

**Night and Day: Mitigation Policymaking in Oakland, California
Before and After the Loma Prieta Disaster***

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The 1989 Loma Prieta earthquake was a watershed event for all of the communities it affected but perhaps more so for Oakland, California, where it had a fundamental and enduring impact on the decision agenda of city government. This paper explains (1) local government inaction on earthquake safety in Oakland before the disaster and then (2) how and why a political coalition was formed to develop a series of city ordinances to abate the hazard posed by earthquake-damaged buildings as well as by a class of structures (unreinforced masonry) known to be particularly earthquake-vulnerable.

A few minutes after 5 p.m. on October 17, 1989, during warm-ups for the third game of the World Series at Candlestick Park (ironically pitting San Francisco against Oakland), a Richter magnitude 7.1 earthquake rocked the entire

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San Francisco Bay Area. The earthquake killed 67, injured 2,435, and inflicted \$5.6 billion (1989 dollars) in property damage (EERI 1989, p. 1). With an epicenter some 40 miles to the south of the city of San Francisco and by standard geologic convention, the event was denominated the Loma Prieta earthquake.

Perhaps no earthquake in history has ever been captured in such real time by the media that—because of the World Series—pervaded the Bay Area. The whole world was witness to the Loma Prieta event and much of its immediate aftermath, although the media tilt toward the urban areas left the hardest hit zone—Santa Cruz and several small towns in the area—underreported (EERI 1989, p. 2).

Loma Prieta's most memorable losses came in Oakland, where more than a mile of the elevated Interstate 880 (known locally as the Cypress freeway) collapsed. Fully 42 of the 67 fatalities in this earthquake occurred in the Cypress collapse. The Oakland situation, however, was actually worse than it appeared because even as search and rescue at the Cypress freeway began to wind down, city officials discovered that many buildings in the city, especially a set of major downtown buildings, including City Hall itself, had been structurally weakened to the point of constituting collapse hazards.

Moreover, Oakland faced an additional problem above and beyond the damage and the continuing aftershocks from the Loma Prieta event: another earthquake. In fact, Oakland had—and has—more to fear from the Hayward fault, which actually traverses the city, than from more distant faults, including the main San Andreas fault, a near offshoot of which generated the Loma Prieta event.

Policy Response: The "Oakland Nine"

As the Loma Prieta damage assessments came in, Oakland officials realized that they faced a two-dimensional public policy dilemma. First, they had an immediate hazardous structure problem with the damaged buildings. Second, because the earthquake had again demonstrated the vulnerability of an entire class of structures, generically referred to as "unreinforced masonry" (URM) buildings, of which Oakland had more than a thousand (it was eventually determined to have 1,604), the larger question was what to do about URMs in general.

If Oakland officials did nothing, they were vulnerable to criticism that they were knowingly putting, or at least leaving, population—a lot of it and mostly poor—at life risk. Over a three and a half year period, however, they did act. Between December 1989 and July 1993, the City of Oakland passed nine major ordinances or ordinance amendments dealing first with earthquake-damaged and then with earthquake-vulnerable structures.¹ These ordinances

represented a major public policy change in Oakland, affecting more than a thousand buildings (mainly downtown), billions of dollars in investment, and entailing millions of dollars in rehabilitation costs.

The Literature Base

The nature and timing of policy innovation, and the role of "windows of opportunity" in the changing of political agendas, are among the most enduring issues in policy research generally (Cobb and Elder 1971, 1972; Kingdon 1984; Stone 1988, 1989; Rose 1993; Baumgartner and Jones 1993; and Sabatier and Jenkins-Smith 1993) and disaster research specifically (Drabek, Mushkatel, and Kilijanek 1983; Lambright 1984, 1985; May 1985, 1992; Olson 1985; Alesch and Petak 1986; Wyner and Mann 1986; Olson and Olson 1993; Olson, Olson, and Gawronski 1998; Lavell 1994; Birkland 1996, 1997). The Loma Prieta disaster clearly opened a window of opportunity for earthquake mitigation in Oakland, but the various post-Loma Prieta ordinances raise two more specific questions within the general interest in policy change and innovation: (1) What was Oakland doing, or more precisely not doing, about earthquake mitigation before Loma Prieta; and (2) What political coalition-building was required to enact the ordinances?

While these questions are the foci of this paper, a larger study (Olson, Olson, and Gawronski 1998) traces the entire policy history of Oakland's attempts—and non-attempts—to deal with earthquake threat to its buildings, and special attention is given to the intergovernmental context of that policy history. The larger study uses Yin's (1994) case study methodology and is an explicit attempt to employ the "Advocacy Coalition Framework" of Sabatier (1988, 1991) and Jenkins-Smith (1993).

Pre-Loma Prieta Earthquake Mitigation: Not Much Going On

A Thorny Problem: Causes of Inaction

Verifying policy inaction in the face of a societal problem is not easy, and inferring the cause or causes for that inaction is even more difficult. Working from the literature on non-decisionmaking, especially that of Bachrach and Baratz (1962, 1963, 1970) that itself was based on the pioneering study of Schattschneider (1960), Crenson noted both the methodological problem and the substantive challenge (1971, p. 26, italics added):

Anyone who hopes to construct an explanation for political inaction immediately faces difficulties. The task, after all, is a peculiar one. *We must account for things that do not happen*, and it

might be argued that such a curious enterprise must inevitably stray far from the hard facts about politics—the observable actions, conflicts, and events that are the raw materials for any reliable piece of social science research. This objection, however, is not a crippling one. *Inaction is just as much a fact, just as susceptible to empirical verification, as is action.*

Disasters provide an unusually clear hindsight optic on policy inaction because, in their aftermath, attention is commonly focused on what “should have been done but wasn’t” before the disaster. Often part of a post-disaster blame assignment/avoidance debate, this attention is not always fair or for that matter empirically accurate. Nonetheless, because disasters are such well defined marker events for communities and sometimes even nations, they provide an especially fruitful way to cut into policy histories and show the before-after contrasts.

Oakland’s Inaction

For more than a decade both the federal government and the state government had been pushing local jurisdictions in California to deal with their URM problems. Rehabilitation technologies existed and legislation was in place, especially California’s SB [Senate Bill] 445 (permitting rehabilitation to less than current code) and SB 547 (requiring a URM inventory to be reported both locally and to the California Seismic Safety Commission). Model local ordinances and even rehabilitation cost projections were available. So, on the eve of the Loma Prieta disaster, where was Oakland on its URM problem?

To begin to answer this question, we reviewed the required Seismic Safety Element of the Alameda County General Plan and of the Oakland Comprehensive Plan. It turns out that as early as the mid-1970s, both elements recognized the dangerous mix of earthquake threat and URMs. The 1974 Oakland Comprehensive Plan was quite explicit about the URM problem:

Certain building types have responded well during seismic activity while others have consistently failed and have been the source of extensive damage and life loss. . . . Buildings with unreinforced brick walls, or unreinforced hollow concrete block are the structures most susceptible to damage and collapse even in relatively moderate shocks.

The Oakland plan then described the local situation (italics added): Generally, it can be said that significant concentrations of [earthquake-vulnerable] buildings of twenty-plus units are to be found in the central area [i.e., downtown] *thus earmarking*

this area as one needing special attention both as to building evaluation and policy formation concerning the degree of hazard this may represent. Beyond the central area, there are only minor concentrations of large multiple-family units, the majority of which have been constructed after 1940 . . .

As with residential structures, the concentration of older commercial buildings is primarily within the central area.

