

Reimagining the ICCPC – Resilience Roundtable 1 – Summary of Key Points

Participants

- Brian Meacham (BM), Moderator
- Jon Heintz (JH), ATC, PBD for decades, early leader of ASCE 41 work, leading development of next generation PB tool, ATC-58, leading efforts on functional recovery
- Steven McCabe (SM), NIST, NEHRP Director, nearly 50 years of seismic work, involved in research and funding of studies on PBD, immediate occupancy, functional recovery
- David Bonowitz (DB), extensive work in resilience efforts for NIST, EERI, NIBS, FEMA and others
- Michael DeLint (MD), formerly with ministry of building and housing in Ontario, Canada, work with World Bank, and International Center for Building Quality
- J.Q. Yuan (JQY), NIBS, executive director of multi-hazard mitigation council at NIBS, involved in next cycle of NEHRP provisions,
- Ryan Kersting (RK), Buehler Engineering, PBD for 15-20 years, existing and new, repair, ATC and FEMA projects, NIST-FEMA efforts,
- Jonathan Buckalew (JB), Nabih Youssef Associates, active on resilience committees, SEAOC and others
- Robert Pekelnicky (RP), Degencolb, work in PBD and resilience space, participating in NIST resilience efforts, involved in many document-development efforts

Key Take-aways

- Buildings are not resilient – communities are: the concept of designing buildings to support resilience is important – setting performance objectives and functional recovery objectives to meet community resilience is the key.
- Functional recover is about maintaining basic intended function after some event, with project defining event and acceptable recovery time, against what hazard level, for buildings of different uses and importance to community (resilience).
- Community resilience in more than just buildings – lifelines are important – each components in a system of systems that must work together to deliver resilience.
- FEMA P-2090 / NIST SP-1254 is important document to describe functional recovery, https://www.fema.gov/sites/default/files/documents/fema_p-2090_nist_sp-1254_functional-recovery_01-01-2021.pdf
- ICC Functional Recovery Portal has a link to that and other resources: <https://www.iccsafe.org/advocacy/seismic-functional-recovery-resources/>
- The categorization of performance groups in current ICCPC seems to be life safety based, but NIST-FEMA work suggests should be looked at from recovery performance as well. Might include functional recovery categories as well as risk categories. Note appendix in ICCPC that asks questions about community issues, but not reflect in the risk matrix. Need to bring in other aspects. Good place to start from.
- Important to note key components of resilient infrastructure that are not under purview of building codes. Might need to be a transition point where ICCPC is overarching document.
- Three key parts. Identify recovery objectives for different buildings / infrastructure, develop design criteria to meet those goals, and consider hazard levels. Need to have some metric to design against, but also need to identify what buildings those goals apply to, and to what hazard level. Some basics in ICCPC but need to go further.