4 Elite Support Levels for Federal Disaster Policy Alternatives

Public policy in the United States is a complicated web of regulations that issue from the myriad local, state, and federal authorities with their overlapping and sometimes conflicting territorial and substantive jurisdictions. Public policies concerning natural hazards are no exception. Natural hazards are territorial by definition, as they occur in specific places. Jurisdictions covering any one place include some form of local, state, and the federal government. In addition, there are special-purpose jurisdictions such as water conservation districts, flood-control districts, coastal zone management districts, and so on. All these jurisdictions share responsibility for public policy and divide authority over the ways of expressing such policies.

Since the 1930s, federal disaster policy has consisted mainly of building public works that tried to confine the flood waters and storm surges and of providing relief in the form of funds and material aid to victims and communities that had been struck by severe natural-hazard events. In recent years, the general drift of federal hazards policy has been away from traditional concepts of structural mitigation and relief and rehabilitation and toward mitigating the hazard risk before disaster strikes, with the emphasis on so-called nonstructural measures. To be sure, the new emphasis has been accompanied by a much expanded relief and rehabilitation policy (as set

forth in The Disaster Relief Act of 1974, PL 93-288). PL 93-288 was primarily an effort to consolidate and rationalize existing relief and rehabilitation policies. Other recent legislation marked out fundamentally new policy directions. The NFIP, the Earthquake Hazards Reduction Act of 1977, and the Coastal Zone Management program are prominent examples of the new policy trends.

There are important differences between a hazards policy emphasizing relief and rehabilitation and one emphasizing risk mitigation. Perhaps the most crucial difference is in the roles states and local communities are expected to play. Under hazards policies emphasizing postdisaster relief or structural mitigation programs, community laws do not need to be changed, nor are local government agencies changed significantly. Furthermore, the local presence of federal agencies is brief.

The new policies emphasizing nonstructural hazard-risk mitigation, in contrast, demand a much more active involvement of the states and, especially, the local communities, particularly when they depend on regulating land use through special zoning regulations and changing building codes and standards and all other regulations governing where and how construction and development can take place. *Disaster Preparedness: Report to Congress* (Office of Emergency Preparedness, 1972) emphasized, "this type of regulation is constitutionally within the powers of the States and of counties and municipalities as delegated to them by the States."

The necessity for local implementation and enforcement of nonstructural mitigations provides the rationale for the topics to be discussed in this chapter. There are, of course, degrees of cooperation: A local community may go through the motions but not adhere to the spirit of such policies as well as simply refuse to enact the necessary legislation or to enforce it when enacted. The concern of this chapter is to estimate levels of support (or lack of it) for alternative disaster-mitigation policies.

In this connection, it is useful to distinguish between global policies and specific programs. A global policy is a statement about the general principles that should be followed in formulating the laws and regulations that govern a particular area. A specific program is composed of the specific steps that a government plans to take implementing the global policy. In this chapter, we will be concerned mainly with global policy; later chapters will consider specific programs. The global policies are the policy alternatives that are or might be currently considered as guiding principles for the federal government. Each of the specific policies have been enunciated and advocated by important segments of our society. In that sense, each may be a contender for the set of ruling guides for our national posture toward natural hazards and their management.

MEASURING SUPPORT FOR GLOBAL POLICY ALTERNATIVES

The central measures with which this chapter will be concerned derive from elite responses to a five-question sequence posed near the middle of the interview (see Appendix A, p. 296). For convenience, we refer to this as the disaster philosophy sequence. The introduction to the sequence states:

> Now, I would like to ask you about what you think the federal government *should* do in regard to natural hazards. Of course, almost everybody agrees on some things—for example, that warning systems should be accurate and timely, and that all government agencies should do everything they can to alleviate suffering in the *immediate* aftermath of a disaster. But on other issues, there is quite a bit of disagreement.

Let us note two points in advance. First, as the introduction makes clear, the questions refer to *federal* hazards policy, not to the policies of communities or states. Second, the questions are posed as independent agree-disagree items, and it is therefore possible for respondents to agree (or disagree) with them in any combination. In other words, the global approaches are not posed as mutually exclusive options among which respondents must choose the one or two most attractive.

The disaster philosophy sequence asks respondents whether they agree strongly, agree somewhat, disagree somewhat, disagree strongly, or don't know, with descriptions of the free-market, structural mitigation, nonstructural mitigation, compulsory insurance, and postdisaster relief positions (see Appendix A, pp. 296-300).

Overall Results

The responses to this part of the survey are given in Table 4.1, first for the total sample, then separately for state and local respondents. Of the five options presented, the free-market viewpoint turns out to be the *least* popular. (Nonetheless, slightly more than a third of the respondents (35.7%) agreed strongly or somewhat with this approach.) So among these state and local political influentials, the idea that the federal government should just stay out of the hazards area altogether is rejected by a sizeable majority.