To delve into earthquake safety’s place historically on the city’s political agenda, we contacted the Oakland City Clerk’s office and inquired about an agenda search of both the Oakland City Council and the Oakland Redevelopment Agency (the memberships are identical; they just meet at different official times, not an unusual urban pattern in the United States). It turned out that Oakland computerized its decision agendas starting in 1985, so we were able to start a track more than four years before the Loma Prieta disaster and continue through to October 17, 1995, the sixth anniversary of the event. For the pre-1985 period, we went back to boxes of index cards on city council discussions and actions. The cards, buried in the bowels of the city vault, took us all the way back to the mid-1950s. Using the key words “earthquake” and “seismic safety,” we came up with the agenda item count detailed in Table 1 (below).²

The before-after contrast—17 to 178—is striking. As Table 1 makes clear, between 1954 and the Loma Prieta earthquake of October 17, 1989, “earthquake” or “seismic safety” popped up only occasionally and never seriously on the Oakland decision agenda. Moreover, *the hazardous buildings-URM problem does not appear as a decision agenda item in Oakland before the Loma Prieta earthquake.* Therefore, and confirming empirically a dearly held belief in disaster research, a disaster event did indeed change the political agenda (in this case, the decision agenda) of the stricken community, and for Oakland it appears to have been a lasting change. While the number of earthquake agenda items goes down after the initial year of emergency and recovery, the earthquake problem has remained salient, although admittedly the community is still in the reconstruction phase even in 1997.

With these documentary findings in hand, we interviewed the most relevant city officials in place prior to Loma Prieta. Some were still in Oakland, others have moved on and/or retired, but nearly all were located. The question was as follows: Prior to the Loma Prieta disaster, how would they characterize awareness of the URM problem and Oakland’s response to SB 547’s requirement for a URM inventory and report?

Our interviews confirmed that Oakland building officials were quite aware of the reporting requirements, and although late (they were going to miss the

Table 1. City of Oakland: Earthquake/Seismic Safety Agenda Salience

Period	Number of Agenda Items
<i>Pre-Loma Prieta Years</i>	
(October 17, 1954 - October 16,1971)	0
October 17, 1972 - October 16,1973	2
October 17, 1973 - October 16,1974	1
October 17, 1974 - October 16,1975	4
October 17, 1975 - October 16,1976	0
October 17, 1976 - October 16,1977	0
October 17, 1977 - October 16,1978	0
October 17, 1978 - October 16,1979	2
October 17, 1979 - October 16,1980	1
October 17, 1980 - October 16,1981	3
October 17, 1981 - October 16,1982	0
October 17, 1982 - October 16,1983	0
October 17, 1983 - October 16,1984	0
October 17, 1984 - October 16,1985	4
October 17, 1985 - October 16,1986	0
October 17, 1987 - October 16,1988	0
October 17, 1988 - October 16,1989	0
Pre-Loma Prieta Subtotal	17
<i>Post-Loma Prieta Years</i>	
October 17, 1989 - October 16,1990	49
October 17, 1990 - October 16,1991	21
October 17, 1991 - October 16,1992	30
October 17, 1992 - October 16,1993	40
October 17, 1993 - October 16,1994	13
October 17, 1994 - October 16,1995	22
Post-Loma Prieta Subtotal	178

January 1, 1990 deadline), they intended to submit the inventory and make the reports. That is all that they intended to do, however, which takes some explaining.

State government mandates to local government are a sore point in inter-governmental relations, especially if they entail local effort without financial

assistance, and SB 547 fell into that category. As it was explained by an interview subject:

[SB 547] just sort of came down as the state law and was handed off here to the building department as the one who will comply and file a report. We let [our superiors] know what we were doing to meet the requirement and they'd go along with it. You will find that most local governments—that is, the political entity part—are not really aware of what state legislation comes down. [In this area] usually it is the building department which has to tell them and keep them informed every time it has a serious effect. Lots of bills come through, and the state always says that they will have little economic effect on local government, which is a bunch of hogwash. They always do [have an economic effect].

To Oakland building officials, SB 547 was only, to quote a different interview subject, "another goddamned state mandate." Before Loma Prieta, to comply with SB 547 the building department assigned a couple of staff inspectors to compile the required URM inventory, but they were given little attention and even fewer resources. As one of those involved stated, their space was a "cubbyhole," and they had to "bum computers" from other staff. Therefore, suffice it to say that Oakland building staff did not see SB 547 as an opportunity for a local abatement program similar to those in Long Beach, Los Angeles, or Santa Ana (see Alesch and Petak 1986). Our question then became, "Why not?"

The answer returns us to the agenda salience problem. Oakland building officials saw the earthquake problem generally and the hazardous structure-URM problem specifically as not of particular concern to their administrative superiors or to the city council. Moreover, to say that Oakland's leaders were preoccupied with economic development prior to the Loma Prieta earthquake would be an understatement. They were obsessed. In one of our interviews, a city council member during the pre-event period was reflecting on Oakland's major concerns at that time. Although it reads somewhat confused (two number 1 issues), the logic of twinning crime reduction and economic development is quite compelling, and the primacy of economic development is crystal clear:

[The] number 1 [issue] was crime and all the attendant . . . pathologies around it that we deal with as a city, which has about 39 percent of our population under the poverty guidelines. . . . The other [issue] was the flip side of that, how do you get jobs, so economic development has always been, was then, and still

is now our number 1 issue.

Within this larger context and discussing his participation in the admittedly low-key response to SB 547, yet another interview subject offered the following observation:

The law [SB 547] was relatively new, and [the city] council was waiting for a staff recommendation on what to do. But we wanted to understand the impact on Oakland first, before deciding on what level of remediation [to recommend]. So most of the focus at that time was just to identify the number of [URM] buildings.

One interview subject wove several threads together:

It was not a priority. In Oakland, all of the URM buildings were in areas that were not particularly well off. How do you force people who own buildings that they aren't making any money off of to fix them up? We were going to identify those buildings but knew nothing was going to be done by anyone because no money.

Another interview subject not directly involved before the earthquake (but very involved afterwards) explained his earlier non-participation this way:

I was vaguely aware that the building [safety] staff were working on something to satisfy state law, but I wasn't much interested because politically it was impossible to do anything meaningful. If they had tried to meaningfully upgrade building standards, it would have been thrown back at them on economic grounds. The businesses and property owners would have come out of the woodwork and opposed it in front of council. Even with a strong individual as city manager, it would have been impossible to do anything about weak buildings. Not a chance. Not a prayer.

In short, while building safety staff were aware of the earthquake risk, they held the perception that pushing an abatement program was hopeless, so they focused on minimal compliance with SB 547. We can find no evidence, however, that building officials were threatened in any way or even directly pressured. They simply accurately assessed their situation and (our words) *self-suppressed*, as we try to show in Figure 2 (below).

Figure 1 (below) is the Sabatier and Jenkins-Smith (1993, p. 224) Advocacy Coalition Framework. Figure 2 narrows the focus to the seismic safety policy subsystem and attempts to capture the pre-Loma Prieta situation in Oakland. The policy proposal would be a true URM abatement ordinance (not just minimal compliance with SB 547). The "Blocking Coalition

A" is the real estate-downtown business-economic development group and is represented as quite strong, at least relative to Coalition B, the seismic safety group. The perceived strength and influence of Coalition A induces Coalition B's self-suppression (the dashed line down). Failing that, and admittedly hypothetically because of how well the self-suppression worked, we would argue that even if Coalition B had somehow summoned the courage/foolhardiness to propose a true URM abatement ordinance, Coalition A had the political resources to keep it off the Oakland City Council decision agenda (the darker wall in the figure between Strategy B1 and Decisions by Sovereigns). Coalition C (historic preservationists, to be explained below) is represented as a latent coalition—hence the dotted lines—and outside the policy subsystem at this point in time. Finally, because no Policy Brokers are needed when non-decisionmaking is at play in a policy subsystem, they are eliminated from Figure 2.

