

Planning for the Rebuilding of New Orleans

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Problem: Catastrophic disasters like Hurricane Katrina disrupt urban systems, economies, and lives, and pose huge problems for local governments and planners trying to organize and finance reconstruction as quickly and effectively as possible.

Purpose: This article aims to summarize the key planning challenges New Orleans faced following the August 29, 2005 flooding in order to identify lessons planners can apply following future disasters.

Methods: In this case study we sought to observe key decisions about the recovery as they unfolded. Collectively, we spent months in New Orleans in 2005, 2006, and 2007, and interviewed leaders of all the planning efforts to date. One of us played a lead role in the design and execution of the Unified New Orleans Plan (UNOP), and all observed and/or participated in neighborhood-level planning activities.

Results and conclusions: We agree with previous findings on post-disaster recovery, confirming the importance of previous plans, citizen involvement, information infrastructure, and external resources. We also observe that the recovery of New Orleans might have proceeded more effectively in spite of the inherent challenges in post-Katrina New Orleans. Many local difficulties are a result of the slow flow of federal reconstruction funding. Despite this, the city administration also could have taken a more active leadership role in planning and information management earlier; the city's Office of Recovery Management has since improved this. On the positive side, the Louisiana Recovery Authority has been a model worth emulating by other states.

Takeaway for practice: Planning can inform actions as both proceed simultane-

ously. Had New Orleans planners not felt so compelled to complete plans quickly, they might have been more effective at providing reasoned analysis over time to support community actions and engaging a broader public in resolving difficult questions of restoration versus betterment. A center for collecting and distributing data and news would have better informed all parties; this remains an important need.

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2007). When Katrina occurred, the city lacked a comprehensive plan and the zoning ordinance was outdated (New Orleans Planning Assessment Team, 2005). This meant that when the city had to rebuild, it also had to invent a planning process.

In this article, we invite readers to think about how they would have approached the problem of post-Katrina New Orleans, and what they would do if their cities were struck by catastrophic disaster. How does one organize and finance the rebuilding of a city? What should a planner, local or state government official, or involved citizen do when faced with such circumstances? To what extent can planning policies and strategies help to facilitate a successful recovery? How important are government-led planning efforts?

This article aims to summarize the key planning challenges New Orleans faced from the August 29, 2005 flooding to the present. Neither the FEMA, the state of Louisiana, nor the city of New Orleans was prepared for the task of rebuilding a city after a catastrophic urban disaster. As a result, these governmental entities have had to invent processes and create new entities over the past two years. Despite the extreme aspects of the New Orleans case, it illustrates many general principles that post-disaster planning, as well as planning in general, should follow. We believe that other cities preparing for disasters, planning after disasters, or struggling with the normal difficulties of planning, will find lessons of value in this story.

Background

For two of the authors, research in New Orleans continues our study of planning and redevelopment management challenges after catastrophic disasters (Johnson, 1999, in press; Olshansky, 2005, 2006; Olshansky, Johnson, & Topping, 2006). Recovery efforts after a disaster aim at least to return an area to its previous level of economic activity and replace the housing units lost. Catastrophic disasters may also provide opportunity for better hazard mitigation, urban design and infrastructure than before; greater equity; economic restructuring; and governmental and political reform. In general, the success of a recovery process can be measured by its quality (the degree to which it returns the area to a state equal to or better than before the disaster), and the speed with which this occurs. These are sometimes contradictory values. In addition, lack of resources hampers success on both dimensions.

Previous studies of post-disaster recovery planning (Berke, Kartez, & Wenger, 1993; Haas, Kates, & Bowden, 1977; Johnson, 1999; Olshansky, 2005; Rubin, Saperstein,

& Barby, 1985; Schwab, 1998) indicate that the most successful recoveries have all of the following ingredients:

- Substantial external funding, provided quickly, and with few restrictions,
- Strong local leadership,
- Cooperation between city, state, and federal officials,
- Local, citizen-based processes for making and reviewing reconstruction decisions,
- Previous planning documents which describe consensus policies for future development, and
- Pre-existing planning institutions.

In New Orleans the disaster was catastrophic, it was followed by the diaspora of most of New Orleans' population, and none of the above elements existed. Instead, Congress and the White House have been reluctant to expedite investment in long-term recovery and send aid directly to the city. The mayor did not support planning done by his own planning department. Relationships were poor between the White House and the governor, between the governor and the mayor, and between the mayor and the city council. The city had no system for citizen involvement in governance and no pre-existing plan for the city's future.

There are many ways to tell the story of New Orleans after Katrina (e.g., Nelson, Ehrenfeucht, & Laska, 2007), since post-disaster recovery is a complex process involving many actors. Our research takes the perspective of one set of these actors, local government, in order to identify lessons useful to other municipalities struck by disaster.

Beginning in October 2005, two of us (authors Olshansky and Johnson) involved ourselves in the recovery in ways that would allow us to observe it as it unfolded. We participated in providing preliminary damage estimates to the White House, an initial American Planning Association recovery planning workshop, the initiation of the partnership between ACORN and university planning programs, and early efforts of the *New Orleans Times-Picayune* to draw lessons from other disaster-affected places. Eventually, Johnson was engaged as a lead consultant to the Unified New Orleans Plan (UNOP), described in this article. Olshansky has continued observing and reflecting on the process through interviews with over 50 participants, repeated contacts with several key individuals, and as an advisor to the UNOP. Although conducting this research as participant-observers has provided us with a unique window on the post-disaster experience, it has also posed some dilemmas, as described in a research blog by Olshansky (2007). We are aware that the relationships we established introduce biases into our interpretation and, in some cases,

limit what we can report. On balance, however, we feel this was the best way to understand the challenges of recovery management from the point of view of local government.

Our perspective was greatly broadened by collaboration with authors Horne, a New Orleans native, and Nee, both graduate planning students at the University of California, Berkeley. Both spent fall semester 2006 in New Orleans observing the planning process in two particular neighborhoods. Their website, nolaplans.com, describes the parallel planning efforts and provides links to a variety of New Orleans plans, past and present.

Thus, collectively, the four authors spent months on the ground in New Orleans in 2005, 2006, and 2007, interviewed leaders of all the planning efforts through December 2007 in New Orleans, played a lead role in the design and execution of the UNOP, and observed and participated in neighborhood-level planning activities. We use citations only sparingly, often to news sources, to allow readers to verify key claims. In fact, we or our informants witnessed or participated in all the events described.

At the time of this writing, recovery management in New Orleans is ongoing. Although most planning activities have ended, implementation has just begun. Thus, in many ways it is still too soon to judge the effectiveness of planning and decision processes to date. Indeed, it may be another decade before one can fairly evaluate the successful elements. However, the major planning efforts have now been completed, and it seems an appropriate time to stop and reflect.

Planning After Katrina

Federal and State Planning

In October 2005, FEMA and the state of Louisiana initiated the Long-Term Community Recovery Emergency Support Function (ESF-14) of the National Response Plan (FEMA, 2004). Before Katrina the ESF-14 process had never been used for a large disaster.¹ Each affected Louisiana parish² was to consult with the community and prepare an ESF-14 plan, typically consisting of a prioritized list of recovery projects. The ESF-14 process was very helpful in many rural parishes, but less so in New Orleans because of the scale of damage, the lack of municipal employees, and the absence of an agreed-upon planning process with which to create project lists. The final version of the Orleans Parish ESF-14 plan, listing 36 projects, was released in mid-August 2006, approximately 4 months later than those of the other hurricane-damaged parishes. This document has generally been ignored, although the mayor's

office briefly considered the possibility that its use could speed the flow of federal money to Orleans Parish.

