

PUBLIC POLICY IN EMERGENCY MANAGEMENT

COURSE OUTLINE

Required Texts:

- (1) Natural Hazard Risk Assessment and Public Policy: Anticipating the Unexpected. William J. Petak and Arthur A. Atkisson, Springer-Verlag, New York, 1982.
- (2) Bureaucracy and Policy Implementation. Randall B. Ripley and G. A. Franklin, 1982.
- (3) Natural Hazards and Public Choice: The State and Local Politics of Hazard Mitigation. Peter H. Rossi, James D. Wright, Eleanor Weber-Burdin, Academic Press, New York, 1982.
- (4) General Accounting Office, "National Flood Insurance: Marginal Impact on Flood Plain Development--Administrative Improvements Needed." Washington, D.C., 1982.
- (5) General Accounting Office, "Federal Disaster Assistance: What Should the Policy Be?" Washington, D.C., 1980.
- (6) Earthquake Mitigation Policy: The Experience of Two States. Thomas E. Drabek, Alvin H. Mushkatel, and Thomas S. Kilijaneck, University of Colorado (IBS#6), Boulder, CO, 1983.

Recommended Readings:

- (1) "Jackson Flood 1979: Public Policy Disaster," Rutherford H. Platt, American Planning Association Journal (Spring 1982), pp. 219-231.
- (2) Integrated Emergency Management System (IEMS) documents; a series of issuances, beginning in September 1983. Available from State and Local Programs and Support at FEMA, Central or Regional Offices.
- (3) ICMA and FEMA "Organizing for Comprehensive Emergency Management." International City Managers Association, Washington, D.C.: 1980.
- (4) "Emergency Decision Making," Irving L. Janis and Leon Mann, Journal of Human Stress 3:2, 1977, pp. 35-48.

PUBLIC POLICY IN EMERGENCY MANAGEMENT

Introduction:

This course is designed for graduate-level study leading towards a masters degree in public administration (MPA). Although designed for graduate-level study, this course can be modified (as appropriate) to complement undergraduate programs in public administration.

Intended as a course designed to analyze key existing and emerging public policy issues and policy decisions in emergency management, the purpose of this course is to provide an understanding of how governments plan for and respond to natural and technological disasters.

As a graduate-level course, an appropriately thorough examination of research relevant to managerial strategies in emergency management is expected. Also expected is a comprehensive review of the state-of-the-art in prevention, warning, evacuation, rescue and recovery systems.

The required and recommended readings focus on providing an understanding of:

1. The stages of the policy-making process;
2. The institutions involved; and,
3. Case studies.

The underlying assumption throughout this course is that "public management that is highly responsive to emergencies can save lives and minimize damage to property."

Objectives:

A general objective is to provide an understanding of how governments plan for and respond to natural and technological disasters.

Specific course objectives are to:

1. Sharpen analytical and systematical thinking about problems likely to occur during emergencies;
2. Provide an understanding of the impact of institutional and political context(s) of policy-making;
3. Provide an understanding of "turf wars" and how to avoid them; and
4. Explore different approaches to policy analysis.

Format:

This course can be used separately or as a part of a series of classes with appropriate modification.

Eleven intensive seminar sessions of two-to-four-hours' duration comprise this course.

A comprehensive bibliography citing relevant literature which addresses major policy issues in emergency management is provided to assist seminar participants in the development of written assignments. Also, the bibliography provides a basic point of departure for further research on emergency management policy issues or specific policy decisions. The on-going identification and assessment of new literature is encouraged.

Prior to each seminar session, participants are required to complete all assigned readings. Additionally, participants are required to prepare a two-to-five-page summary of the assigned readings which either the individual or the instructor selects from the relevant bibliography. These papers are to be duplicated and disseminated to both seminar participants and the instructor. Each participant is expected to present an overview of relevant findings and be prepared to defend salient points addressed.

In addition to the above requirement(s), each seminar member is required to develop a 15-20 page comprehensive research paper on either an emerging policy issue or a specific policy decision. The specific focus of the research paper will be determined by the instructor. The paper is to be analytical and not solely narrative or speculative. As a minimum, the final research paper should:

1. Contain a clear problem statement;
2. Identify key actors (e.g. proponents and opponents) and their positions;
3. Provide an outline of the alternatives and consequences of the policy issue/decision;
4. Contain an assessment of decisions made; and,
5. Critically assess the degree of success in implementing the policy issue or decision.

After initial lectures, the instructor serves primarily as a discussion leader and resource person. Depending on appropriateness and availability of resources, films, guest speakers, simulations, case studies and field trips may be used to complement instruction.

Evaluation:

Performance evaluation of seminar participants shall be based on the quality of: (a) written assignments; (b) weekly presentations summarizing reviews of selected or assigned literature; and, (c) the comprehensive research paper and its defense during the final seminar session.

Evaluation criteria for assessing written assignments include: (a) the quality of research design; (b) writing; (c) organization; and (d) presentation/defense of research papers.

A final factor used in assessing performance is the quality of each person's participation in seminar discussions.

Course Content

Session 1. Introduction and Institutional Setting of Policy-Making

Film: "Countdown to Disaster" (Introduction)

Readings: Ripley and Franklin: Chapters 1 and 3: Program Implementation, Policy Types and Federalism

Petak and Atkisson: Chapter 1: Anticipating the Unexpected as a Focus on Public Policy

General Accounting Office (GAO) Report National Flood Insurance and Public Policy

Assignment: Identification of major policy issues in emergency management.

Using the "Public Policy in Emergency Management" bibliography as a point of departure, identify, select and analyze a key policy issue in emergency management.

