Disaster Recovery Annotated Bibliography - Economic

This document was developed to provide information on the state of knowledge on disaster recovery. This document includes a list of articles collected in the Fall of 2018. To obtain relevant articles, a list of keywords was used to search Google Scholar and University Library Databases. These keywords were: “community disaster recovery”, “disaster recovery”, “post recovery planning” “pre disaster planning”, and “national planning recovery”. An additional search of academic journals that are related to the planning field was then undertaken to ensure that articles from these journals were not overlooked. These journals included: Journal of the American Planning Association, Journal of Planning Education and Research, Applied Geography, Land Use Policy, Environment and Planning A, Planning Theory, Progress in Planning. After collecting articles, each article was then systematically reviewed to ensure relevance. The articles needed to address community level recovery (including issues related to housing, economic, infrastructure, planning, etc.) or note issues that affect recovery outcomes (e.g., differences in housing outcomes for rental versus owned housing). Next, we reviewed the reference list of identified articles to determine if any articles had been missed in the initial collection process. If there were additional articles that were missed, we collected the information and searched for the title of the article. After processing each article, the articles were then compiled into the Zotero software.

The Zotero bibliographic database is open to the public to view at:
https://www.zotero.org/groups/2278263/recoveryguidancetamu/items

Economic

Articles focused on business, financial, or economic recovery.


Problem: Even if significant reductions in global greenhouse gas emissions are achieved, some amount of climate change appears to be inevitable. Local, regional, state, and federal planning and regulation should begin to address how to adapt to these changes. Purpose: This article presents a policy synthesis of adaptation planning issues, using California as a case study. We examine the institutional and regulatory challenges and tradeoffs that climate change poses in six particularly vulnerable areas: water resources, electricity, coastal resources, air quality, public health, and ecosystem resources. We discuss obstacles to adaptation planning and successes overcoming these barriers, and suggest how planning can incorporate adaptation. Methods: This article presents a policy synthesis of adaptation planning issues, drawing on our recent research on California’s experience and related literature. We summarize the results of six studies that draw on quantitative and qualitative information gathered through surveys, interviews, and literature review. Results and conclusions: Planners should use forward-looking climate data that include higher water and air temperatures, sea-level rise, and increased numbers of extreme events like heat waves, floods, and wildfires when making decisions about future development, infrastructure investments,
open-space protection, and disaster preparedness. Climate change will exacerbate conflicts between goals for economic development, habitat protection, and public safety, requiring stronger interagency coordination and new laws and regulations. Takeaway for practice: Local and regional planners can help society adapt to a changing climate by using the best available science, deciding on goals and early actions, locating relevant partners, identifying and eliminating regulatory barriers, and encouraging the introduction of new state mandates and guidelines.


The social support strand of network analysis has confirmed the importance of taking seriously the personal network context in studies of informal support. But, as recent reviews make clear, it has paid relatively little attention to other situational contingencies that may influence flows of informal support. To begin to fill this gap, we draw on social-resources theory and research on helping behavior during disasters to expand its analytical focus to cover two other situational contingencies: local community context and receipt of formal support. Using data on recovery support during Hurricane Andrew, we find that although all three situational contingencies are important, their roles in the support process become clear only when their effects are considered simultaneously. We conclude by using the finding that the effects of the personal network and local community contexts on informal support differ for individuals who did and who did not receive formal support to call for a better integration of the social support and social-resources strands of network analysis.


Disasters—natural ones, such as hurricanes, floods, or earthquakes, and unnatural ones such as terrorist attacks—are part of the American experience in the twenty-first century. The challenges of preparing for these events, withstanding their impact, and rebuilding communities afterward require strategic responses from different levels of government in partnership with the private sector and in accordance with the public will. Disasters have a disproportionate effect on urban places. Dense by definition, cities and their environs suffer great damage to their complex, interdependent social, environmental, and economic systems. Social and medical services collapse. Long-standing problems in educational access and quality become especially acute. Local economies cease to function. Cultural resources disappear. The plight of New Orleans and several smaller Gulf Coast cities exemplifies this phenomenon. This volume examines the rebuilding of cities and their environs after a disaster and focuses on four major issues: making cities less vulnerable to disaster, reestablishing economic viability, responding to the permanent needs of the displaced, and recreating a sense of place. Success in these areas requires that priorities be set cooperatively, and this goal poses significant challenges for rebuilding efforts in a democratic, market-based society. Who sets priorities and how? Can participatory decision-making be organized under conditions requiring focused, strategic choices? How do issues of race and class intersect with these priorities? Should the purpose of rebuilding be restoration or reformation? Contributors address these and other questions related to environmental conditions, economic imperatives, social welfare concerns, and issues of planning and design in light of the lessons to be drawn from Hurricane Katrina.