The governor of Louisiana created the Louisiana Recovery Authority (LRA) by executive order on October 17, 2005, initially with a 26-member board, later expanded to 33 members.³ Its key purpose is to represent the state's funding needs to the federal government, by providing documentation of those needs and demonstrating transparency and accountability in funding decisions. The LRA adopted principles and policies for local redevelopment and established a long-range planning taskforce, which oversaw the Louisiana Speaks regional planning process, completed in May 2007 (LRA, 2007a). The LRA has also provided policy guidance for how to use the \$6.2 billion, \$4.2 billion, and \$3 billion in Community Development Block Grant (CDBG) funds provided by the federal government in December 2005, June 2006, and December 2007, respectively, as well as an expected \$1.15 billion in hazard mitigation grant funding from FEMA (Louisiana Office of Community Development, 2007). Most of this money will go to individual homeowners through the \$11.1 billion Road Home program, which funds rebuilding or buys property from owners who choose not to rebuild. It also includes \$1.7 billion for workforce rental housing, \$2.3 billion for infrastructure, and \$350 million for economic development.

The Bring New Orleans Back Commission

Mayor Ray Nagin created the 17-member Bring New Orleans Back Commission (BNOBC) on September 30, 2005, just one month following Katrina, with the goal of preparing a rebuilding plan by the end of 2005. In mid-November the commission invited the Urban Land Institute (ULI) to send a team to New Orleans for one week. Among other recommendations, the ULI group made the rational, but politically poisonous, suggestion to shrink the building footprint of New Orleans for the present and to redevelop in phases over time (Urban Land Institute, 2005a, 2005b). To do this, they recommended converting the lowest-lying, most heavily damaged neighborhoods to green space through government-financed buyouts of property. It being an election year, the mayor distanced himself from the ULI's proposed smaller city, and announced his intention to allow all residents to decide where to rebuild, including in the heavily flooded neighborhoods (Donze, 2006).

When the still-controversial BNOBC report (authored by Philadelphia consulting firm Wallace, Roberts & Todd) was released in late January 2006, it emphasized that its plan was only preliminary, and proposed a four-month neighborhood planning process to make up for the lack of citizen participation up to that point. BNOBC leaders,

under the impression that FEMA had promised to provide the necessary \$7.5 million, began to design this effort. However, FEMA claimed it had never made such a promise, and that it could not legally fund consultants to do local planning. With no funding, the BNOB process came to a halt, having done significant damage to the public's trust in planning, and leaving the city without a planning process six months after the storm. Meanwhile, the fear that neighborhoods might need to prove their viability spurred several groups from the lowest-lying neighborhoods to hold community meetings and spearhead their own independent recovery planning processes (Nelson et al., 2007). Some of these efforts, most notably in Broadmoor and the Lower Ninth Ward, benefited from significant assistance from outside universities (Reardon, Green, Bates, & Kiely, 2007).

The Lambert Plans

During the mayor's BNOB process, the New Orleans City Council decided to commission its own neighborhood-based planning process, to hasten the ability of residents to return. On December 15, 2005, the council voted to extend an existing housing-related contract with Miami-based Lambert Advisory LLC and the local firm, Shedo LLC, to create plans for the city's 49 flooded neighborhoods. The contract was finalized on March 30, 2006, providing \$2.97 million for the effort. Lambert assigned each of seven teams of architects and planners to work with multiple neighborhoods, with neighborhood meetings beginning in May 2006. When Paul Lambert presented the 41 neighborhood plans (Lambert Advisory LLC & Shedo LLC, 2006) to the city council on September 23, 2006, he made it clear that one of the most important differences between this new effort and the earlier BNOB process was that planners explicitly avoided a discussion of neighborhood viability and, instead, detailed a list of projects suggested by residents under the assumption that the basic form of the city was sound. Unfortunately, the Lambert plans did not go through the city planning commission, nor did they meet the LRA's conditions for planning. Thus, although the process was useful for other reasons, the Lambert plans had no link to recovery funding.

The Unified New Orleans Plan

When FEMA refused to fund the BNOB's neighborhood-level planning effort, the mayor's office requested the needed \$7.5 million from the LRA, which then approached the Rockefeller Foundation. The Rockefeller Foundation agreed to partially fund planning in New Orleans, provided all voices would be heard, the process would be led by the best planners, and it would be completed in a timely fashion. Rockefeller donated \$3.5 million to the Greater

New Orleans Foundation (GNOF) to manage the process, and GNOF contributed an additional \$1 million to the effort. The Bush-Clinton Katrina Fund later added another \$1 million, bringing the total to \$5.5 million. Termed the Unified New Orleans Plan (UNOP), it was supposed to achieve consensus among all the key stakeholders and include and augment all prior planning processes, including the ongoing Lambert plans.

The structure set up to manage UNOP was complex. GNOF created a separate foundation, the New Orleans Community Support Foundation, to finance the effort, and hired a private firm, Concordia Architects, to manage the contracts. This insulated the planning process from local politics, but also risked appearing to be an outside effort, imposed on the city by the LRA and the Rockefeller Foundation. One great strength of UNOP was that it was designed to end up in the hands of the city planning commission, the body responsible for approving or denying the plan. Although ignored to this point by both Mayor Nagin and the city council, the city planning commission is legally responsible for city planning in New Orleans, and the city's charter specifically charges it with preparing post-disaster recovery plans. UNOP was to be guided by the Community Support Organization (CSO), whose board was made up of representatives of the mayor, city council, planning commission, and neighborhood organizations, embodying the "U" in UNOP.

On June 5, 2006, GNOF issued a request for qualifications for nationally recognized planning firms (New Orleans Community Support Foundation, 2006), and five weeks later a panel of planning experts chosen by Concordia and Rockefeller in consultation with the American Planning Association interviewed 23 teams. The contract for the citywide team was awarded to a team lead by Villavaso and Associates and Henry Consulting, both local New Orleans firms. Fifteen teams were prequalified as neighborhood or district planners.

A highly significant complication for the start of UNOP was that the process began before the signatories had fully agreed to it. It was not until August 28, 2006 that the mayor and city council finally signed a memorandum of understanding, officially allowing UNOP to begin (City of New Orleans, New Orleans City Council, City of New Orleans Planning Commission, GNOF, New Orleans Community Support Foundation, 2006; Warner, 2006a). The delayed start posed many challenges to organizing the consultants' start of work, and initially allowed the CSO only to react and advise, rather than to provide the proactive leadership originally envisioned.

Both the citywide and district teams followed a similar three-phase structure: (1) a comprehensive recovery assess-

ment; (2) recovery scenario preferences; and (3) a prioritized list of recovery projects. District planners held four rounds of meetings in each planning district of the city during four designated weekends. In addition, most districts convened additional meetings of neighborhood planning groups, subdistrict planning groups, and steering committees. Hundreds of citizens participated actively in these meetings, facilitated by several dozen consultants, and supported by dozens of students and volunteers. AmericaSpeaks, a nonprofit organization focused on engaging citizens in public decision making, joined forces with UNOP to design and conduct three “community congresses” that brought together 300 to 2,500 New Orleanians (both local residents and those still displaced by the flooding) to provide input into the citywide planning process. The community and diaspora outreach activities by AmericaSpeaks were critical elements to the success of UNOP. AmericaSpeaks was responsible for its own fundraising, which amounted to an additional \$3 million on top of UNOP funds (Warner, 2006b). Community Congresses II and III were conducted as simulcast meetings in New Orleans, Houston, Dallas, and Atlanta, with many others linked via the internet at libraries and other meeting sites across the country.

Following the third community congress, the UNOP citywide plan, identifying \$14 billion in priority recovery projects not already covered by other funding sources over the next 10 years, was submitted to the planning commission for its review on January 30, 2007 (Warner, 2007). The LRA had hoped the plan would be completed in time for the needs it identified to reach the new Congress early in the year. The plan, however, still required review and revision by the planning commission and approval by the city council before it could be sent to the LRA and on to Congress. Planning staff reviewed the plan, and gathered public comments at hearings in February and March, but did not approve the revised UNOP citywide plan until May 22 (City of New Orleans, 2007b; City Planning Commission of New Orleans & Office of Recovery Management, 2007). Some city council members continued to dispute the need for UNOP, claiming that the Lambert plans and other neighborhood plans, especially the university-assisted plans for Broadmoor and the Lower Ninth Ward (ACORN Housing/University Partnership, 2007), were more useful. As a result, the council engaged in significant debate regarding exactly which plan or plans they were approving. On June 21 the full council approved the UNOP plan, with language that includes all the other plans that led to it, as well as the subsequent Office of Recovery Management plan described below. The New Orleans recovery plan, at long last, was on its way to the LRA.