Suggested issues for analysis include, but are not limited to: (a) liability; (b) news media; (c) intergovernmental relations; (d) hazardous materials; (e) nuclear facilities; (f) public support and management; (g) funding; and, (h) the use of volunteers.

In analyzing the issue of your choice, include, as a minimum, a discussion of:

1. The history of the issue;

2. Who is affected by the issues today?
3. What public policy is relevant and what policy alternatives have been taken?
4. What tradeoffs are reflected in the existing policy or policies related to the issue?
5. What assumptions are made about the premises e.g. "the proper role of government?"

Write a brief paper and be prepared to discuss and defend significant findings at the next scheduled seminar session.

Session 2. Public Policy and Natural Hazards: Characteristics and Mitigations

Readings:	Petak and Atkisson:	Chapter 2:	Hazard Characteristics
		Chapter 3:	Public Policy Approaches
	Drabek, et al.	Chapter 1:	Point of Departure Issues of Earthquake Mitigation Alternatives Lessons in Policy
		Chapter 2:	Approach/Use of Case Studies
	Rossi, et al.	Chapter 1:	Policy, Politics and Hazards

Assignment: Identification of Major Public Policy Issues in Natural Hazards Mitigation.

Using the first five pages of the "Public Policy in Emergency Management" bibliography as a point of departure, identify, select and analyze a key natural hazards mitigation public policy issue.

Suggested issues for analysis include, but are not limited to, the following: (a) floods; (b) hurricanes; (c) nuclear facilities; (d) earthquakes; (e) hazardous materials; (f) news media; (g) intergovernmental relations; and, (h) the politics of hazard mitigation.

In analyzing the issue of your choice, include, as a minimum, a discussion of:

1. The history of the issue;
2. Who is affected by the issue today?
3. What public policy is relevant and what policy alternatives have been taken?
4. What tradeoffs are reflected in the existing policy or policies related to the issue?
5. What assumptions are made about the premises e.g. "the proper role of government?"

Write a brief paper and be prepared to discuss and defend significant findings at the next scheduled seminar session.

Session 3. Natural Hazard Risk Assessment: Technological Hazard and Mitigation Analysis:

Film: "The Killing Ground: Issue of Major Chemical Contamination and Policy Alternatives for Government Entities"

Readings:	Petak and Atkisson:	Chapter 4:	Methodologies for Hazard Analysis (Risk, Cost Analysis and Social Impacts)
	Drabek, et al.	Chapter 3:	Alternative Interpretive Frameworks (Multi-organizational Networks)
	Rossi, et al.	Chapter 5:	Assessment of Hazards Policies: The Case of Nine California Communities

Assignment: Natural/Technological Hazard Risk Assessment and Public Policy

Using the first eight pages of the "Public Policy in Emergency Management" bibliography as a point of departure, identify, select and analyze a key natural or technological hazard mitigation public policy issue.

New articles addressing such issues may be found in: (1) "The Natural Hazards Observer," a bimonthly publication obtainable from the Natural Hazards Research and Applications Information Center, University of Colorado, Boulder, Colorado; and, (2) New monographs published by the Disaster Research Center of Ohio State University.

Other journals and new publications announced by the instructor may also be used as resources.

Suggested issues for analysis include, but are not limited to, the following: (a) the economics of natural disasters; (b) natural hazard risk and public policy; (c) risk assessment in the policy-making process; (d) technological hazards; (e) integrated hazard management policies and alternatives; (f) natural hazard risk assessment for insurance, emergency preparedness and hazard mitigation activities, and seismic hazard awareness; (g) seismic hazard awareness and public policy; and, (h) economic analysis of natural and technological hazards.

Write a brief paper and be prepared to discuss and defend significant findings at the next scheduled seminar session.

Session 4. Hazard Exposure, Loss and Mitigation Costs and Chemical/Technological Hazards

Film: "Love Canal Case: Role of FEMA"

Readings: Petak and Atkisson: Chapter 5: Hazard Loss/Effects/Federal Liability for Natural Hazard Losses

Chapter 6: Losses and Strategies for Mitigation

Assignment: Chemical/Technological Hazard Risk Assessment and Public Policy

Review "A Primer for Preparedness for Acute Chemical Emergencies" by Kathleen Tierney (1980).

Write a brief paper and be prepared to discuss and defend significant findings at the next scheduled seminar session.

Session 5. Policy Planning, Constraints in Management Policy Making

Readings: Petak and Atkisson: Chapter 7: Approaches to Actual
Events: San Francisco
Earthquake

Chapter 8: Policy Makers

Chapter 9: Legal Issues in Policy

Assignment: Public Policy Planning and Policy Formulation

Select an article on intergovernmental relations as it relates to policy development. Articles may be selected from either either (a) a bibliography not previously used in the seminar; (b) new journals on disaster management; or, (c) new journals on land use and administration.

Write a brief paper and be prepared to discuss and defend significant findings at the next scheduled seminar session.

Session 6. Policy Implementation

Readings: Ripley and Franklin: Chapter 4: Implementation of Programs

Chapter 5: Competitive Regulatory
Policy

Chapter 6: Protective Regulatory
Policy

Assignment: The Case Study Approach to the Analysis of Emergency Management Policy Issues.

Using the "Public Policy in Emergency Management" bibliography (or other literature) as a point of departure, select and analyze an article that uses the case study approach to examine a key public policy issue.

Write a short case study review. The review should be divided into three sections:

- o Problem Statement: In your opinion, what is/are the policy problem(s)?