Figure 1
The Sabatier and Jenkins-Smith Advocacy
Coalition Framework (ACF)

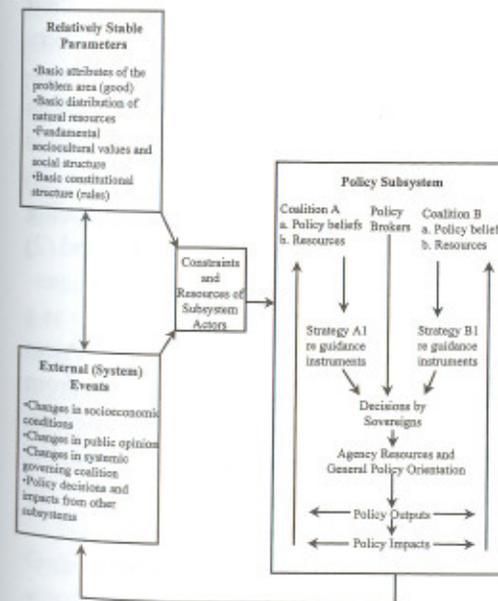
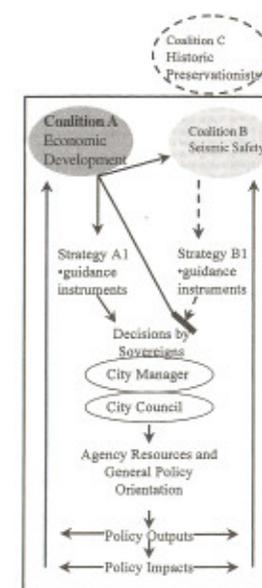


Figure 2
The ACF Seismic Safety Policy Subsystem in
Pre-Loma Prieta Oakland



Perhaps the best way to capture several before-after contrasts and to transition to the next section is to quote a former city official (italics added for emphasis):

The earthquake gave us a window, if we could use it skillfully, to review the entire city approach to building safety in a seismically active area. The city manager's office saw the [post-earthquake] situation as very political. It was no longer a matter of complying technically with an arcane state mandate. *The earthquake changed everything in terms of what we thought we could do for public safety versus private property owners, who would have ruled the day on this issue before the earthquake.*

The Window Opens

Building Safety: Political Dimensions

Virtually all building safety ordinances revolve politically around two issues: scope and standards. The scope of a hazardous buildings ordinance, for example, defines which (and therefore whose) buildings will be affected. The standards portion defines the required repair or rehabilitation levels (and therefore, in effect, the costs of compliance). Politically, and despite their (only) apparently technical nature, scope and standards are at the heart of every building safety ordinance, along with appeal and/or variance procedures—but those in fact usually modify the scope and standards sections. Indeed, in Oakland after Loma Prieta, all but one of the nine eventual ordinances focused on scope and standards.

The Oakland ordinances fell into two distinct subtypes: (1) those dealing with structures identified as damaged by the Loma Prieta earthquake, and (2) those dealing with structure classes known to be generally earthquake-vulnerable. That is, while one can speak of the "Oakland Nine," in reality it was a set of seven ordinances focused on earthquake damage from the Loma Prieta event and two ordinances focused on URM and future risk, especially from the suddenly much more salient Hayward fault. For city officials, however, the issues remained linked, as a February 20, 1990, interoffice letter from the public works director to the city manager made clear:

It is imperative that we begin to prepare for the strong earthquake on the Hayward fault now. Staff believes that we need to use the October 17th earthquake as a warning and move ahead with policies and programs that will bring both damaged and undamaged buildings in Oakland to a safe structural standard within a reasonable time.

While all nine of the Oakland ordinances are interesting, we will focus on four major ones: (1) the 1989 emergency repair ordinance, (2) the 1990 permanent repair ordinance, (3) an important 1990 amendment to the permanent repair ordinance, and (4) the 1993 URM abatement ordinance.

The Emergency Order and Ordinance 11173

While the Oakland City Council was able to generate a formal declaration of emergency on October 18, 1989, the disruption of city government caused by the loss of its principal administrative buildings greatly inhibited policymaking of all types, including how to handle damaged buildings. It was only on November 21, 1989, that the city manager, acting under his own authority but with the approval of the city attorney, formalized an emergency order to deal with seriously damaged buildings.

The city had a compelling need for such an order, in part because the earthquake threat had never been dealt with legislatively before, and therefore the city had nothing in place to cover the new situation. As Oakland's public works director explained to the city manager in a November 21, 1989, letter, an emergency order with interim standards was necessary because "currently, City codes would not require any structural upgrading of earthquake damaged buildings. Therefore, if this order were not implemented, damaged buildings could be repaired without seismic upgrade." This official also noted that a permanent ordinance would take "3 to 6 weeks" to develop, and he anticipated "much community input and discussion." He was to prove wildly optimistic on the timing but quite correct on community input.

The emergency order was subsequently re-submitted as Ordinance 11173 (*An Emergency Order Adopting Abatement Procedures for Structures Which Are An Immediate Hazard and Danger*) and formally approved by the Oakland City Council on December 5, 1989.

It did not take a genius to drive around Oakland, especially the downtown area, to see that many buildings were seriously damaged, and this emergency ordinance focused on safeguarding the public. In specifying "an immediate hazard and danger," the ordinance gave considerable authority to the Oakland Building Official, who was charged with determining when a building posed either a collapse hazard (part or all of the building) or a falling object hazard (from loose cornices, parapets, bricks, etc.).

Having set the scope broadly—basically all damaged buildings—Ordinance 11173 turned to damage triggers and the all-important repair standards. For triggers, it established thresholds using two different methods to measure the amount or significance of the damage. The first measure was based on repair costs; the second was predicated on engineering

estimates of the loss of lateral (earthquake-resistant) capacity. These triggers were then tied to repair standards, and here was the key: With some exceptions, damaged buildings *in their entirety* were to be repaired to *current codes* (Oakland had adopted the 1988 UBC prior to the Loma Prieta disaster), *all* sections of those codes, not just the structural parts for earthquake resistance.

Ordinance 11173 distinguished between buildings that had suffered a loss of lateral capacity of either 10 percent or greater or 25 percent or greater (as determined by the Oakland Building Official). As noted above, *in either case, the entire building, not just the repaired part(s) of it, had to be brought up to current codes*. The more conservative 10 percent loss threshold was applied to a specific set of buildings with certain basic characteristics that made them a higher priority, including large and densely populated buildings, structural types with a high earthquake vulnerability, (e.g., URMs and concrete tilt-ups), those deemed critical or highly important (e.g., hospitals, schools, and emergency facilities), and those where toxic or explosive materials were stored or used. The 25 percent threshold gathered in all of the other seriously damaged buildings. To provide some flexibility, waivers could be granted at the discretion of the Oakland Building Official when either (a) the building was a "Qualified Historical Building" as defined in the State Historical Building Code, or (b) the costs of making the improvements to meet current codes would result in an economically unfeasible project. The waivers, however, had to be applied for and granted on a building-by-building basis.

Ordinance 11173: The Politics

From one point of view, Ordinance 11173 was a seismic expert's dream: tough, ambitious, no-nonsense. A "purist's" ordinance, it would have remade the city at the expense of the owners of damaged buildings, in effect socializing the benefits of improved life safety of all types and privatizing the costs. Therefore, from another point of view, Ordinance 11173 was shortsighted, naive, unrealistic, and downright dangerous; it would have made Oakland that long-feared ghost town of abandoned buildings. So where did Ordinance 11173 come from?