The LRA, at its monthly meeting on June 25, 2007, passed a resolution to approve “the New Orleans Strategic Recovery and Redevelopment Plan as the official recovery plan for the parish of Orleans,” and also to “officially receive and accept the Unified New Orleans Plan as the foundation for the Orleans Parish recovery plan” (LRA, 2007b). This allowed the LRA to provide funds to New Orleans, including an initial allocation of \$117 million of CDBG funds. In addition, it allowed both city and state to finally tell the outside world that New Orleans has a plan based on a professional process and supported by widespread citizen involvement.

Office of Recovery Management and the Beginning of Implementation

The most recent chapter in the New Orleans planning story is the mayor’s Office of Recovery Management (ORM)⁴, which came into being with the arrival of its director, Ed Blakely, in early January 2007. With considerable municipal experience at the City of Oakland and a long academic career in planning and economic development, Blakely instantly stood out as the most highly regarded planner to be involved in post-Katrina New Orleans. Charged with coordinating the city’s rebuilding efforts, identifying and attracting funding, working with state and federal agencies, and developing recovery strategies, the ORM represents the beginning of implementation of all the months of planning effort. The ORM’s initial implementation vision was released on March 29, with the unveiling of a pragmatic plan focusing on redevelopment of 17 target areas throughout the city (City of New Orleans, 2007a; Krupa & Russell, 2007). The plan identified \$1.1 billion in attainable funding sources and proposed to use public funds strategically to attract private investment to the target areas. The target areas were selected by the ORM and city planning staff as logical nodes from which city-building could grow, based on previous planning efforts including the UNOP district plans. At the time of this writing (December 2007), the ORM’s plans are frustrated by continued lack of assured funds. Of the \$1.1 billion in attainable funds, only the \$117 million in CDBG funds have been allocated. Another approximately \$300 million was promised by the LRA in December 2007. Over half of the remaining balance may never come. Most of FEMA’s public assistance funds (reimbursement for damages to public facilities) have not yet arrived from Washington, frustrating the city’s efforts to rebuild its streets and sewage and water systems.

The New Orleans Redevelopment Authority (NORA), a political corporation of the state established to undertake community improvement projects consistent with city

plans and policies, will also be important to implementation of the recovery plans. NORA is currently acquiring properties that were blighted before Katrina, and will also acquire properties abandoned and blighted as a result of the flood. NORA has also been designated as the recipient of properties voluntarily sold to the state through the Road Home program, expected to total approximately 7,000 parcels in Orleans Parish. NORA's work is just beginning; its plan for disposition of the Road Home properties was just approved by the LRA at the time of this writing, on December 11, 2007.

Problems New Orleans Shared With Other Recovering Cities

New Orleans exhibits many problems common in post-disaster reconstruction. One is the tension between simultaneous desires for speed and for deliberation. Communities must rebuild as quickly as possible in order to maintain existing social and economic networks. But they must also be thoughtful and deliberate in order to maximize the opportunity for improvement and to ensure that funds are spent as efficiently and equitably as possible. As noted by Kates, Colten, Laska, and Leatherman (2006), "cities and regions seeking to reconstruct after a disaster seem to simultaneously pursue goals to rapidly recover the familiar and aspire to reconstruct in safer, better, and sometimes more equitable ways" (p. 14,656). Above all, post-disaster planning is highly constrained by funding (Olshansky, 2005; Topping, 2000). Money is what drives recovery, and all the struggles in New Orleans have centered on obtaining scarce funds for reconstruction.

The High Speed of Recovery Planning

Time has been a particularly severe constraint in New Orleans, manifested in several ways. First, planning and decision processes have been constrained by the speed of information flows. This was particularly pronounced during the first 15 months, when state and city agencies, FEMA, neighborhoods, and individuals were all making significant decisions with inadequate information about what others were doing. It is well known that short-term disaster response processes have this chaotic, "fog of war" characteristic (Comfort & Haase, 2006; Tierney, Lindell, & Perry, 2001). In the case of the catastrophic urban disaster in New Orleans, however, this chaos continued for many months, well into the recovery phase. In spite of urgent needs to commit to plans, neither individuals nor government agencies had sufficient information to make decisions.

Second, decisions occurred at a faster pace than people could absorb. Planning takes time because individuals and groups need to acquire and comprehend information, build trust among the parties, consider alternative courses of action, and feel some confidence in the decision. Most of the planning processes kept moving ahead even in the face of discord.

Third, most of the planning efforts have made mistakes due to haste, believing that they lacked the time to stop and fix them. For example, the BNOBC was so intent on finishing by the end of 2005 that it did not involve neighborhoods or the people forced to leave New Orleans after the storm. Toward the end of the Lambert planning process some neighborhoods still had not had meaningful meetings; nevertheless, all the plans were prepared and delivered by the deadline. And UNOP planners, keeping to their tight schedule, held the first community congress less than two months into the process and without the public outreach and grassroots organizing necessary to get representative public participation in the meeting. The participants were so different from the city's pre-Katrina demographics that the meeting's results were dismissed by the public. If additional resources had not subsequently been committed to outreach, the damage caused by this community congress could have crippled the remainder of the UNOP process.

Value of Prior Planning

Following a disaster is not the ideal time to initiate planning. Without a basic planning infrastructure in place, post-disaster planning is more challenging and takes much longer. The best preparation for recovery planning is to have active planning processes beforehand, including networks of well-established community organizations, lines of communication, and a variety of planning documents and tools. This was not the case in New Orleans. Prior to Katrina, the city lacked a formal neighborhood planning program, and was perceived to be generally insensitive to citizen views (New Orleans Planning Assessment Team, 2005).⁵ Furthermore, it lacked a current comprehensive plan, and the zoning ordinance was outdated. The New Orleans Planning Commission had initiated a master plan process in 1997 but never completed it.

It would be unfair, however, to claim that New Orleans was starting entirely from scratch. Parts of the 1997 master plan had been completed. Planning districts and neighborhoods designated in 1973 provided a very helpful areal framework. Finally, as noted earlier, the city charter clearly designated the city planning commission as the official body responsible for city planning in general in New Orleans, and specifically for recommending the recovery plan to the city council.

Unfortunately, shortly after the flood the mayor reduced the city's planning staff from 24 to 8, approximately half of whom were professional planners (New Orleans Planning Assessment Team, 2005). This reduced the city's already limited planning capacity even further at this critical time. Inam (2005) writes that planning institutions can adapt existing routines to solve complex new problems to help recover from crises. Reducing the city's planning capacity undermined its ability to apply existing institutional resources to the challenges of post-Katrina reconstruction.

That said, the city as a whole has shown that it is possible to reinvent planning in the wake of a catastrophic disaster. Now nearly two-and-a-half years after the flood, city hall has been strategically reorganized around recovery and community and economic development, and two new entities (ORM and NORA) are staffed and share a sense of cooperation and common purpose. A series of completed planning processes and unprecedented citizen involvement (see also Williamson, 2007) have also provided a foundation for implementation. This achievement is rather remarkable.