- o Participants: Who are the key actors on each side of the question?
- o Options: From the perspective of each key actor, what are the achievable (e.g. realistic) policy options and their likelihood of success?

Be prepared to discuss and defend significant findings at the next seminar session.

Session 7. Comparing Earthquake Mitigation Policy: The Experience of Two States

Readings: Drabek, et al.

Chapter 4: Missouri

Chapter 5: Resistance from Below:
St. Louis and HUD--Policy
Types and Implementation
Strategies

Chapter 6: Washington

Chapter 7: Closer Look and Policy
Matters of Schools/Nuclear
Power

Assignment: Public Policy Implementation Strategies: Lessons Learned

Drawing from previous readings on public policy applications, select a policy issue that is unique to either a community or a State with which you are familiar.

Write a brief report that assesses either the application or the implementation of the emergency plan used by the community or State selected.

Instructor assistance will be provided to participants in need of direction relative to how to retrieve copies of the public policy or emergency plan for the State/community of your choice.

The report is to be divided into three sections:

- o Problem Statement: In your opinion, what is/are the policy problem(s)?

- o Participants: Who are the key actors on each side of the question?
- o Options: From the perspective of each key actor, what are the achievable (e.g. realistic) policy options and the likelihood of success?

Session 8. Comparison of Two States with Policy Constraints

Readings: Drabek, et al.	Chapter 10: Progress and Restraint
Rossi, et al.	Chapter 3: How Important Are Natural Hazards Problems to State and Community Elites
	Chapter 4: Elite Support Levels for Federal Disaster Policy Alternatives
	Chapter 6: Elite Appraisals of the NFIP

Assignment:

Drawing from previous readings on public policy applications, issues, and alternatives, select two states adversely affected by natural or technological hazards public policy or policy decision.

Write a brief comparative assessment that addresses inherent constraints impacting the successful implementation of the public policy or the public policy decision.

The report is to be divided into three sections:

- ° Problem Statement: In your opinion, what is/are the policy problem(s)?
- ° Participants: Who are the key actors on each side of the question?
- ° Options: From the perspective of each key actor, what are the achievable (e.g. realistic) policy options and the likelihood of success?

Be prepared to discuss and defend significant findings at the next scheduled seminar session.

Session 9. Politics of Policy Implementation and Insurance Compensation

Readings: Ripely & Franklin:	Chapter 7: Implementation of Redistribution Programs
	Chapter 8: Politics of Implementation
Petak and Atkisson:	Chapter 10: Policy Alternatives
General Accounting Office:	"Federal Disaster Assistance: What Should the Policy Be?"
General Accounting Office:	National Flood Insurance Program, (GAO/RCED-83-53) January, 1983.

Assignment:

Using the "Public Policy in Emergency Management" bibliography (or other literature) as a point of departure, select and analyze an article that addresses political issues surrounding the implementation of the National Flood Insurance Program. Include in your assessment an analysis of risks associated with insurance compensation.

Write a brief paper and be prepared to discuss and defend significant findings at the next scheduled seminar session.

Session 10.

Activity: Discussion of inherent problems associated with the implementation of the Federal Disaster Assistance Act

Discussion of research papers for presentation and defense at the final seminar session.

Session 11.

Activity:

Presentation and defense of final research paper

PUBLIC POLICY BIBLIOGRAPHY IN EMERGENCY MANAGEMENT

BIBLIOGRAPHY

- Abernethy, James J., "Teaching Hazards Mitigation," Journal of Architectural Education, Vol. 33, No. 4, 1980, pp. 43-45.
- Abney, F. Glenn and Larry B. Hill, "Natural Disasters as a Political Variable: The Effect of a Hurricane on an Urban Election," The American Political Science Review, LX (Dec. 1966), pp. 974-981.
- Adamic, Milan Orozen, "The Effects of the 1976 Earthquake in the Soca River Basin," in Social and Economic Aspects of Earthquakes: Proceedings of the Third International Conference, Barclay G. Jones and Miha Tomazevic, eds., Ithaca, New York: Program in Urban and Regional Studies, Cornell University, 1982, pp. 533-556.
- Adams, David, "The Red Cross: Organizational Sources of Operational Problems," American Behavioral Scientist, Vol. 13, No. 3 (Jan-Feb. 1970), pp. 392-403.
- Adams, David S., Policies, Programs and Problems of the Local Red Cross Disaster Relief in the 1960's, Historical and Comparative Disaster Series No. 4. Columbus, Ohio: Disaster Research Center, Ohio State University, 1977.
- Alaska, Division of Emergency Services, "Guidelines for Local Government Emergency Planning", Alaska Division of Emergency Services, Anchorage, Alaska: p. 32.
- Aldrich, Howard E., Organizations and Environments, Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1979, pp. 26-74.
- Alquist, Alfred E., "Government's Response to Risk," in Earthquake Risk: Conference Proceedings, Sacramento, California: Joint Committee on Seismic Safety to the California Legislature, 1971, pp. 35-38.
- American Association for the Advancement of Science, "Fire Safety and Disaster Preparedness," Report from a workshop on problems identified by the Inter-governmental Science, Engineering, and Technology Advisory Panel, Washington, D.C.: 1979.
- Anderson, William A., Local Civil Defense in Natural Disaster: From Office to Organization, Disaster Research Center Report Series No. 7, Columbus, Ohio: 1969.

