



Claire B. Rubin

LONG TERM RECOVERY FROM A MAJOR NATURAL DISASTER : Lessons Learned the Hard Way

By Claire B. Rubin

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Since 1979, a small team of researchers has been visiting communities impacted by major natural disasters to document the long-term recovery process at the community level. During that time, 12 localities — representing a wide array of disasters — were examined. The individual accounts of each community studied and the cross-case analyses completed to date have been reported elsewhere.¹ The research work is still on-going and the results to date show substantial variation in the recovery process in communities throughout the country. Nevertheless, there are enough consistent findings and observations that could be of use to public practitioners to warrant sharing them at this time.

First of all, it is important to note that significant progress has been made in the last few decades in the U.S. in terms of our ability to deal with and recover from major natural disasters. No community has failed to recover, even if slowly and painfully. We have no ghost towns resulting from a major natural disaster. As recently as 15 years ago, Allen Barton summarized what little research existed at that time about the recovery process; one pattern he noted was that "Local government is unable to cope with the overload of problems and is replaced by an improvised emergency government such as a Citizens' Committee, or by authorities from state or national agencies."² No longer is it true that local governments are supplanted by either public or private organizations. In recent years, the growing capability of local public officials, together with the experience and resources of emergency management personnel at the state and federal levels, have contributed to the improved ability to recover.

All of the communities studied are located in the continental U.S., and each had experienced a major natural disaster no more than five years ago. From our field research, we have observed that local governments do cope with disaster recovery, but they do so in a context of national acknowledgement (i.e., a Presidential Disaster Declaration) and in conjunction with state and federal emergency management officials. While no communities have been "lost" involuntarily, occasionally public officials decide to relocate all or part of a community. For example, Valdez, Alaska was severely damaged by massive landslides in connection with the 1964 Alaska earthquake. The continuing landslide hazard at Valdez led to the decision to relocate the entire town to a less vulnerable location several miles away. Another example is Soldier's Grove, Wisconsin, a

community of 524 people, which had experienced six major floods this century. After the 1978 flooding, state and federal agencies agreed that relocation was the best solution. Relocation of the town's 42 business structures was the heart of the effort that transformed the flood-threatened, economically stagnant community into an economically viable town.

This article summarizes some of the lessons learned from studying communities that have achieved successful recoveries and presents them in a way that, hopefully, will contribute to the ability of local officials to plan an effective strategy for recovery from a disaster. These lessons should be especially helpful to a community that has never experienced a major disaster, or one where a decade or more has elapsed since its last experience. Knowing what actions taken by local governments after a major disaster are usually effective and which are not should be valuable, in terms of saving time and effort and in maximizing aid and assistance.

After a disaster, the center of action for both response and recovery is at the local level. For our purposes, a community is said to have recovered from a natural disaster when all of its political, economic, and social systems are functioning at least as well as they did before the disaster event. This determination of a successful recovery is made by local residents — local public officials, civic leaders, and citizens. In our current research, we are attempting to measure local satisfaction with recovery about one year after the disaster. The results will be documented in the Fall of 1984.

What follows are some of our findings cast in the form of useful lessons. Few local public officials are familiar with how their counterparts in other communities have dealt with disaster recovery. We have documented major disaster recovery experiences so that other public practitioners may learn about the recovery process without having to experience a disaster.

It should be noted that each of the communities studied received a Presidential Disaster Declaration. This means that the lessons offered below pertain to large-scale disasters where local efforts and resources are overwhelmed. Advice is given regarding the planning and management decision-making processes that are necessary to recover expeditiously and effectively (i.e., successfully).

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LESSON NO. 1

The resources of the federal government are **critical** to a successful recovery after a major natural disaster. While it is useful to have state assistance, it is not essential to local recovery. No local government, **by itself**, has been able to achieve an expeditious and effective recovery from a major natural disaster.

Observations

In most cases of successful recovery, state or federal government played an essential role in marshalling the resources necessary for local recovery. Such resources are usually **managed** at the local level, but they originate elsewhere.

Although each of the sites studied had a Presidential Disaster Declaration (which triggers some special federal assistance programs), some forms of federal assistance may be made available to communities that have had a disaster that does not qualify for a Presidential Declaration. For example, the Small Business Administration has its own authority to declare a disaster-impacted area eligible for SBA assistance. Nevertheless, local officials who have experienced a major disaster should know what the requirements are for a Presidential Declaration, and if warranted, they do what they can to convince the state and federal officials that the community needs a Presidential Declaration. Receiving a Declaration is important because it makes available the fullest array of federal programs and assistance.