The Role of Government in Post-Disaster Planning

It is important to appreciate who makes plans in the post-disaster environment, and for what purposes. Government is only one of the actors making key decisions after a disaster. In fact, some would say that government is one of the lesser actors. Because bureaucracies cannot manage decision processes at the pace required for recovery, we know from other disasters that new organizations always emerge, and that they are necessary for successful recovery (Ganapati, 2006; Quarantelli, 1999). This has also been true in New Orleans (Coates, 2007). Although this article focuses on the official governmental planning processes, most of the work of community organizing, clean-up, and rebuilding to date have been done by emergent and nongovernmental organizations, such as ACORN, Common Ground, Habitat for Humanity, Enterprise Foundation, university groups (Reardon et al., 2007), and scores of faith-based groups that have mobilized thousands of volunteers to gut flood-damaged houses (Rose, 2007). The neighborhood planning process would not have occurred without the work of over 160 neighborhood organizations (Cityworks, 2007; Maloney, 2007), including both pre-existing and emergent groups. These groups have also provided residents with information on financial issues and the evolving status of city services. The Neighborhood Partnership Network (NPN) appeared in the spring of 2006, and its weekly meetings and monthly newspaper with a circulation of 10,000 throughout the city and among displaced households in Houston has provided

information and connections to neighborhood organizations and community activists.

If post-disaster planning is just a more intense version of normal planning, and urban plans are primarily persuasive arguments by many actors communicating information to appropriate audiences for particular reasons (Donaghy & Hopkins, 2006), then a recovery plan's persuasive power depends on the credibility of its authors, the information it contains, and the scope and equity of the process that creates it. Furthermore, conversations between plans occur while development decisions are taking place. It has never been more apparent than in New Orleans that planning and action proceed simultaneously. City and state governments, utilities, community organizers, housing nonprofits, and others have been working since September 2005 to rebuild the city, and while doing so have used formal and informal plans to communicate their intentions.

Government-led recovery plans have several particularly important functions. They alone can steer private investment waiting to know the intentions of public agencies. They alone can establish public budget priorities. And only governments can provide certain kinds of definitive, publicly accessible information that will help other government entities, nonprofits, and individuals make more informed and rational decisions.

Given this, how did each of the various officially supported plans in New Orleans perform? The BNOB plan used a rational planning process that primarily represented the elites of the city. It made preliminary cost estimates, but its main contribution was to raise key issues and lay out a framework for considering how a rebuilt New Orleans might work. Even though it lacked a well-defined audience, it was an important conversation starter. The Lambert plans initiated neighborhood discussions throughout the city and built upon the many incipient neighborhood planning efforts. They also represented the views of their primary audience, members of the city council, each of whom wanted to protect their own district's future. The council had hoped its own plan would be the Orleans Parish plan, but the LRA chose UNOP, which brought the pieces together, filled in the gaps, and developed a price tag. The LRA realized that a plan suited to acquiring federal funds and releasing them to New Orleans would need a transparent process with extensive public involvement, a strong factual foundation, strategies for public investment, recommendations for how to restore and improve quality of life for all, and guidance for investors and residents. UNOP offered this, as it represents the views of the thousands of citizen participants in its own and other neighborhood planning efforts.

UNOP had several target audiences, but three stand out. First it was important to document to Congress the need for additional federal funds. Nine months after Katrina, Congress finally approved \$10.4 billion for Louisiana's recovery, but most Louisiana officials knew this would be insufficient. The LRA used UNOP to help make that argument convincingly to Congress, which in December 2007 did provide an additional \$3 billion. Second, both the ORM and NORA were important audiences. The UNOP plan provided guidance to the ORM in selecting the priority target areas and to NORA in designating and prioritizing its redevelopment projects. Third, UNOP had an audience in outside real estate interests, foundations, businesses, and Road Home recipients trying to decide whether to stay, come, or leave the city. It signaled directly itself and indirectly through its influence on the ORM plan. The ORM plan represents the first phase of a practical approach to the economic redevelopment of the city. It is incremental yet systematic, has the confidence of the mayor, and includes in its audience all potential investors in the reconstruction of New Orleans.

With each planning effort, the discussion has become better informed and more sophisticated. People have also come to accept change and downsizing that were unacceptable in the fall of 2005. In the intervening time they have been able to absorb information, consider alternatives, and make planning decisions.

The Public Representation of Planning

The citizens of New Orleans are now arguably the best-educated citizen planners in the country. They have participated in months of meetings. They have become accustomed to using planning jargon, do not appreciate planners talking down to them, and are a difficult audience to fool.

Nevertheless, they are still confused about the purpose of their completed plans and of planning in general. In part, this confusion can be attributed to the evolution of proponents' claims for planning. In various venues, UNOP was alternatively described as a "blueprint," "framework," "roadmap," and "strategy" (e.g., Millhollon, 2006; Reid, 2006; Saluny, 2006; Wallace, 2007; Warner, 2006e). The Rockefeller press release in April 2006 stated that its funding was to be used for "a comprehensive rebuilding plan for New Orleans" (Rockefeller Foundation, 2006). UNOP leaders referred to their process in July 2006 as an opportunity for citizens to be involved in planning the redevelopment of their neighborhoods (Warner, 2006c). UNOP was also represented in public meetings as a "recovery plan" with limited scope and timeframe, concerned primarily with infrastructure financing and coordination of recovery activities, and not about redevelopment.

In fact, the purpose of UNOP actually did evolve, and not all its participants realized this at the same time. Initially, planners talked about planning in New Orleans as a necessary step toward release of the still substantial CDBG monies held by the LRA. Since then, as the state continued to spend down its initial allocation and the extent of the devastation in New Orleans became clearer, the focus shifted to producing a document that, along with the other recovery plans for the remaining hurricane-damaged parishes, would be used to go back to Congress to request an additional infusion of federal grants. This reality, however, was not made clear to New Orleanians until later in the process (Warner, 2006d), and many participants in the planning process were not aware that this was the case. For example, the Bureau of Governmental Research (BGR), a local watchdog group, criticized UNOP for its \$14 billion price tag specifically because these funds were not available (Bureau of Governmental Research, 2007). BGR did not appreciate that this deficiency was precisely the point: The plan explained why these funds were needed and how they would be spent, and the amount had been agreed upon jointly by UNOP and LRA planners.

People never quite understood what to expect from the plans, in part because the leaders did not consistently explain to the public the purpose of their plans and what outcomes they would produce. So citizens were left to infer the purpose from news reports and planning products. The public saw the Lambert plans as lists of desired projects, UNOP as somehow rolling all of these into a citywide infrastructure plan, and Dr. Blakely as turning it all into reality. (In fact, only Blakely actually had any real authority to make funding commitments.) Most citizens expected the plan to be a blueprint for how to achieve a desired future end state. Only a small percentage of participants comprehended its more subtle functions as persuasive argument for increased funding and as a foundation for continued planning. As a result, some citizens are now disappointed, feeling that they attended dozens of meetings with no apparent tangible result.

The public outcry for planning began almost immediately after the disaster, and led to requiring that the BNOB plan be finished by the end of 2005, rushing the city council to arrange the Lambert contract, and setting the deadline to finish UNOP by early 2007. The insistence on developing plans as quickly as possible seemed to imply that no one could act until the plans were completed, and that the completed plans would be binding. This led many people to see planning as the obstacle to their return, and pushed many people to begin the rebuilding process before the planners could tell them otherwise. For example, when the BNOBC proposed a moratorium, some people reacted by

obtaining building permits immediately, and pressured city officials to estimate their damages at less than 50% (49% was a common value) to exempt them from having to comply with new FEMA elevation requirements. This view colored subsequent planning efforts so much that none of the subsequent plans could even consider designating some parts of the city as risky.

We draw two lessons from this. The first is that it would have been acceptable to take more time to develop a consensus for planning, as well as to articulate its purposes. One deliberate plan could have been done in less time than it took to complete three hasty ones. Such deliberative planning might have been possible had the major parties initially been more patient, and had clearer leadership emerged from city hall. For example, early 2006 would have been an appropriate time to establish the ORM, supported by city planning staff and public involvement. Rockefeller might then have negotiated directly with the city to support the work of the ORM and planning staff and to provide funds for neighborhood consultants.