The most popular global approach is the structural mitigation position, which enjoys the support of slightly more than 70% of our respondents. The very serious reservations about this approach expressed by planners, environmentalists, and certain private-interest groups such as the League of

TABLE 4.1

Elite Support for Alternative Policy Approaches to the Management of Natural Hazards Risk: Total, State, and Local Samples

		Total		State		Local	
Free Market Position[a]		%		%		%	
Agree Strongly		12		9		13	
Agree Somewhat		24		27		23	
	% Agree		36		36		36
Disagree Somewhat		34		36		24	
Disagree Strongly		30		29		30	
	% Disagree		64		65		54
	100% =	(2277)[b]		(456)		(1821)	
Structural Mitigation Position							
Agree Strongly		29		23		30	
Agree Somewhat		42		46		41	
	% Agree		71		69		71
Disagree Somewhat		19		20		19	
Disagree Strongly		10		12		10	
	% Disagree		29		32		29
	100% =	(2199)		(434)		(1765)	
Post-Disaster Relief Position							
Agree Strongly		21		18		22	
Agree Somewhat		34		35		33	
	% Agree		55		53		55
Disagree Somewhat		23		24		23	
Disagree Strongly		22		22		22	
	% Disagree		45		46		45
	100% =	(2226)		(444)		(1782)	
Non-Structural Mitigation Position							
Agree Strongly		18		12		20	
Agree Somewhat		28		23		30	
	% Agree		46		35		50
Disagree Somewhat		23		26		22	
Disagree Strongly		30		38		28	
	% Disagree		53		64		50
	100% =	(2222)		(442)		(1780)	
Compulsory Insurance Position							
Agree Strongly		12		15		11	
Agree Somewhat		29		30		29	
	% Agree		41		45		40
Disagree Somewhat		29		26		29	
Disagree Strongly		30		28		31	
	% Disagree		59		54		60
	100% =	(2218)		(446)		(1772)	
Disaster Traditionalism Index[c]		%		%		%	
Strongly Traditional	2	7		5		7	
	3	16		14		16	
	4	26		25		26	
	5	28		27		28	
	6	15		18		14	
	7	6		7		6	
Strongly Non-Traditional	8	3		3		2	
	100% =	(2153)		(424)		(1729)	
	Average ($\bar{X}$) =	4.57		4.73		4.53	
	σ =	1.39		1.41		1.38	

TABLE 4.1 (*Continued*)

Disaster Innovation Index[d]		Total	State	Local
Strongly Innovative	2	5	5	5
	3	8	9	8
	4	16	13	17
	5	22	18	23
	6	20	20	20
	7	14	17	13
Strongly Non-Innovative	8	14	17	13
100% =		(2164)	(431)	(1733)
Average ($\bar{X}$) =		5.42	5.58	5.39
σ =		1.66	1.75	1.64

[a]For question wording, see text.

[b]Missing data are omitted on an item-by-item basis.

[c]Sum of responses to "structural mitigation" and "post-disaster relief."

[d]Sum of responses to "non-structural mitigation" and "compulsory insurance."

Women Voters apparently have not penetrated very deeply into the thinking of our sample.

The only other approach that enjoys majority support is the postdisaster relief position. In contrast, small majorities *reject* both the nonstructural mitigation and the compulsory insurance approaches.[1] Overall, 53% of the respondents *disagreed*, strongly or somewhat, with the nonstructural mitigation viewpoint. About 59% *disagreed*, strongly or somewhat, with the compulsory insurance viewpoint. Among state respondents, rejection of the nonstructural mitigation viewpoint rises to 64.5%; the difference between state and local respondents is statistically significant.

These results amount to an affirmation of traditional federal hazards-management policies and a rejection, at least in part, of recent policy emphasis. This does not imply that state and local influentials are going to actively oppose such policy innovations as the flood insurance, seismic safety, or coastal zone management programs or that they will insist that

[1]Additional evidence, discussed later, makes it apparent that support for land-use and building code approaches to hazard-risk reduction is much greater when considered as a program rather than as global policy. Thus, the NFIP enjoys strong support among all elite groups

these policies be abandoned in favor of the more traditional approaches they tend to favor. The data suggest only that there is some *potential* for opposition to such policies at the state and local level.

Two indexes were created from four of the global approach questions to summarize the traditional and nontraditional policies. A disaster traditionalism index was formed by summing responses to the structural mitigation and postdisaster relief items, and a disaster innovation index was formed by summing responses to the nonstructural mitigation and compulsory hazards insurance items. Responses to each question were given numerical weights from 1 (strongly agree) to 4 (strongly disagree); scores on the two indices vary from 2 to 8. Table 4.1 also presents frequency distributions and descriptive statistics for these two measures. The average disaster traditionalism score, 4.57, is slightly below the scale midpoint, reflecting a skew in the data toward the strongly traditional end of the scale. Likewise, the average disaster innovation score is 5.42, reflecting a skew toward the strongly noninnovative end of the scale.

As one would expect, the traditionalism and innovation indexes are slightly negatively correlated ($r = -.219$; $p = .000$; $N = 2075$). It may seem superfluous to report that traditionalists tend to be noninnovators and vice versa, as this negative correlation shows, but these items were *not* presented as mutually exclusive options. This negative correlation, therefore, does sustain an important substantive point, that our respondents tend to understand that some approaches to hazards management are inconsistent with others and respond to the questions accordingly. It must also be acknowledged that this tendency, while statistically significant, is weak. The weak separation between these two broad policy positions means that there are many who endorse both positions, apparently believing that we might profitably pursue some mix of both policies. Or it may mean that this is an arc of such low salience (as suggested in Chapter 3) that the inherent contradictions of the two have not yet been made apparent to many persons.

