

CALIFORNIA BUILDING CODE SEISMIC PERFORMANCE INTENT **- EDUCATIONAL DOCUMENT**

SCOPE OF WORK

Objectives

It is proposed that the Pacific Earthquake Engineering Research Center work cooperatively with a variety of organizations, companies and governmental entities to synthesize and analyze results they obtained regarding the expectations of seismic behavior of buildings and their contents, when designed to the provisions of the current California Building Code. The targeted audience for the document is the general (i.e. non-technical, non-engineering) public, and the purpose of the document is to better educate the general public and mitigate the risk to California posed by earthquakes. Topic areas that will be studied include earthquake effects on the built environment when designed to the current Building Code, and a general discussion of socio-economic impacts and expectations.

The Pacific Earthquake Engineering Research Center, under that aegis of the Regents of the University of California, agree to provide services that will identify the following:

1. The general evolution of the seismic provisions of the building code, and the intent of current seismic code provisions.
2. Performance expectations of new buildings when designed to the seismic provisions of the California Building Code – with respect to building use and general material construction, including residential, commercial, and essential facilities, including tall buildings.
3. Performance expectations of retrofitted existing buildings.
4. Issues related to code performance and socio-economic expectations.

Tasks

The following tasks will be conducted in order to meet the objectives of this scope of work.

Task 1: Develop a working list of relevant seismic code-performance topics with respect to the seismic provisions in the California Building Code.

Task 2: Develop a preliminary list of resources: data sources, scholarly papers and reports, people to interview, articles, etc.

Task 3: Develop preliminary report thesis statement, abstract, and proposed format, including a proposed format for the info-graphic handout.

Task 4: Communicate and meet with a small group from the CSSC to review the working list of relevant code-performance topics, resources, preliminary report and handout format (i.e. Tasks 1-3).

Task 5: Assemble data and synthesize to develop code-performance descriptions.

Task 6: Determine the code-performance descriptions and the overall context of socio-economic issues from the public point of view. Communicate and meet with a small and representative group of stakeholders (which may be assembled by the CSSC) to inform this task.

Task 7: Develop first draft of report and handout.

Task 8: Send draft report and handout to CSSC for review and comments.

Task 9: Finalize report and handout based upon CSSC feedback and distribute to CSSC.

Process and Schedule

As noted, this work will build on and leverage technical studies being done by others, and will consider other recent documents pertaining to code-performance issues such as those resulting from the California Building Officials, Structural Engineers Association of California, the USGS HayWired Scenario and activities by the City of San Francisco, Los Angeles, and organizations such as Association of Bay Area Governments (ABAG), San Francisco Bay Area Planning and Urban Research Association (SPUR), and others.

It is planned to gather and review available technical and other information, and to interview a few experts (from the groups listed above) in the areas related to the tasks listed above. In particular, a series of in-person meetings and conference calls are planned including key technical and policy experts and stakeholders. An in-person meeting will be held at the beginning of the project to discuss observations,

examine commonalities and differences in expectations, and identify gaps in data. Data will be analyzed by the project team, team meetings and conference calls will be conducted, and draft material will be prepared and submitted to CSSC for review and comment in the second quarter of 2017. A final report will be issued approximately one month after receipt of comments from CSSC. The project team will participate in a meeting convened by CSSC to discuss findings and recommended actions.

Deliverable

The deliverable to the Seismic Safety Commission will be a concise, clear and focused final report, along with an electronic file of a single sheet, double-sided, color info-graphic handout suitable for public dissemination. The intent of this educational document is not to develop a compendium of all information known about the California Building Code but specific findings related to the objectives identified above. Details will be provided as needed in appendices and by reference to other sources of information.

BUDGET DETAIL

Estimated Budget:

Salary (including Benefits):	\$37,600
Travel (including meeting participant travel as needed):	\$ 2,000
Overhead (25%):	\$ 9,900
Total:	\$49,500