

7 Patterns of Interest and Power in Nonstructural Hazard-Mitigation Politics in Local Communities*

The elites we surveyed are far from a representative sample of their communities. They were chosen because they were in positions that enabled them to exercise more than the citizens' simple franchise of the vote in determining policies within their states or their local communities or because we felt that their positions would make them particularly interested in hazards issues. However, authority may not be exercised, nor does interest automatically become action. In short, whether or not our respondents are, in fact, key persons is problematic.

There is still another issue of some interest in understanding the politics of state and local disaster-mitigating legislation and regulations. For some public issues, a rather well-defined, enduring complex of persons and activities arises. Antagonists and protagonists are identified, conflict arenas appear, and supporters align themselves firmly on one side or another. At the other extreme, an issue may be so far below the level of active controversy that alignments may be shaky because few are ready to commit themselves to one view or the other. Hence the degree of structure surrounding an issue is a critical element that describes a state of affairs at some particular point in time. Structures of this sort can be expected to change as issues wax and wane in importance as items on public agendas.

These considerations define the two major topics of interest in this chapter

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and the next. First, we are concerned with differences in activity and power among major groups within local communities and state capitals. Second, we describe the structures of the coalitions and alliances that characterize decision making on these issues. Because the state and local arenas involve different alliances and coalitions, as well as different actors, we treat these two levels separately, dealing in this chapter with the local scene and in the next with the 20 states in our sample.

The study of influence and power is itself a controversial area. On the one hand, some social scientists—mainly political scientists—assert that power and influence are most properly studied by tracing specific instances of public decision making in search of critical incidents that reveal which individuals and organizations were crucial to bringing about a decision. On the other hand, others—mainly sociologists—claim that power and influence are more appropriately studied by asking participants which individuals and organizations are generally influential and powerful in decision making. The first position has the virtue of being thoroughly grounded in actual events, but the disadvantage, especially in the present context, of being appropriate only when decisions are made. The reputational approach is easier to carry out in the field, and it likely measures how decisions are usually made. However, it may be misleading for particular decisions if a special and unique assemblage of persons and organizations was active because of their special interests.

The method we have employed here is most properly classified as deriving from the reputational approach. In effect, we have asked our respondents to tell us who is active and influential in local and state issues involving disaster. Since we are not at all interested in the particular individuals involved in specific places, but rather in the organizational attachments of such persons and in the common patterns manifested from place to place, our interviews focused on positions (e.g., mayor, Civil Defense director) or groups (e.g., major industries, banks, farmers). Hence the assessments of activity, influence, and power in this chapter are essentially in group structural terms.

It is important to keep in mind that the structure of power and influence that emerges from the analyses are structures that are largely hypothetical. In most of the states and local communities, disaster-mitigation policy measures were of low salience and did not become issues in 1977. By and large, we are dealing with what our interviewees believe would be the case were such issues to arise, or what has been the case when such issues did arise in the past. There is, of course, no guarantee that the political alignments we find will hold true in all cases. A generally inactive group can rebel if it feels that its interests are threatened. In a sense, our findings represent normal low-level decision-making expectations in local communities and state capi-

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tals. This portrait is of affairs as they were in the summer of 1977, not as they might become if land-management was to become a controversial issue.

Of course, for some of the states and local communities studied, natural disasters and the political issues associated with them are very much at the center of attention. Some of these places were identified earlier. We account for the effect of high levels of salience in our analyses

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Any area of decision making in the public sector is defined in the first instance by a locus of authority that consists of the positions and organizations that hold the legitimate authority to make binding decisions for the community. For most local communities in our study, the locus of authority consists of mayors and members of the city council. For others, especially counties, similar bodies—county executives, county managers, selectmen, and so on—perform this function. Issues that may involve the enactment of ordinances, codes, or administrative regulations must necessarily engage the attention of such public executives and legislative bodies.

Beyond the locus of authority, the cast of characters in local decision making is problematic. Appointed officials may adopt a very passive stance or a very active one. Local businesses, associations, mass media, and so on also may or may not become major actors in the public arena. We can expect those businesses and associations whose activities are peculiarly local in nature—for example, real estate agencies, stores, banks, and construction firms—to be especially attentive to what is going on in the public arena since their vital interests may be strongly engaged. Other groups are not so closely dependent on locality and may choose not to enter the local political arena if their vital interests are not affected.

Which groups, organizations, or public servants become active in connection with a particular set of issues is consequently an open question. We can expect mayors and City Councils (or their counterparts) to be engaged in almost every local issue, but the participation of others is an open question. Table 7.1 presents data on whether each of 24 positions or groups is perceived as active on issues involving “local natural disaster legislation or regulation.”¹ In addition, as shown at the bottom of Table 7.1, respondents

¹Although the wording of this question is not very explicit, it and the others discussed in this chapter were administered to the respondent toward the end of a 1½ hour interview, in which context the meaning of local disaster-mitigating legislation undoubtedly attained the required specificity and content.

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TABLE 7.1

Proportions Perceived Active on Local Disaster Mitigating Legislation (N = 1831)

Position/Group ^b	Percent Perceived as ^a			
	Active	Not Active	Don't Know	Not Applicable ^c
City Council (Legislative Body)	84 ^d	11	4	1
Mayor (Chief Executive)	83	12	5	1
Civil Defense Director	80	11	7	2
Local Newspapers	79	16	4	0
Fire Department	78	17	4	1
City Planning Department	76	14	6	4
Public Works Department	75	15	7	4
Police Department	73	22	4	1
TV and Radio Stations	71	22	5	3
Red Cross Chapter	71	20	7	2
Chamber of Commerce	69	23	6	1
Conservation Groups	61	28	10	2
People Living in High Risk Areas	60	31	8	1
Leading Industries	51	38	10	2
Democratic Leaders	44	41	14	1
Leading Merchants	43	46	10	0
Major Land Developers	42	44	11	3
Construction Firms	42	47	10	2
Republican Leaders	39	45	15	1
Banks and Savings Associations	37	48	14	1
Homeowners' Association	36	45	15	4
Real Estate Board	34	49	15	3
Farmers	28	55	11	5
Construction Unions	25	54	16	6
Respondent	74	24	1	1
Respondent's Agency (firm, position)	77	19	1	3

^aResponses to "... please tell me whether each (group/person) is active or not active in local natural disaster legislation or regulation."