The data clearly do not show strong state and local opposition to innovative approaches to natural hazards risk, or do they show much rampant enthusiasm. The majority viewpoint is "mitigate with structures then rehabilitate after disaster strikes." What our respondents are probably saying therefore, is that existing federal hazards policy, as they understand it, adequate in their eyes.

THE MUTABILITY OF DISASTER POLICY PREFERENCE

In referring to the previous questions as *disaster philosophies*, we have probably imparted more finality to the responses than they deserve. With the exception of elites who are directly involved with natural hazards on a daily

basis by virtue of their occupations, we doubt that many of our respondents would have firm, consistent, and well-articulated opinions on most hazard-management issues. That the correlation between disaster traditionalism and innovation is approximately −.2 is strong evidence for this view. For many of our respondents, the attitudes displayed in Table 4.1 are probably not sharply crystallized, implying that elite attitudes more favorable to hazard management innovations might well be secured if a persuasive case were made. Are substantial shifts in elite opinions on these issues possible or likely, especially shifts toward support for the innovative approaches?

To address this issue, we posed a follow-up question after each item in the disaster philosophy series (see Appendix A, pp. 296–300). If the respondent agreed, strongly or somewhat, to a given viewpoint, we asked

> Suppose you became convinced of the opposite viewpoint and made a public speech here in (STATE/LPJ) arguing that the Federal Government should *not* [*emphasize the viewpoint in question*]. Would making such a speech tend to help or hurt your chances in your present position, or would it be irrelevant?

For respondents who disagreed to a viewpoint, we asked them to assess the effects on their "chances" of a public change of heart to the opposite (or agree) position.

The reasoning for these questions was based on what is known about the social bases of political philosophies. By and large, persons' views tend to become consistent with those of others in their significant environment. Our purpose was to determine whether or not significant others would press for conformity. Thus, the responses are indirect evidence of mutability of views, because they measure the amount of mutability that is affected by social pressures.

The results of the follow-up questions are shown in Table 4.2. The most striking pattern is that, in every case, the majority assessment is that a public change of position would be irrelevant to their chances, which strongly implies that state and local influentials believe themselves to be relatively free to alter their thinking on hazards-management issues. Substantially more than 50% of the sample, it appears, could shift to an exact opposite position without suffering. With this much latitude, proinnovation majorities may well prove somewhat easier to attain than the previous data suggest.

It is also obvious that these findings are entirely consistent with Chapter 3 data showing that hazards issues are not especially salient at state and local levels. The opinion of the majority of our respondents is that they could take more or less any viewpoint they wished on these topics without serious

TABLE 4.2

Expected "Effects" of a Public Change of Attitude Regarding Hazard-Management Policies on Elites' "Chances" in Their Present Positions: Total Sample

Respondent Agrees With:	Free-Market Position	Structural Mitigation	Post-Disaster Relief	Non-Structural Mitigation	Compulsory Insurance
Public Disagreement on the Issue Would:	%	%	%	%	%
Help Chances	14	8	5	10	9
Hurt Chances	16	28	34	25	16
Be Irrelevant	70	64	61	65	75
100% =	(777)	(1496)	(1162)	(994)	(857)

Respondent Disagrees With:	Free-Market Position	Structural Mitigation	Post-Disaster Relief	Non-Structural Mitigation	Compulsory Insurance
Public Agreement on the Issue Would:	%	%	%	%	%
Help Chances	5	7	12	4	4
Hurt Chances	39	28	21	43	32
Be Irrelevant	56	65	67	52	64
100% =	(1419)	(614)	(965)	(1137)	(1258)

consequence to their positions. That the people to whom these elites are ultimately responsible (voters, constituents, superiors, etc.) do not themselves care very much about these issues may well account for this opinion.

Interestingly, for the minority who judge that a change of heart would *not* be irrelevant, the tendency is to perceive that such a change would hurt rather than help. There are at least two possible explanations: elites may either (a) stake out positions on these topics on the basis of what they think significant groups and/or the public will find acceptable (an *opportunism* hypothesis); or (*b*) believe their constituents tend to share their own views on such issues. Either explanation raises in part the question of public versus elite opinion on hazard-management issues and of the relationship between the two. This question is addressed through our California survey (see Chapter 5). Either explanation also bears on the question of the influences exerted by powerful groups (see Chapters 7 and 8).

The tendency for a public change of position to be considered harmful rather than helpful varies. The *most* hurtful attitude change indicated in Table 4.2 is switching from opposition to nonstructural mitigation measures to support. The percentage of respondents reporting that a switch to support of compulsory hazards insurance would be detrimental to their careers is also relatively high (32.1%). The freedom to change stands on hazards issues thus is apparently most restricted among present opponents of innovative hazard-management techniques. Another interpretation of these data is that present opposition to these policies is probably somewhat firmer than present support.

The cost of switching to support of innovation warrants a more detailed examination. Accordingly, Table 4.3 shows for present *opponents* of nonstructural mitigations and compulsory insurance the proportions who said that a public change of heart would hurt their chances, separately by elite position.

To switch in favor of nonstructural mitigation at the state level, positions showing "hurtful" percentages substantially above the average include (for non-structural mitigations) all categories of state legislators, planners, and representatives of the real estate and homebuilder industries. For compulsory hazards insurance, disproportionately high percentages are registered for most state legislators (Democratic leaders excepted) and for realtors. Thus, opposition to these measures among state legislators and real estate and development interests appears to be rather more solid than elsewhere. These, in any case, are the state elites most likely to feel they would be hurt by changing their minds.

