

WORKING PAPER #84  
HOUSEHOLD AND BUSINESS RECOVERY FROM  
DISASTERS: ISSUES RELATED TO INSURANCE AND  
DISASTER ASSISTANCE\*

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The process of disaster recovery involves several dimensions. For persons who have sustained physical injuries, recovery entails restoration of physical well-being. Recovery also has a psychological dimension, as victims try to cope and come to terms with extreme stress, loss, and bereavement. Finally, recovery has a material and financial dimension, involving the processes by which households, businesses, and communities attempt to restore property and compensate for financial losses.

My testimony concerns the third dimension, specifically the extent to which existing government programs contribute to material recovery. The observations contained in this narrative are based on data I obtained in research on three recent California earthquakes, the Coalinga (1983), Whittier Narrows (1987), and Loma Prieta (1989) events, as well as my involvement in studies of a number of other natural disasters and my general knowledge of the disaster literature. My remarks will not address issues of public sector recovery, which are an important topic, but will focus instead on households and businesses.

One general observation that should be made at the outset is that programs to assist disaster victims have many positive features. Compared with one or two decades ago, the disaster application process in the 1980s has been streamlined and is easier for the average applicant to understand. The agencies responsible for administering the programs are better organized, more sensitive to the needs of disaster victims, and more capable of mobilizing rapidly to make assistance available than they had been in the past. At the same time, however, there is general agreement among researchers and policymakers in the disaster area that there is a great deal that we do not

know about how to promote successful disaster recovery. With respect to earthquakes, a number of issues related to disaster recovery remain to be addressed, some of which I will discuss briefly below.

First, earthquake insurance programs, as currently constituted, play a very small role in disaster recovery for households and businesses. When earthquake insurance is used, it still does not shield disaster victims from large financial losses. In California, at most an estimated 20% of homeowners currently have earthquake insurance. Even for this minority, most deductible levels are so high that many homeowners with considerable earthquake damage still may not have the opportunity to take advantage of their insurance protection. Insured homeowners with expensive property and very high damage levels face having to make proportionately high deductible payments in order to take advantage of insurance. In Santa Cruz County, California, for example, the median price of a home is about \$260,000; even if such a home were insured, to rebuild or make major repairs would still entail considerable expense for the owner.

More importantly, earthquake insurance is not even an option for renters, who probably constitute the largest population at risk in earthquake-vulnerable areas in California. Other things being equal, significant earthquake damage is more likely to occur in older, unreinforced masonry buildings and in substandard housing units--the types of housing that are likely to be used as rental property in earthquake-prone communities. The only way renters who lose their homes in an earthquake might conceivably benefit from earthquake insurance is indirectly, if their landlords have coverage and are able to use it to rebuild or repair.

As is the case with residential dwellings, large segments of the business community are currently without insurance protection. Generally speaking, large companies are self-insured. They can also afford to invest in disaster preparedness. Recovery is thus likely to be relatively smooth for these large enterprises. In contrast, a small business can be devastated by earthquake damage, and small business owners tend not to have earthquake coverage. For example, Joanne Nigg and I analyzed data on several hundred businesses that were affected by the Whittier earthquake and that applied for assistance from the Small Business Administration. Ninety-five percent of these businesses did not have insurance to cover any portion of their earthquake losses. We believe this group is representative of most small businesses in California and around the U. S.

Government-sponsored programs are the main mechanism through which disaster victims receive recovery assistance. These programs currently reach many more people than are covered by insurance, but their capacity to facilitate recovery is also limited.

One important concern involves the limitation on the amount of assistance, in the form of individual and family grants, that non-homeowners and non-business owners can receive from the Federal government. This ceiling, which was previously \$5,000, has been raised to \$10,000 in some recent disasters, and that amount has sometimes been supplemented with state funds. However, even in situations where this assistance has been sufficient to replace the goods lost by disaster victims, displaced families still face problems finding long-term housing. In many earthquake-prone areas, affordable housing is already in short supply. The shortage becomes even more acute when an earthquake eliminates existing housing units. For example, I

just returned from Watsonville, California, where approximately one hundred displaced families are currently living in mobile homes provided by FEMA and facing the search for permanent housing in a community that didn't have enough low-cost housing to begin with.