- Archibald, K.A., "Three Views of the Expert's Role in Policy Making: Systems Analysis, Incrementalism and the Clinical Approach," Santa Monica, California: Rand Corporation, 1970.
- Association of Bay Area Governments, Earthquake Preparedness Program, "Earthquake Intensity and Related Costs in the San Francisco Bay Area," San Francisco, California: 1978.
- Atkisson, Arthur A., and William J. Petak, "Seismic Safety Policies and Practices in U.S. Metropolitan Areas: A Three City Case Study," Working Report No. 80-1373-2, Redondo Beach, California: J. H. Wiggins Co., 1981.
- Atkisson, Arthur A., et al., "Natural Hazards and Public Policy: Recommendations for Public Policies to Mitigate the Effects of Natural Hazard Exposures in the United States," Springfield, Virginia: National Technical Information Service (PB80-187-412), 1978.
- Baird, Bruce P., Motivating and Educating Key Publics, Sacramento, California: Seismic Safety Commission, 1980.
- Baker, Earl J., and Joe Gordon McPhee, Land Use Management and Regulation in Hazard Areas, Boulder, Colorado: University of Colorado, 1975.
- Baker, Earl J., "Public Attitudes Toward Hazard Zone Controls," Journal of The American Institute of Planners, Vol. 43, No. 4, 1977, pp. 401-408.
- Baker, Earl J., "Geographical Variations in Hurricane Risk and Legislative Response," Coastal Zone Management Journal 5:4, 1979.
- Baker, E. J., Toward an Evaluation of Policy Alternatives Governing Hazard-Zone Land Uses, Institute of Behavioral Science, Boulder, Colorado: University of Colorado, 1976.
- Baltz, Duane, "Applying Interlocal Agreements to Emergency Management - A Handbook," Washington, D.C.: National Association of Counties Research, Inc., 1981, p.16.
- Baram, Michael S., Alternatives to Regulation: Managing Risks to Health, Safety and The Environment, Lexington, Massachusetts: Lexington Books, 1981.
- Beach, H. D., Management of Human Behavior in Disaster, Ottawa, Ontario: Canada Department of National Health and Welfare, 1967.
- Burby, R. J. and S. P. French, "Coping with Floods: The Land Use Management Paradox," Journal of The American Planning Association, (July 1981).
- Burton, Ian, Robert W. Kates, and Gilbert F. White, The Environment as Hazard, New York: Oxford University Press, 1978.
- California, Office of Emergency Services, Disaster Assistance Procedure Manual, Sacramento, California: 1984.
- California, Seismic Safety Commission, "Assessment of Public Policy Regarding Lifelines and Critical Facilities in California, 2 Vols., Sacramento, California: 1980.

- California, Seismic Safety Commission, "Goals and Policies for Earthquake Safety in California," SSC 79-04, Sacramento, California: 1979.
- Carter, T. Michael, "The Role of Coordination Among Emergency Service Agencies in Community Preparedness," University of Minnesota: Natural Hazard Warning Service Report Series 79-09, 1979.
- Carter, T. M., "Community Warning Systems: The Relationships Among the Broadcast Media, Emergency Service Organizations, and the National Weather Service," Disasters and the Mass Media, Washington, D.C.: National Academy of Sciences, 1980, pp. 214-228.
- Carter, T. M., J. P. Clark, and R. K. Leik, "Organizational and Household Response to Hurricane Warnings in the Local Community," Houston: Paper presented to the annual meetings of the American Association for the Advancement of Science, 1979.
- Commonwealth of Pennsylvania, Joint Legislative Air and Water Pollution Control and Conservation Committee, "Integrated Flood Management: A Pennsylvania Perspective," Harrisburg, Pennsylvania: 1981.
- Conservation Foundation, Flood Hazard Management and Natural Resources Protection--Trainer's Manual, Washington, D.C.: Conservation Foundation, 1980.
- Dacy, Douglas C. and Howard Kunreuther, The Economics of Natural Disasters: Implications for Federal Policy, New York: Free Press, 1969.
- Diggins, William, "Necessary Decisions? Disaster Mitigation Policy on the Local Level," Tulane University.
- Drabek, Thomas E., "Methodology of Studying Disasters: Past Patterns and Future Possibilities," American Behavioral Scientist, Vol. 13, 1970, pp. 331-343.
- Drabek, Thomas E., Managing Multi-Organizational Emergency Responses: Emergent Search and Rescue Networks in Natural Disaster and Remote Settings, Boulder, Colorado: Institute of Behavioral Science, University of Colorado, 1981.
- Drabek, Thomas E., et al., Earthquake Mitigation Policy: Experience of Two States, Boulder, Colorado: Institute of Behavioral Science, University of Colorado, 1983.
- Duncan, R. B., "Characteristics of Organizational Environments and Perceived Environmental Uncertainty," Administrative Science Quarterly, Vol. 17, 1972, pp. 313-327.
- Dynes, Russell R., "Organized Behavior in Disaster," Columbus, Ohio: Disaster Research Center, The Ohio State University, 1975.
- Dynes, Russell R., "Organizational Involvement and Changes in Community Structure in Disaster," American Behavioral Scientist, Vol. 13, 1970, pp. 430-439.
- Dynes, Russell R., and Enrico L. Quarantelli, Organizational Communication and Decision Making in Crises, 2nd ed., Disaster Research Center Report Series No. 17, Columbus, Ohio: Disaster Research Center, Ohio State University, 1977.