Among local community opponents of nonstructural mitigation, an absolute majority of each of the following groups said their chances would be hurt if they switched to support: executives (mayors and city managers),

TABLE 4.3

Perceived Effects of Public Change of Position on the "Chances" of Elites Who Are Presently Opposed to Hazard Management Innovations by Political Position

	Percent "Hurt" by Position Change on:			
	Non-Structural Mitigation		Compulsory Insurance	
State-Level Positions	%	(N)	%	(N)
Governor	36.4	(11)[a]	36.4	(11)
Republican Leaders	69.0	(29)	66.7	(24)
Democratic Leaders	55.0	(20)	35.0	(20)
State Legislature with Disaster Response	58.1	(43)	45.5	(44)
Civil Defense	18.8	(16)	18.2	(11)
State Planners	81.8	(11)	--[b]	(7)
State Geologist	30.8	(13)	--[b]	(6)
Community Affairs Director	--[b]	(7)	30.0	(10)
Water Resources Director	--[b]	(5)	--[b]	(5)
Real Estate	73.3	(15)	83.3	(12)
Homebuilders	68.8	(16)	20.0	(15)
Insurance	0.0	(14)	6.3	(16)
Construction Union	40.0	(15)	20.0	(15)
Bankers	31.3	(16)	27.3	(11)
Editors	13.3	(15)	7.1	(14)
State FIA Coordinators	--[b]	(9)	--[b]	(4)
Farmer's Home Administration	--[b]	(7)	--[b]	(3)
State SBA Coordinators	28.6	(14)	--[b]	(5)
Total, State	47.5	(276)	34.3	(233)
Local-Level Positions				
Executive	57.4	(68)	36.1	(72)
Legislators	51.3	(156)	39.6	(202)
Planning and Zoning	45.6	(57)	21.9	(64)
Police and Fire	20.6	(68)	26.2	(103)
Public Works	27.3	(33)	13.9	(36)
Civil Defense	38.5	(39)	25.0	(44)
Chamber of Commerce	50.0	(52)	39.3	(56)
Red Cross	34.1	(41)	45.1	(51)
Taxpayer's Association	54.5	(11)	52.9	(17)
League of Women Voters	--[b]	(9)	41.9	(31)
Building Trade Council	25.9	(27)	14.7	(34)
Banking	31.8	(44)	23.2	(56)
Real Estate	52.4	(63)	55.1	(49)
Editors	17.6	(51)	18.3	(60)
Homebuilders	58.7	(46)	26.8	(41)
TV	26.9	(26)	11.1	(36)
Regional Alliance	82.4	(17)	25.0	(20)
Flood Control District	50.0	(22)	25.0	(20)
Farmer's Home	29.0	(31)	39.4	(33)
Total, Local	42.3	(861)	31.6	(1025)

[a]Thus, there are 11 governors in the sample who disagreed with the non-structural mitigation position. Of these 11, 36.4% said their chances would be hurt if they switched to the opposite (or pro-nonstructural mitigation) position, etc.

[b]N Less than 10

legislators (e.g., city councilmen), the Chamber of Commerce, the taxpayer's association, realtors, homebuilders, the Regional Alliance of Local Government, and the local flood control district official. The predominance on this list of elected officials and representatives of real estate, development, and business interests is striking. If it is true that those who would be hurt by a change of position make the most aggressive and uncompromising opponents, then local opposition to hazards-management innovations might well prove strenuous indeed.

POLICY ENDORSEMENTS OF ELITE POSITIONS

The state and local elites interviewed come from a variety of positions. They present different interests that might be reflected in correspondingly varied levels of approval for the global disaster policies. Tables 4.4 and 4.5 show that such is indeed the case. Elite categories have been rank-ordered (separately in each column) from highest to lowest levels of approval. Recall that a low number means more approval.

The Free Marketeers

A sizeable minority of our sample, about one-third, believes that the best federal hazards policy is no policy at all. This is a variant on the conservative theme that that government is best that governs least. It is also a theme one hears with increasing frequency in connection with natural hazards policy. Among our sample of influentials, who tends to share this view?

At the state level, there are three elite groups with a majority or more who agree with the free-market approach: the Farmer's Home Administration, homebuilders, and realtors. Bankers and Republican legislators are also relatively (but not significantly) high on the list. The appearance of the Farmer's Home Administration on this listing is the only apparent anomaly, otherwise, these data suggest rather clearly that the free-market approach to natural hazards is concentrated primarily in the real-estate and development sectors.

At the local level, no group shows a majority in agreement with the free-market viewpoint; groups showing significantly greater approval than the local average include the Farmer's Home Administration, the local Flood Control District official, realtors, bankers, and the Taxpayer's Association.

