IMPLEMENTING SEISMIC SAFETY POLICY:

THE CASE OF LOCAL GOVERNMENTS IN CALIFORNIA

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Accomplishing seismic safety policy objectives requires the successful implementation of action oriented programs. While there remains some disagreement about specific relationships between earthquake generated forces and the subsequent performance of certain structures, there is no disputing the general proposition that the severity of damage and the extent of human loss from an earthquake is affected by the way in which seismic safety policies are implemented prior to the event. It is evident from a growing body of academic literature that public policy implementation is almost always problemmatic.[1] Mere adoption of public policies does not guarantee the consummation of the envisioned goals. Many intervening factors stand ready to block, delay, or detour implementation efforts. Seismic safety policies are as prone to these implementation problems as any other public policy. Indeed, it is at least arguable that seismic safety policies are more susceptible than many other policies.

This paper focuses on some important aspects of efforts to implement seismic safety policies in California. The process by which seismic safety policies are adopted, as well as the substance of the policies, will be accepted as a given in this paper. More specifically, this paper draws upon research conducted in thirteen local California communities. The thirteen jurisdictions were chosen so that they would include areas that had suffered damage from a recent (within ten years) earthquake as well as those areas that have not had a damaging earthquake within the adult life of those persons currently holding positions of influence within the local government. Small cities, suburbs, and large central cities were chosen.[2]

For several reasons, local governments are an appropriate focal point in an examination of seismic safety policy implementation. Although local governments have no formal standing in the American constitutional structure, they have assumed a vital place in the arrangement of governments. Not surprisingly, the initial growth of local government importance coincided with the dramatic population growth of cities in the first several decades of this century. Suburban development after World War II accelerated efforts to increase local independence--financial and political--from state governments; these efforts were moderately successful. To some extent, the increased financial independence from state government has been achieved only by an increased financial dependence on the federal government. Today most cities function within a constitutional and political structure in which the states (and the federal government) establish boundaries or outlines for what is acceptable policy. Within these boundaries some policies must be adopted by local governments, while others remain subject to local discretion. Local governments always

retain some room for maneuverability in the actual implementation of policy; this is true for policies that are optional as well as those policies more specifically mandated by state or federal government edict. Delegation of implementation responsibility--whether it be in education, law enforcement, or seismic safety--creates ipso facto an opportunity to exercise independent judgment about how to implement the policy. Seismic safety policy implementation in California illustrates these trends.

California state government has established the outlines of seismic safety policies. With the exception of school and hospital construction and dam safety, local governments are where the policies must be given operational meaning. For example, California requires that each city and county government prepare a "Seismic Safety Element" of its local land use plan. Guidelines that indicate the kind of seismological and geological data to be incorporated into the Elements are published by the state. Local governments, however, actually prepare the Element and then are solely responsible for any implementation.[3] Such land use decisions as whether to permit a residential subdivision in a certain location remain the responsibility of local government, whose judgment is supposedly informed by the state required Seismic Safety Element. This modus operandi also prevails in the areas of building code enforcement and emergency response planning. Therefore, the success of seismic safety policy implementation by California local governments heavily influences the fate of most earthquake mitigation efforts.[4]

Implementation: Theoretical Frameworks

Seismic safety has been on the public policy agenda in the United States, and especially in California, for most of the last decade. Using the more precise terminology of Roger Cobb and Charles Elder, seismic safety has been on the "systematic agenda" consistently and on the "governmental agenda" sporadically. Cobb and Elder define the systematic agenda as consisting of:

> all issues that are commonly perceived by members of the political community as meriting public attention and as involving matters within the legitimate jurisdiction of existing governmental authority. [Cobb and Elder, 1972, p. 85]

The governmental agenda is differentiated by defining it as:

> that set of items explicitly up for the active and serious consideration of authoritative decision-makers. [Cobb and Elder, 1972, p. 86]

The difficulty of sustaining a place on the systematic agenda should not be minimized, nor should the strategic and tactical posturing of those who wage political battles over governmental agenda items relating to seismic safety. Once having achieved governmental agenda status, many proposed policies have been adopted; again, especially in California.[5] What should concern us at this point, however, is the fate of those policies after adoption. Put more bluntly, there is no point to continued arguing over agenda status and the specifics of proposed additional seismic safety policies without having some understanding of how previously adopted policy has been implemented.