- Earle, M. Mark, et al., "Multi-Jurisdictional Responses to Urban and Regional Disasters," Springfield, Virginia: National Technical Information Service (AD-A091 553/6), 1980.
- Eckstein, Harry, "Authority Relations and Governmental Performance: A Theoretical Framework," Princeton University: Center of International Studies, 1968.
- Federal Emergency Management Agency, "Disaster Operations--A Handbook for Local Governments," (GPC 1-6), Washington, D.C.: July 1981, p. 179.
- Federal Emergency Management Agency, "Standards for State Civil Preparedness," Washington, D.C.: 1978.
- Federal Emergency Management Agency, "Flood Hazard Mitigation: Handbook of Common Procedures," Washington, D.C.: 1981.
- Federal Emergency Management Agency, "Integrated Emergency Management System," a series of issuances, beginning September 1983, available from Office of State and Local Programs and Support at FEMA Central and Regional Offices.
- Federal Emergency Management Agency, "An Assessment of the Consequences and Preparations for a Catastrophic California Earthquake: Findings and Actions Taken," Washington, D.C.: 1981.
- Field, Robert I., "Patterns in the Laws on Health Risks," Journal of Policy Analysis and Management, Vol. 1, Winter 1982, PP. 257-260.
- Fischhoff, Baruch, et al., "Handling Hazards," Environment, Vol. 20, No. 7, 1978, pp. 16-20 and 32-27.
- Fischhoff, B., et al., "Approaches to Acceptable Risk," Eugene, Oregon: Decision Research, A Branch of Perceptronics, 1980.
- FitzSimmons, Ann R., Natural Hazards and Land Use Planning, Boulder, Colorado: University of Colorado, Natural Hazards Research and Applications Information Center, 1983.
- Florida, Department of Community Affairs, Bureau of Disaster Preparedness, and Florida State University, "Hurricane Hazard Mitigation at The Local Government Level: The Roles of The Building Codes and Other Development Management Strategies," Tallahassee, Florida: 1980.
- Foster, Harold D., Disaster Planning: The Preservation of Life and Property, New York/Berlin: Springer-Verlag, 1981.
- Frame, Hess, Nielsen, Techniques of Organizational Change, San Diego, California: University Associates, 1982.
- Francaviglia, Richard V., "Xenia Rebuilds: Effects of Pre-disaster Conditioning on Post-disaster Redevelopment," American Institute of Planners Journal, No. 44, January 1978.
- Given, William C. and Mitchell, J. B., "Community Power Structure: A Methodological Analysis and Comparison," Research Bulletin 1046, Wooster, Ohio: Ohio Agriculture Research and Development Center, 1971.

- Griffin, C. T., "Causal Model Analysis of Role Performance of Coordinators in the Operating Systems Following a Disaster," Ames, Iowa: Iowa State University, 1972.
- Gunderloy, Frank C., Jr., and Wayne L. Stone, "Planning Guide and Checklist for Hazardous Materials Contingency Plans" (FEMA-10), Washington, D.C.: Federal Emergency Management Agency, July 1981.
- Haas, J. Eugene, and Dennis S. Miletic, "Socio-Economic Impact of Earthquake Prediction on Government, Business and Community: Research Findings, Issues, Implications for Organizational Policy," Boulder, Colorado: Institute of Behavioral Science, University of Colorado, 1976.
- Haas, J. E., R. W. Kates, and M. Bowden, Reconstruction Following Disaster, Cambridge, Massachusetts: The MIT Press, 1977.
- Hall, Richard, et al., "Patterns of Interorganizational Relationships," Administrative Science Quarterly, 22, (September 1977), pp.457-474.
- Herman, Roger E., Disaster Planning for Local Government, New York: Universe Books, 1982.
- Hildebrand, Michael S., "Disaster Guidelines for Fire Chiefs," Washington, D.C.: International Association of Fire Chiefs, July 1980, p. 70, and Springfield, Virginia: National Technical Information Service.
- International City Management Association and Federal Emergency Management Agency, "How Prepared is Your Community for its Next Emergency: A Manager's Checklist," Local Government Emergency Management Handbook Series No. 2 and ICMA publication on "Organizing for Comprehensive Emergency Management: A Practitioner's Workbook," Handbook Series No. 3, Washington, D.C.: ICMA 1980.
- Janis, Irving L. and Leon Mann, "Emergency Decision Making: A Theoretical Analysis of Responses to Disaster Warnings," Journal of Human Stress, Vol. 3, No. 2, 1977, pp. 35-48.
- Jones, William, "On Decision Making in Large Organizations," Santa Monica: The Rand Corporation, 1964.
- Kartez, Jack D., "Emergency Planning Implications of Local Governments' Responses to Mt. St. Helens," Working Paper #46, Boulder, Colorado: University of Colorado, NHRAIC (IBS#6), 1982.
- Kim, John Choon K., Richard L. Ender, "Earthquake Hazards Mitigation Policy Implementation: The Alaskan Experience," paper presented at the American Society for Public Administration Conference, New York, April, 1983. (NSF #8112632)
- Kimberly, John, "The Life Cycle Analogy and the Study of Organizations: Introduction," in The Organization Life Cycle, San Francisco, California: Jossey-Ball, Inc., 1980.
- Kreps, Gary A., "Decision Making Under Conditions of Uncertainty: Civil Disturbance and Organizational Change in Urban Police and Fire Departments," Disaster Research Center Report No. 13, Columbus, Ohio: Ohio State University, Disaster Research Center, 1973.