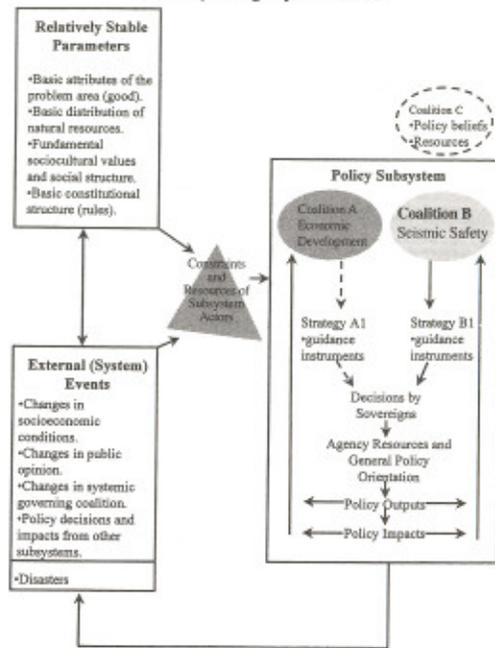
Earthquakes can do strange things to local political systems, altering resource bases and therefore influence, intergovernmental relations, and public opinion (or perceptions of public opinion). Most importantly, however, disasters change political agendas by showing previously slighted issues to be important and therefore empowering previously non-existent or marginal groups, usually at the expense of previously dominant groups.

After the Loma Prieta earthquake, the little "Seismic Safety" unit of the Oakland building safety group in the Department of Public Works took center stage; it would hardly be an exaggeration to say that the entire building safety group became a kind of seismic safety unit. In addition, and this is common, more than 300 engineers and other geotechnical experts came to Oakland from all over the state and were "deputized" to help the building staff assess damage. A few stayed on to help the city prepare ordinances to deal with the various post-earthquake problems.

In other words, after Loma Prieta, the building safety staff, and especially the Seismic Safety unit within it, suddenly had profile, resources, access, and the attention of administrative and political sovereigns. Heady stuff for usually lowly building officials, this combination is the quintessential window of opportunity for policy innovation, and Oakland's Ordinance 11173 must be seen from that perspective. That is, Ordinance 11173 was the *internal* product of the Oakland building department, with assistance from a small number of local seismic safety experts, primarily structural engineers. As a city official at the time said, "We just did it [the emergency order]," and their collective intention was to "do it right," giving the city the toughest possible repair ordinance and in effect make up for previous years of inattention to earthquake safety. Seeing it as primarily technical, the Oakland City Council simply passed the emergency ordinance.

To illustrate, Figure 3 puts the Advocacy Coalition Framework into its first disaster-altered state. The earthquake is represented as a new, fifth item in "External (System) Events" that changes the "Constraints and Resources of Subsystem Actors" (hence the delta form), suddenly empowering the previously minority Coalition B (the once intimidated seismic safety group) at the relative expense of the previously dominant Coalition A (the real estate-downtown business-economic development group), which was distracted, lost its coherence, and went into a kind of suspension (the dashed lines). That is, the disaster-induced reversal (1) releases Coalition B from its self-suppression, (2) unblocks Coalition B's access to the sovereigns and their decision agenda, and (3) disorganizes Coalition A.³ The result was Ordinance 11173. At this point Coalition C (historic preservationists) are still on the outside looking in—but they are mobilizing.

Figure 3
The Early Emergency Period ACF



The situation, however, would not hold, and it did not take long to begin to see changes.

Forming "The Coalition" (or Everybody Inside the Tent, Please)

The operating norm of the Oakland City Council was and remains the avoidance of public conflict. Poorly paid part-timers and very dependent on the city manager for staff work, the council strongly prefers unanimous voting and wants items on its agenda only after a consensus is worked out. In a typical year more than 95 percent of the council's votes are unanimous.

Lacking any prior experience with how politically charged earthquake safety issues can become, especially when they involve hundreds of buildings, the Oakland City Council and even the city manager's office were unprepared for the intense reaction to Ordinance 11173, especially from historic preservationists who, in the words of one city official, "led the charge [against us]." As a result, the entire preparation process of earthquake-related building safety ordinances would be changed.

Shortly after the Loma Prieta earthquake, and based on their observations as damage assessment volunteers in several cities of the affected area (including Oakland), members of various historic preservation groups (e.g., from the

East Bay Chapter of the American Institute of Architects, the Oakland Heritage Alliance, Oakland Design Advocates, the California Preservation Foundation, and the National Trust for Historic Preservation) began to coalesce. They were increasingly fearful that under the emergency ordinance, downtown Oakland would very quickly lose most, if not all, of its landmark buildings, many of which were earthquake-damaged.

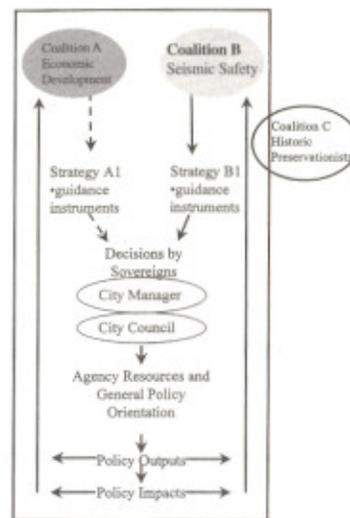
Of immediate concern to the preservationists was the possibility that the severely damaged City Hall would be demolished, an option being actively considered (the City Hall Annex was already being slated for demolition).⁴ Another structure of particular concern was the also badly damaged Broadway Building, a lovely triangular shaped, privately-owned building in the very heart of the city, just across a small plaza from the City Hall.

A preservation leader explained in one of our interviews that before the earthquake, "the City of Oakland's record in preserving its historic resources was, in our opinion, pretty bad." This person then described something of a confrontation with city officials shortly after the earthquake and remembered telling them that "You're going to have a problem [if you try to tear down City Hall] because we're not going to go away on this . . ." This person then added:

On the Broadway Building, it was known that if [the owners] tried to tear it down, we were ready to shed blood on that and probably take them to court because we didn't believe their [rehabilitation] cost figures.

The preservationists were convinced that the scope and standards of the emergency ordinance were so inflexible that many private building owners would simply walk away from their buildings rather than bear the costs of rehabilitation; the city would then finish the job by ordering demolition of the abandoned buildings as threats to public safety. The preservationist message to the city government was, as one member put it, to "stop and think" before implementing the emergency ordinance. Reflecting this, Figure 4 represents our effort to show Coalition C (historic preservationists) moving into the policy subsystem.

Figure 4
The ACF Seismic Safety Policy Subsystem
in the Late Emergency Period



The preservationists obviously needed allies, and the most likely were the building owners/managers, real estate interests, and downtown businesses. They held several informational (ally-seeking) meetings, all based around the idea that the emergency ordinance was leading to "precipitous" city actions and that alternatives needed to be developed.

Over time, however, the preservation groups were merged into a much larger and more influential group called, simply, "the Coalition" (usually capitalized) and associated closely with the Oakland Chamber of Commerce (OCC). As one preservation leader remembered:

A lot of the participants in the City Hall project were transferred over [to the Coalition], ourselves included, so this was another political achievement . . . not to make this a staff-driven discussion . . . [with an ordinance] suddenly delivered up to city council for a vote, but to again work at building some kind of consensus on . . . reasonable life safety but also giving historic buildings a fair shake . . . sorry for the pun.

The importance this "Coalition" cannot be underestimated. It became the forum for the review of all earthquake-related building ordinances in Oakland after the emergency ordinance.⁵ It also fell within an Oakland tradition for dealing with potentially disruptive issues, as a former city official explained to us:

In a city as demographically complex and as economically depressed as Oakland, which was suffering the de-urbanization common to older industrial cities, the coalition approach, where you get all the community groups together, is the only way to go. Otherwise, a conflict would become unmanageable and unpredictable.