Among the state respondents, *opponents* of the free-market approach seem rather more impressive politically than the supporters. In fact, there are six state-level groups where three-quarters or more *reject* the free-market

TABLE 4.4

Disaster Policies Approval by Elite Position: States

	"Free Market" Policy			"Traditionalism" Policy			"Innovation" Policy		
	Group	$\bar{X}$	n	Group	$\bar{X}$	n	Group	$\bar{X}$	n
TOTAL	---	2.85	(456)	---	4.73	(424)	---	5.58	(431)
Rank-Order									
1 (Highest Approval)	FHmA	2.41[a]	(17)	Homebuild	3.78[a]	(18)	FIA	4.11[a]	(19)
2	Homebuild	2.47[a]	(19)	Bankers	4.00[a]	(18)	FHmA	4.18[a]	(17)
3	Realtor	2.50[a]	(20)	Cons. Union	4.10[a]	(20)	Water Res.	4.47[a]	(17)
4	Water Res.	2.56	(18)	Realtors	4.35[a]	(20)	Insur.	4.65[a]	(34)
5	Bankers	2.61	(18)	Governor	4.56	(18)	SBA	4.73[a]	(22)
6	Repub	2.70	(37)	Civ. Def.	4.56	(16)	Planners	5.33	(18)
7	Dis. Leg.	2.71	(70)	Dis. Leg.	4.59	(64)	Com. Aff	5.36	(14)
8	Geolog.	2 75	(20)	Editors	4.62	(24)	Geolog	5.56	(18)
9	FIA	2.80	(20)	Repub.	4.64	(33)	Democ.	5.72	(32)
10	Insur.	2.86	(37)	Insur.	4.76	(34)	Civ. Def.	5.81	(21)
11	SBA	2.91	(22)	FHmA	4.82	(17)	Dis. Leg.	5.83	(65)
12	Civ. Def.	2.95	(21)	SBA	4.86	(22)	Governor	5.95	(19)
13	Democ.	3.03	(35)	Democ.	4.87	(31)	Editors	5.96	(26)
14	Cons. Union	3.10	(20)	Geolog.	4.90	(20)	Cons. Union	6.06[b]	(18)
15	Editors	3.19[b]	(27)	Water Res.	5.11	(18)	Realtors	6.25[b]	(20)
16	Planners	3.21[b]	(19)	Com. Aff.	5 15	(13)	Repub.	6 28[b]	(36)
17	Com. Aff.	3.35[b]	(17)	Planners	5.44[b]	(18)	Bankers	6.56[b]	(16)
18 (Lowest Approval)	Governor	3.37[b]	(19)	FIA	6.35[b]	(20)	Homebuild	6.74[b]	(19)

[a] Group mean is significantly lower than overall state mean (t-test, one-tailed, $\alpha = .10$).

[b] Group mean is significantly higher than overall state mean (t-test, one-tailed, $\alpha = .10$)

viewpoint: Democratic leaders, construction unionists, newspaper editors, state planners, community affairs directors, and the governors. (Means for the last four groups are significantly above the overall state average.) The anti-free-market forces at the local level, however, would not appear to command nearly as much political clout, only Civil Defense and local Red Cross executives are significantly more opposed than average.

Finally, the spread in opinion between most- and least-favorable groups is higher in the states (.96 scale points) than in the local communities (.50 scale points), which implies that opinions of the free-market concept are more polarized among state elites than among locals.

TABLE 4.5

Disaster Policies Approval by Elite Position: Local Communities

	"Free Market" Policy			"Traditionalism" Policy			"Innovation" Policy		
	Group	$\bar{X}$	n	Group	$\bar{X}$	n	Group	$\bar{X}$	n
TOTAL	---	2.82	(1821)	---	4.53	(1729)	---	5.39	(1733)
Rank-Order									
1 (Highest Approval)	Flood Cont.	2.55[a]	(42)	Homebuild	4.05[a]	(59)	RALG	4.33[a]	(61)
2	Realtors	2.55[a]	(83)	Realtors	4.07[a]	(80)	LWV	4.39[a]	(59)
3	Tax	2.58	(24)	C of C	4.15[a]	(84)	FHmA	4.66[a]	(82)
4	FHmA	2.60[a]	(84)	Legis.	4.28[a]	(336)	ANRC	5.10[a]	(88)
5	Bankers	2.63[a]	(90)	BTC	4.32	(53)	Civ. Def.	5.19	(85)
6	RALG	2.65	(62)	ANRC	4.34	(86)	Planners	5.19	(122)
7	Homebuild	2.69	(62)	Pol./Fire	4.39	(158)	Pol./Fire	5.24	(164)
8	C of C	2.72	(87)	Civ. Def	4.48	(85)	Flood Cont.	5.26	(42)
9	Pub. Wks.	2.75	(67)	Exec.	4.49	(112)	BTC	5.34	(53)
10	TV	2.77	(53)	Editors	4.50	(90)	Pub. Wks.	5.38	(65)
11	Legis.	2.82	(349)	Pub. Wks.	4.54	(65)	Editors	5.49	(86)
12	Editors	2.87	(95)	Tax	4.55	(22)	Legis.	5.50	(327)
13	Exec.	2.91	(123)	TV	4.59	(51)	C of C	5.72[b]	(86)
14	BTC	2.91	(56)	Flood Cont.	4.78	(40)	Bankers	2.73[b]	(86)
15	Pol./Fire	2.91	(171)	Bankers	4.83[b]	(83)	Exec.	5.79[b]	(116)
16	Planning	2.95	(128)	Planners	4.96[b]	(123)	TV	5.82[b]	(50)
17	LWV	2.98	(63)	FHmA	5.04[b]	(81)	Tax	4.86	(22)
18	Civ. Def.	3.03[b]	(89)	RALG	5.34[b]	(59)	Realtors	6.07[b]	(81)
19 (Lowest Approval)	ANRC	3.05[b]	(93)	LWV	5.60[b]	(62)	Homebuild	6.14[b]	(58)

[a]Group mean is significantly lower than overall local mean (t-test, one-tailed, $\alpha = .05$).