^bDesignation changed as applicable, e.g., where the local political jurisdiction did not have a mayor, the appropriate title for the chief executive officer was inserted.

^cPosition/group does not exist in local community.

^dPercentages add up to more or less than 100% across each row because of rounding.

are asked about their own activity and that of the organization to which they belong (e.g., their real estate firm, the city council, etc.).

In some communities, particular groups may not exist or may not be known to the respondent. For example, some localities do not have planning departments or homeowners' associations, and some respondents may not be aware of them when they do exist. The column at the extreme right of Table 7.1 shows that 1% or 2% of the respondents typically indicate that such positions or organizations do not exist. Six percent indicated that their

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communities do not have any construction unions. For groups that do exist, some respondents do not know their level of activity.

The elites interviewed had fairly strong ideas about who would be or not be active in legislation dealing with disaster-mitigation. It is, of course, impossible to discern the experiential bases for their answers from our data. We may reasonably speculate that such impressions are drawn from actual experience and from the respondents' general understanding of how such things work in their communities.

The perceived levels of activity were much as we had speculated. First, positions and groups that define the locus of authority are seen by overwhelming majorities as being active in disaster-mitigating legislation. Eighty-four percent of our respondents consider city councils as active in this area, and 83% indicate that their mayors or other local chief executives are active. Public agencies concerned with the physical infrastructure—planning, Public Works—or directly with the emergencies that disasters may create—Civil Defense directors, fire and police departments—are all seen by from 73% to 79% as active in disaster-mitigating legislation. In the private sector, those organizations with particular local foci—newspapers (79%), local television and radio (71%), the local Red Cross chapter (71%), and the Chamber of Commerce (69%)—are usually considered active. No other group is perceived as active as frequently as those we have mentioned.

Perhaps the major surprise in these findings is that Republican and Democratic leaders are considered active by only 39% and 44%, respectively. Since City Council members and mayors are often elected on a partisan basis, if the party leaders are not particularly active in disaster-mitigating legislation, the most likely reason is that these issues do not divide the parties into opposing camps (or did not, at least in 1977). Mayors and City Councils have to deal with such issues because their positions require them to do so, but they do not deal with the issues as Republicans or Democrats working out a political platform.

Thus, on the local scene it appears that those in charge of dealing with local legislation and those whose position requires them to pay attention to local legislation on such issues are the persons and groups that are viewed as the active core concerned with aiding or opposing legislation dealing with disaster mitigation. The extent to which this pattern is applicable to all legislative activity or particular to the special issues involved can be seen in Table 7.2. There, we present the results of a set of questions asking whether or not each of the groups was active in "environmental issues," a comparison that proves instructive.²

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It is clear, first of all, that the levels of activities of almost all groups are less for environmental issues than for disaster-mitigating issues, a finding that is partially an artifact of the method used. But more important is the different pattern of activities shown in Table 7.2. Whereas the mayor and the City Council are clearly among the most active, the remainder of the groups show a pattern that varies, sometimes markedly, from Table 7.1.

Indeed, if we correlate the results of Table 7.1 with those of Table 7.2, the overall correlation is but a modest $r = .44$.³ Thus, although there is some overall tendency for those groups that are seen as active on natural disaster issues also to be seen as active on environmental issues, the rather low correlation indicates that there are many groups active on one issue that are not active on the other. Indeed, whatever co-varying tendency exists appears to reflect mainly that any mayor and any City Council are involved in local legislation and regulation: if we delete the mayor and the City Council and recompute the correlation across the entries in Tables 7.1 and 7.2, the correlation drops to $r = .26$, indicating only a very loose correspondence between the perceived levels of activities of these groups on environmental and on natural disaster issues. These findings bolster our interpretations of the findings on activity concerning natural disaster issues as reflecting some particular features of the area itself, and not simply the general patterns of decision making in local communities.

Up to this point, we have not touched upon the last two entries in either Table 7.1 or 7.2, in which the respondents rate their own level of activity and that of the agency or position they represent. Note that 74% represent themselves as "active" with regard to natural disaster issues, and 77% so characterize their agency. In contrast, 42% and 43%, respectively, are active with respect to environmental issues. These findings are not unexpected: since the respondents were chosen because we believed their positions would lead them to high levels of activity with respect to natural-disaster issues. Later we examine the personal characteristics of our more active respondents.

The patterns of participation in hazard-mitigation issues shown in Table

list of the 25 groups were active in environmental issues. The latter methods underestimate the proportion of "don't know" responses since the nondesignation of a group as "active" can either mean that the respondents had no knowledge or that they thought the group was not active.

³Computed by correlating the entries in the first column of Table 7.1 with the corresponding column of Table 7.2, omitting the last two entries. This correlation expresses the extent to which the levels of activities registered for a group with respect to natural disaster legislation tend to vary in consonance with their levels of activity with respect to environmental issues.