The last few years have seen an upsurge in efforts to construct a generalizable conceptual framework of the public policy implementation process. A brief presentation of several theoretical frameworks usefully precedes an examination of seismic safety policy implementation in California. Only a representative sample of this literature will be discussed, but this sample includes the frameworks most widely cited. These frameworks contribute to our present concerns because they permit a fuller explanation of seismic safety policy implementation activities and because they remind us of both similarities and differences inherent in a comparison of seismic safety policy to other policy areas.

Utilizing a systems theory perspective, Donald Van Meter and Carl Van Horn [1975] suggest the intervention of six major variables between policy enactment and ultimate performance; by performance they mean the impact of policy. Integral to any policy, they argue, is the establishment of (1) standards and objectives and the allocation of (2) resources (or lack thereof). These two variables create the opening conditions for the core of the implementation process in which (3) interorganizational communication and enforcement activities, (4) characteristics of the implementing agencies, (5) personal disposition of the implementors, and (6) the political, social, and economic environment all interact so as to produce an impact or policy performance. Although the various interactions can become quite complex, the model has the virtue of identifying the key components of any policy implementation effort.

Eugene Bardach [1977] characterizes implementation as a series of games. In a description that would also fit the Van Meter and Van Horn model, Bardach starts with the "essential implementation problem," that is:

> to control and direct the vast profusion of program related activities carried on by numerous and disparate organizations and individuals so as to achieve program objectives, keep costs down, and reduce delay. [Bardach, 1977, p. 250]

By using the metaphor of a game, Bardach can highlight actions that may have adverse effects on implementation. The games can be categorized by the stakes at issue. Four adverse effects may result from the implementation games:

(1) diversion of resources, especially money
(2) deflection of policy goals stipulated in the original mandate
(3) resistance to explicit, and usually institutionalized efforts to control behavior administratively
(4) dissipation of personal and political energies in game playing that might otherwise be channeled into constructive programmatic action. [Bardach, 1977, p. 66]

The "Budget" game diverts resources because implementors have an incentive to spend their full allocation in a given fiscal year so that funding for succeeding years will not be reduced. Deflection from original policy goals can occur in the "Up for Grabs" game when a program

is ambiguously designed or when there is no enthusiasm for the program among the implementors. The game of "Tokenism" emerges from efforts to control behavior administratively. Here there are public expressions of support and agreement, but privately only token implementation is forthcoming. Probably the most pervasive game that dissipates energies Bardach labels "Territory." This game is played by bureaucrats who invest substantial energies and time in the protection and expansion of their own domain. Therefore, they are unable to devote very much to actual policy implementation. These various games, which are illustrative and not exhaustive, have effects that hinder successful policy implementation.

After praising authors such as Van Meter and Van Horn and Bardach for their pioneering efforts, Paul Sabatier and Daniel Mazmanian [1981a] argue for an approach to implementation analysis that considers the importance of three factors, two of which are not explicitly contained in previous conceptualizing endeavors. They suggest an examination of the (1) tractability (or solvability) of the problem being addressed in the policy, (2) the way in which the statute structures implementation capability, and (3) the net effect of political variables for the support given to goal attainment during implementation. Sabatier and Mazmanian forcefully make the case that a problem's tractability can be categorized along several dimensions, and that any attempt to understand policy implementation must take into account the degree of tractability posed by the original problem. This reasoning is a logical and important contribution. The second point which sets Sabatier and Mazmanian apart is their insistence that the composition and character of the enabling statute--and the way in which the statute delegates implementation responsibilities--must be carefully analyzed for its impact on implementation success. The law, in other words, should not be taken for granted in an implementation analysis.

