforts

# Benefits

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Coordinated and collaborative efforts will enhance public understanding and support

- Better buildings of known capability
- Better post earthquake understanding of what happened
- Better understanding of the shortcoming of existing buildings
- Will provide common benchmarks for infrastructure system performance
- Will encourage Community Resilience planning