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TABLE 7.2

Proportions Perceived as Active on Environmental Issues in Local Communities

Position/Group	Percent Perceived as ^a			
	Active	Not Active	Don't Know	Not Applicable
Conservation Groups	76	22	1	1
City Council	72	26	1	1
Mayor (Chief Executive)	65	33	1	1
Newspapers	63	36	1	0
City Planning Department	59	37	1	3
Chamber of Commerce	55	43	1	1
TV and Radio Stations	52	45	1	2
Major Land Developers	49	47	1	2
Leading Industries	47	50	1	1
Public Works Department	45	51	1	3
Homeowners' Association	38	57	1	4
Real Estate Board	37	60	1	2
Construction Firms	33	65	1	1
People Living in High Risk Areas	32	67	1	1
Democratic Leaders	31	68	1	0
Civil Defense Director	30	67	1	2
Republican Leaders	29	69	1	1
Farmers	29	66	1	4
Leading Merchants	27	71	1	0
Construction Unions	25	69	1	
Fire Department	21	77	1	0
Banks and Savings Associations	21	78	1	0
Red Cross Chapter	20	77	1	2
Police Department	17	82	1	0
Respondent	42	57	1	0
Respondent's Agency (firm, position)	43	55	1	0

^aResponses to "Which ... would be active - either supporting or opposing - in legislation dealing with environmental issues, for example, water or air pollution?"

7.1 do not take into account joint group activity. Thus, while it is likely that elected public officials are most consistently active over all communities (almost by definition of their role), other groups may be activated in combinations. To discern these patternings, a factor analysis was performed by correlating the patterns of activity across communities and analyzing the

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resulting correlations.⁴ This approach is a way of characterizing communities by the concomitant variation in levels of activity manifested by combinations of groups.

The resulting factors, labeled according to what they seem to have in common, are shown in Table 7.3. Thus, the first factor, labeled *business*, refers to tendencies for certain types of business enterprises and the banks to be active together. Another factor, *real estate*, expresses the same tendency for major land developers, real estate boards, and homeowners' associations to be perceived as active together. *Public officials* involves elected public officials and such local government departments as planning and Public Works. Local political party leaders apparently define the fourth factor, *local politicians*, but the inclusion of persons living in high-risk areas and construction unions in that cluster appears somewhat mysterious. Perhaps local political party leaders become activate in such controversies only when local constituencies also become agitated. The fifth factor is *emergency services*, which includes the police and fire departments. A final, factor, is *community services*, relatively miscellaneous, but includes the Civil Defense director, the Chamber of Commerce, television and radio stations, and the local Red Cross chapter.⁵ It is not at all clear what it is that these four groups have in common. Finally, local newspapers do not seem to fall clearly in any one factor, although the strongest loading is with emergency services.

Another way of interpreting the factor loadings shown in Table 7.3 is that they define types of local communities in terms of the kinds of groups and positions that become active in natural disaster legislation. Thus, there are cities in which major businesses are more active than average, with other clusters of groups being less active. We return to this topic later to try to discern the special characteristics of cities that place relatively more or less emphasis on the activities of one or another cluster of groups.

It also appears that natural hazards activate interests and positions in clusters. Distinct clusters appear and constitute the active participants in the arena of political decision making concerning natural disaster issues. Of course, activity alone does not decide the outcome of a decision-making process, since it can be expected that groups and positions vary in authority and influence. These activity groupings have to be evaluated in terms of their power positions within local communities, a topic to which we also return.

⁴The correlations were computed by considering each community as a case and the percentages for each group's activity within each community as a variance. Thus, a correlation between two groups represents the extent to which activity levels of the two groups co-vary from community to community.

⁵The Civil Defense director could almost as easily have been classified with the emergencies services group, since the loadings for this group on the two factors were almost identical.

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TABLE 7.3

Factor Analysis^a of Group Activity on Natural Disaster Scores for Local Communities (N = 100)

Position/Group	FACTOR AND FACTOR LOADINGS					
	Business	Real Estate	Public Officials	Local Polts.	Emergency Services	Community Service
Banks and Savings	.85	.15	.01	.19	-.03	.15
Leading Merchants	.80	-.03	.25	.29	.16	.15
Farmers	.74	.14	-.23	.12	.30	-.18
Leading Industries	.57	.30	.13	.27	-.03	.29
Construction Firms	.57	.40	.15	.26	.27	.20
Major Land Developers	.23	.82	.13	.20	.05	.07
Homeowners Assoc.	.01	.74	.15	.35	.12	.14
Real Estate Board	.39	.69	.27	.06	-.04	.20
City Council	.17	.11	.80	.21	.16	.05
Mayor	.15	-.01	.75	.27	.18	.11
City Planning Dept.	-.19	.47	.68	-.10	-.12	.13
Public Works Dept.	-.42	.43	.58	-.04	.13	.12
Republican Leaders	.36	.09	.17	.81	.01	.03
Democratic Leaders	.48	.05	.19	.75	.03	.11
People in Hi Risk Areas	.03	.30	.17	.74	.15	.17
Construction Unions	.19	.41	-.03	.55	.01	.13
Fire Department	.06	.06	.13	.01	.86	.16
Police Department	.21	-.03	.13	.07	.86	.12
Civil Defense Director	-.30	.16	-.11	.02	.47	.53
Chamber of Commerce	.27	.22	.36	.14	-.13	.73
TV & Radio Stations	.12	.23	.25	.05	.32	.68
Red Cross Chapter	.17	-.00	-.06	.28	.39	.66
Newspapers	.28	.24	.38	.37	.46	.15
Conservation Groups	.42	.38	-.07	.36	.13	.03

^aComputed by correlating proportions active in each community for each of the groups. Factor analysis computed using the method of principal components and rotated into a varimax solution. Factors extracted until eigen values dropped below 1.00.