- Kunreuther, Howard, "Societal Decision Making for Low Probability Events: Descriptive and Prescriptive Aspects," Working Paper No. 80-164, Laxenburg, Austria: International Institute for Applied Systems Analysis, 1980.
- Kunreuther, Howard, with Ralph Ginsberg, et al., Disaster Insurance Protection: Public Policy Lessons, New York: John Wiley and Sons, 1978.
- Kunreuther, Howard, et al., An Interactive Modeling System for Disaster Policy Analysis, Technology, Environment, and Man Monograph Series No. 26, Boulder, Colorado: University of Colorado, NHRAIC, 1978.
- Lave, L., "Risk, Safety and the Role of Government," in Perspectives on Benefit Risk Decision Making, Report of a Colloquium Conducted by the Committee on Public Engineering Policy, Washington, D.C.: National Academy of Engineering, 1971.
- Lagorino, Henry, "Failures in Public Policy Research," in What Decision Makers Need to Know: Policy and Social Science Research on Seismic Safety, S. Scott, ed., Berkeley, California: Institute of Governmental Studies, pp. 15-16, 1979.
- Lammers, C. J., "Power and Participation in Decision-Making in Formal Organizations," American Journal of Sociology, Vol. 73, No. 2, 1967, pp. 201-216.
- Leik, Robert, and G. A. Gifford, "Decision Making under Threat of Disaster," University of Minnesota, Department of Sociology, 1979.
- Lowrance, William W., Of Acceptable Risk, Los Altos, California: William Kaufman, Inc., 1976.
- Ludwig, Harvey and Gordon McCallum, "Public Health Service Emergency Assistance in Disaster Relief," Public Health Reports, Vol. 68, June 1953, pp. 630-632.
- Lukko, R. and G. Morton, "Media Coverage of Disasters: Better than Reported, Worse than Necessary," Journalism Quarterly, Vol. 55, 1978, pp. 68-72.
- Mann, Dean E. and Alan J. Wyner, "The Responses of Local Governments in California to Seismic Events," Santa Barbara, California: Department of Political Science, University of California, 1977.
- Margerum, Terry, "We're Not Ready for the Big Quake: What Local Governments Can Do," Berkeley, California: Association of Bay Area Governments, 1980.
- Mazmanian, D. A., and J. Nienaber, Can Organizations Change? Environmental Protection: Citizen Participation and the Corps of Engineers, Washington, D.C.: The Brookings Institution, 1979.
- Meir, Kenneth J., "Measuring Organizational Power: Resources and Autonomy of Governmental Agencies," Administration and Society, Vol. 12, (November 1980) pp. 357-375.
- Mileti, Dennis S., Thomas E. Drabek, and J. Eugene Haas, Human Systems in Extreme Environments: A Sociological Perspective, Boulder, Colorado: University of Colorado, NHRAIC, 1975.

- Mileti, Dennis, and E. M. Beck, "Communication in Crisis," Communication Research Vol. 2, No. 1, 1975, pp. 24-49.
- Mintier, J. Laurence, and Peter Arne Stomberg, "Seismic Safety at the Local Level: Does Planning Make a Difference?," California Geology, Vol. 36, No. 7, (July 1983), pp. 143-154.
- Morentz, J. W., H. C. Russell, and J. A. Kelly, Practical Mitigation: Strategies for Managing Disaster Prevention and Reduction, Rockville, Maryland: Research Alternatives, Inc., 1982.
- Munroe, Tapan, and Cynthia Blair, "Economic Impact of Seismic Design Decision Analysis: A Preliminary Investigation," Springfield, Virginia: National Technological Information Service, PB-259 187, 1975.
- Murray, Lynn C., "Socio-Economic Effects of Denied Requests for Major Disaster Declarations," Washington, D.C.: Federal Emergency Management Agency, Office of Disaster Response and Recovery, Office of Federal Response Coordination, 1980.
- National Governors' Association, "Hazard Mitigation: Strategies for Managing Disaster Prevention and Reduction," Washington, D.C.: 1981.
- National Governors' Association, "Comprehensive Emergency Management: A Governor's Guide," Washington, D.C.: 1982, pp. 299-306.
- National Governors' Association, "National Emergency Assistance Programs--A Governor's Guide," Vol. III, Washington, D.C.: 1979.
- New England Municipal Center, "You Are Never Completely Safe...Emergency Management: A Handbook for Local Government Officials," Durham, New Hampshire: 1980.
- Newman, Frederick L., et al., "Decision Versus Policy in Crises Intervention," American Journal of Community Psychology, Vol. 7, No. 5, 1979, PP. 543-562.
- Norton, C. F., "Emergency Preparedness and Disaster Assistance: Federal Organization and Programs," Washington, D.C.: Library of Congress Congressional Research Service, 1978.
- Norton, C. F., "Emergency and Disaster Preparedness Reorganization," Issue Brief No. 77118. Washington, D.C.: The Library of Congress Research Service Major Issues System, 1979.
- Olson, Richard Stuart, and Douglas C. Nilson, "California's Hazardous Structure Problem: A Political Perspective," California Geology, Vol. 36, No. 4 (April 1983), pp. 89-91.
- Olson, Robert A., "The California Seismic Safety Commission, 1975-80: Public Policy and a Practitioner's Observations," in Social and Economic Aspects of Earthquakes: Proceedings of the Third International Conference, Barclay G. Jones and Miha Tomazevic, eds., Ithaca, New York: Program in Urban and Regional Studies, Cornell University, 1982, pp. 275-289.