Sociological research on the relationship between social bonds and economic activity typically focuses on how social bonds facilitate economic activity. There is, however, a growing and important literature on the development of commercial relationships into social friendships and the important role that commercial spaces can play in facilitating social connections. To date, however, this research has not focused on the important role that these commercial friendships and spaces can play in facilitating an individual’s recovery efforts after a major disaster like a tornado, hurricane or flood. It has also not focused on the effect that major disasters can have on commercial ties. Moreover, while the sociological literature on post-disaster recovery has emphasized the important role of social capital, it has not emphasized the role that social networks developed within commercial contexts can play in helping individuals to rebound from disaster. This article is an effort to fill these gaps in the literature. Using interview data collected in the Gulf Coast following Hurricane Katrina, we argue and describe how meaningful social bonds that emerge out of and are facilitated by commercial activity as well as the social spaces provided by commercial entities can facilitate community rebound after a major disaster.

[https://doi.org/10.2139/ssrn.1350513](https://doi.org/10.2139/ssrn.1350513)

Using information gleaned from interviews conducted in the Greater New Orleans region over the last three years, this Policy Primer examines the role that economic entrepreneurs play in post-disaster community recovery and describes how social entrepreneurs promote community resilience. The authors conclude by proposing policy recommendations that would eliminate artificial barriers to economic and social entrepreneurship and improve the recovery process. In particular, the authors recommend that policy makers relax unnecessary regulations, as in a post-disaster context, such regulations can become not only unwieldy, but also can impede recovery. They also urge policy makers to permit entrepreneurs to step in as soon as possible, because entrepreneurs are in the best position to assess local conditions and needs in the rapidly changing, post-disaster environment.

[http://www.sciencedirect.com/science/article/B6VFV-4TPF8Y8-1/2/da1135c28f390b65d9a9bbe8e713b94d](http://www.sciencedirect.com/science/article/B6VFV-4TPF8Y8-1/2/da1135c28f390b65d9a9bbe8e713b94d)

There is considerable research interest on the meaning and measurement of resilience from a variety of research perspectives including those from the hazards/disasters and global change communities. The identification of standards and metrics for measuring disaster resilience is one of the challenges faced by local, state, and federal agencies, especially in the United States. This paper provides a new framework, the disaster resilience of place (DROP) model, designed to improve comparative assessments of disaster resilience at the local or community level. A candidate set of variables for implementing the model are also presented as a first step towards its implementation.

[https://doi.org/10.1080/02732173.1998.9982189](https://doi.org/10.1080/02732173.1998.9982189)

Although the long-term effects of disasters and the factors that affect the ability to recover have received increasing attention from social science researchers, little systematic research has been conducted on the
processes and outcomes associated with business disaster recovery. This article attempts to fill that void by exploring the determinants of recovery within the private sector. We develop a model of business recovery by drawing from existing research on disaster recovery and on organizational survival in nondisaster contexts and test it by using data collected from a stratified random sample of 1,110 Los Angeles area firms affected by the 1994 Northridge earthquake. Business size, disruption of business operations due to the earthquake, earthquake shaking intensity, and the utilization of external postdisaster aid are all predictors of business recovery. Size helps businesses weather disaster losses, just as it proves advantageous in nondisaster contexts. How businesses fare following disasters depends not only on direct physical impacts but also on how disasters subsequently affect business operations, as well as on ecological and neighborhood-level impacts. The aid available to businesses following disasters not only does not appear to help them recover; it may actually create additional problems, such as higher debt.


Planning scholars have argued that property owners who develop land in hazardous areas, and thereby impose costs on their communities for emergency planning and disaster recovery, should pay their fair share of those costs. We describe a method of allocating such costs for hurricanes based on relative risk and apply it to Lee County, Florida. While the impact on most property owners is likely to be modest, we show that a risk-based assessment can achieve tax benefit equity and be the means of financing local government costs of disaster response and recovery not covered by federal and state disaster aid.