The clustering of group activity levels shown in Table 7.3 is specific to the natural hazards issue. To illustrate the clustering of group activities on another issue, Table 7.4 presents the factor loadings that arise out of an analysis of groups active on environmental issues. The factors appearing in Table 7.4 are fewer in number (four instead of six) and less clear-cut. Of the factors shown in Table 7.3, it is fairly easy to identify the commonalities that hold the groups in each cluster together. In the case of Table 7.4, however, the clusters appear to be more heterogeneous, so much so that we restrained

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TABLE 7.4

Factor Analysis^a of Community Patterns of Group Activity on Environmental Issues (N = 100)

Position/Group	FACTOR LOADINGS			
	Factor 1	Factor 2	Factor 3	Factor 4
Newspapers	.79	.28	-.01	.23
Mayor	.77	.11	.12	.09
City Council	.74	.16	.11	.09
TV and Radio Stations	.72	.31	.06	.25
City Planning Department	.62	.50	.11	.06
Public Works Department	.62	.25	.33	.14
Conservation Groups	.56	.53	-.00	-.09
Major Industries	.55	.50	.18	.39
People Living in High Risk Areas	.52	.35	.39	.24
Real Estate Board	.22	.87	.16	.11
Major Land Developers	.34	.82	.21	.11
Construction Firms	.23	.80	.07	.36
Homeowners' Associations	.44	.66	.11	.07
Chamber of Commerce	.55	.57	.29	-.07
Red Cross Chapter	.13	.18	.84	.07
Civil Defense Director	.15	-.06	.82	.06
Police Department	.18	.07	.76	.45
Fire Department	.12	.12	.69	.47
Banks and Savings Associations	.03	.36	.63	.23
Democratic Leaders	.44	.18	.15	.77
Republican Leaders	.43	.25	.19	.74
Leading Merchants	.25	.25	.42	.66
Farmers	-.14	.07	.29	.55

^aSee footnote in Table 7-3 for information on computation of factor analysis.

from giving each of the clusters a name because the commonality of interests that held each cluster together was unclear. However, the very uninterpretability of the factor loadings in Table 7.4 provides further support for our point: The clustering of interests that arises around hazard-mitigation legislation appears to be unique to that issue.⁶

⁶This is not to say that there are no clearcut clusters of interests around the conservation issues. The groups we have studied were selected because we believed that they would be active in natural-disaster issues. A different set of groups would have been selected were our concern for the clustering surrounding conservation issues as strong. For example, we might have considered adding the medical profession, heart, lung, or cancer associations, the Public Health department, and so on.

The results of the factor analysis suggest that communities vary in which groups become active in hazard-mitigation issues, but the factor analysis does not reveal the characteristics of communities that vary in these ways. To cast some light on this issue, we computed for each community the average levels of activity for each of the clusters shown in Table 7.3 and regressed those activity levels on some available community characteristics. This mode of analysis is designed to distinguish among communities that have high average perceived levels of activity for each of the clusters, taken as a group. In addition, we computed an overall average level for all of the 24 groups and positions. This index shows the extent to which the key persons in the community perceive a generally high or low level of activity concerning hazard-mitigation legislation. The results of these analyses are shown in Table 7.5.⁷

Although only a few community characteristics are used in the regression analyses, a good deal of the variance among communities is explained. For example, more than one-third of the variance in overall activity (labeled *all groups*) and more than one-half of the variance in the activity levels of business groups can be accounted for. For only one group cluster, *emergency services*, were we unable to explain a significant amount of the variance among communities.

Perhaps the most outstanding finding presented in Table 7.5 is that the average level of disaster salience plays a big part in producing higher activity levels for all groups. The measures of disaster salience were taken from the first question in our interview schedule, in which respondents were asked to rate the importance of a variety of potential problems in their communities (see Chapter 3). Those community leaders who perceive natural disasters to be serious problem to the community also perceive all the clusters of groups to be relatively more active.

Each of the groups shows a slightly different pattern of responsiveness to community characteristics. Business groups become less active the higher the median household income within a community and when the community is in a Standard Metropolitan Statistical Area (SMSA). Perhaps this reflects the dominance of businesses in small industrial cities that are independent of major metropolitan areas. Community service leaders are a more active in lower-income communities. Real estate groups and public officials appear to be sensitive mainly to the salience of natural disasters. They are active only when salience is high. Political party leaders are particularly sensitive to disaster salience and controversy over flood insurance.

⁷Standardized regression coefficients are reported because each of the dependent variables represents activity levels for different numbers of groups or positions, aggregated to the community level.

TABLE 7.5

Average Group Cluster Activity Levels Regressed on Selected Community Characteristics (N = 94)

Characteristic	All Groups	Business	Real Estate	Public Officials	Political Leaders	Emergency Services	Community Service
Median Household Income (1970)	-.35** (3.02)	-.46*** (4.71)	-.17 (1.28)	.09 (.71)	-.23 (1.87)	-.14 (1.05)	-.33** (2.67)
Flood Insurance Controversy ^b	-.15 (1.76)	-.14 (1.91)	-.11 (1.16)	-.11 (1.23)	-.19* (2.04)	.12 (1.15)	-.01 (1.54)
Disaster Experience (1960-1970) ^c	.04 (.443)	-.00 (.06)	.12 (.84)	.09 (.84)	-.16 (1.60)	.10 (.893)	.14 (1.36)
Disaster Salience ^d	.39*** (4.08)	.20** (2.51)	.27** (2.5)	.27** (2.7)	.40*** (4.01)	.12 (1.10)	.33** (3.31)
Flood Insurance Opposition ^e	-.09 (.851)	-.01 (.09)	-.08 (.71)	-.13 (1.15)	-.12 (1.13)	.11 (.901)	-.15 (1.39)
In Metro Area ^f	.03 (.220)	-.29** (2.76)	.18 (1.24)	.23 (1.74)	.06 (.43)	-.12 (.78)	.16 (1.20)
R ² =	.354***	.553***	.186***	.266***	.297***	.118	.285***

^a Entries in table are standardized regression coefficients with t-statistics in parentheses.