Second, in spite of the above, it is unwise to bring everything else to a halt while taking additional time to plan. "Over-ambitious and detached planning will generally be counterproductive" (Haas et al., 1977, p. 67). For example, imposing a moratorium can backfire except in limited areas needing further study. This happened following the 1972 Managua (Nicaragua) earthquake, when a moratorium was imposed on reconstruction in the downtown. By the time the plan was completed, the functions of downtown had already moved elsewhere (Haas et al., 1977). If planning and action are accepted as simultaneous activities however, deliberation can occur without halting vital recovery actions. Since there must be a tradeoff between speed and deliberation, we recommend that decisions about which has the higher priority at a particular time not apply citywide, but at a smaller scale and among several entities.

Local Leadership

Scholars have written that successful post-disaster recovery depends on strong local leadership (Johnson, 1999; Rubin et al., 1985). An effective leader can turn adversity into opportunity, using it to implement plans that improve the community. One way a leader does this is by creating and nurturing community organizations after the disaster. Successful leaders are also skillful at networking with state and federal agencies and articulating the community's needs to outside entities.

In the case of New Orleans, critics have repeatedly pointed to the lack of such leadership, at both the local (Filosa, 2006; "Not Coming Together," 2006) and national ("Waiting for a Leader," 2005) levels. Some have criticized

Mayor Nagin for not making the hard decisions to abandon certain parts of the city. But strong leadership means much more than simply making draconian land use decisions. More to the point, the mayor could have taken a stronger role in promoting the planning efforts, supporting community involvement, and making city hall a central information and communication node. In the crucial months of early 2006, he did the opposite, laying off most of the professional planning staff and ignoring the planning department and planning commission. Ultimately, the mayor created the ORM, which, 16 months after the storm, finally became the focal point for local recovery efforts.

The organization that has taken the strongest leadership role, albeit at the state level, is the LRA. It set policy, developed a variety of assistance programs, established funding pipelines, supported the Louisiana Speaks regional planning process, orchestrated local and national press support, lobbied Congress, and created and facilitated UNOP. The LRA's involvement in UNOP, however, could not replace local planning leadership.

Although the UNOP process was seen as fair, it had little initial planning credibility. Although the city planning commission was to approve UNOP, neither the commission nor its executive director took an active role in developing it or shepherding it through disputes, and the GNOF was merely a conduit for money. The citywide consultants saw themselves as just that: consultants hired by a client with limited authority. Thus, no one other than the LRA was really in charge of UNOP, and no one with authority at the city level led planning in New Orleans until the ORM was established and Ed Blakely named to lead it, establishing a source of credible and authoritative local planning leadership.

The Challenge of Resilient Recovery

Resilience describes a community that will bend but not break when struck by an extreme natural event (Burby, 1998).⁶ As observed by Vale and Campanella (2005), cities are inherently resilient after disaster, because they have reasons for existing and because their residents believe in them. But even though an urban system recovers, many of its individual households or businesses may not (Alesch, 2007), since disasters create both winners and losers. Furthermore, a recovered urban system's resilience may be weakened if it is too similar to its predecessor, making it more vulnerable when a similar disaster hits in the future.

Communities can strengthen their resilience and reduce risks to their residents by using a suite of development management tools to mitigate hazards (Burby, Deyle, Godschalk, & Olshansky, 2000), and there is often a window of opportunity for initiating such policies following

a disaster event (Birkland, 1997; Godschalk, Beatley, Berke, Brower, & Kaiser, 1999; Olshansky & Kartez, 1998). Yet, while it is common for disasters to lead to long-term policy changes that will affect future development, it is much more difficult to apply such changes immediately, in post-disaster reconstruction, because of pressure to rebuild what was there before (Haas et al., 1977; Kates et al., 2006). This is what has happened in New Orleans, where it has been difficult to discuss any of the broad array of risk-reduction tools. Some observers have criticized UNOP's Community Congress II for not going far enough in presenting the unpleasant realities of future flood risks throughout New Orleans. But we believe that this meeting and its preceding district planning meetings were the first citywide discussion of such issues, and thus an important step forward, even if tentative. In the end, UNOP encouraged two methods for mitigating the effects of future floods: elevating structures, and clustering structures at higher elevations and at transportation nodes.

It is difficult to achieve the LRA's motto ("Safer, Stronger, Smarter") while simultaneously pursuing economic recovery and the reconstruction of affordable housing.⁷ UNOP and the LRA policies clearly call for mitigating future flood hazards, and in fact approximately 10% of the state's Road Home budget consists of federal hazard mitigation funds. The ORM and NORA are currently developing redevelopment programs that will include mitigation where possible: elevating buildings, purchasing permanent open space in low-lying areas, obtaining public title to flood-prone land through land swaps, and improving construction techniques. For example, "safety and elevation" is one of the 17 principles in NORA's plan for disposition and redevelopment of its approximately 7,000 Road Home properties (NORA, 2007). But implementing this policy will be difficult, as it continues to compete with the other 16 principles, including imperatives to create jobs, bring back displaced families, and create opportunities for affordable housing. It is not yet clear how New Orleans will manage the often competing goals of restoration and improvement, or to what extent redevelopment in the new New Orleans will provide safety, equity, green technology, accessibility, affordability, economic viability, and profitability for private investors.

Challenges That Are Unique to New Orleans

An Environment of Mistrust

Some problems have been unique to the New Orleans case, making reconstruction success particularly difficult. First among these is mutual mistrust, which has proven to be a serious handicap. The biggest gulf of mistrust is that between the races. Long-resident White families have historically had the most power and money in New Orleans, and have used them to control Blacks and newer arrivals. For example, those who could afford gracious homes built on the higher ground of the Mississippi River's natural levees were usually untroubled by the flooding that plagued other residents (Lewis, 2003). Many African Americans know that members of the White elite ordered a levee protecting a poor area destroyed in order to save New Orleans during the Mississippi River flood of 1927 (Barry, 1997), and believe that the levee on the Industrial Canal was destroyed on purpose to drive them from their homes.

African Americans are also suspicious of promises that neighborhoods will be improved through redevelopment such as that proposed during the BNOB process, because of experience with broken agreements in the recent past. For example, despite initial promises to provide new housing for all the displaced low-income residents when the St. Thomas public housing project was redeveloped under HOPE VI, the project evolved instead into a mostly market-rate development with insufficient units for previous residents (Bagert, 2002; Finch, 2007). And just days after the storm, Jimmy Reiss, the head of the New Orleans Business Council, was quoted in *Newsweek* as saying that the diaspora after Katrina created an opportunity to build a city with fewer poor people (Alter, 2005; Scott, 2005). Thus, it is not surprising that African Americans were suspicious of the BNOB plan, as well as of the motives of the elites of GNOF managing UNOP.

The White elites are also suspicious of the ethics and governing ability of many of the city's Black politicians. In 2007, for example, Congressman William Jefferson was indicted for money laundering and racketeering, and, at the time of this writing, several associates of former Mayor Marc Morial, currently the president of the National Urban League, are on trial in New Orleans on a variety of corruption charges. Council member-at-large Oliver Thomas, who had widely been expected to be the city's next mayor, also pleaded guilty in August 2007 to accepting illegal payments.

There is also a history of mutual mistrust between New Orleans and the rest of the state, including its capital,

Baton Rouge. Sometimes described as an island in Louisiana, the urban, Catholic culture of New Orleans has long been at odds with the upstate, Protestant culture that dominates the bulk of the state as well as with the rural, but also Catholic, Cajuns (Lewis, 2003). The recent growth of Baton Rouge, coupled with the steady population decline of New Orleans, has exacerbated this.

Finally, the federal government mistrusts the ethics of Louisiana and New Orleans in particular. Evidence of wrongdoing in recent times is plentiful: Governor Edwin Edwards, who served for 16 years in that office, was one of the most popular Louisiana governors in history, but was convicted in 2001 on federal racketeering charges, and remains in prison. Louisiana in general and New Orleans in particular have also received large payouts under the National Flood Insurance Program while being reluctant to enforce flood mitigation measures (see Burby, 2006). Many claim that 21st-century Louisiana is no more corrupt than other states, and that its reputation rests more on its colorful history than on present reality. Nevertheless, such perceptions have made it harder for New Orleans to secure the federal resources it needs to recover successfully. When Louisiana Senator Mary Landrieu introduced a bill asking for \$250 billion in aid in September 2005, it drew national attention to the potential for misdirection and waste of large amounts of federal funds intended for the recovery.