This article investigates the role race and class play in the economic recovery after Hurricane Katrina. Comparing the economic recovery of the cities of New Orleans and Gulfport, as well as making comparisons at the state level, reveals distinct differences in the economic recovery of these places. Utilizing a panel analysis, this article analyzes the effect Federal Emergency Management Agency dollars had on the recovery of jobs and housing post-Katrina. Results show that in the areas of job recovery, money played little role in economic recovery even while controlling for the effects of race and class. These results inform the debate over recovery in economically depressed places and show the importance of connecting emergency and disaster planning, particularly the recovery stage, to economic development.


The present paper examines the local community’s support for the post-tsunami recovery of two affected places in India: one a tourist destination and the other an agrarian village. The investigation begins with the proposition that social capital is a vital influence upon local communities willingness to support tsunami recovery efforts. The underlying assumption was that the resident community at the agrarian village with its rich social capital and tradition of community activities would proactively participate in the reconstruction program and thereby make a speedier and more meaningful recovery than the resident community at the tourist destination. However, an empirical survey conducted to prove this point provided us with contradictory results: the survey revealed no significant difference in the levels of social capital across the communities. Consequently, the researchers carried out a focus group discussion with
the locals at the tourist destination. The interesting conclusion is that it is probably the richness of the very same social capital that provoked local participation at the agrarian village and eliminated it at the tourist destination.


This article examines the process of post-disaster recovery and rebuilding in New York City since 9/11 and in New Orleans since the Hurricane Katrina disaster (8/29). As destabilizing events, 9/11 and 8/29 forced a rethinking of the major categories, concepts and theories that long dominated disaster research. We analyze the form, trajectory and problems of reconstruction in the two cities with special emphasis on the implementation of the Community Development Block Grant program, the Liberty Zone and the Gulf Opportunity Zone, and tax-exempt private activity bonds to finance and promote reinvestment. Drawing on a variety of data sources, we show that New York and New Orleans have become important laboratories for entrepreneurial city and state governments seeking to use post-disaster rebuilding as an opportunity to push through far-reaching neoliberal policy reforms. The emphasis on using market-centered approaches for urban recovery and rebuilding in New York and New Orleans should be seen not as coherent or sustainable responses to urban disaster but rather as deeply contradictory restructuring strategies that are intensifying the problems they seek to remedy.


Recovery of seasonal housing after disasters is driven by different types of decisions and resource streams than those of year-round homes. Given the importance of seasonal rentals in the economy of coastal and particularly island communities, understanding the levels and recovery trajectories of seasonal housing may inform overall recovery expectations. The authors report findings from an empirical study of impact and recovery trajectories for owner-occupied and rental single-family housing in housing sub-market areas in Galveston, Texas following Hurricane Ike using random effects panel models to predict the parcel-level values over an eight-year period. Divergent impact and recovery trajectories and processes were found when comparing housing in residential markets with those in dynamic versus more languid vacation housing markets. Damage, tenure, minority population, and income all had significant effects on trajectories with varying direction and magnitudes across submarkets. These differences in the mechanisms of submarkets and vulnerability in recovery trajectories of coastal communities highlight the importance of mapping the influential factors in each area to target mitigation and recovery assistance effectively.


The purpose of this article is to determine how facility managers currently plan for emergencies and disaster recovery. Although preparation and drills have been demonstrated to improve lifesaving and business recovery capabilities, many organizations still do not have these plans. The scope of unpreparedness and reasons for lack of preparation were key issues, along with preferred methods to gain support for setting up plans.
In this article, I use New Orleans’ experiences pre- and post-Katrina, as well as information on other cities exposed to shocks, to develop and advance an original explanation for urban resiliency. The explanation suggests that economic origins influence elite commitment to and participation within cities, thereby influencing the city’s ability to redefine itself after experiencing an exogenous shock, whether it be a natural disaster, economic crisis, or any other threat. I show that New Orleans’ economic origins were incompatible with the production of an elite that showed place commitment, which was needed for leadership and resources to recreate the city after Katrina. New Orleans’ development mirrors that of other cities that have proven not to be durable. As a result, the city “came back” from Katrina as a smaller and more socially challenged version of its old self—a city still split by racial inequality. Thus, despite its climb out of the damage caused by Hurricane Katrina and the levee failures, New Orleans is not resilient. I conclude by reiterating the importance of leadership in building resiliency, especially in a place that is more likely than most others to experience a disaster.


After the attack on the World Trade Center on September 11, many firms, directly affected by the attack, resumed trading when markets reopened less than a week later. How were these companies able to respond, working under conditions of fear and grief, so quickly and effectively? Drawing on conversations with executives and employees in financial service firms with offices in the World Trade Center and adjacent buildings, this report documents the importance of strong personal ties, lateral self-organization, and nonhierarchical relations in the recovery process. As a response to uncertainty, organizational factors that explain recovery are similar to those that generate innovation.