^b Aggregated answers to item L36 asking how much controversy was there in community over the Flood Insurance Program (HI score = low controversy).

^c Combined number of tornadoes, hurricanes, and floods experienced by community 1960 to 1970 from American Red Cross disaster report files.

^d Aggregated responses to item 1 asking how important are floods, hurricanes, tornadoes, and earthquakes as a problem to community.

^e Aggregated responses to item asking whether respondent approves of Flood Insurance Program (HI score = opposed opinions).

^f Dummy variables for whether the community is in an SMSA.

Statistical significance indicated by asterisks: (*), *** = .001 level, ** = .01, and * = .05.

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The clearest finding is that the level of activity of all groups is sensitive to perceptions of how important to the community the problems presented by vulnerability to natural disasters are. The more important the natural disaster problem, the more likely are all groups to become involved. There is some tendency for the average socioeconomic level of a community to affect activity levels as well. Business and community service groups appear to be less active when the socioeconomic level of the community is high, although this may simply reflect that average socioeconomic level is itself a correlate of other things.

The respondents' self-ratings as active or inactive, as shown in Table 7.1, present another way of evaluating who becomes involved in hazard-mitigation legislation. Using the self-rating as an index of activity, we can explore the kinds of factors that determine such levels by correlating them with other individual characteristics and with community context variables. Table 7.6 presents such an analysis, regressing self-reports of activities on a number of individual characteristics.

Only about 12% of the variance is explained by the model. Of course, since we chose respondents with the expectation that they would be particularly active (and 75% considered themselves to be active), there is not much variance from individual to individual, and hence the explanatory power of the model is low.

The coefficients shown in Table 7.6 have a direct interpretation as an increment or decrement in the probability of giving oneself a rating of being active. Thus, elected public officials (whose coefficient is .15 and highly significant) have a .15 higher probability of a self-rating of active as compared with the omitted positions. Similarly, appointed officials have a .20 increment in their probability of being active, while private sector positions lead to a .10 lowering of the probability. Note that these three individual characteristics are among the strongest shown in Table 7.6.

The more important problems presented by natural disasters are perceived by respondents, the more likely they are to be active, each increment in disaster seriousness ratings results in a .01 increase in the probability of rating oneself as active. Age also leads to increased activity; each additional year of age leading to a .002 increase in activity. This means a 60-year-old leader has a .04 lead in activity over a 40-year-old leader.

The remaining predictors are ideological in character. Those who disapprove of the federally mandated nonstructural hazard-mitigation regulations are more likely to be active than those who approve. However, those more in favor of federal controls over economic activity are more likely to be active than those who are opposed. Perhaps the latter finding means that those who are more permissive about government regulations are more interested in government affairs in general, while the earlier finding ex-

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Patterns of Influence

PATTERNS OF INFLUENCE

Being active on some issue does not guarantee that one can effectively influence others. Decision-making authority is distributed among offices and organizations, and those who do not have authority must persuade and convince those who do. The ways of influence and power are sufficiently diverse within our local political jurisdictions to make the wielding of both obscure and even mysterious.

To reveal the pathways of power, we asked our respondents to indicate which of 24 groups they would like to have on their side, were they to try to get "something enacted . . . on some issue concerning natural disasters." Their answers are shown in Table 7.7. It is certainly no surprise that considerable majorities would like to have the City Council and/or the mayor on their side. Since these two groups hold the statutory powers, and their formal approval is necessary for local ordinances, it is only surprising that 100% of our respondents did not cite them.

Close behind the mayor and the city council are the mass media, local newspapers, and television and radio, each with strong majorities indicating that their support would be helpful. Fifty-three percent would like to have the Civil Defense director on their side, and 50% see the Chamber of Commerce as an important group. The remainder of the groups are endorsed as helpful by minorities of our respondents, indicating that few see them as particularly useful as endorsers of a proposed change. Few see themselves as important to have on their side (29%), although more (42%) feel that their agencies' endorsement would be helpful and important.

The cluster patterning of the 24 groups is shown in the factor loadings in Table 7.8. The factors appear to be largely similar to those shown earlier for the clustering of activity (see Table 7.3). Public officials—mayor, City Council, and some of the city departments—form one cluster.⁸ A second cluster includes such emergency services as the police, fire departments, and the Civil Defense director.⁹

A *media and community service* cluster is composed of the mass media plus the Chamber of Commerce and the Red Cross. The Civil Defense director also participates in this cluster, as well as in *emergency services*. *Business and industry* appear to be the best-defined cluster. It is composed of merchants, banks, local industries, and oddly, farmers. Construction firms also participate in this cluster, with strong ties to the *real estate* cluster, as well. The *real estate* cluster consists of the interests surrounding the

TABLE 7.6

Regression of Self Ratings of Active on Natural Disaster Legislation on Selected Individual and Community Characteristics

Independent Variables	Dependent Variable is Respondent Self Rating as Active (Dummy Variable)	
	b	SE
Elected Official Position ^a	.15***	.030
Appointed Official Position ^a	.20***	.030
Private Sector Position ^a	-.10**	.032
Federal Land Use Controls-Disapproval ^b	-.02*	.104
Saliency of Disaster Issues ^c	.01**	.003
Age (Years)	.002*	.001
Disapprove Flood Insurance	-.02	.144
Liberal on Government Regulation	-.03*	.014
Education	-.01	.008
Perceived Disaster Probabilities ^d	.00	.000
Population 1970	.00	.000
Median Household Income 1970	.00	.000
Number of Disasters 1960-1970 ^e	.00	.004
Metro Area	-.06	.032
Intercept	.93***	.088
	R ² =	.118***
	N =	(1498)

^aDummy variables indicating position occupied by respondent. Private Sector positions include Chamber of Commerce officials, local Taxpayers' Association heads, Real Estate Board executive, and Homebuilders' Association executive. Omitted category includes all positions other than those in government employ (local) and private sector.