Several important implementation issues related to seismic safety emerge from the three conceptual frameworks presented above. Only a few can be dealt with in this paper. In subsequent sections three types of implementation issues are discussed, each having a place in one or more of the frameworks, but not being a comprehensive treatment of any. I will consider the important role of key personnel, some implications for implementation of the political environment surrounding the issue of seismic safety, and the tractability of the issue itself. The operating thesis guiding this discussion can be simply put: Seismic safety is not an issue that generates consistent expressions of organized public support and, therefore, implementation will always be problematic at best unless a highly committed and motivated core of officials diligently pursue implementation. Absent these personnel, the perceived intractability of the problem and lack of visibile political rewards for supporting seismic safety make seismic safety another policy area prone to unsuccessful or incomplete implementation.

Personnel

The personal disposition of strategically placed local officials is an important ingredient in determining the success of seismic safety policy implementation. While a similar statement could be advanced for almost any policy area, personal disposition seems especially important in seismic safety because non-governmental interests are not usually

pressing local government for action. What policy that is implemented--and the degree of its implementation--will be determined in spite of and not as a result of public expressions of organized local interest groups. As Van Meter and Van Horn explicitly argue, and as Bardach implicitly suggests, the dispositions and attitudes of the implementors must be examined in order to understand the fate of seimic safety policy implementation.

A brief look at the seismic safety policy behavior of officials in two cities that have undertaken several successful implementation efforts as compared to the attitudes and behavior of officials in two cities that have done very little to implement seismic safety policies underscores the importance of personal dispositions. The cities of Los Angeles and Santa Rosa fall into the first category while Burbank and Oakland lapse into the latter.[6] Santa Rosa city government has several individuals, both elected and appointed, who view their city's efforts to replace old structurally unsound buildings with something approaching missionary zeal. Following the 1969 Santa Rosa earthquake, they began vigorous implementation of a local law requiring rehabilitation or demolition of many older buildings in the downtown area. Resisting the initial heavy opposition were several city officials who personally believed the unsound buildings must be fixed. Over the last ten years, a small number (3-6) of city staff members and a few elected councilmembers have persevered in supporting implementation efforts because of their own convictions and not because of any visible public demands or obvious political benefits.

The same may be said about Los Angeles, although some modest public support for seismic safety came from a few professional associations (e.g., structural engineers) and the local press. Nevertheless, it has been the determination of a few city staff members, including one in the mayor's office, that has accounted for the reasonably successful implementation of the 1975 city Seismic Safety Element. For example, the Seismic Safety Element called for the adoption of a law requiring the identification and rehabilitation or demolition or structurally unsound old buildings. Six years after making a commitment to pass such a law the city council actually did so. Those intervening years were noteworthy for the delays caused by the ever-intense opposition to such a law by the owners--and sometimes the tenants--of the 14,000 buildings possibly affected. At numerous points during the six year controversy it would have been possible to abandon the effort without anyone suffering political repercussions or embarrassment. Only the strongly held beliefs of a few councilmembers, mayor's office personnel, and high ranking city staff members kept the matter alive and eventually completed.[7]

Burbank and Oakland offer examples of cities with public officials who generally do not feel seismic safety matters are worth much attention, and, therefore, implementation of policy has been minimal or even non-existent. Burbank suffered some modest damage from the 1971 San Fernando earthquake, but the event did not seem to catalyze a heightened seismic safety awareness by city officials. Numerous city officials have expressed a belief that the city "can't do much about earthquakes and their damage". A variation on this theme is the statement that only the private sector, and not the city, should think about the risk from an earthquake. A high ranking official in Burbank indicated that the city's Seismic Safety Element, which contains many recommendations for policy implementation, has never been used; indeed,

this official could not find a copy of the Element after a diligent search of his office.

In similar fashion Oakland city officials, elected and appointed, almost uniformly disavow any interest in implementing seismic safety. No one within city government feels that seismic safety goals are worth pursuing and making a high priority. It is not the case that Oakland officials want to ignore the risk from earthquakes and not implement policies designed to mitigate damage, but it is rather a matter of Oakland officials feeling that many other policy areas demand their attention because of their more immediate relevancy. Oakland does not have city officials who have made seismic safety an important goal. Studies have been completed and reports filed, and little implementation occurs. Oakland city hall itself was the subject of one such report, with the conclusion pointing to the dubious integrity of the structure in the event of an earthquake. Emergency response planning and seismic safety building code enforcement have been given very low priority because of the prevailing attitudes.