LESSON NO. 2

Intergovernmental relations are highly important from the very beginning of the recovery process. Those communities that attended to the many intergovernmental processes and grantsmanship activities promptly and efficiently fared best in the aftermath of the disaster.

Observations

Local government's relations with state and federal emergency management officials tend to be fraught with tension and friction. After a major catastrophe, emotions run high and reason does not always prevail when local public officials are highly stressed.

The ability to understand and comply with the rules, procedures, and documentation required under a Presidential Disaster Declaration is a rare one. At the local level, it usually is limited to the relatively few persons who have been through a prior disaster. Both federal and state officials have more experience and, hence, have mastered the intricacies of this special arena of public administration. The problems of federally-acceptable record-keeping and of managing the local public cash flow have thwarted many local officials and slowed the community's recovery.

In the localities that recovered most successfully, local officials began immediately after the disaster to work closely with their Governor and Congressman as well as with state and federal emergency management officials. A comprehensive approach, involving all levels of government, worked best.

LESSON NO. 3

Local officials in communities with known hazards, or ones at chronic risk, should determine what programs, procedures, and benefits are contained in the state and

federal disaster assistance programs for response and recovery **before** they experience a disaster.

Observations

Pre-disaster information available about the Presidential Declaration process, what it entails and what it provides, leaves a great deal of room for improvement. Among the areas of greatest misunderstanding in localities that have been hit by major disasters are current, specific knowledge of the Small Business Administration's programs and of the Federal Emergency Management Agency's assistance programs — particularly the Public Assistance Program which requires a 25% local match for the repair and restoration of public facilities.

LESSON NO. 4

Decide soon after a major disaster what you want to do and who you want to participate in the planning and implementation of the recovery.

Observations

Those local public officials who were clear about how they wanted to recover, knew who they wanted to help plan and implement the recovery, and made a firm public commitment to mitigation measures during the recovery fared best.

From interviewing officials in the more exemplary communities, the advice offered is similar. Soon after the disaster, determine if you have the requisite skills and the time to deal with the federal officials and the public assistance program requirements with existing local staff. Keep in mind that many routine activities must be continued during the recovery period. If the necessary skills and staff time are not available, move quickly to acquire assistance. For example:

- You may be able to use the staff at another level of government. (e.g., Cardington, Ohio, a small town devastated by a tornado, was able to get considerable assistance from the State Office of Economic Development).
- You may want to hire an outside consultant. (Estes Park, Colorado, a resort town struck by a huge flood during the peak of its tourist season, hired an experienced person, a former FEMA official, to be the local disaster recovery manager.)
- You may want to revise the scope of work for an existing consultant. (In Fort Wayne, Indiana, to aid with flood recovery the mayor used a consultant who had disaster recovery experience but was on board for another project; he reassigned him to flood recovery planning.)

It has been noted by many researchers that after a major disaster, local government is confronted with a tremendous overload of decisionmaking and administrative work. The demands for local public leadership usually far outstrip the capabilities available. It is essential to perform a prompt reliable assessment of capacity and to move quickly to augment it.

LESSON NO. 5

If you view a heavily damaged area as a site for "instant urban renewal," a broader perspective and a wider array of reconstruction options should be entertained. In other words, in an area newly cleared of existing structures, there may be opportunities to change land uses or to rebuild safer, higher quality structures.

LONG TERM RECOVERY . . .

Observations

In Estes Park, Colorado, shortly after the flood, a local business organization succeeded in enacting a long-simmering plan for a local urban renewal authority. That authority was involved in the recovery decision-making process for the badly damaged central business district (CBD). Consequently, the CBD reconstruction had a longer-term frame of reference and included several mitigation measures.

Similarly, in Coalinga, California — a small community that experienced a highly destructive earthquake in May 1982 — a redevelopment agency was instituted to help restore the downtown area. When asked about plans for the redevelopment of the downtown area, the City Manager commented

Well, fortunately, I have been here so long that I have many times thought about how we could redevelop. Actually, no matter what I think, unless the property owners and the merchants and land-owners feel that way, you must have a process so that the merchants and land-owners can sort out what could be done. I have often thought that when you are developing something, the first technique is to find as many alternatives as you can, then you start discarding.³

Yet, if the local public leaders linger too long over a "grand plan," some property owners may make their own decisions and rebuild as they please. After a disastrous tornado struck Xenia, Ohio in 1974, lengthy discussions and elaborate plans for renewal of the

CBD ultimately contributed to the failure of the proposed urban renewal plan.