^bBased on answers to Question 48.

^cSum of saliency ratings given to floods, hurricanes, tornadoes, and earthquakes as local problems.

^dSum of probabilities perceived by respondent of flood, hurricane, tornado, and earthquake events in local community.

^eFrom Red Cross Chapter reports.

Asterisks indicate statistical significance. *** = .001, ** = .01, * = .05.

presses the concern of those who are opposed to the mandatory regulatory aspects of programs such as the NFIP and are active because they want to express that opposition.

Finally, there are a number of factors that do not seem to play a role in these self-ratings. The disaster experience of the community, as measured by the Red Cross Chapter Reports, appears to be irrelevant, as do community size, socioeconomic level, and the perceived probabilities of disaster recurrence.

7. Patterns of Interest and Power in Nonstructural Hazard-Mitigation Politics

TABLE 7.7

Proportions Perceived as Important^a on Local Natural Disaster Issues (N = 1831)

Position/Group	Percent Perceived as		
	Important	Not Important	Not Applicable
City Council (Legislative Body)	81	18	0
Mayor (Chief Executive)	77	22	0
Newspapers	71	29	0
TV and Radio Stations	61	36	2
Civil Defense Director	53	46	1
Chamber of Commerce	50	48	1
City Planning Department	45	52	3
Democratic Leaders	38	62	0
Public Works Department	37	60	3
Fire Department	36	63	0
Police Department	34	65	0
Republican Leaders	33	66	1
Conservation Groups	32	66	1
Red Cross Chapter	31	67	2
Leading Industries	31	68	1
People Living in High Risk Areas	28	71	1
Leading Merchants	26	74	0
Land Developers	25	72	2
Banks and Savings Associations	23	76	0
Real Estate Board	22	75	2
Homeowners' Associations	22	74	4
Construction Firms	18	81	1
Construction Unions	15	80	5
Farmers	14	81	4
Respondent	29	71	0
Respondent's Agency (firm, position)	42	58	0

^a Responses to "If you wanted to get something enacted here in this community on some issue concerning natural disasters, which of these groups or persons would it be important to have on your side?" Less than 1% responded "Don't know."

sale and ownership of real property, but also includes conservation groups and people who live in high-risk areas. A final cluster contains the leaders of the two major political parties, a group that seems quite distinctively different from all the others.

Although the clusters that appear in Table 7.8 are roughly similar to those

Patterns of Influence

TABLE 7.8

Factor Loadings^a for Community Aggregated Perceptions of Group Influences on Disaster Mitigation^b Legislation (N = 100)

Group/Position	FACTORS AND FACTOR LOADINGS					
	Public Officials	Emergency Services	Media & Community Service	Business Industry	Real Estate	Political Parties
City Council	.81	-.00	.15	-.11	.17	-.04
Mayor (Chf. Exec.)	.72	.03	.10	-.06	.03	.04
Public Wks. Dept.	.62	.44	.09	.05	.41	-.00
Construction Unions	.46	.24	.06	.30	.28	.24
Fire Department	.14	.90	-.06	.08	.08	.05
Police Department	.16	.90	.09	.18	.10	.01
Civil Defense	-.30	.65	.50	-.02	.07	.07
TV & Radio	.20	.12	.84	.08	.13	.05
Chamber of Commerce	.18	-.05	.75	.06	.32	-.07
Newspapers	.25	.17	.63	-.02	.21	.26
Red Cross	-.19	.33	.54	.20	.23	.23
Merchants	.15	.19	.13	.71	.04	.46
Banks	-.28	-.11	.01	.71	.28	-.01
Farmers	-.44	.27	-.09	.68	.06	.10
Construction Firms	.18	.32	.21	.59	.45	.22
Local Industries	.29	.08	.28	.53	.16	.47
Conservation Grps.	-.19	.00	.09	.02	.71	.25
Land Developers	.11	.08	.28	.38	.71	-.02
Real Estate Board	.32	.04	.25	.25	.67	.02
Homeowners' Assoc.	.28	.07	.19	.18	.66	.10
Planning Board	.50	.17	.13	-.13	.65	.12
Risk Area Dwellers	.12	.26	.23	.15	.61	.33
Republican Leaders	.02	.05	.02	.07	.18	.90
Democratic Leaders	-.05	-.01	.12	.22	.16	.90

^a Computed by principal component method rotated by varimax criterion.

^b See footnote on Table 7-7 for question wording.

shown earlier for group activity levels (see Table 7.3), the correlation between levels of activity and levels of influence across the 24 groups is only $r = .62$, indicating that the similarity of clustering does not simply mean that those groups seen as active are also seen as influential. The correlation $r = .62$ means that only 36% of the variance in one variable is explained by the variance in the other variable. A high correlation in this context would

TABLE 7.9

Average Group Cluster Influence Levels Regressed on Selected Community Characteristics (N = 93)