Scarcity of Reconstruction Funds for Local Governments

According to UNOP, approximately \$47 billion in public or private funds had been obligated or spent for long-term rebuilding in Orleans Parish as of April 2007. Twenty billion dollars came from private insurance; approximately \$6 billion from the National Flood Insurance Program; \$5.7 billion for flood protection; and the remainder from Small Business Administration loans, CDBG payouts (primarily the Road Home program), highways, and FEMA reimbursement for damaged public facilities. Much of this assistance went to private owners, however, and very little has yet reached local governments.

Furthermore, although 40% of Louisianans who lost their homes were renters, only 15% of the Road Home housing funds are designated for rental housing (Rose, 2007). As a result, rents are higher, and no plans exist for replacing most of the lost rental units. So despite the rhetoric that New Orleans residents before Katrina have a "right to return," it is in fact very hard for those who were displaced to return to homes and jobs in New Orleans unless they are homeowners covered by the Road Home program.

UNOP identified a significant gap between committed funds and remaining needs, totaling over \$14 billion over

the next 10 years. Subsequently, the ORM plan identified \$1.1 billion of that funding that appeared to be attainable, and allocated those funds to high priority projects throughout the city. But to date resources available to the city for public projects have been limited: \$117 million have been allocated from CDBG funds, \$75 million in bonds have been authorized, \$57 million in FEMA mitigation funds will eventually arrive, and progress is being made on obtaining private financing. As of October 2007, the city had received only \$353 million in obligated FEMA public assistance funds, about half what it ultimately expects to receive. Of the \$353 million, the city has used \$188 million, most of it for immediate response-related activities like debris removal, and plans to spend another \$135 million in 2008 for repairs to roads, public safety facilities, parks, recreational facilities, and other eligible public infrastructure projects. The FEMA public assistance funds are available only through a cost reimbursement process, meaning the city must pay in advance for construction and architectural and engineering services.

The following example illustrates how funding has been delayed, making it exceptionally difficult for the city to plan and implement the reconstruction. In December 2007 the LRA promised the city approximately \$300 million more in CDBG funding. These funds emanate from a May 2007 Congressional act waiving the required 10% state match for FEMA public assistance reimbursements (approximately \$800 million) for repairing damaged public buildings and infrastructure. To obtain this waiver, Louisiana lobbied intensely for several months in the spring of 2007, and was ultimately successful in getting the waiver attached to a \$120 billion emergency war spending bill signed by the President in May 2007. However, these funds did not become immediately available for reconstruction as hoped, because the state had to place this money in reserve to cover a shortfall in the Road Home program when FEMA apparently initially underestimated the number of flood-affected homes. Following lobbying by Louisiana throughout the summer and fall, Congress approved \$3 billion to address this shortfall as part of a \$471 billion defense bill in November 2007. The state was able to confirm that this was sufficient, because it coincided with the December 1 cutoff for individuals to register with the Road Home program. Thus Louisiana was finally able to release the waiver money to the parishes, including approximately \$300 million for New Orleans. It will still be a long time, however, before any of this actually reaches the city, because CDBG-funded projects require approval by the U.S. Department of Housing and Urban Development, a time-consuming process of documentation and public review. This is one illustration of why, nearly two-

and-a-half years after the flood, the city still lacks much of the public funding due to it, which itself is substantially less than the documented need. This lack of funds is the root cause of much citizen frustration over broken streets, inconsistent water supply, insufficient Road Home checks, shortage of affordable rental housing, and planning and public discussions that yield no apparent results.

Lessons Learned

Clearly, this experience has confirmed much of what we know about post-disaster recovery, including the importance of previous plans and planning capacity, citizen involvement, information infrastructure and data clearing-houses, and external resources. It has also confirmed that recovery is a complex and often chaotic process, requiring nimble institutions and creative ways of harnessing the power of emergent organizations. It also illustrates the recurrent tension between rebuilding better than before and quickly replacing what was there previously.

Given this, how might the New Orleans process have done better at reconstructing both quickly and well? It is easy to criticize such a complicated process in hindsight. Virtually all the people we encountered had admirable goals and were doing their best, given bureaucratic requirements and limited time and information. There are few bad guys in this story. Nonetheless, we think a few key actions could have made a difference.

The federal government, which acted quickly to provide relief funds in the first weeks following Katrina, has been slow to provide funds needed for permanent reconstruction, retarding recovery in several ways. First, Congress and the White House have consistently been reluctant to provide reconstruction funds to Louisiana, even when presented with appropriate evidence and assurances from the LRA. Four times (in December 2005, June 2006, May 2007, and November 2007) Congress provided just enough money to address an immediate need, each negotiated as part of gaining support for a war funding bill. Funding of flood protection and wetland restoration has proceeded similarly. Second, it has become increasingly clear to all observers that the Stafford Act, the nation's disaster management law, is insufficient for catastrophic disasters (Moss & Shelhamer, 2007). It does not provide funds to support local government operations in their time of greatest need, does not provide immediate cash assistance to residents and small businesses, has excessively burdensome requirements for local governments to obtain reimbursement for repair of their damaged facilities, and has perverse incentives that work against replacing outmoded public facilities with

newer and safer ones. Third, despite the deficiencies of the Stafford Act, the White House has considerable discretion it has not used. The federal government exhibited flexibility and creativity in recovery programs following the 1994 Northridge earthquake and the 1997 Red River floods, but for some reason this administration has chosen not to aggressively cut red tape for Louisiana's Katrina recovery. The recovery of New Orleans could be proceeding much more smoothly had Congress provided a larger block grant (perhaps on the order of \$15 billion) in December 2005, and had the administration actively streamlined the FEMA public assistance program.

Although we understand that the city was desperately strapped for funds in the fall of 2005, we still believe that the mayor could have taken a more substantial leadership role in advancing recovery planning at that time. In the chaos of those months, citizens were looking for a central source of information that would provide clear, consistent messages regarding the recovery process. The ORM now provides this, but it could have happened much sooner. The mayor could also have defused the negative response to the BNOB plan by accepting it as just a first step in the planning process. He could also have encouraged citizens to continue making their own informed choices, while at the same time aggressively seeking funding to continue the public planning process.

Spring 2006 was a critical time for planning in New Orleans in the wake of the BNOB plan. Stepping into this vacuum, the city council and the LRA simultaneously sought funds to start their own planning processes. The Rockefeller Foundation was willing to help, but at the time was reluctant to give funding directly to the city because it lacked planning capacity.⁸ Despite the obstacles and personality conflicts involved, we believe that greater effort should have been spent trying to merge the Lambert and UNOP processes. UNOP proponents felt compelled to proceed, thinking meaningful action awaited a plan, but in retrospect more time could have been spent on planning without slowing down other activities. The negotiations would have been difficult, but probably no more than those needed to convince the mayor and council to agree to UNOP, which extended over two months. Had Lambert been given a role within a larger UNOP consultant team, had the LRA specified the overall objectives of this broader plan, and had the CSO played the significant role intended for them in the structure of UNOP, such a merger could have created good will and speeded final completion and adoption of the plans.

We find the LRA's performance to be outstanding, and take from it several lessons for organizing a state-level recovery agency capable of responding to a catastrophic

disaster. First, it was designed to be a conduit for federal funds, recognizing the centrality of external resources to the overall recovery. Second, it has a carefully crafted bipartisan membership, as well as a mix of expertise and broad geographic representation. Third, it is a policy rather than a planning body. It formulates policy and establishes procedural frameworks, and it also serves a watchdog role once agencies have put those policies into action. The LRA provides the most positive lessons to emerge from the post-Katrina recovery.