A very important May 8, 1990, interoffice letter to the Oakland city manager from the public works director, and which went as a cover letter to the Oakland City Council accompanying the draft of an ordinance to replace the emergency ordinance, detailed the principal organizations comprising the Coalition at that time:

[T]he Alameda County Taxpayers Association, American Institute of Architects, Apartment House Association of Alameda County, Building Owners and Managers Association, Oakland Association of Realtors, Oakland Chamber of Commerce, Oakland Design Advocates, Oakland Heritage Alliance, and the Oakland Hotel Association.⁶

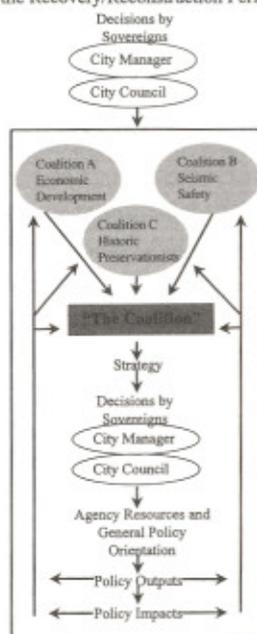
That is, if we reorder the list, the Coalition at that time was a combination of three historic preservation organizations (AIA, the Oakland Design Advocates, the Oakland Heritage Alliance) and six owner/manager/business organizations (the Taxpayers Association, the Apartment House Association, the Building Owners and Managers Association, the Association of Realtors, the Chamber of Commerce, and the Hotel Association). To this profile of the Coalition, however, must be added a third component: The city's building safety group as technical staff to the Coalition.

Therefore, instead of having advocacy coalitions form up and compete in open forums, the Oakland City Council, and operationally the city manager's office, brought all of the organized interests in the seismic rehabilitation of buildings—the stakeholders—together and told them to work out their differences among themselves to the greatest extent possible before bringing anything to the council. Thus, in Oakland after Loma Prieta, the politics of building rehabilitation were *intra-Coalition* politics involving three "sub-coalitions": (1) city building staff and consulting engineers, the core of the seismic safety group; (2) the historic preservationists; and (3) the building owners/managers, real estate interests, and downtown businesses.

Focusing now on the broader system, Figure 5 (below) reflects the seismic safety policy subsystem in Oakland as we see it developed for the longer term recovery/reconstruction disaster phases (which continue to this day). The "Decision Sovereigns" (city council and city manager) move literally into two places at the same time: While remaining in their normal lower midpoint of the

policy subsystem, they also step outside and up above it to restructure the subsystem itself, bringing in the Coalition C (the historic preservationists), who were previously outside the policy subsystem, and then forcing all three of the groupings into "the Coalition." This umbrella—"the Coalition"—then served as a "Policy Broker" to make certain that whatever came down through the new policy subsystem was not highly conflictual when the decision sovereigns had to deal with it.

Figure 5
The ACF Seismic Safety Policy Subsystem in
the Recovery/Reconstruction Period



One of the preservation leaders offered this observation on why the city manager and city council were willing to alter the policy subsystem and bring them into it:

What [the responsible city official] realized was that he had the opportunity to at least get some other looks at the subject [of damaged buildings]. I think too, in my opinion, that with the possibility that we were going to go to court, he saw this as an opportunity to take us out through a task force approach, in other words to subsume our hostility into a consensus-building exercise.

It became clear that there were a lot of people out there representing [preservation] and they [city government] needed to . . . bring some of them in and

perhaps disarm the more radical ones . . . [that is], include some so as to undercut the others on the edges. . . . This was both cynical and smart.

It should be noted that the Coalition was not an official public body, kept no formal minutes, and never involved the media. Indeed, the Coalition made an explicit attempt to keep the media away from its discussions. While the meetings were technically open, they were not announced in the newspapers or through any official outlets; one had to be on the mailing or calling list or otherwise know about them to be able to attend.⁷ As a result, the attendance varied considerably from meeting to meeting. Most interesting, however, was the fact that the core organizations represented in the Coalition had voting rights (one vote per organization, no matter how many representatives attended).

A later (August 26, 1991) Coalition agenda mailing reminded the members of

" . . . the procedures under which we are operating: Representatives . . . are identified at the meetings with table signs and vote according to the positions of their respective groups. City and Chamber [of Commerce] staff are also present and identified with table signs but serve in an *ex-officio* capacity with no vote. Others are on the mailing list and attend . . . from time to time . . . and are welcome to participate fully in the discussions.

The Coalition chair ("convenor"), however, worked assiduously to avoid formal voting so as not to make any organizational representatives feel that they would be better off working outside the Coalition. As one representative put it rather colorfully, "They wanted everyone inside the tent pissing out and no one outside the tent pissing in." Less colorfully, another representative noted that the goal was to make sure that "important groups had places at the table." Another said, "We established by consensus that we would operate by consensus."

The city building staff was consistently the core of the "seismic safety" sub-coalition that pushed for rehabilitation ordinances with broad scope and rigorous standards. Opposition came from the owner-manager-business "economic development" sub-coalition that argued for no ordinances at all or, failing that, for ordinances with the least scope and lowest or most flexible standards. As seen above, the "preservationist" sub-coalition came from a different value position that merits further explanation.

Historic Preservationists

By definition, historic preservationists are concerned with the protection of as many historic structures or landmark buildings as possible. They want

to see the past both honored and maintained, arguing that many buildings of bygone eras are often architectural treasures that help define the culture, collective memory, and social fabric of entire communities. From this value set, preservationists oppose rehabilitation programs that demolish old buildings or destroy their appearance or intrinsic nature. On the other hand, preservationists realize that earthquakes also destroy old buildings, so they support programs that strengthen buildings of interest. This value set makes preservationists a swing group between seismic safety advocates on one hand and the economic development group on the other—depending upon the exact nature of the ordinance under consideration, especially its scope, standards, and variance procedures.

The Result: Making the Emergency Ordinance Permanent (But Different), Ordinance 11217

The emergency ordinance had clearly contemplated the need for, and by its nature required, permanent legislation dealing with the buildings damaged in the Loma Prieta earthquake. Adopted June 5, 1990, Ordinance 11217 (*An Ordinance Repealing Ordinance No. 11173 and Adopting Permanent Procedures and Regulations for the Repair and Demolition of Earthquake Damaged Structures*) appeared to do just that. Moving from an emergency to a permanent ordinance, however, Oakland's 11217 showed both subtle and not so subtle changes, most of which were attributable to the Coalition. It is worthwhile to note seven points about Ordinance 11217:

1. It altered the repair and rehabilitation standards of the emergency ordinance by adding variations of a key modifying phrase, "shall substantially comply," to the current codes requirement of the original, emergency ordinance.
2. A combined scope and standard clarification, single family dwelling repairs were specifically addressed, and "substantial compliance" with current code was to apply only to the foundation, foundation attachment (sill bolting), and cripplewall bracing.
3. Because by their very nature many damaged buildings could not be brought up to current code, even with the "substantially comply" modification, Ordinance 11217 allowed a way out:

The Building Official may approve an alternative procedure, if the owner's or applicant's engineer or architect can demonstrate by rational analysis, to the satisfaction of the Building Official, that the structure, after alteration, repair, rehabilitation or restoration, will provide that level of safety as required by the intent of this Chapter.