- Osborn, Richard N., and James G. Hunt, "Environment and Organizational Effectiveness," Administrative Science Quarterly, Vol. 19, (June 1974), pp. 231-242.
- Pate, M. Elisabeth, "Risk and Public Policy," Technical Report, John A. Blume Earthquake Engineering Center, Stanford University, Springfield, Virginia: National Technical Information Service, PB81-120057, 1980.
- Perry, Ronald W., and Marjorie R. Greene, "The Role of Ethnicity in the Emergency Decision-Making Process," Sociological Inquiry, Vol. 52, (Fall 1982), pp. 306-334.
- Perry, Ronald W., et al., "Evacuation Decision-Making and Emergency Planning: Report of Preliminary Findings," Seattle, Washington: Battelle Human Affairs Research Center, 1980.
- Petak, William J., Arthur A. Atkisson, and P. H. Gleye, Natural Hazards: A Public Policy Assessment, Springfield, Virginia: National Technical Information Service, PB-297 361, 1978.
- Petak, William J., Arthur A. Atkisson, Natural Hazards Risk Assessment and Public Policy: Anticipating the Unexpected, New York: Springer-Verlag, 1982.
- Platt, Rutherford H., "Jackson Flood 1979: Public Policy Disaster," American Planning Association Journal, (Spring 1982), pp. 219-231.
- Prud'Homme, A., "What an Emergency Plan Should Cover: The Key Planning Issues," Los Angeles, California: Atlantic Richfield Company, 1982.
- Quarantelli, Enrico L., and Russell R. Dynes, "When Disaster Strikes: It Isn't Much Like What You've Heard and Read About," Psychology Today, Vol. 9, 1972, pp. 67-70.
- Regens, James L., Thomas M. Dietz, and Robert W. Rycroft, "Risk Assessment in the Policy-Making Process: Environmental Health and Safety Protection," in Public Administration Review, Vol. 43, No. 2, (March/April 1983), pp. 137-145.
- Richards, Peter G., "Questions about Local Authorities and Emergency Planning," Local Government Studies, Vol. 5, No. 3, (May/June 1979), pp. 37-42.
- Rogers, Everett, and Rahul Sood, Mass Media Operations in a Quick-Onset Natural Disaster, Boulder, Colorado: University of Colorado, NHRAIC, 1981.
- Rogers, David, David Whetten and Associates, Interorganizational Coordination, Ames, Iowa: Iowa State University, 1982.
- Rose, Adam, Local Government Emergency Management: An Economic Perspective, Natural Hazards Research Paper, Boulder, Colorado: Institute of Behavioral Science, University of Colorado, 1980.
- Rose, Adam, "Mandating Local Government Emergency Services," The Urban Interest, Vol. 2, No. 1, (Spring 1980), pp. 65-73.
- Ross, Alexander, "Organizational Innovation in Disaster Settings," Disasters: Theory and Research, 1977, pp. 215-232.

- Rossi, Peter H., et al., Natural Hazards and Public Choice: The State and Local Politics of Hazard Mitigation, New York: Academic Press, 1982.
- Rowe, William D., "Governmental Regulation of Societal Risks," The George Washington Law Review, Vol. 45, (August 1977), pp. 944-968.
- Rowe, William D., An Anatomy of Risk, John Wiley and Sons, Inc., 1977.
- Rubin, Claire B., Natural Disaster Recovery Planning for Local Public Officials, Columbus, Ohio: Washington, D.C.: Academy for State and Local Government, 1979.
- Rubin, Claire B., "Managing the Recovery from a Natural Disaster," Management Information Service Report, Vol. 14, Washington, D.C.: International City Management Association, 1982, pp.1-14.
- Rubin, Claire B., "Case Studies of Communities Recovering From Natural Disasters: Year II Final Report," Washington, D.C.: George Washington University, (January, 1983).
- Scheuch, D. R., "A Retrospective Look at Some of The Basic Issues Connected with National Command, Control and Communications," Menlo Park, California: SRI International, 1980.
- Schmidt, Stuart M., and Thomas A. Kochan, "Interorganizational Relationships: Patterns and Motivations," Administrative Science Quarterly, Vol. 22, (June 1977), pp. 220-234.
- Scott, Stanley, "California Cities and Seismic Safety: Local Officials Need to Give More Attention to Disaster Preparedness," in Western City, (August 1983), pp. 6-16.
- Scott, Stanley, Policies for Seismic Safety: Elements of a State Governmental Program, Berkeley, California: Institute of Governmental Studies, University of California, 1979.
- Scott, Stanley, ed., "What Decision Makers Need to Know: Policy and Social Science Research on Seismic Safety," Institute of Governmental Studies Research Report No. 79-5, Berkeley, California: Institute of Governmental Studies, University of California, 1979.
- Scott, Stanley, "Formulating and Implementing Policies for Seismic Safety," in Social and Economic Aspects of Earthquakes: Proceedings of the Third International Conference, Barclay G. Jones and Miha Tomazevic, eds., Ithaca, New York: Program in Urban and Regional Studies, Cornell University, 1982, pp. 267-274.
- Slovic, P., et al., "Rating the Risks," Environment, Vol. 21, No. 3, pp. 16-22 and 32-37.
- Smart, Carolyn, and I. Vertinsky, "Designs for Crisis Decision Units," Administrative Science Quarterly, Vol. 22, 1977, pp. 640-657.