Post-disaster planning provides information in a decision environment constrained by time and money, and its goal is to facilitate both the speed and quality of reconstruction. We conclude with three observations. First, planning can inform actions as both proceed simultaneously. Had the New Orleans planning processes not been constrained to meet early deadlines, they might have been more effective at providing reasoned analysis and engaging a broader public to address difficult tradeoffs between restoration and betterment. Second, federal reconstruction funds should have come more quickly, and we hope the Stafford Act will be revised so as to speed the flow of money the next time catastrophic disaster strikes. Third, a better information infrastructure, with a center for collecting and distributing data and news, would have helped to better inform all parties; this remains an important need.

The coming months and years will continue to be critical times for New Orleans as the city struggles to rebuild as quickly, safely, equitably, and effectively as possible. We hope that the nation's planning community will continue its interest in the success of this endeavor.

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Notes

1. FEMA first tried out the ESF-14 process of recovery planning after two small-town tornadoes in 2004.
2. Parishes in Louisiana are roughly comparable to counties in other states.
3. Although all members were originally from Louisiana, several members no longer live in the state, and other members are nationally prominent.
4. In November 2007, this office absorbed the former Office of Planning Development (comprising economic development, housing, and

code enforcement), and has been renamed the Office of Recovery and Development Administration (ORDA).

5. The city did, however, have a base of strong neighborhood organizations before the flood (Nelson et al., 2007).

6. This is similar to the concept of sustainability in the face of disaster (Berke & Beatley, 1997).

7. This is no surprise. Rosen (1986), for example, describes the difficulties in improving Chicago, Boston, and Baltimore after devastating fires due to the complex realities of city growth.

8. The Rockefeller Foundation has since provided funds for the ORM. Rockefeller, the Ford Foundation, and the Bill and Melinda Gates Foundation jointly provided \$1.54 million to support ORM staff in 2007.

References

- ACORN Housing/University Partnership. (2007, January). *A peoples' plan for overcoming the Hurricane Katrina blues*. Ithaca, NY: Department of City and Regional Planning, Cornell University.
- Alesch, D. J. (2007, October). *Documenting and conceptualizing community disaster recovery*. Paper presented at the 21st Disaster Roundtable, National Academy of Sciences, Washington, DC.
- Alter, J. (2005, September 12). How to save the big easy. *Newsweek*, p. 53.
- Bagert, B. Jr. (2002). *Hope VI and St. Thomas: Smoke, mirrors and urban mercantilism*. Unpublished master's dissertation, London School of Economics, London, England.
- Barry, J. M. (1997). *Rising tide: The great Mississippi flood of 1927 and how it changed America*. New York: Simon & Schuster.
- Berke, P. R., & Beatley, T. (1997). *After the hurricane: Linking recovery to sustainable development in the Caribbean*. Baltimore: Johns Hopkins University Press.
- Berke, P. R., Kartez, J., & Wenger, D. (1993). Recovery after disaster: Achieving sustainable development, mitigation and equity. *Disasters*, 17(2), 93–109.
- Birkland, T. A. (1997). *After disaster: Agenda setting, public policy, and focusing events*. Washington, DC: Georgetown University Press.
- Brookings Institution. (2005). *New Orleans after the storm*. Washington, DC: Brookings Institution Metropolitan Policy Program.
- Burby, R. J. (Ed.). (1998). *Confronting natural hazards: Land-use planning for sustainable communities*. Washington, DC: National Academy/Joseph Henry Press.
- Burby, R. J. (2006). Hurricane Katrina and the paradoxes of government disaster policy: Bringing about wise governmental decisions for hazardous areas. *Annals of the American Academy of Political and Social Science*, 604(1), 171–191.
- Burby, R. J., Deyle, R. E., Godschalk, D. R., & Olshansky, R. B. (2000). Creating hazard resilient communities through land-use planning. *Natural Hazards Review*, 1(2), 99–106.
- Bureau of Governmental Research. (2007, March). *Not ready for prime time: An analysis of the UNOP Citywide Plan*. New Orleans, LA: Author.
- City of New Orleans. (2007a, March). *City of New Orleans recovery plan*. Retrieved April 16, 2007, from <http://www.cityofno.com/portal.aspx?tabid=95>
- City of New Orleans. (2007b, April). *The Unified New Orleans plan: Citywide strategic recovery and rebuilding plan*. New Orleans, LA: New Orleans City Planning Commission.
- City of New Orleans, New Orleans City Council, City Planning Commission, Greater New Orleans Foundation, & New Orleans Community Support Foundation. (2006, August). *Memorandum of*

understanding between the City of New Orleans, New Orleans City Council, City Planning Commission, Greater New Orleans Foundation, and New Orleans Community Support Foundation. New Orleans, LA: Author.

City Planning Commission of New Orleans & Office of Recovery Management. (2007, May). *Consideration of the citywide strategic recovery & rebuilding plan: Final city planning commission report.* New Orleans, LA: Author.

Cityworks. (2007, April). Neighborhood mapping project. Retrieved April 26, 2007, from <http://www.city-works.org/pg-56-5-map-project.aspx>

Coates, T. (2007, November). *Building the plane as you fly it: Community development systems in New Orleans.* Paper presented at the 29th Annual Research Conference of the Association for Public Policy Analysis and Management, Washington, DC.

Comfort, L. K., & Haase, T. W. (2006). Communication, coherence, and collective action: The impact of Hurricane Katrina on communications infrastructure. *Public Works Management and Policy*, 11(1), 1–16.

Donaghy, K. P., & Hopkins, L. D. (2006). Coherentist theories of planning are possible and useful. *Planning Theory*, 5(2), 173–202.

Donze, F. (2006, March 20). Rebuild, but at your own risk, Nagin says; Recommendations from BNOB come with warnings and worries. *New Orleans Times-Picayune*, p. 1, National.

Federal Emergency Management Agency. (2004, December). *National response plan (ESF-14 Long-term Community Recovery and Mitigation Annex).* Washington, DC: Author.

Federal Emergency Management Agency. (2006, June). *Public assistance projects hit \$2.38 billion in Louisiana; Katrina debris removal two-thirds complete, Rita cleanup almost finished* (FEMA Release Number: 1603-491). Washington, DC: Author.

Filosa, G. (2006, July 29). Experts excoriate recovery leaders; Nagin, council are failing N.O., they say. *New Orleans Times-Picayune*, p. 1, National.

Finch, S. (2007, July 10). Plan for resettling public housing residents OK'd. *New Orleans Times-Picayune*, p. 1, Metro.

GCR & Associates, Inc. (2007). *Population estimates for Orleans Parish, July 2007.* Retrieved August 27, 2007, from www.gcr1.com/resettlement_trends_july07.htm

Ganapati, N. E. (2006, November). *The resilient victims: Rise of social capital in the rubble.* Paper presented at the 47th Annual Conference of the Association of Collegiate Schools of Planning, Fort Worth, TX.

Godschalk, D. R., Beatley, T., Berke, P., Brower, D. J., & Kaiser, E. J. (1999). *Natural hazard mitigation: Recasting disaster policy and planning.* Washington, DC: Island Press.

Haas, J. E., Kates, R. W., & Bowden, M. J. (Eds.). (1977). *Reconstruction following disaster.* Cambridge, MA: MIT Press.

Inam, A. (2005). *Planning for the unplanned: Recovering from crises in megacities.* New York: Routledge.

Johnson, L. A. (in press). New Orleans' recovery following Hurricane Katrina: Observations on local catastrophic recovery management. *Journal of Disaster Research.*

Johnson, L. A. (1999, May). *Empowering local governments in disaster recovery management: Lessons from Watsonville and Oakland in recovering from the 1989 Loma Prieta earthquake and other recent disasters.* In Earthquake Engineering Research Institute (Ed.), *Lessons learned over time, Volume I* (pp. 41–84). Oakland, CA: Earthquake Engineering Research Institute.