4. A separate variances section replaced the earlier waivers section in the emergency ordinance. It provided several important allowances that could be used to reduce even further the "substantial compliance" with current code phrase. In no case, however, could the earthquake design forces used be more than 25 percent below the current code. The variances section also provided that the Oakland Building Official could grant a variance if it could be shown that special individual circumstances and difficulties made meeting the strict letter of the current code impractical.
5. The ordinance limited the code maximum earthquake force that must be considered in repairing buildings with certain specific kinds of structural systems (e.g., concrete and masonry shear walls, braced frames) to less than current code. The maximum design forces for those buildings would be approximately equal to that required in the 1973 edition of the Uniform Building Code (UBC) for those structural systems.
6. The ordinance significantly reduced its scope of application, primarily by expanding the definition of historic structures to include not only those on the National Register of Historic Places but also those qualified under a whole set of more local (i.e., Oakland) criteria. Under Ordinance 11217, historic structures were not limited to buildings given the status of "California Registered Historical Landmark" or a "California Point of Historical Interest." The new ordinance expanded the criteria to include *any* historic landmark as declared by the Oakland City Council, *any* building contributory to an "S-7 Preservation Combining Zone," or *any* structure appearing on a City of Oakland "preservation study list" that had received "either an 'A' or 'B' rating in the Oakland Cultural Heritage Survey." Under these much expanded criteria, the number of "historic" earthquake-damaged buildings went from a few to well over a hundred.
7. The permanent ordinance also reflected a concern that certain owners of historic buildings might use earthquake damage as an excuse to significantly change or even demolish their buildings. In a separate section, Ordinance 11217 attempted to protect (in a sense, from their owners) earthquake-damaged historic buildings:

Notwithstanding any other law, procedure, regulation or provision of this Chapter, it shall be unlawful for any person to alter, abate, repair, restore, rehabilitate, demolish, or make significant changes to any earthquake-damaged

structure that is a historic structure, unless the procedures of this Chapter have been followed and applicable permissions have been granted, including but not limited to applicable building or demolition permits.

The Emergency versus the Permanent Ordinance: An Assessment

Compared to the emergency ordinance, the permanent ordinance was a major retreat from strict seismic safety values and reflected the considerable input of the Coalition. Although they did not achieve everything they wanted, the preservationists were major winners, as were the businesses and building owners and managers, who saw significant scope and standards reductions along with more sensitive (to them) variance procedures.

Again compared to the emergency ordinance, city building staff were the major losers, if you could call it that, but Ordinance 11217 still gave them a program for dealing with damaged buildings. The process, however, educated the seismic safety sub-coalition to the realities of local politics in Oakland, realities that were temporarily suspended in the immediate post-Loma Prieta period and that had allowed the adoption of the emergency order and ordinance. Reflecting on the differences between the process that yielded the emergency ordinance and the Coalition process that yielded the permanent ordinance, one member of the seismic safety sub-coalition said of the latter, "I lost my [professional] virginity in Oakland. I thought life safety would be everyone's goal. I found out different."

The major post-Loma Prieta addition to the seismic safety policy subsystem was obviously the historic preservation "Coalition C." Previously on the outside looking in, they responded to the opportunity presented by the need for their expertise in the earthquake's aftermath to organize themselves into the subsystem. As one of their leaders put it in an interview with us:

This was the first time that the preservation community in Oakland was taken seriously . . . , and city officials [saw] their contributions and were surprised that they weren't just interested in old buildings but had a broader social, economic, and environmental connection.

Using Every Last Inch of the Window Frame: The URM Ordinance

An Arduous Process

Over the next two years Oakland would enact five additional ordinances dealing primarily with damaged buildings, including a mandatory repair ordinance aimed at recalcitrant owners of some major downtown structures that

had become what a city official called "bad teeth." Neither the city nor the Coalition could escape the larger issue of URM's as a class, however, and in 1992 they turned their attention to this very knotty problem.

The search for a consensus ordinance on the URM issue that all organizations represented in the Coalition could support was elusive. Conflict was very intense, especially at the outset, as chair Rosemary Muller recalled in one of our interviews:

At the first meeting . . . it was clear that there were some very real differences of opinion. It was hard to even keep people in the same room and talking amicably. There were two—I won't call them factions—but two points of view. One was . . . engineers, an architect, and city people saying that earthquakes are dangerous and will kill a lot of people, and we had to improve safety by having an ordinance that will work. The other group was the building owners and real estate people, and they tended to say that "we can't afford it."

Muller also noted that the two "polar" groups initially attacked the factual basis for each other's position but that another sub-coalition—the historic preservationists—held a kind of middle ground, although tilting slightly to one side at the outset:

Each one of these groups was denying the other's point of view. The real estate-property owners people were saying that "You're overestimating the danger. We don't believe [it]; we went through Loma Prieta, and this [next] disaster won't happen," so they were denying the danger.

The technical group was saying "it doesn't cost so much to repair these buildings. Anybody can afford it, and you've got to save lives," so they were denying the economics.

The historic preservationists were sort of in the middle, not totally in either camp, but tending to be more with the building owners, saying that "[the situation] is not all that dangerous, let's not go way overboard."

One of the Coalition members echoed Muller's argument about where the preservationists fell on the spectrum of opinion but carried the point a bit further, especially on how preservationists found themselves the somewhat uneasy allies of the economic development interests:

We [preservationists] had so often been perceived as adversarial to business interests . . . [but after the earthquake] what was interesting was that our concerns . . . were in many ways similar to some of the business concerns—but for different reasons.

We were concerned, what we were afraid of, was that if the ordinance, no matter how it developed, were too onerous, it would result in demolition by economic pressures. If all these owners of fairly low value buildings were forced to do high cost retrofits, they would demolish their buildings, sort of finishing off what the earthquake failed to do.

This person then added that it was often surprising for real estate interests to see preservationists as allies, that often in Coalition sessions:

You had a real estate person saying that "I can't believe that I just heard something I agree with coming out of the mouth of somebody [with whom] we've always disagreed."

Given these differences and the obvious potential for breakdown, Muller de-emphasized formal procedures, explaining that she took the position that the Coalition

was not a voting body, despite some of the things that [the Chamber of Commerce] prepared. I put that on the table early and surprised a lot of people. What I wanted was the support of each of the organizations. . . . If we came up with a URM ordinance that all could support, then it was clear that city council could pass it, easily. That was the one thing—the one thing—that we could all agree upon at that first meeting.

Actually, they didn't totally agree with that [over the long term]. People would come to a meeting and demand a vote on something or other. Then, instead of taking a vote, I would go around the room to each person who represented an organization—who had the asterisk there [by their names], and I would ask each one individually, "Now what does your organization feel about this?" So I would *poll* [emphasis tone] the members rather than vote.

The obvious problem for Oakland was how to bring the two most extreme, polar sub-coalitions together or at least close enough to agree on something. The initial factor contributing to a narrowing of the gap was general recognition among Coalition members that the city manager's office and the city council really were expecting a URM ordinance. Only the most recalcitrant member of the economic development sub-coalition argued long for the previous—do nothing—approach, and even he "went along in the end, although kicking and screaming," as another member put it.

Further narrowing of the gap between the most divergent sub-coalitions was accomplished in two steps. To quote one of the Coalition:

We had two major phases of discussions. First of all, we brought in people to convince the building owners and real estate people that, yes, there is a danger. . . . We brought in Tom Tobin [of the California Seismic Safety Commission, CSSC] and Rich Eisner [of the Bay Area Regional Earthquake Planning Project, BAREPP]. . . . We made people get a more graphic picture of earthquake effects.

[The second phase] was when the real estate and preservationist people . . . said that we needed to do an economic study of the results of several different ordinances that we might propose [to determine] likely compliance. . . . They said that for the rest of us to understand their point of view, we actually needed a study. The city came up with the money for that study. . . .

[The consultants] ended up convincing those of us who wanted a stronger ordinance that it wasn't possible. And so what happened was that [each draft] got progressively weaker and weaker. That was the result of having the economic study [Hausrath 1993]. It was clear to all of us that having an ordinance that most people wouldn't comply with wasn't going to do us any good.