Community Characteristics	All Groups	Public Officials	Average Group Cluster Activity ^a					Political Leaders
			Emergency Services	Business	Real Estate	Community Services		
Disaster Salience ^b	.08 (.757)	-.04 (.497)	-.03 (.262)	.14 (1.22)	.08 (.714)	.04 (.353)	.22* (1.99)	
Population 1970	-.02 (.169)	.03 (.412)	-.24* (2.17)	-.01 (.124)	-.00 (.039)	-.20 (1.91)	.26** (2.44)	
Flood Insurance Controversy ^b	.03 (.251)	.02 (.249)	.04 (.365)	.03 (.281)	.02 (.174)	.04 (.399)	.00 (.049)	
Population Growth (1960-1970)	.07 (.662)	.00 (.045)	.13 (1.17)	-.01 (.075)	.13 (1.28)	.06 (.629)	.02 (.179)	
Flood Insurance Opposition ^b	-.28* (2.41)	-.37** (4.27)	.17 (1.43)	.00 (.016)	-.24* (2.18)	-.29** (2.65)	-.22* (1.96)	
Disaster Experience 1960-1970	.25* (2.41)	.24** (3.03)	.19 (1.72)	.05 (.478)	.22* (2.14)	.34*** (3.31)	-.20 (1.91)	
Median Household Income 1970	.01 (.058)	.41*** (4.48)	-.14 (1.16)	-.21 (1.72)	.16 (1.39)	-.13 (1.14)	-.19 (1.61)	
R ²		.510***	.110	.083	.211***	.211***	.182**	

^aEntries in table are standardized regression coefficients with t-statistics in parentheses.

^bSee Table VIII-7 for definition of these variables.

Coefficients that are statistically significant are starred (*). *** = .001 level, ** = .01, * = .05.

Patterns of Influence

be of the order $r = .8$ or more. The difference between activity and influence may be seen more clearly in Table 7.9, where we have regressed average cluster influence levels on much the same set of community determinants as cluster activity levels.

Disaster seriousness plays a minor role in whether or not group clusters are influential in their communities. In contrast, disaster seriousness played a consistently important role in determining the activity levels of almost all the groups. Disaster experience plays a similar role with regard to cluster influence: The more disasters a community has experienced during 1960-1970, the more likely are all groups to be perceived as influential.

It should also be noted that less of the variance is explained for influence levels (Table 7.9) than was, on average, explained for activity levels (Table 7.5). For two of the clusters, *emergency services* and *business*, we are not able to explain enough of the variance to achieve statistical significance. Apparently, these groups are regarded as influential under conditions that are not fully captured in the community characteristics used in the regressions.

The most predictable influence is that of the *public officials* cluster ($R^2 = .51$). Public officials are regarded as more influential when the prevailing characteristics of the community are high median household income, high levels of approval of the NFIP, and high-risk exposure to natural disasters. Real estate and community service groups are influential under quite similar circumstances, namely high approval levels for the NFIP and a high-risk exposure to hazards. Quite a different pattern obtains for Republican and Democratic party leaders, who are important when disaster salience is high, in larger communities, and in communities with high levels of approval for the NFIP.

Although we obtained self- and agency ratings from our elite respondents, as shown in the bottom two lines of Table 7.7, we were not able to find a set of predictors involving characteristics of the elites or of the communities that would explain any appreciable amount of variation in such ratings. One interpretation is that these self- and agency ratings are generated by factors that we did not measure. Alternatively, the explanation may be that the patterning of influence is entirely or largely community determined. That is, each community has its particular clustering of importance, and respondents are reporting these clusters fairly uniformly. Their reports appear to be uninfluenced by their positions or other personal characteristics. This is perhaps the most congenial interpretation of our findings, since it implies that our respondents are reporting on realities that are independent of distortions of perception that arise from the perspectives acquired from their positional roles and their personal characteristics.

7. Patterns of Interest and Power in Nonstructural Hazard-Mitigation Politics

REGULAR CONTACT WITH GROUPS

Another dimension of the importance of positions and/or groups is their range of contacts: the number of other positions with which they are in some sort of regular contact. We asked each of our respondents with which of the 24 groups and positions they were in contact on a "more or less regular basis." The responses are shown in Table 7.10.

The levels of contact range widely. At one extreme, 72% claim that they are in regular contact with members of the City Council, and, at the other

TABLE 7.10

Proportions Having Regular Contact^a with Position/Group on Local Level (N = 1831)

Position/Group	Proportion with		
	Regular Contact	No Regular Contact	Not Applicable
City Council	72	27	0
Mayor (Chief Executive)	71	29	0
Newspapers	64	35	0
City Planning Department	57	40	3
Chamber of Commerce	55	44	1
TV and Radio Stations	53	44	2
Police Department	51	49	0
Public Works Department	49	48	3
Fire Department	48	52	0
Banks and Savings Associations	38	61	0
Major Land Developers	38	60	2
Major Merchants	37	62	0
Major Industries	37	61	1
Civil Defense Director	37	61	1
Conservation Groups	35	64	1
Construction Firms	35	64	1
Democratic Leaders	35	65	0
Real Estate Board	31	67	2
Republican Leaders	29	70	1
Homeowners' Associations	25	71	4
Red Cross Chapter	23	75	1
Farmers	22	74	4
People Living in High Risk Areas	19	80	1
Construction Unions	15	80	5

^aResponse to "In your present position, with which of these groups are you in contact on a more or less regular basis?" Less than 1% responded "don't know."

Regular Contact with Groups

extreme, 15% claim to be in regular contact with construction unions. The positions that a majority of the elites claimed regular contact with are the City Council, mayor, newspapers, city planning department, Chamber of Commerce, television and radio, and the police department. Respondents were also in regular contact with the Public Works and fire departments (49% and 48%, respectively). It is difficult to draw generalizations from these findings, since our elite respondents are scarcely common citizens, and hence their levels of contact with a particular group may not be an index so much of the contact range of the group involved but of the positions of the persons interviewed. Thus, that the city planning department, for example, appears to have so wide a contact scope may only imply that our respondents are concerned with the actions of the planning department as they may impinge on the respondents' occupational activities.

However, to the extent that the elites we interviewed represent the inner core of local activists concerned, or potentially concerned, with natural disaster issues, these contacts may represent the extent to which each of the 24 groups and positions can use their regular contacts with members of the inner core to affect outcomes. In this respect, it is noteworthy that, other than the mass media and the Chamber of Commerce, the private sector does not appear to participate substantially in the inner core. Banks, land developers, industry, and business are in regular contact with roughly 38% of our elite respondents. It may also be significant that the local Red Cross is relatively isolated: Only 23% of our respondents claim regular contact with their chapters.

