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Cultural heritage management and California's State Historical Building Code

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California, like many other places, lives under the curse of frequent, sometimes devastating earthquakes. Yet because of that curse, Californians are now blessed with the world's best survivability statistics. In other words, the ratio of lost lives to the severity of the earthquake, as measured by property damage, is the world's lowest. California's building industry and its retrofit programs are essentially doing things right.

Gratefully, for Californians, the biggest post-earthquake problem is not burying its dead but, rather, returning the state to normalcy: recovery. However, the all-too-common practice of jurisdictions seizing on necessary repair work following a disaster as an opportunity to demand *additional* upgrading of routine code non-compliance work, cripples that recovery. Firstly, and however theoretically desirable, such demands add unnecessary costs to an owner already financially and emotionally damaged by the disaster.

The Secretary of the Interior's Standards and the impact of pre- and post-disaster demands on cultural resources

We in California can call on two important tools in order to sensitively and cost-effectively implement historic preservation. 'The Secretary of the Interior's Standards for Rehabilitation' is a universally accepted model for safeguarding the honesty and the integrity of a historic resource. The Secretary's Standards *must be met* if a project:

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- is owned or funded - even in part - by the federal government;
- is owned or funded - even in part - by the State of California;
- is undertaken in any jurisdiction with a local preservation ordinance requiring adherence to the 'Standards'; or
- is to receive preservation investment tax credits.

The second tool is California's State Historical Building Code. It is the vehicle which makes meeting the Standards both feasible and cost-effective. By statute, it governs all other statutes and regulations as they may apply to historic resources within the State. The State Historical Building Code empowers owners and jurisdictions to minimize alterations and modifications, and to ensure that they are sensitive to the historic resource rather than intrusive. Essentially, the State Historical Building Code looks on historic resources as though they are ongoing occupancies, subject - naturally - to 'health and safety' issues, but unconcerned with routine non-compliance issues, just as are all other ongoing occupancies in a community's building stock. Thus, the State Historical Building Code contains no 'triggers', nor does it recognize 'triggers' found in other codes. Rather, it is a mandate, by means of adopting reasonable alternatives and reasonable levels of equivalency, to ensure the continued viability of our historic resources.

Historic preservation, distilled to its basics, is composed of two elements: *Honesty* and *Commitment*. Honesty is about the resource and the commitment is to pass these historic buildings and sites onto the next generation as unaltered as possible. We cannot let ourselves lose sight of these basics. The State Historical Building Code and the Secretary of the Interior's Standards for Rehabilitation facilitate that honesty and commitment. However, even as we make the changes necessary to ensure the continued viability of these buildings and sites, we must never forget that, just like with vintage cars, every alteration diminishes the ability to accurately convey - or understand - our history.

Seismic safety of existing federal buildings

The federal Standards of Seismic Safety for Existing Federally Owned or Leased Buildings (RP4) are being applied equally to non-historic and historic buildings. This policy runs the risk of imposing an unnecessary burden on those resources which society has determined worthy of preservation. A better call might be the one made by the chief of one of California's most important life safety agencies when a number of such concerns brought us all together at Hearst Castle at San Simeon: "When it comes to historic resources", he told the assembled officials, "we should simply close the code books and start using knowledge, experience, and common sense". Since the 1970s, that has been the advice of Section 104(f) of the Uniform Building Code which - paraphrased - says that the end result of work on historic resources may not be more hazardous to the public health, safety and welfare than the building's condition before rehabilitation work started.

How is that for a call for flexibility? Without sacrificing life safety considerations - which must always be paramount - California's State Historical Building Code simply builds on

the premise of Section 104(f). It is, in fact, a mandate to implement reasonable alternatives whenever a structure's historic fabric or historic character is threatened by the language of the community's regular codes and ordinances.

The State Historical Building Code is a performance code. As such, sometimes its enforcement options vary widely and disputes arise as to reasonable alternatives. Sometimes, disputed issues must be settled by the final administrative authority a statutory established 21-member State Historical Building Safety Board - which is the final administrative authority. However, it is interesting to note that attempts are underway to convert both structural codes and fire codes to 'performance' documents, recognizing that mega-structures like large exhibition centers simply no longer can be built under the prescriptive values found in existing codes.

Like these mega-structures, the only way to successfully deal with the unique character of historic resources is to recognize their special qualities; then to agree to protect these qualities by making the commitment to impose no rigid repair and/or upgrade standards. Only then can come the freedom and latitude to generate the best possible combination of intrusion and sensitivity for the achievement of life and property protection.

Thanks in no small measure to the State Historical Building Code, California's major cultural icons continue to give valuable service while retaining their historic integrity. The Los Angeles Coliseum, San Francisco's City Hall and Ferry Building, the California Missions and a host of others, are all able to continue to accurately reflect their past while preparing themselves for the future.

The roles of other federal, state and local agencies and commissions

As has been said so many times: *Before* the earthquake, "tie it down and tie it together!". Between Loma Prieta and Northridge, the International Conference of Building Officials produced a 20-minute video entitled 'Bolt it Down'. It is designed for home owners, do-it-yourselfers, and it is very good. It is particularly valuable because it addresses the seismic upgrading in a setting separate from the trauma of post-disaster repair and recovery.