The grudging acceptance by some Coalition members that Oakland's "real" earthquake, a major event on the Hayward fault, was yet to come, and that the Loma Prieta disaster was indeed just a wake-up call was confirmed by a member from the downtown business group:

We tried to do what we could to come forth with a consensus that would somehow lead to a correction of the problems and a reduction . . . of damage in the future . . . because we all knew that at some point in time we were going to have another [earthquake], and probably a lot stronger.

On the other side, a member of the seismic safety sub-coalition explained how the repeated arguments from the building owners, later buttressed by the consultants' report, finally moved his fellow hardliners from their initial ("the UBC by God") position:

The farther we went with the thing, the more it became apparent that the owners did not have the capitalization to . . . rehab [rehabilitate their buildings]. The money just wasn't there. And the other thing that became very apparent was that the earning ability of the buildings to pay off additional mortgages wasn't there either. . . . It was an economic disaster.

The fact that the historic preservationists had been so involved with the early ordinances and had, in important ways, "triumphed" also contributed to

the eventual achievement of consensus on the URM ordinance. Tactically, the preservationists served as a kind of middle ground because they shared partial points of view with both the seismic safety sub-coalition (strengthen buildings) and the economic development sub-coalition (avoid a ghost town).

From the versions we saw and from the interviews, it appears that the drafts of the ordinance indeed did become "weaker and weaker," especially on standards, during the extended consensus building process, which is hardly surprising. As one Coalition member explained:

We didn't want to cut off our noses to spite our faces by making the standards so high that people just wouldn't do them. We wanted to get some level of compliance. If you don't get compliance, standards are worthless. There was a *real* [emphasis tone] struggle, committee meeting after meeting after meeting. The city officials wanted some level of public safety that they . . . could hang their hats on. Liability issues [arose], and it was a very slow process to drag them into considering the lower option and what incentives there might be to get people to go to the higher option. That was the biggest change [by the city staff]. . . . The eventual ordinance was a voluntary ordinance with a mandatory retrofit at only a very low level. That was an enormous change from the original position draft.

A different Coalition member recalled "consensus by fatigue," another called it "the Forever Coalition," a third remembered "a zillion meetings," and yet another reflected fatigue, finality, and resignation:

In the end, it was what we thought we could get, [which] . . . was, we concluded, better than nothing. Hopefully it would cause some owners to take the next step, to make a full improvement [to the voluntary standards].

A city official offered this corroboration:

All in all, while there was a lot of shooting . . . at different people's positions, I think that we were able to forge a final position . . . that no one was really happy with But that's a good sign.

Given the complexities and the multiple tradeoffs, Coalition chair Muller noted that the Oakland City Council seemed very relieved to have the Coalition as a policy broker. The council really did not want to be involved, except at the very end:

The city council wasn't involved at all. They were aware of [the Coalition working on the URM problem]. I spoke to city council on a couple of occasions on behalf of the Coalition,

maybe to get the funds for the [consulting] study, and one other time I think. Every time I spoke I read the list of who was on [the Coalition], all the members, and so it was very clear to council that we had everybody who was interested. . . . [Council] trusted the process, they really felt that we were taking what might otherwise be an onerous duty off of them.

A somewhat more cynical interpretation was offered by another Coalition member, who stressed that the council was simply incapable of dealing with the issues posed by URMs:

When it came to city council testifying or appearing at committees . . . when we started to talk about structural concepts, push-over, and parapets and cantilevers, and why things would go, there would usually be a glazing over of the city council members' eyes, not being able to understand what was going on.

In one of our interviews, a city official at the time seemed to concur with both points of view:

The politics were hot to handle. The council wanted to act on policy . . . but understood the process. They appreciated that it was a complex problem. . . . They were really hands off, just asking [us] how to get through this thing.

Going Formal

What would become Ordinance 11613 was presented formally to the city council at a special meeting on April 27, 1993. The statement at that time by Coalition chair Muller to the council outlined the Coalition process, the internal divisions, and the consensus. Muller started with the history:

The Unreinforced Masonry Coalition was originally created in 1990 to work with the City on the Emergency Earthquake Repair Ordinance as well as a proposal to mitigate the hazard of other unreinforced masonry buildings in the City of Oakland. With the approval of the Chamber [of Commerce] Board of Directors, I agreed to serve as the coordinator, little realizing that it would take us three years to bring a draft ordinance for your consideration and action.

Muller laid out the (voting member) composition of the Coalition and then explained to the council why it had taken so long to develop the draft ordinance:

Originally there were extreme differences . . . among members of the Coalition as to what a responsible [URM] mitigation program . . . should include. We all agreed, however, that if the diverse groups included in the Coalition could agree on

a proposed ordinance that we could then provide very powerful support . . . before City Council.

Muller added that "some of the coalition members would prefer a stronger ordinance requiring a higher level of upgrade, while others would prefer that no upgrade be required at all." Muller stated, however, that the "general consensus" was that the draft ordinance "strikes a careful balance between the need to improve the seismic safety of our 1640 [URMs] and the economic realities that the owners of such buildings face in Oakland today."

Despite this open meeting being "contentious," the city council did not really have to be concerned about opposition. The opposition was so fragmented and individualistic, and it so often focused on particular buildings, that it failed to make an impact. The most important factor was that no *organizations* took a negative position on the ordinance. As a city official reflected in one of our interviews about the final presentation, the open meeting, and the vote:

We had to make some difficult marriages [within the Coalition] . . . , and sometimes just not opposing was good enough . . . because that meant that we could get council votes.

The Result: Ordinance 11613

With the understanding that implementation of any URM program would be, in the words of one city official, "sensitive" to property owner financial problems, and with the blessing of the Coalition, the Oakland City Council passed the ordinance—as usual, unanimously—on July 23, 1993.

Ordinance 11613 (*An Ordinance Adding Article 6 to Chapter 18 of the Oakland Municipal Code Adopting A Seismic Hazards Mitigation Program for Unreinforced Masonry Buildings*) was both interesting and innovative. For scope, Ordinance 11613 was "to apply to all existing unreinforced masonry buildings constructed . . . prior to the November 26, 1948 Oakland Building Code." The exceptions were (1) purely residential structures with five or fewer living units and their accessory buildings, and (2) any building that had been structurally upgraded since 1948 to comply with "the earthquake regulation of the Oakland Building Code in effect at the time the building permit was obtained . . ." In effect, this latter clause exempted those buildings that had been rehabilitated under an earlier voluntary ordinance.

The Oakland URM ordinance established an interesting mitigation process. First, the building department would prepare and maintain "a list of potentially hazardous buildings and shall notify the owners in writing [of the identification] and of their obligation to mitigate . . ." Second, the building department was to set three priority levels for both URM bearing wall and URM infill buildings based on "the type of soil on which the building is

located, number of stories, pedestrian and vehicle traffic adjacent to the building, use of building, number of occupants, and complexity of work."⁸

The ordinance gave historic buildings special protection. Before a building permit would be issued for a URM retrofit, it had to be evaluated and "rated by the Oakland Cultural Heritage Survey to determine if the building is a historic structure." As in the original permanent ordinance of 1990, the criteria to qualify as "historic" were broad.

As always, along with scope, the key to the URM ordinance was the standards section. For URM infill buildings or buildings with URM veneer, owners had to conform to the timetable set by the priority given their buildings and upgrade them "to mitigate . . . potential falling hazards." This was to be accomplished by bracing or reinforcing parapets and removing, repairing, or upgrading other "non-structural falling hazards" and by assuring that all stairways, corridors, and other exit balconies, courts, and passageways were protected from falling hazards. That is, for URM infill (and veneer) buildings, Ordinance 11613 required no structural rehabilitation of the buildings. It protected people trying to exit from the buildings and people on the adjacent streets, but it did not mitigate hazards from structural failure or outright collapse.