Tremendous pressures are at work locally to quickly restore everything as it was before the disaster. Few neighborhoods are perfect as is — settlement patterns, siting of commercial establishments, and road systems usually can be more efficient, or simply better. Further, to allow existing land uses and structures to "snap back," exactly as they were before the disaster, may leave them equally vulnerable to the same or other hazards in the future. Community betterment should be factored into the recovery process.

Conclusion

In summary, the most effective recoveries we observed were well-orchestrated performances — they were a team effort, many specialists were called upon to participate, all were using the same sheet music, and rehearsals were very important to the quality of the performance. □

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References

¹See "Long-Term Recovery From Natural Disasters: A Comparative Analysis of Six Local Experiences," 1981 and "Case Studies of Communities Recovering from Natural Disasters," November 1982. The ongoing project, "Recovery from Natural Disasters: Case Studies in Local Public Planning and Management" (NSF Grant No. CEE-82-14344), is expected to be completed in the Fall of 1984. These recovery studies have been supported by the National Science Foundation.

²Allen H. Barton, *Communities in Disasters*, New York: Doubleday Anchor, 1969.

³Transcript of the July 14, 1983 Seismic Safety Commission Meeting, in Coalinga, California"; pp. 29-30.

ABOUT THE NATURAL DISASTER RESOURCE REFERRAL SERVICE (RRS)

Information Resources

The RRS provides in-depth information on many aspects of natural hazards and disasters. Among the sources are reports, books, periodicals, plans, and also contacts with experts or experienced practitioners.

Below is a partial list of categories for which information is collected and maintained:

- Building Codes, Structural Standards
- Disaster Assistance
- Evacuation
- FEMA
- Land Use
- Lifelines
- Mitigation
- Planning
- Presidential Declarations
- Public Information & Awareness
- Reconstruction & Recovery
- Relocation
- Training Courses & Exercises
- Water Resources Management

Materials are collected on the following specific hazards:

- Agriculture (risk to)
- Coastal Zones
- Dams
- Earthquakes
- Fires and Explosions
- Floods
- Hurricanes; Cyclones
- Landslides
- Subsidence; Expansive Soils
- Tidal Waves and Tsunamis
- Tornadoes
- Volcanoes
- Weather

For a full list of categories, please call or write.

Individualized Services

The RRS staff will answer questions or otherwise assist you with issues or problems regarding natural hazards or disasters.

Inquiry Services

Each inquiry will be answered by a brief, individualized search on the topic. In this process, the staff uses the RRS Library, which contains more than 3,000 items. The library includes reports, books, periodicals as well as state and local preparedness and mitigation plans. If appropriate to the inquiry, the staff may supply the names of disaster specialists, researchers, or practitioners to contact for additional information.

Documents Requests

A Menu of bibliographies, research briefs, and other documents is available. Also, books and documents are available for loan from the RRS Library.

Other Services

Technical Assistance - both indirect and direct (on-site) assistance are available upon request.

Training Programs - a variety of training programs, including simulations of response and recovery phases, can be provided.

The RRS also offers the following special services:

- literature searches
- specialized bibliographies
- reports on Congressional or Administration actions occurring in Washington, D.C.

ALL OF THE ABOVE SERVICES ARE AVAILABLE ON A FEE-FOR-SERVICE BASIS.

Requests

Requests should be made as specific as possible to facilitate a pertinent reply; e.g., please send examples of how communities have mitigated flood damage by relocating existing structures.

The Staff

Claire B. Rubin is the creator and director of the Resource Referral Service. Ms. Rubin has directed numerous research, training and information transfer projects in the field of emergency management for the past six years. She has extensive prior experience in municipal management, urban programs, and intergovernmental relations. Ms. Rubin is the author of numerous publications, specializing in long-term recovery after natural disasters.

Melinda S. Carlson heads the library services for the RRS. She holds a Master of Library Sciences degree and has many years of experience with state and local government library collections. She is an experienced reference librarian in the field of emergency management.

Requests for information should be directed to:

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