Disaster recovery planning for organizations is fundamental and often urgent. Planning supports the firm’s ability to recover the core business functionality of its software, data, and systems after the occurrence of a natural or man-made disaster. Organizations must take steps to protect their software, systems and data backups from natural disasters, power outages, and even terrorist attacks. However the issue of disaster recovery is often awash in checklists or marooned in mundane statistics. Such sterile approaches tend to lead key managers, CEOs, and CIOs to relegate disaster recovery planning to a lower priority when they become overwhelmed with planning minutiae or bored with staid presentations. This paper introduces a theatre metaphor to enable a lively discussion and deeper understanding of disaster recovery planning. Specifically, we introduce the concept of workshopping a play. We explore this new approach from the world of theatrical productions to illuminate and deepen understanding of the importance of testing, evaluation, and reworking of scenarios for each potential disaster.

The publication summarizes the outcomes of the International Symposium on Rebuilding After Earthquakes, sponsored by Stanford University in August 1990. Approximately 40 planners participated, including presenters from Yugoslavia, Armenia, Italy, Algeria, Mexico, and Nicaragua who illustrated parallels between their country’s redevelopment experiences following major earthquakes. The document provides advice for planners who face rebuilding of residential and other properties: the need to work across traditional professional boundaries; advice on pre-earthquake steps, such as assuring consistency between plans and development regulations; and the importance of creating the legal authority, structure and plans for future development. The presenters also stressed the value of regional planning and appropriate site planning considerations for temporary housing, and the worth of identifying geologic, seismic, and structural hazards before an earthquake hits. In addition, they addressed social considerations planners should take into account, particularly when confronted with historic preservation issues; homeowners’ safety concerns; the disparate effects on small business owners within the older central business districts; and the reestablishment of neighborhoods following the catastrophe.


Exogenous, non-normative shocks to small businesses such as natural disasters have been understudied. Moreover, most disaster research on small businesses has focused on business recovery as a dichotomy at one point in time. However, disaster recovery for small businesses is an iterative process set in the context of individual, family/household, and community recovery over time. A new dynamic research framework for small business recovery is proposed which allows for a shared framework and vocabulary.


A reading of the social capital literature suggests that the networks and the social relationships which enable collective action can be used to address critical livelihood needs, even in disaster contexts. Yet even when such community-led approaches are combined with substantial resources, too often these interventions (re)produce vulnerabilities without recovering prior levels of development. Examining the outcomes of community-led approaches in post-tsunami Aceh after the gaze of the aid industry has moved elsewhere, this paper finds that in a few cases, interventions worked with social networks to revive livelihoods successfully, albeit in complex, contingent ways. Yet, given the nature of post-disaster contexts and the exigencies driving NGO and donors actions, the research concludes that the capacity for community based approaches to address the underlying drivers of vulnerability remains limited. The paper calls for a rewriting of intervention narratives and a reworking of intervention practices, to address the deeper determinants of disadvantage and vulnerability.


This paper sets out the foundations for developing robust models of community recovery from earthquake disasters. Models that anticipate post-disaster trajectories are complementary to loss estimation models that predict damage and loss. Such models can serve as important decision support tools for increasing
community resilience and reducing disaster vulnerability. The paper first presents a comprehensive conceptual model of recovery. The conceptual model enumerates important relationships between a community’s households, businesses, lifeline networks, and neighborhoods. The conceptual model can be operationalized to create a numerical model of recovery. To demonstrate this, we present a prototype computer simulation model and graphical user interface. As the model is intended for decision support, it is important to involve potential users in model development. We conducted a focus group involving Puget Sound, Washington, area disaster management practitioners to elicit local insight about community recovery and model development needs, using the prototype as stimulus. Important focus group issues included potential model inputs, useful recovery indicators, potential uses of recovery models, and suitable types of software systems.


This study argues that ignorance of businesses in disaster management systems from the point of spatial policies leads to deviations from initial recovery goals aiming to create a safer urban environment. Therefore, the paper examines the location choices of businesses in a disaster-stricken case from Turkey through an empirical research conducted after the 1999 Earthquake. In doing so, data were gathered from 232 firms in Adapazari city via a questionnaire to inquire about their location choices before and after the disaster and the reasons behind their strategy. Findings suggest that recovery goals at community level cannot be achieved without referring to the spatial decisions of businesses in hazard-prone areas. With regard to the findings of the study, policy recommendations are developed to guide post-disaster practises from a space-sensitive perspective by focusing on businesses.