The standards for URM bearing-wall buildings were more complicated and two-tiered. Stating that the focus was on "potential falling hazards," the mandatory portion of Ordinance 11613 required an owner to (1) "secure the roof and floors to the building's exterior walls" using tension bolts to counter "out of plane forces on the walls;" (2) secure—"brace or reinforce"—parapets; (3) remove, upgrade, or repair other non-structural falling hazards; and (4) protect the exitways from falling hazards.

It should be noted that the "falling hazards" focus of Ordinance 11613's mandatory portion for bearing wall buildings was a bit modest. In fact, the use of tension bolts to secure the roof and every floor to the exterior walls is designed to prevent the walls from moving independently of the roof and floors ("out of plane") and therefore separating the major components of a structure. This may sound technical, but the life safety implications are enormous: The recipe for a classic structural failure is to have a roof and then floors separate from walls and come down in a catastrophic pancake collapse, usually with devastating life loss. Ordinance 11613 was therefore more than just a "falling hazards" ordinance for bearing wall buildings.

Nonetheless, an owner who undertook these mandatory repairs met the minimum requirements of the ordinance but did not see his/her building removed from the city's list of "potentially hazardous URM's." To get a building off the list (and that was the only incentive), an owner had to rehabilitate a URM bearing wall building to Ordinance 11613's "voluntary standard," which was quite

simple: "The entire building shall be retrofitted in accordance with the current UCBC [Uniform Code for Building Conservation]." Most importantly, the UCBC standard requires an evaluation and strengthening to a minimum standard of the in-plane strength of the URM walls, the roof and floor diaphragms, and it requires adding supplemental vertical supports at trusses or major beams supported on URM walls.

Final resolution of the URM issue in Oakland is obviously some time off. The non-complying owners of the high priority URMs will have to be dealt with, probably through legal channels, and the lower priority URMs are still there. After the Loma Prieta experience, however, all concerned are aware that it is a race between retrofit compliance and standards on one hand and ruptures on either the San Andreas fault or, more worrisome, the Hayward fault on the other. As one city official offered, "It will be a disaster either way, but we can deal with that. We just don't want it to be a catastrophe."

Conclusion

In Harm's Way

It is very clear in retrospect that Oakland dodged a huge, deadly bullet in the late afternoon of October 17, 1989. By rights, shaking from the Loma Prieta earthquake should have lasted longer than it did, and if it had, Oakland would likely have faced a considerable number of partial or complete building collapses and a far greater number of casualties than it did. As it was, the Cypress freeway collapse killed fewer than it might have simply because traffic was light—people were home early to set up their barbecues for the World Series.

Having dodged a killer bullet from the Loma Prieta event, Oakland was able to respond at least somewhat to its major threat, an earthquake on either the Hayward or San Andreas faults, and actively reduce its vulnerability by dealing first with its damaged buildings from Loma Prieta and then with its most dangerous class of buildings, URMs. That is, Oakland *learned*, once it was given an unmistakable wake-up call. It was the need for a wake-up call that is our first point of conclusion.

For all intents and purposes, despite ample information about its objective earthquake risk and especially about its vulnerable URM buildings, the City of Oakland did little about seismic safety in general and nothing about URM mitigation specifically prior to the Loma Prieta earthquake. The economic development bias was so strong in Oakland before the Loma Prieta earthquake that seismic safety advocates self-suppressed, their *inaction* enforced by the (accurately, we believe) perceived power and influence of the real estate-downtown business-economic development interests, what we called "Blocking Coalition A" above.

It seems equally clear that the Loma Prieta earthquake was required to move Oakland from inaction to action on seismic safety in general and the URM problem specifically. Without the disaster or a much stronger state mandate than SB 547, Oakland would not have actively addressed the URM problem, despite its severity, in the foreseeable future. The disaster induced a fundamental change in the Oakland decision agenda.

More specifically, the Loma Prieta disaster altered the seismic safety policy subsystem in three areas: salience, resources, and participants. Earthquake problems in general and weak buildings in particular have been "mainstreamed" into the Oakland public policy process and are salient not only to the higher city administration but also to the city council. In addition, the building safety department was refocused, tasked much more explicitly, and given new instruments for dealing with earthquake threat. Perhaps most interestingly, the disaster opened political space for seismic safety advocates to actually maneuver and propose legislation. Even more importantly, it opened the subsystem to new participants, the most obvious of which were the historic preservation groups.

Our second concluding point revolves around the political requirements for passing the "Oakland Nine." Simply put, the single most important factor in understanding the politics of building safety in Oakland after the Loma Prieta earthquake, whether the focus be on damaged buildings or URMs, was the creation of "the Coalition" and the forcing of those organizations that wanted to be part of ordinance development into it as sub-coalitions. This strategy would not have worked, however, without the Loma Prieta disaster itself because that event suspended the pre-event non-decisionmaking about seismic safety and URMs. In effect, the disaster moved the URM problem from a question of ordinances/no ordinances to a question of *what type* of ordinances. The formation of the Coalition then set the terms—the boundaries—of allowed conflict and gave the search for consensus an organizational form.

Our final observation can be expressed quite simply: Hazard mitigation is overwhelmingly an issue of political economy. The building safety problems in Oakland after the earthquake did not primarily reside in the geotechnical or engineering domains. In fact, in the end those aspects were of secondary importance. The vast majority of the debates within the Coalition ultimately revolved around the costs of repair and retrofit and how—and by whom—those costs were to be absorbed. Therefore, when all is said and done, when all the scientific and engineering studies have been completed, when all the technological options have been specified, when all the affected populations have been considered, and when the costs and benefits of the various policy options have been detailed to the extent possible, it is a community's *political system* that decides authoritatively who will get how much life safety and who will pay for it.

Notes

1. For more technical discussions and viewpoints, see Lum (1990), Freeman (1993), Holmes (1994), and Russell (1994).

2. The index cards tend to overstate issue salience because they also itemize discussion points that came up without an item ever being on the decision agenda, which makes them somewhat non-comparable with the post-1985 system.

3. Policy Brokers aren't needed in this kind of reverse-dominant situation either.

4. Most people were actually quite happy with demolishing the Annex, as a city official explained: "[It] . . . was terminal; besides that, it was ugly, most people didn't like it, and so we thought 'Okay, that's good.' Oh yes, and it was insured [laughter]."

5. According to two former city officials, the Coalition existed prior to the Loma Prieta event and was supposed to be working with building safety staff on compliance with SB 547. Perhaps, but it was so low key that the principal members identified by the city officials don't remember it at all. One categorically denied that it even existed conceptually before the earthquake.

6. This description of the Coalition's membership does not quite jibe with one from 1993 by the Coalition's own chair: "[T]he Chamber [of Commerce], the American Institute of Architects, Oakland Heritage Alliance, California Preservation Foundation, Downtown Merchants Association, Alameda County Taxpayers Association, Building Owner and Managers Association (BOMA), Oakland Association of Realtors, Structural Engineers of Northern California (SEAONC), and the City." By 1993, of course, the Coalition had evolved and become more formal, so both descriptions may be accurate—for their respective times.

7. The *Oakland Tribune* focused almost entirely on human interest stories and the debate over the rebuilding of the Cypress freeway, which the affected neighborhood vehemently opposed as Oakland's "Great Wall" separating their neighborhood from center city life.

8. The first item (soil) is similar to the system used by San Francisco to prioritize its URM building inventory, but it is fairly unique in terms of other ordinances, because most cities have not factored in the added vulnerability due to the effects of soft soils when deciding which buildings to address first. To be fair, in many cities this is not an issue because little or no variation exists in soil conditions underlying their URM buildings. Nonetheless, it is an important and very valid consideration where a city (such as Oakland or San Francisco) has a variety of soil conditions.

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