Kates, R. W., Colten, C. E., Laska, S., & Leatherman, S. P. (2006). Reconstruction of New Orleans after Hurricane Katrina: A research perspective. *Proceedings of the National Academy of Sciences*, 103(40), 14653–14660.

Krupa, M., & Russell G. (2007, March 29). N.O. post-K blueprint unveiled. *New Orleans Times-Picayune*, p. 1, National.

Lambert Advisory, LLC & Shedo, LLC. (2006, October). *City of New Orleans neighborhoods rebuilding plan, summary.* New Orleans, LA: Author.

Lewis, P. F. (2003). *New Orleans: The making of an urban landscape* (2nd ed.). Santa Fe, NM: Center for American Places.

Louisiana Office of Community Development, Division of Administration. (2007, May). *Proposed action plan amendment 14 (First allocation)—Road Home homeowner compensation plan.* Baton Rouge, LA: Author.

Louisiana Recovery Authority. (2006, June/August). *Louisiana Recovery Authority quarterly report.* Baton Rouge, LA: Author.

Louisiana Recovery Authority. (2007a, May). *Louisiana speaks regional plan: Visions and strategies for recovery and growth in South Louisiana.* Baton Rouge, LA: Author.

Louisiana Recovery Authority. (2007b, June). *A resolution to approve Orleans Parish community recovery planning.* Baton Rouge, LA: Author.

Maloney, S. (2007, August 20). Moving forward: Grassroots groups in New Orleans dig in. *New Orleans City Business.*

Millhollon, M. (2006, August 11). Critics: Urgency lacking in New Orleans; Rockefeller grant to help LRA work. *Baton Rouge Advocate*, p. B-1.

Moss, M. L., & Shelhamer, C. (2007). *The Stafford Act: Priorities for reform.* New York: Center for Catastrophe Preparedness and Response, New York University.

Nelson, M., Ehrenfeucht, R., & Laska, S. (2007). Planning, plans, and people: Professional expertise, local knowledge, and governmental action in post-Hurricane Katrina New Orleans. *Cityscape*, 9(3), 23–52.

New Orleans Community Support Foundation. (2006, June 5). *Request for qualifications for city-wide planning teams.* New Orleans, LA: Greater New Orleans Foundation.

New Orleans Planning Assessment Team. (2005, November). *Charting the course for rebuilding a great American city: An assessment of the planning function in post-Katrina New Orleans.* Chicago: American Planning Association.

New Orleans Redevelopment Authority. (2007, December). *New Orleans Parish redevelopment and disposition plan for Louisiana Land Trust properties.* Baton Rouge, LA: Louisiana Recovery Authority.

Not coming together. (2006, June 18). *New Orleans Times-Picayune*, p. 6, Metro.

Olshansky, R. B. (2005, October). *How do communities recover from disaster? A Review of current knowledge and an agenda for future research.* Paper presented at the 46th Annual Conference of the Association of Collegiate Schools of Planning, Kansas City, MO.

Olshansky, R. B. (2006). Planning after Hurricane Katrina. *Journal of the American Planning Association*, 72(2), 147–153.

Olshansky, R. B. (2007, January 10). *Planning following catastrophic disaster: Research challenges.* Retrieved January 20, 2007, from <http://planningresearch.blogspot.com/2007/01/olshansky-on-planning-following.html>

Olshansky, R. B., Johnson, L. A., & Topping, K. C. (2006). Rebuilding communities following disaster: Lessons from Kobe and Los Angeles. *Built Environment*, 32(4), 354–374.

Olshansky, R. B., & Kartez, J. D. (1998). Managing land use to build resilience. In R. J. Burby (Ed.), *Confronting natural hazards: Land-use planning for sustainable communities* (pp. 167–200). Washington, DC: National Academy/Joseph Henry Press.

Quarantelli, E. L. (1999). *The disaster recovery process: What we know and do not know from research.* Newark: Disaster Research Center, University of Delaware.

- Reardon, K.**, Green, R., Bates, L., & Kiely, R. (2007, October). *Overcoming the challenges of post-disaster planning in New Orleans: Lessons from the ACORN Housing/University Collaborative*. Paper presented at the 48th Annual Conference of the Association of Collegiate Schools of Planning, Milwaukee, WI.
- Reid, M.** (2006, October 7). Together at last? A recap of the city's rebuilding plans. *New Orleans Times-Picayune*, p. 1, Inside Out.
- Rockefeller Foundation.** (2006, April). The Rockefeller Foundation to provide \$3.5 million to accelerate recovery planning for the City of New Orleans. *Rockefeller Foundation News Advisory*, New York: Author.
- Rose, K.** (2007). Struggling in the Crescent City. *Shelterforce Online*, 151. Retrieved September 27, 2007, from <http://nhi.org>.
- Rosen, C. M.** (1986). *The limits of power: Great fires and the process of city growth in America*. Cambridge, UK: Cambridge University Press.
- Rubin, C. B.**, Saperstein, M. D., & Barbee, D. G. (1985). *Community recovery from a major natural disaster* (Monograph No. 41). Boulder: Program on Environment and Behavior, Institute of Behavioral Science, University of Colorado, Boulder.
- Saluny, S.** (2006, July 6). New Orleans sets a way to plan its rebuilding. *New York Times*, p. A-14.
- Schwab, J.** (Ed.). (1998). *Planning for post-disaster recovery and reconstruction* (Planning Advisory Service Report 483/484). Chicago: American Planning Association.
- Scott, R. T.** (2005, September 18). Turf wars, political strife threaten plans to rebuild; Racial tension mars initial discussions. *New Orleans Times-Picayune*, p. 1.
- Tierney, K. J.**, Lindell, M. K., & Perry, R. W. (2001). *Facing the unexpected: Disaster preparedness and response in the United States*. Washington, DC: Joseph Henry Press.
- Topping, K.** (2000, September). *Challenges of recovery: Los Angeles and Kobe*. Paper presented at Cal Poly, San Luis Obispo, City and Regional Planning Department, San Luis Obispo, CA.
- U.S. House of Representatives.** (2006). *A failure of initiative: Final report of the Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina*. Washington, DC: U.S. Government Printing Office.
- Urban Land Institute.** (2005a, November). *A rebuilding strategy, New Orleans, Louisiana* (Presentation). Washington, DC: Author.
- Urban Land Institute.** (2005b, December). *A strategy for rebuilding New Orleans, Louisiana* (Draft report for review). Washington, DC: Author.
- Vale, L. J.**, & Campanella, T. J. (Eds.). (2004). *The resilient city: How modern cities recover from disaster*. New York: Oxford University Press.
- Waiting for a leader.** (2005, September 1). *New York Times*, p. 22, Section A.
- Wallace, N.** (2007, August 23). Blueprint for rebuilding. *Chronicle of Philanthropy*, 19(21), 32.
- Warner, C.** (2006a, August 29). Recovery planning pact signed; "Unified Plan" is designed to ease conflicts. *New Orleans Times-Picayune*, p. 1, Metro.
- Warner, C.** (2006b, October 12). N.O. planning sessions set for Saturday. *New Orleans Times-Picayune*, p. 1, National.
- Warner, C.** (2006c, July 20). Locals key to N.O. rebirth; Expert says residents get "historic" chance. *New Orleans Times-Picayune*, p. 1, Metro.
- Warner, C.** (2006d, December 15). Recovery pledge is letdown for N.O. *New Orleans Times-Picayune*, p. 1, National.
- Warner, C.** (2006e, July 6). N.O. blazes trail for grant money; City and state agree on planning process. *New Orleans Times-Picayune*, p. 1, National.
- Warner, C.** (2007, January 31). N.O. planners' vision will cost \$14 billion. *New Orleans Times-Picayune*, p. 1, National.
- White House.** (2006, February). *The federal response to Hurricane Katrina: Lessons learned*. Washington, DC: Author.
- Williamson, A.** (2007). *Citizen participation in the Unified New Orleans Plan*. Cambridge, MA: Kennedy School of Government, Harvard University.