This paper reviews past federal government experience in redeveloping distressed communities, outlining lessons that need to be brought to the process in the Gulf post-Katrina.


Official response to explosive volcano hazards usually involves evacuation of local inhabitants to safe shelters. Enforcement is often difficult and problems can be exacerbated when major eruptions do not ensue. Families are deprived of livelihoods and pressure to return to hazardous areas builds. Concomitantly, prevailing socioeconomic and political conditions limit activities and can influence vulnerability. This paper addresses these issues, examining an ongoing volcano hazard (Tungurahua) in Ecuador where contextual realities significantly constrain responses. Fieldwork involved interviewing government officials, selecting focus groups and conducting surveys of evacuees in four locations: a temporary shelter, a permanent resettlement, with returnees and with a control group. Differences in perceptions of risk and health conditions, and in the potential for economic recovery were found among
groups with different evacuation experiences. The long-term goal is to develop a model of community resilience in long-term stress environments.


Problem, research strategy, and findings: Little research examines the effect of diversity on regional economic resilience to natural disasters. We examine whether economic diversity benefits regional economies in typical circumstances and in recovery after a natural disaster, using the case of the 1993 U.S. Midwest flood. By matching counties in the nine states affected by the flood to control counties, we isolate the influence of diversity on employment and income in normal circumstances and after a substantial shock. We found economic diversity to have mixed associations with employment and income in typical circumstances. On average, economically diverse counties tended to experience faster employment gains but slower growth in per capita income than less diverse areas. The effect of economic diversity upon resilience following a natural disaster was unambiguous. Economic diversity aided counties in weathering the downturn following the flood and sped their return to long-term patterns of employment and income growth. Takeaway for practice: In promoting policies to enhance economic diversity, planners in communities located in areas prone to natural disasters should consider both the goal of disaster resilience and the potential tradeoffs between different aspects of economic performance.


Abstract: This article analyzes the role of dynamic economic resilience in relation to recovery from disasters in general and illustrates its potential to reduce disaster losses in a case study of the Wenchuan earthquake of 2008. We first offer operational definitions of the concept linked to policies to promote increased levels and speed of investment in repair and reconstruction to implement this resilience. We then develop a dynamic computable general equilibrium (CGE) model that incorporates major features of investment and traces the time-path of the economy as it recovers with and without dynamic economic resilience. The results indicate that resilience strategies could have significantly reduced GDP losses from the Wenchuan earthquake by 47.4% during 2008-2011 by accelerating the pace of recovery and could have further reduced losses slightly by shortening the recovery by one year. The results can be generalized to conclude that shortening the recovery period is not nearly as effective as increasing reconstruction investment levels and steepening the time-path of recovery. This is an important distinction that should be made in the typically vague and singular reference to increasing the speed of recovery in many definitions of dynamic resilience.


“People first” is one of the guiding principle of post-earthquake recovery and reconstruction (PERR) in China. Residents’ satisfaction should be one of the objects of PERR. The article examines the satisfaction level of residents in Lushan county of Sichuan Province, an area stricken both by the Wenchuan Ms8.0 earthquake in 2008 and the Lushan Ms7.0 earthquake in 2013. Census data and factor analysis were used for analysis. Based on the result of data analysis, eight factors are selected to indicate residents’ satisfaction: the relation of resident, infrastructure and employment, social security, the effect of disaster
mitigation, natural environment, social affair, owner-occupied housing, price of commodities. Based on result of this study, some recommendations are put forward.


Guided by previous studies and the community assets perspective, a concurrent mixed-method case study was conducted five years after a devastating flood to investigate how invisible community assets played a role in Princeville’s rebuilding process from the flood of 1999. The independent variables in this study included retrospectively assessed elected leadership, community cohesion, and depression. The dependent variables were the perceived financial recovery to the pre-disaster level and the current emotional status. The quantitative method (n = 127) indicates a statistically significant relationship between the retrospectively assessed depression and the financial recovery (Spearman’s p = .327, p < .001). Chi-square coefficient reveals that elected leaders’ ability to mobilize needed resources was also significantly related to the financial recovery (Cramers’ V = .350, p = .013). Qualitative methods identified the community’s symbolic meaning and unique needs of being an aged community as the most precious internal assets of the community during the rebuilding process. Major implications are discussed.