[b]Group mean is significantly higher than overall local mean (t-test, one-tailed, $\alpha = .05$).

The Traditionalists

By our definition, disaster traditionalists favor structural mitigations and postdisaster relief as the most appropriate federal policies; they constitute an absolute majority of the sample. Among state respondents, 14 of the 18 elite groups have majorities favoring the traditional approach; among local respondents, this is true of 16 of the 19 groups. Thus, outright opposition to these approaches is rare indeed.

At the state level, the most enthusiastic traditionalists include homebuilders, bankers, construction unionists, and realtors; at the local level, they include homebuilders, realtors, the Chamber of Commerce, and legislators. Support for traditional approaches tends to be concentrated among real estate and development interests. There is nothing very surprising in these results.

The least enthusiasm for traditional approaches at the state level comes from state planners and the state Flood Insurance Administration official; all these are elites who are directly involved in land-use, floodplain, and coastal zone management issues. At the local level, the most significant opposition to disaster traditionalism comes from two organizations that have lobbied for more innovative approaches to the management of hazards risk: the League of Women Voters and the Regional Alliance of Local Governments. Bankers, planners, and the Farmer's Home Administration also show relatively little enthusiasm for traditional approaches.

The Innovators

As might be expected, groups that do not support traditionalism tend to support innovation, and vice versa. As defined here, to support *innovation* means to support nonstructural mitigation measures and compulsory hazards insurance; thus defined, innovators constitute a definite minority of the overall sample. At the state level, only 5 of 18 groups have majorities supporting these innovations; at the local level, there is majority support in only 3 of 19 groups. Also, the spread between those most in favor of this approach and those least in favor is greater for disaster innovation than for the other two approaches; this is true of both state and local results. Thus, elite opinion is more polarized regarding these techniques than any other.

The five state elite groups with proinnovative majorities are Federal Insurance Administration representatives, Farmer's Home Administration representatives, state water resources directors, the insurance industry, and Small Business Administration officials. It is significant that three of the five groups on this list are state representatives of federal agencies, each having important hazards-related responsibilities. This implies that the greatest support for these innovations comes from what are essentially federal officials working in the states and not, by and large, from indigenous state elites. Much the same is apparently true in the local communities as well: The four local groups most in support of innovation are the Regional Alliance of Local Governments, the League of Women Voters, the Farmer's Home Administration, and the Red Cross.

As in all previous cases, real estate and development interests are least in

favor of innovation in hazards policy. At the state level, the strongest opposition to disaster innovation is registered by construction unions, realtors, Republican leaders in the state legislature, bankers, and homebuilders; at the local level, the opponents include the Chamber of Commerce, bankers, local executives, local television station managers, the taxpayer's association, realtors, and homebuilders. Thus, opposition to hazard-management innovations appears to be concentrated among some of the most powerful and influential sectors of the local community.

Finally, five of the seven local groups most strongly opposed to these innovations had a majority of respondents who said their chances would be hurt were they to switch their position on nonstructural mitigation. These potentially aggressive and uncompromising opponents include the taxpayer's association, realtors, homebuilders, the Chamber of Commerce, and local mayors and city managers—a formidable, if not invincible, coalition.

DETERMINANTS OF POLICY APPROVAL BY INDIVIDUALS AT THE LOCAL LEVEL

The opinions of community influentials regarding the management of hazards risk are affected by many factors other than their formal positions. Some of these factors, for example, the local balance of power on natural hazards issues, prove to be rather complex and are therefore discussed in later chapters; some of the less complex factors are considered here.

We can reasonably speculate that respondents' opinions about how to deal with the natural-hazard problem may be conditioned, in addition to their careers, by their personal experiences with natural disasters, the seriousness with which they regard hazard problems, their general political ideology, other biographical or personal characteristics such as education and length of residence in the community, and the disaster experiences and other relevant characteristics of the community in which the respondent lives. To examine the effects of these factors on respondents' views, the three disaster philosophy measures have been regressed on these several variables. The results are shown in Table 4.6.

The proportion of variance explained (R^2) by these variables is uniformly low (although in all cases significantly above zero), ranging from 10.3% (innovation) to 12.4% (free market). Thus, the largest share of the variance in disaster philosophies is random with respect to the variables analyzed here. This again suggests that the views of local community influentials are not, by and large, sharply crystallized with regard to hazards issues.

In general, the regression results for the position dummies reproduce the zero-order findings of Table 4.5, at least in regard to sign and approximate

TABLE 4.6

Regression of Disaster Policy Endorsement on Selected Characteristics of Local Elites

