Disaster Recovery Guidance: Executive Summary Research Study Findings

American Planning Association
Creating Great Communities for All

HAZARD REDUCTION & RECOVERY CENTER

TEXAS A&M UNIVERSITY
EXECUTIVE SUMMARY

In 2016, the American Planning Association, with a Federal Emergency Management Agency (FEMA) Cooperating Technical Partners (CTP) grant, published the Planning Advisory Service report 576, *Planning for Post-Disaster Recovery: Next Generation*. Since that time, there have been 265 major presidential disaster declarations (FEMA 2019) costing billions of dollars in damages with increasing impacts due to climate change, demographic shifts, and other socioeconomic conditions. Further, changes in legislation, like the Disaster Recovery Reform Act and the maturing of the National Disaster Recovery Framework indicate a need to determine what supplemental guidance planners need to continue to advance this important work.

While there are multiple recovery guides available, few, if any, are designed specifically for planners to harness their education and professional training to provide “at-your-fingertips” information to help them navigate the short-and intermediate-phases of recovery in order to manage longer-term risk reduction. Most resources tend to focus on the recovery process without specific guidance on integration and alignment with a community’s network of plans and implementation processes in a post-disaster recovery setting. This research project was designed to generate the evidence base needed to guide planners and planning departments on how to leverage existing planning activities and programs for recovery and resilience.

The American Planning Association (APA) worked with the Hazard Reduction and Recovery Center at Texas A&M University to undertake a research project that would provide the evidence base as part of an overarching project to develop guidance for planning practitioners on this topic. The findings, in turn, will influence the contents of guidance materials that will be designed and tested in the next stage of a project titled, “Disaster Recovery Guide for Planning Practitioners.”

The research effort sought to understand two broad questions:

1. What are planners’ perceptions of the disaster recovery process and their roles in community recovery?
2. What do planners need to know about disaster recovery to better support their communities?

This Executive Summary provides results of qualitative telephone interviews with professionals experienced in recovery, and an online survey of the general APA membership.

The full reports have been published online and are available on the APA website. Click here to access the Qualitative Interview Report. Click here to access the Quantitative Survey Report.
Qualitative Interview Report

Between April and July 2019, APA and Texas A&M conducted 33 interviews with experienced recovery professionals, volunteers, or scholars who had participated in a variety of disaster situations and locations. The intent of the interviews was to assess what resources planners need to support them as they help their community recover from disasters. The interviews were structured in four parts:

- The interviewee's roles and experiences with disaster recovery.
- Their observations during post-disaster recovery planning.
- Their observations during pre-disaster recovery planning.
- Their preferences on how and what they needed to learn about planning for recovery.

Interviewees represented nonprofit, for-profit, civil society, and public sectors at city, county, state, and/or national government.

Results from the qualitative interviews include the following 10 themes to support the development of further recovery guidance for planners:

1. Planners did not perceive themselves, or were not perceived by others, as central to the disaster recovery process, even though their skillsets are important to recovery efforts.
2. There is a need for wider coordination and collaboration between planners and other professionals, agencies, and communities working in disaster recovery.
3. Learning about disaster recovery should take various forms but be centered on best practices through coaching and mentorship.
4. Planners benefited most when learning about disaster recovery from fellow professionals who had been through recovery elsewhere.
5. Planners navigated policy options for recovery by learning on their own, improvising, and applying best practices to maximize efforts.
6. Planners are overwhelmed by general recovery information but felt that they had limited access to specific information that would accelerate community-level disaster recovery processes.
7. Lack of coordination for volunteer planning advisory teams, technical support teams, external volunteers, and additional resources and donations hinders local recovery planning processes.
8. Recovery funding processes were frustrating due to the lack of clear guidelines, the conditionalities of various funding streams, and the optimal use of available funding to support disaster recovery planning.
9. Translating indicators and goals for equity and inclusivity into tangible outcomes in the disaster recovery planning process at the community level is difficult.
10. Public participation in disaster recovery planning was still primarily expert-led, rather than community-centered and used traditional, and less inclusive, methods of obtaining public feedback.

Overall, based on analysis of the interviews, it is recommended that recovery guidance developed emphasize, develop, synthesize, and support local communities in these manners:

- **Emphasize** the importance of recovery planning as a knowledge area for all planners and allied professionals.
- **Emphasize** how recovery and resilience should be integrated into all planning efforts.
- **Emphasize** the importance of soft skills in recovery planning.
- **Emphasize** social networking and collaboration across sectors and agencies during “blue skies.”
- **Emphasize** the importance of equity and social vulnerability during disasters.
- **Develop** formal peer-to-peer learning between planners in need and experienced recovery planners.
- **Develop** various learning and training methods.
- **Develop** immediately useful, short guidance information, such as checklists, pull outs, brochures, that can be used quickly during early- and mid-recovery.
- **Develop** guidance to increase public participation during pre- and post-disaster recovery planning.
- **Develop** guidance on the management of external aid.
- **Synthesize** available recovery information.
- **Synthesize** guidance on funding options.
- **Synthesize** academic research that can be integrated into practice.
- **Synthesize** use of best practices and documented lessons.
- **Support** local communities to collect and analyze data that is needed during disaster recovery planning.
Between June and August of 2019, a survey was conducted to learn how the American Planning Association can better support community planners and other professionals in being prepared for disaster recovery efforts in their communities.