The inclinations and tendencies--in a word, dispositions--of public officials in these four communities have made a clear difference.

Political Environment

As Van Meter and Van Horn, Bardach, and Sabatier and Mazmanian all indicate, the political environment in which implementation takes place has an important bearing on the likelihood of successful implementation.[8] Three aspects of the political environment of seismic safety policy implementation deserve mention: organized interest group support, mass public support, and the political benefits or incentives for officeholders.

Seismic safety is not an issue that has stimulated the creation of new interest groups, nor, for the most part, has it been an issue that has attracted the support of already established local interest groups. When the California local governments which were studied were considering the adoption of their Seismic Safety Elements, virtually no interest groups appeared to support the concepts or the specific policies embodied in the Elements. On several occasions interest groups expressed their opposition to parts or all of the Element. Locally based interest groups have not initiated requests for new seismic safety policy.[9] Given this lack of visible support for policy adoption, it is not at all surprising that implementation of seismic safety policy has not been supported by local interest groups; any interest group involvement in implementation has been primarily opposition by affected parties.

There were only a few occasions where seismic safety concerns were part of the political behavior of local groups in the thirteen communities studied. In those few instances, local groups opposing proposed residential developments used the possibility of future earthquake damage as one of several reasons for their opposition. In no case was it the primary or sole justification for their political behavior.

Mass public support for seismic safety policy and its implementation remains latent and has not been translated into overt political behavior.

Recent research by Ralph Turner and his colleagues strongly suggests that the mass public, at least in Southern California, believes that local government should actively pursue seismic safety goals. [Turner, et al., 1980] Those attitudes, however, have not been sufficiently motivating to generate any significant political behavior.[10] Until the research of Turner, et.al., even the existence of this latent support was not realized.

Local officials do not perceive seismic safety and the implementation of policy about it as providing any political benefits to them. In their eyes, the public does not know much about seismic safety, ranks it very low on any priority list of community problems, does not communicate with officials about it, and does not engage in any sustained organized political activity regarding it. No elected or appointed officeholder in any community studied felt that seismic safety had been an issue in a recent political campaign. Political incentives and rewards are almost entirely lacking, at least as perceived by those who must implement seismic safety policy.

Tractability

Sabatier and Mazmanian introduce the concept of tractability as it relates to policy implementation by saying,

> Totally apart from the difficulties universally associated with the implementation of governmental programs, some special problems are much easier to deal with than others. [Sabatier and Mazmanian, 1981a, p. 6]

While there are surely public problems of greater complexity and difficulty, seismic safety, nevertheless, is not an easy problem. For instance, the benefits from seismic safety policy implementations are not always obvious. Rather, an act of faith is required by officials and the public, both of whom may never have experienced an earthquake nor know much about them. Lack of personal experience or acute awareness of potential earthquake damage or of possible mitigations--all of which accurately characterize most people in public office--makes seismic safety a less tractable issue. Designing buildings in a certain way or spending public money on an improved emergency communication system does not confer clear benefits immediately upon completion, but only when an earthquake occurs--and that occurrence may be a long time in coming. There is a strong probability that most of those in public office today will not be required to respond officially to an earthquake. Given the relatively short time perspective of most officeholders, it is not unusual for them to say that the actual seismic safety problems generated by an earthquake will not occur while they are in office.

The seismic safety issue itself is imbued with considerable fatalism because earthquakes cannot be prevented. This simple reality encourages some fatalism about efforts to mitigate the effects of earthquakes. Several local government officials expressed this attitude as a rationalization for their inaction in policy implementation.

The tractability of seismic safety problems is reduced by the way in which the costs and benefits of policy implementation are usually arranged. Implementation of seismic safety regulatory policies in the

areas of land use and building code enforcement create costs borne by a specific target group such as the building owner or land developer. The benefits, however, are spread in a diffuse manner to all those individuals, for example, who may happen to be in or around a building that would have otherwise collapsed in an earthquake, absent successful implementation of seismic safety policy.[11]

These and other aspects of tractability make implementation difficult. This discussion of tractability also highlights the previously mentioned importance of the personal dispositions held by staff and elected officials.