Independent Variables	"Free Market" b[a]	se[b]	"Traditionalism" b	se	"Innovation" b	se
1. Position Dummies[c]						
RALG	-.33**	.15	.71**	.20	-1.05**	.24
LWV	-.11	.14	.94**	.20	-.90**	.24
FHmA	-.15	.13	.54**	.18	-.98**	.22
ANRC	.23*	.12	-.09	.17	-.40**	.20
Civil Defense	.25**	.12	.20	.17	-.29	.20
Planners	.02	.11	.48**	.15	-.25	.18
Police/Fire	.12	.09	.16	.13	-.21	.16
Flood Control	-.31*	.17	.28	.23	-.24	.28
BTC	-.05	.15	.03	.21	-.03	.25
Public Works	-.07	.14	.12	.19	-.19	.23
Editors	.04	.12	.03	.16	.01	.20
Chamber of Commerce	-.01	.13	-.23	.17	.12	.21
Bankers	-.07	.12	.49**	.17	.16	.20
Executives	.02	.11	.06	.15	.25	.18
TV	-.10	.15	.17	.21	.16	.26
Taxpayers	-.16	.22	.35	.30	.18	.36
Realtors	-.19	.13	-.25	.18	.49**	.21
Homebuilders	-.11	.14	-.30	.20	.56**	.24
2. Respondent's Disaster Experience[d]						
Tornado	.13**	.05	.19**	.07	-.05	.08
Flood	-.05	.05	.04	.07	.01	.08
Hurricane	-.09*	.05	-.16**	.07	.06	.09
Earthquake	.07	.06	.07	.08	-.01	.09
3. Respondent's Rating of Disaster Seriousness[e]						
Tornado	.01	.02	-.01	.02	-.02	.03
Hurricane	.03	.02	.06**	.02	.03	.03
Flood	.04**	.01	-.00	.02	-.02	.02
Earthquake	.04	.03	.03	.04	.01	.08
4. Respondent's Political Ideology[f]						
Republican	-.03	.06	-.03	.08	-.15	.09
Econ. Lib.	.16**	.04	.02	.06	-.05	.07
Social Lib.	.12**	.03	.01	.05	.03	.06
Pro-gov't Regs.	.04	.04	.21**	.05	-.34**	.06
"Growth"[g]	.01*	.01	.00	.01	-.01	.01
5. Respondent's Personal Characteristics						
Education	.06	.05	.22**	.07	.18*	.08
Length of Residence	.00	.00	-.001**	2.0	-.02	2.4
6. Community Disaster Experience						
Respondent Variables[h]						
Flood	.11*	.06	-.06	.09	.14	.11
Tornado	-.13	.08	-.15	.12	-.01	.14

(Continued)

TABLE 4.6 (*Continued*)

Independent Variables	"Free Market" b[a]	"Free Market" se[b]	"Traditionalism" b	"Traditionalism" se	"Innovation" b	"Innovation" se
Earthquake	-.19	.22	-.20	.30	.01	.36
Hurricane	-.05	.08	.15	.12	.10	.14
CFAP Variables[i]						
Flood (x 10^3)	.22	.33	-.14	.45	.46	.54
Hurricane (x 10^3)	.04	.07	.01	.10	.10	.12
Tornado (x 10^3)	-.14	.27	.34	.38	.28	.45
7. Community Characteristics[j]						
1970 Population (x 10^{-7})	.79*	.47	.27	.65	-.44	.78
Growth (60-70) (x 10^3)	.43	1.3	3.4*	1.8	-1.2	2.2
TYPE[k]	.19**	.07	-.02	.10	-.12	.12
Median Income (x 10^3)	2.45	1.79	.00	.02	2.4	3.0
Constant	1.67		3.52		5.41	
R^2	.124**		.121**		.103**	
N	1644		1644		1644	

[a]Unstandardized regression coefficients.

[b]Standard error of the estimate **denotes statistically significant at alpha = .05 (t-test, two-tailed), and *at alpha = .10.

[c]Legislators are the omitted category. Thus, the coefficients for the position dummies express the difference between the positional mean and the legislators' mean, net of all other variables in the equation.

[d]"Have you ever personally experienced a (DISASTER TYPE) either here or elsewhere?" (1 = yes; 2 = no.)

[e]See Chapter 3 for a description of these items. (0 = no problem at all; 10 = a most serious problem.)

[f]1 = Republican; 0 = all others For Econ. Lib. and Pro-gov't Regs, 1 = very conservative; 4 = very liberal.

[g]Respondent's rating of the seriousness of the problem of "too little economic growth" (see f, above).

[h]"Thinking back over the last ten years, has (LOCAL COMMUNITY) experienced a (DISASTER TYPE) that you would consider to be a serious event?" (1 = yes; 2 = no.)

[i]See Wright et al., 1979, for a description of these data. Variables employed here are based on ANRC chapter report data from 1960-1970. For each disaster type, indices are constructed by taking twice the number of houses destroyed in the LPJ in the decade and adding that to the number of houses suffering major damage.

[j]As measured in the 1970 Census.

[k]This variable expresses whether the sample unit in question is a county unit (= 0) or an incorporated city unit (= 1).

magnitude.[2] The reference point for Table 4.6 is the average score for local legislators. We find two local community groups who are significantly more attracted to the free-market outlook than are legislators: These are the Regional Alliance of Local Governments and the local Flood Control District official. Likewise, there are two local groups who are significantly more opposed to this approach than legislators, the Civil Defense and the Red Cross, both typically most involved with the wreckage and destruction that follow natural disaster.

Regarding traditionalism, all but four of the coefficients are positive (implying *less traditional* outlooks than the omitted category, legislators), which means only that legislators in the local communities tend to strongly favor the traditional approach. Groups significantly less traditional than legislators include the Regional Alliance of Local Governments, the League of Women Voters, the Farmer's Home administration, planners, and bankers. No group is significantly *more* traditional than legislators; groups at least somewhat more traditional, however, include the Chamber of Commerce, realtors, and homebuilders, in that order.

