

**WESTERN STATES SEISMIC POLICY COUNCIL
DRAFT Policy Recommendation 21-6**

Functional Recovery of Buildings

Policy Recommendation 21-6

WSSPC recommends state and local building code officials develop, adopt, and implement “better than minimal code” components within their official building codes and practices for both structures and infrastructure to pro-actively address impacts from seismic events.

Executive Summary

Per the International Code Council (ICC) and California Building Officials (CalBO), “The term “functional recovery” means that buildings are not only designed and constructed for life safety, but also to support the basic intended functions of the building’s pre-earthquake use and occupancy within a maximum acceptable time. In other words, a building built for functional recovery would be able to be used for its intended purpose(s) with re-occupancy time based first on the criticality of the building functions and further to ensure community viability for individual businesses and households.

However, buildings only represent one structural aspect to the built environment of a community. The second key aspect is the lifeline infrastructure systems which directly support the recovery of business structures, residential structures, and the economy. Providing a “better than minimal code” component for one, but not the other, will not provide the desired reduction in recovery costs or time.

Background

The [*National Earthquake Hazards Reduction Program Reauthorization Act of 2018*](#) (NEHRP) was signed into law on December 11, 2018. As re-authorized, it contained changes from prior versions. One of the changes was to include an emphasis on the concept of “Functional Recovery.”

Work on this concept dates back to at least 2013 as discussed in [*NIST Technical Note 1795 Developing Guidelines and Standards for Disaster Resilience of the Built Environment: A Research Needs Assessment*](#). After the re-authorization, further investigation into what defines functional recovery was reviewed in the [*NEHRP Responses to the 2019 ACEHR Report Recommendations ON THE STATE OF THE PROGRAM*](#). The document specifically states, “The NEHRP Reauthorization Act of 2018, signed into law as PL 115-307, requires that FEMA and NIST jointly convene a committee of experts from Federal agencies, nongovernmental organizations, private sector entities, disaster management professional associations, engineering professional associations, and professional construction and homebuilding industry associations, to assess and recommend options for **improving the built environment and critical infrastructure to reflect performance goals stated in terms of post-earthquake re-occupancy and functional recovery time.**” (WSSPC emphasis)

This effort has been pursued by member states, WSSPC partner non-profits, and professional organizations. Examples include:

- The State of California has proposed the inclusion of language into its building codes focused on functional recovery. [*AB-1997 Building codes: earthquake safety: functional recovery standard.\(2019-2020\)*](#).
- A white paper from the Earthquake Engineering and Research Institute (EERI), [*Functional Recovery: A Conceptual Framework with Policy Options*](#).
- The International Code Council (ICC) and California Building Officials (CalBO) through July 2019 roundtable discussion and workshop summarized in [*A National Approach to Seismic Functional Recovery for New Construction*](#).

Discussion on the development of a WSSPC policy on functional recovery started in Fall of 2019, concurrent with the ICC and CalBo roundtable discussion. The need for a policy was further discussed during the Spring Board and Annual Business Meeting of 2020.

History

- Policy Recommendation 21-6 was unanimously adopted during the 2021 Annual Business Meeting