Concluding Comments

This paper has argued that local government is the appropriate focus of study if our interest is in seismic safety policy implementation. As with many policy areas, local governments' discretion in implementation may lead to policy consequences which vary by jurisdiction. Some differences in California local governments were discussed, most of them stemming from various personal dispositions of certain officeholders. Several uniformities in implementation problems were also mentioned. The political environment of seismic safety in most local jurisdictions is characterized by weak or nonexistent political interest group support, opposition by interest groups directly affected, latent but not overt mass public support for local governmental seismic safety regulatory actions, and a perceived lack of political rewards for officeholders. Because of concentrated costs and widely distributed but not obvious benefits, and a fatalistic attitude, seismic safety presents policy problems that are not easily solved.

The conclusion is inescapable--successful implementation of seismic safety policy cannot be simply assumed. Rather, the norm may be delay and less than full accomplishment of the policy goals envisioned when the policy was adopted. Reasons for this are scattered throughout the paper, and in many more ideas not mentioned, but the essence of the problem lies in the inherent nature of policy implementation. It is a process filled with organizational, personal, and politically based obstacles.

A generally negative tone has been struck in this paper. Policies are described as less than fully implemented, a lack of political support for seismic safety is discussed, and the issue itself is characterized as less than solvable. While this is accurate, it is not the entire picture. In fact, some seismic safety policies have had an impact through their implementation. Most buildings in California are designed and constructed according to more stringent standards, residences and other structures are not permitted on or near known active faults, many structures which were proposed on "problem soils" have either been prohibited or special engineering has been required to reduce the likelihood of failure, and some communities, such as Los Angeles County, have improved their emergency communications systems as a result of previous earthquake experience. What is important to remember, however, is that these and other implementation efforts did not just happen. They were accomplished by exertion and in the face of the problems discussed.

FOOTNOTES

1. Some of the major research on policy implementation includes: [Pressman and Wildavsky, 1973]; [Bardach, 1977]; [Mazmanian and Sabatier, 1981]; [Van Meter and Van Horn, 1975]; [Ingram, 1977]; [Berman, 1978]; and [Edwards, 1980].

2. The larger body of research upon which this paper draws was conducted in collaboration with my colleague Dean E. Mann and was supported by a grant from the National Science Foundation. Those jurisdictions included in the research that had recent earthquake experience were: City of Los Angeles, County of Los Angeles, Burbank, San Fernando, Glendale, Simi Valley, and Santa Rosa. Those included that have not had recent experience with an earthquake were: Oakland, Alameda County, Berkeley, Hayward, Fremont, and Salinas.

3. Most jurisdictions hired private consultants to write the technical part of the Seismic Safety Element. Some jurisdictions, however, did utilize their own staff.

4. This is not to deny the potentially important contributions to seismic safety that may come from other levels of government. What I am arguing is that most of the action occurs at the local level. It is also important to remember that the private sector helps define the level of seismic safety in a community. This paper only discusses governmental regulation of certain private sector activities pertaining to land use and construction, and, therefore, does not consider any voluntary private sector mitigation.

5. Time and space constraints prevent the presentation of an inventory of California seismic safety policies adopted in the last decade. See the following for an indication of what has been adopted: [California Seismic Safety Commission, 1979] [Executive Office of the President, 1978.]

6. While there is no hesitancy to identify the jurisdictions by name, specific officials will not be identified because promises of confidentiality were made to them during interviews.

7. I have characterized the passage of this old building law as an implementation of the Seismic Safety Element, but, of course, the more important implementation issue must be the carrying out of the law itself. It is too early to make any judgments about that.

8. The concept of an "environment" for policy implementation encompasses more than politics. Social and economic circumstances as well as the physical environment should also be considered. For present purposes, however, we will confine ourselves to political aspects.

9. An exception to this generalization is the Southern California Association of Structural Engineers.

10. Joanne Nigg [1981] offers several reasons why this may be the case.

11. James Q. Wilson [1973, pp. 334-335] refers to this as a case of "distributed benefits and concentrated costs."

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