- Spangle, W. and Associates, Inc., Land Use Planning After Earthquakes, Portola Valley, California. William Spangle and Associates, 1980.
- Stallings, Robert A., "The Community Context of Crisis Management," American Behavioral Scientist, Vol. 16, 1973, pp. 312-325.
- Stephens, Lynn H., and Stephen J. Green, eds., Disaster Assistance, Appraisal, Reform and New Approaches, New York: New York University Press, 1979.
- Stoddard, Ellwyn R., "Some Latent Consequences of Bureaucratic Efficiency in Disaster Relief," Human Organization, Vol. 28, 1969, pp. 177-189.
- Texas Department of Public Safety, Emergency Services, "Manual for Local Government Operations," 1984.
- Thiel, Charles C., "Lifelines, Seismic Hazards and Public Policy," in Social and Economic Impact of Earthquakes on Utility Lifelines: Proceedings, J. Isenberg, ed., New York: American Society of Civil Engineers, 1981.
- Thompson, James D., and Robert W. Hawkes, "Disaster, Community Organization and Administrative Process," in Man and Society in Disaster, George W. Baker and Dwight W. Chapman, eds., New York: Basic Books, 1962, pp. 268-300.
- Torry, William I., "Disasters, Societal Risks and Interorganizational Stresses," Berkeley, California: University of California, 1978.
- Turner, Barry A., "The Organizational and Interorganizational Development of Disasters," Administrative Science Quarterly, Vol. 21, No. 3, 1976, pp. 378-397.
- U.S. Comptroller General, Areas Around Nuclear Facilities Should Be Better Prepared for Radiological Emergencies, Washington, D.C.: General Accounting Office, 1979.
- U.S. Comptroller General, Federal Disaster Assistance: What Should the Policy Be?, (PAD-80-39), Washington, D.C.: General Accounting Office, 1980.
- U.S. Comptroller General, Improved Administration of Federal Public Disaster Assistance Can Reduce Costs and Increase Effectiveness, Washington, D.C.: General Accounting Office, July 23, 1982.
- U.S. Comptroller General, "Requests for Federal Disaster Assistance Need Better Evaluation," Washington, D.C." General Accounting Office, 1981.
- U.S. Comptroller General, States Can be Better Prepared to Respond to Disaster, Washington, D.C.: General Accounting Office, March 31, 1980.
- U. S. General Accounting Office, "National Flood Insurance: Marginal Impact on Flood Plain Development--Administrative Improvements Needed," Washington, D.C.: 1982.
- U. S. Library of Congress, Congressional Research Service, "Background and Status of Executive Order 11490: The Assignment of Emergency Preparedness Functions," by Harold C. Relyea, Washington, D.C.: U.S. Government Printing Office, 1980.

- University of Southern California, College of Continuing Education and School of Public Administration, Office of Program Development, "Emergency Disaster Preparedness in Los Angeles County: A Multi-Jurisdictional Dilemma," Springfield, Virginia: National Technical Information Service, (AD-A081 440), 1979.
- Vig, Normal J., and Patric J. Bruer, "The Courts and Risk Assessment," Policy Studies Review, Vol. 1, May 1982, pp. 716-727.
- Warheit, George J., and Russell R. Dynes, "The Functioning of Established Organizations in Community Disasters," Disaster Research Center Report Series No. 1, Columbus, Ohio: Disaster Research Center, Ohio State University, 1968.
- Weller, J. M., "Organizational Innovation in Anticipation of Crisis," Disaster Research Center Report Series No. 14, Columbus, Ohio: Disaster Research Center, Ohio State University, 1974.
- White, Gilbert F., and J. Eugene Haas, Assessment of Research on Natural Hazards, MIT Press Environmental Studies Series. Cambridge, Massachusetts: MIT Press, 1975.
- Whitman, Robert V., Norton S. Rimmer and Betsy Schumaker, "Feasibility of Regulatory Guidelines for Earthquake Hazards Reduction in Existing Buildings in Northeast," Cambridge, Massachusetts: Department of Civil Engineering, M.I.T., 1980.
- Whittow, John, Disasters: The Anatomy of Environmental Hazards, London, England: Alan Lane/ Penguin Books, Ltd., 1980.
- Whyte, Anne V., and Ian Burton, eds., Environmental Risk Assessment, SCOPE Report No. 15, Chichester, England: John Wiley and Sons, 1980, Washington, D.C.: U. S. Government Printing Office, 1980, (Written by Harold C. Relyea.)
- Wiggins, John H., "Balanced Risk Analysis," Journal of Architectural Education, Vol. 33, No. 4, 1980, pp. 6-8.
- Wolensky, Robert P., and W. J. Miller, "The Everyday Versus the Disaster Role of Local Officials: Citizen and Official Definitions," Urban Affairs Quarterly, Vol. 16, No. 4, June 1981.
- Wolensky, Robert P., "How Do Community Officials Respond to Major Catastrophes?," Disasters, Vol. 1, No. 4, 1977, pp. 272-274.
- Wolensky, Robert P., "Power Structure and Group Emergence in Disasters," Stephens Point, Wisconsin: University of Wisconsin, 1979.
- Wolfe, Myer R., "Urban Scale Vulnerability: Some Implications for Planning," in Social and Economic Aspects of Earthquakes: Proceedings of the Third International Conference, Barclay G. Jones and Miha Tomazevic, eds., Ithaca, New York: Program in Urban and Regional Studies, Cornell University, 1982, pp. 307-322.
- Woodward-Clyde Consultants, "Assessment of Public Policy Regarding Lifelines and Critical Facilities in California," San Francisco, California: 1980.

- Wright, J. D., et al., The Apathetic Politics of Natural Disasters, Amherst, Massachusetts: University of Massachusetts, Social and Demographic Research Institute, 1979.
- Wright, James D., et al., After the Clean-Up: Long-Range Effects of Natural Disasters, Contemporary Evaluation Research, Vol. 2, Beverly Hills: Sage Publications, Inc., 1979.
- Young, Mary E., "Disasters: Effects, Preparedness, Assessment, and Recovery," Vol. 1, 1964-1975, (a bibliography with abstracts), Springfield, Virginia: National Technical Information Service, (PB80-802127), 1977.
- Yutzy, Daniel, "Priorities in Community Response," American Behavioral Scientist, Vol. 13, 1970, pp. 344-353.