Since these patterns of contact say much about the respondents, our factor analysis was computed on an individual respondent, rather than a community, level. Table 7.11 therefore characterizes persons by their patterns of contact with clusters of groups. Each group cluster is distinguished by elites who are in regular contact with each other. However, although this factor analysis is based on individual responses, the clusters are familiar ones, with the exception of a cluster we have labelled *popular interest groups*. A *business cluster* includes industries, merchants, developers, the Real Estate Board, and construction firms. Businesses that deal with the sale and development of land are classified with other businesses and do not form a separate cluster of their own. The *emergency services cluster* combines the police and fire departments with the Red Cross and the Civil Defense director, a grouping that has not appeared before.

A *public officials cluster* consists of the mayor, the City Council, and the planning and Public Works departments, a grouping that suggests that some respondents simply have a lot to do with the local government and its agents. The *popular interest groups cluster* encompasses segments of the public: conservation groups, inhabitants of high-risk areas, farmers, and

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TABLE 7.11

Factors and Factor Loadings for Group Levels of Frequent Contact with Key Persons (N = 1831)

Group/Position	FACTOR AND FACTOR LOADINGS					
	Business	Emergency Services	Public Officials	Popular Interest Groups	Political Leaders	Media
Construction Firms	.74	.04	.10	.24	.05	-.02
Banks	.73	.00	-.07	.11	.16	.19
Real Estate Board	.68	-.05	.06	.33	.04	.18
Land Developers	.67	-.11	.24	.35	-.02	.05
Major Industries	.66	.36	.14	-.06	.20	.17
Leading Merchants	.63	.39	.5	-.11	.27	.17
Fire Department	.08	.73	.36	.01	.04	.13
Police Department	.08	.70	.39	-.02	.07	.18
Red Cross	.12	.69	-.02	.16	.14	.12
Civil Defense Director	-.05	.68	.00	.30	-.01	.10
City Council	.11	.03	.76	-.04	.16	.16
Mayor	.04	.15	.68	-.07	.19	.16
Public Works Dept.	.06	.35	.68	.26	-.07	.04
City Planning Dept.	.19	.07	.67	.29	-.06	.12
People in Risk Areas	.21	.34	.04	.59	.13	.08
Homeowners' Assoc.	.29	.12	.25	.56	.07	.09
Conservation Groups	.08	-.03	.23	.56	.34	.16
Farmers	.24	.20	-.23	.52	.14	-.01
Dem. Party Leaders	.18	.11	.11	.18	.87	.12
Rep. Party Leaders	.20	.10	.08	.21	.86	.12
Newspapers	.16	.19	.18	.15	.09	.80
TV and Radio	.16	.25	.20	.12	.12	.77
Chamber of Commerce	.37	.13	.32	-.02	.18	.44
Construction Unions	.43	.29	.18	.26	.30	-.24

^a Computed from individual responses on regular contact with each of the 24 groups. Factor analysis is a principal component analysis with varimax rotation.

homeowners' associations. What seems to hold this cluster together is its components' proximity to the "grass roots." The remaining two clusters are very familiar ones, *political party leaders*, and the *mass media*.¹⁰

Since the contact measures refer primarily to the person being interviewed, the analysis of differential contact is more appropriately centered

¹⁰The Chamber of Commerce participates weakly in the mass media cluster, but also (and as weakly) in the business cluster. Perhaps it is too "public regarding" to be part of the business community, and too partisan toward business to be regarded as mass media

Regular Contact with Groups

around individuals. Accordingly, Table 7.12 presents a set of regressions in which the extent of contact that individual respondents have with all of the 24 groups and with each cluster of groups (as identified in Table 7.11) are regressed on selected individual and community variables. Standardized regression coefficients are displayed because the measures of contact are based on different numbers of groups or positions and have no direct substantive meaning that is easily interpretable.¹¹

Several patterns of interest appear among the findings displayed in Table 7.12. First, relatively modest amounts of variation in contact levels can be explained by the independent variables in the model. The regression explains about 12% of the variance for the extent of contact in general (i.e., the average number of groups with which the respondent claims regular contact). The amounts of explained variance for contact with the business cluster (16%), emergency services (16%), and public officials (23%) are somewhat better.

The individual characteristics most consistently related to levels of contact are "position," education, and other local offices the respondent has held. Mayors and other chief executives are more likely to have contact with all group clusters except popular interests groups and, somewhat surprisingly, political leaders. This is by no means a startling finding, since it is to be expected that persons in this position would be the target for any group that depended on the decisions of city government for its functioning. Similarly, local legislators claim to have regular contact with all groups, and the public officials cluster (a group that includes the legislators). Appointed officials show a rather different patterning of contact, as indicated by positive coefficients (indicating greater contact) for general contact, emergency services, and the public official cluster, but negative coefficients (indicating lesser contact) with the popular interest groups and political leaders clusters. Apparently, the technical functions of appointed officials dominate their patterns of regular contact. Finally, respondents from the private sector have high levels of general contact and of contact with the business and public officials clusters, but lower levels of contact with the emergency services and popular interest groups clusters.

Age has a negative coefficient for all clusters except emergency services, indicating that older respondents are less likely to claim regular contact. The more highly educated a respondent, the more likely he or she is to claim regular general contact and regular contact with the business, public officials, and mass media clusters. The educational level of our respondents is quite high, the modal category being a college degree.

¹¹The measures of contact are based on the number of groups within a cluster with which the respondent claims regular contact. Since the clusters vary in number, unstandardized regression coefficients, a measure that is usually preferred, would not be comparable across regression equations.