At the higher end of the income scale, the problems are different but still difficult to resolve. Homeowners and business owners are eligible to apply for Small Business Administration loans, but even with these loans, recovery is sometimes not easy. For example, the maximum amount of money that the SBA can lend is \$500,000. That may seem like a considerable amount of money, but even that sum may fall seriously short of covering the losses of some small businesses--particularly in high-cost areas like California and in cases where the building, the equipment, and the inventory are all owned by a single individual.

SBA loans carry two rates: the low rate, which is 4%, and the high rate, 8%, which is given to applicants SBA determines are able to obtain credit elsewhere. Applicants who qualify only for the 8% rate must repay their loans in three years. The monthly payments attached to the three-year loans are sometimes so high that applicants are unable to use government loans as a form of recovery assistance.

Although it was surely not the intent of those who developed the procedures for determining eligibility, the disaster loan process appears to place some applicants at a disadvantage. A preliminary analysis of loan application data and loan decisions for businesses affected by the Whittier earthquake suggests that applicants' social characteristics are related to the lending process. For example, older applicants were less likely than younger applicants to receive disaster loans, and when they were given money, they

received smaller amounts than they initially requested. Applicants who owned the property in which the business was located were more likely to receive loans than those who were leasing space. Caucasians were more likely than non-white ethnic group members to receive loans. Residents of the city of Whittier (compared to three other jurisdictions we studied) received more money on the average than they initially requested, were more likely than others to obtain low interest loans, and were more likely to appeal the SBA's initial loan decision.

Government assistance programs are geared toward the individual applicant, i.e., the homeowner or business owner who sustained losses and needs help to recover. However, the experience in recent large earthquakes clearly shows that recovery cannot be approached solely on an individual basis, but rather is a communitywide concern. In Coalinga, Whittier, Santa Cruz, Los Gatos, and Watsonville, for example, the pattern of earthquake damage was such that entire business districts were affected. Businesses are interdependent; in these types of situations the future viability of each individual business is closely tied to the fates of other businesses in the community. Similarly, the problem of providing housing to displaced earthquake victims must be seen in the context of overall housing needs and policies. Obviously, in addition to focusing on individual losses and applications for assistance, communitywide strategies for recovery are needed.

Finally, some costs entailed by reconstruction and recovery are not covered by any existing disaster assistance programs. For example, following an earthquake, the owners of damaged unreinforced masonry buildings may be required by the local jurisdiction to retrofit their buildings in order to strengthen the buildings to some earthquake-resistant code before they can be

reoccupied. Instituting such policies is a very good idea from the standpoint of reducing future hazards and losses. However, with a few exceptions, building owners have been compensated by disaster assistance programs only for repairs, but not for the costs associated with expensive earthquake retrofit procedures.

The Loma Prieta earthquake caused considerable problems on slopes and apparently reactivated an ancient landslide in Santa Cruz County, raising questions about whether the affected area is safe. The County government moved to restrict both new construction and earthquake-related reconstruction in the area of concern by deciding not to issue building permits until property owners submit the results of certain specified soils and engineering analyses. This is an entirely defensible strategy for mitigating future hazards, but for the individual property owner, the financial costs associated with hiring professionals to prepare the necessary geologic and engineering reports are quite high. Assistance programs can pay for restoring physical structures, but no mechanism currently exists to finance this kind of recovery-related expense.

In conclusion, despite the occasional bad press, considerable progress has been made in attempts to compensate disaster victims and assist in the recovery process. The small amount of research that is available on public perceptions and evaluations of the assistance process indicates that users of disaster services and residents of stricken communities believe disaster assistance agencies are doing a good job. However, recent disaster experience has also increased our awareness of things that need to be done and ways the system can be improved.