Respondents' personal disaster experiences are not, in general, sharply related to their attitudes on hazards management: eight of the 12 coefficients are statistically insignificant Respondents who have personally experienced a tornado are significantly *more* attracted to the free-market outlook and to the traditional viewpoint, whereas respondents who have personally experienced a hurricane show an exact opposite pattern. Neither flood nor earthquake experience have significant effects on any of the three measures

Respondents' ratings of the seriousness of the four hazards problems in their communities are not strongly related to their hazard-management outlooks. Ten of the 12 coefficients are insignificant. The two exceptions· As the perceived seriousness of the flood problem increases, support for the free-market viewpoint decreases; as the seriousness of hurricanes increases, support for traditionalism decreases

Some of the strongest relationships involve respondents' political ideologies Consistent with out earlier depiction of the free market position as a traditionally conservative outlook, support for the view declines as either economic or social liberalism increases. (The correlation between the two liberalism measures is .40.) Neither economic nor social liberalism is significantly related to either traditionalism or innovation in hazards management. Support for innovation, is, however, strongly related to respondents' liberalism on "issues that involve government regulations, such as

[2]Levels of statistical significance vary somewhat because in Table 4.5 the reference point is the overall community average, whereas in the regression, the reference point - the omitted category—is the average score for local legislators

regulating the stock market, air transportation, prices on natural gas, etc." Respondents favoring these kinds of governmental regulations in general also tend to favor hazard-management innovations and to oppose traditional approaches. Thus, elites' opinions on hazards management issues are derived in part from their more general ideological dispositions (versus the alternative possibility of ad hoc or pragmatic considerations), and this may well have implications for the topic of attitude change introduced earlier.

Education is related to both traditionalism and innovation; however, both coefficients are positive—as education increases, support for traditionalism *and* innovation goes down. Length of residence is related only to traditionalism; the longer one has resided in the community, the more traditional one is.

The disaster experiences of the community of residence are, by and large, *not* related to the respondents' hazard-management outlooks. This is equally true whether the community experience is as reported by the respondent or as estimated from Red Cross chapter report data (see Wright *et al.*, 1979). The Red Cross variables express the total damage and destruction suffered by a community from natural disasters for 1960–1970, none of the coefficients is significant. Of the 12 coefficients for the *respondent variables*—respondents' assessments of whether the community had suffered a serious disaster in the previous 10 years—only 1 is significant. Respondents reporting a community flood experience are *more* attracted to the free-market view than other respondents. (These variables are discussed in Chapter 5.) There is a noteworthy pattern to the signs of the nonsignificant coefficients: Three of the four traditionalism coefficients are negative and three of the four innovation coefficients are positive. Thus, in general, community disaster experiences tend to *decrease* support for traditional approaches and *increase* support for innovative approaches, but this tendency is much too weak to produce significant effects.

Regarding other community characteristics, there are two results of note. First, respondents in larger cities are *less* attracted to the free-market viewpoint than are respondents from smaller cities and towns, coefficients for both 1970 population and TYPE, the variable expressing whether the sample unit is a county or a city, are significant and positive. Second, traditionalism is significantly related to the 1960–1970 growth rate of the community; the higher the growth rate, the *lower* the support for the traditional approach.

Overall, the regression is more remarkable for what it does *not* show than for what it does. Respondents' views on hazards management are related, at least in part, to their formal positions and to their political ideologies, but are largely unrelated (or at best weakly related) to all other variables contained in the analysis. This again reinforces our earlier conclusion that elite attitudes toward the management of natural hazards risk are not sharply crystallized or very well-structured, at least not by the variables considered here.

Summary

The explanatory power of the total set of individual characteristics and community characteristics was small, as indicated by the low R^2's for the regression equations. This means that most of the difference among individuals are idiosyncratic as far as these ways of classifying persons are concerned. Of course, there are several interpretations that fit the facts: First, we may simply have missed measuring some one or more critical individual characteristics, although we were careful to include many that have been useful in explaining other kinds of political beliefs. Second, given the low salience of natural hazards issues (see Chapter 3), respondents may not have thought deeply or at length on the issues involved and as a consequence answered our questions in an off-handed fashion. Under such circumstances, answers would tend to be less consistent one with the other and with other individual characteristics. For example, Republicans have to learn what Republicans stand for and, in the absence of discussion, might not manifest as much unanimity as on some other, more salient, issues.

Most likely, both explanations were at work. In any event, the end result is that as of 1977 strong cleavages of an identifiable sort did not exist on these issues.

RESULTS BY STATES AND LOCAL COMMUNITIES

There is a potentially important source of variation in elite hazard-management attitudes that is unrepresented in all analyses to this point, namely, variation from state to state and from community to community. We can ask, for example, which states and which local communities are most receptive, on average, to hazard management innovations. A related question is how the state-by-state and community-by-community variation can be explained.

Table 4.7 rank-orders the 20 states according to average (mean) scores on disaster traditionalism and innovation, based *only* on state-level respondents. The table thus shows those states within which state-level influentials are relatively more or less attracted to traditional or innovative approaches to the management of hazards risk. Table 4.8 presents equivalent data (on disaster innovation only) for the 100 KPS local communities.

From Table 4.7, we note that Oklahoma is *the most traditional and the*