The post-earthquake imposition of substantial mandatory programs for seismically upgrading the existing stock of buildings - particularly when imposed as a condition of repair and occupancy of an already damaged structure - could well create a financial burden beyond the owner's capabilities, and thus pose a threat to the continued existence of these buildings. For historic resources, whose protection and preservation is in the public interest, this is not an acceptable situation.

The 'safe' or 'earthquake-proof' building is essentially non-existent. All our codes and ordinances can really provide is a degree of defense from risk that society agrees is reasonable. The annual loss of life from lightning is clear evidence that even innocently occupying open space is not risk-free. Moreover, society has endorsed a whole hierarchy of levels of risk, and presumably considers them all 'reasonable'. Does the fact that Californian schools are designed to more rigid standards mean that Californian hotels are not 'safe'? Everything we inhabit - structures, ships, automobiles and aircraft - involves a cost-benefit ratio in which is a risk factor. That some people choose not to fly, while others

refuse to ride in a sub-compact car, does not negate the ‘public good’ that these means of travel engender.

The same applies to historic buildings. Within commonly accepted standards of ‘reasonable protection’, it is in the public interest to retain and protect our cultural heritage. The Uniform Building Code, Section 104(f), has been facilitating this protection since the 1970s. California’s State Historical Building Code simply elaborates on this theme, calling for alternative solutions, listing some and leaving the remainder to the knowledge, experience and judgment of officials, most of whom recognize that the mandates for health and safety *and* for preservation are *both* important threads of a common legal fabric of the people’s thinking.

Yet there is a disturbing change in perspective looming on the horizon: the removal from California of any differentiation of seismic zones for code enforcement purposes. The result is likely to be a ‘one-size-fits-all’ approach to seismic retrofit. Strangely, this is occurring just when the level of technical expertise is more and more able to determine locations and maximum credible strengths of earthquakes in California.

The seismic upgrading of historic resources, in order to be both adequate and sensitive, cannot abandon the necessity for resolution on a case-by-case basis. The imposition of a ‘one-size-fits-all’ or a ‘cook book’ solution would likely put our cultural heritage as much at risk from the ‘solution’ as from the ‘problem’. No one argues extraordinary and case-specific measures to protect and conserve the historic treasures of a museum. The cultural legacy of our historic buildings is worthy of equal consideration.

The State Historical Building Code provides Californians with the legal framework to uniquely tailor whatever work is necessary to the individual needs of the historic resource. For jurisdictions to impose ‘cookbook’ solutions, depriving these resources of reasonable, sensitive and cost-effective alternatives could, indeed, constitute a ‘taking’.

Effects of current FEMA policies and code enforcement

Subsequent to California’s Loma Prieta Earthquake, the citizens passed a bond issue for the seismic retrofit of local structures housing essential services, and of a number of major state-owned buildings. Among the policies established for state-owned buildings was that if retrofit costs exceeded 60% of the cost of new construction, demolition becomes an option. However, for historic resources, only when retrofit costs exceed 120% of the cost of new construction, does demolition become an option.

With this distinction, the State has recognized a fundamental difference between the value placed on the two types of structures. Most of the federal government also genuinely acknowledges the profound difference between standard buildings and those which have become an element of our cultural legacy, and Section 106 of the National Historic Preservation Act underscores that fact. Yet federal RP4 standards for seismic upgrading impose the same demands on non-historic and historic buildings, thereby generating sometimes unnecessarily intrusive solutions. There is a need to amend these standards, recognizing that the protection of our historic resources deserves special consideration while concurrently ensuring a reasonable level of life safety. This is particularly important for the continuing viability of federal buildings in California.

Post-earthquake repair and structural upgrading of California's historic resources have generated a great deal of discussion regarding the appropriate degree of intrusiveness of the work, *vis-a-vis* the latitude available under California's State Historical Building Code. While some owners may be guilty of looking for a way for the government to pick up the costs for not only repair, but for decades of deferred maintenance, some members of those government agencies may be equally in error for looking for ways to merely 'paint the cracks'. Neither approach is right.

It must be recognized, that while the State Historical Building Code is a call for making the least intrusive modifications necessary to retain the viability of California's historic resources, a justifiable case can readily be made that, when addressing seismic stability, this is not a call for the barest minimum of work, but rather a call for the most prudent balance of intrusion and preservation that will effect the highest reasonable level of protection against future significant damage or loss of the historic resource.

Perhaps we need a sliding 'cost multiplier' to better reflect these values - '1' reflecting a non-historic building, and up to '10' reflecting, say, the Lincoln Memorial. I have little doubt that this nation's citizens, in order to repair, restore and preserve that hallowed structure, would gladly spend ten times the cost of a replacement stucco box of the same dimensions.

I would like to suggest that the National Park Service and FEMA, along with California's Office of Emergency Services and the State Historic Preservation Office, investigate and adopt a hierarchy of such values to be assigned to California's historic resources. If accomplished prior to a disaster, it could provide a rational basis for assigning premium repair dollars for those icons of our society whose loss would be unthinkable, and are therefore deserving of upgraded (and consequently more costly) levels of protection.

It is not much different than Homeowner's Insurance. With good reason, we rarely are willing to insure for nothing more than the depreciated value of used goods. Rather, we highly value our homes and their contents. They tell us who we are. No-one even questions the appropriateness of full replacement value insurance. Historic buildings tell a community - or a nation - who and what we are. This heritage is no less deserving of the same special consideration.