The survey involved a random sample of 1,000 APA members and garnered 196 individual responses. Of those 196 participants, 140 fully completed the survey. The results of the survey provide insight into what planners need in order to advance the Federal Emergency Management Agency’s (FEMA) Risk Mapping, Assessment and Planning (Risk MAP) goals. This report identifies how existing guidance can be updated and advanced to address the issues planners face during recovery. It also helps to distinguish and clarify the range of community hazard and disaster recovery experiences—specifically, illuminating the various roles planners can play in the disaster recovery process—with the goal of improving guidance for communities with varying capacities to better recover from hazard events.

Key findings show that few participants have experience with making actual plans for recovery, and most existing resources for recovery are not being used by participants. This indicates that there is a lack of education and training for disaster recovery planning. However, the findings also suggest that there are many opportunities to establish these educational resources. Notably, there is a need for disaster-specific funding information and guidelines that identify which disaster and recovery specific data will be useful. While few participants had completed post- or pre-disaster recovery plans, those who had done pre-disaster recovery plans were more likely to incorporate existing community plans into the recovery plan than those who had only done post-disaster recovery plans.

Finally, results indicate that the training methods preferred by respondents are workshops, conferences, and symposia rather than books or documents. Interactive training and educational tools are desired.

The findings are divided into three sections:

1. **Recovery Perspectives** assesses whether background education is needed to convince a target population of its role in recovery or other challenges.
2. **Previous Disaster Experience and Recovery Activities** gathers information on recovery participation and tests if locations or personnel with more experience are more knowledgeable or more likely to have recovery planning experience.

3. **Post- and Pre-Disaster Recovery Planning** measures involvement in post- and pre-disaster recovery planning experience.

**Key Findings: Recovery Perspectives**

1. When asked who should lead recovery, the most common response was local emergency management, followed by state emergency management, and local elected officials.
2. When asked about specific role of planners in a variety of recovery activities, respondents felt that planning professionals should be extremely involved in four activities: (1) integrating disaster recovery planning with other city plans, (2) integrating resilience into various city plans, (3) developing resilience goals, and (4) promoting a culture of prevention and preparedness.
3. About 52 percent of respondents agreed or strongly agreed that there is not enough support from state or national entities for preparing for disaster recovery.
4. About 89 percent disagreed or strongly disagreed that “pre-disaster planning is not an issue for my community.”
5. Almost half of respondents reported they had previously received classroom or in person disaster recovery training, and the remainder through webinars. The most common source was FEMA, followed by the state.
6. When asked about disaster resources used, as expected, most of the respondents indicated that they referenced resources about disaster recovery from FEMA followed by APA and U.S. Housing and Urban Development (HUD).
7. APA’s Planning Advisory Service (PAS) reports had been used by more than half of the respondents. The PAS reports and courses taught at FEMA’s Emergency Management Institute (EMI) were viewed as the most useful.
8. Seventy-eight percent of respondents indicated that their community is in the National Flood Insurance Program (NFIP), while 36 percent are in the Community Rating System (CRS).
9. Respondents felt most knowledgeable about land use, development, and zoning. Respondents were least confident in their knowledge of economic recovery, social capital, all timescales for housing recovery, communication, recovery management, coastal zone management, reconstruction of either buildings or infrastructure, and climate change adaptation. Mitigation, resilience, historic presentation, and plan development process each had a median response of “fairly knowledgeable/working knowledge.”
10. When asked about federal funding mechanisms for post-disaster recovery, respondents felt “barely knowledgeable” or less about the funding that is specific for post-disaster recovery, like FEMA Hazard Mitigation Assistance (HMA), FEMA Individual Assistance (IA) or Public Assistance (PA), and HUD Community Development Block Grants for Disaster Recovery (CDBG-DR). The same is also true for non-federal aid from nonprofits and states, among others.
Key Findings: Previous Disaster Experience and Recovery Activities

1. The majority of respondents had the most experience with flood events. In addition to flooding, winter storms, thunderstorms, drought, tornadoes, wildfires, and coastal storms were the hazards that caused the most damages in the past 10 years according to the respondents.
2. About 60 percent of the respondents have been a part of recovery activities while only 36 percent of the respondents say they have been a member of a recovery committee.
3. About 43 percent of the respondents felt they did play a key role in recovery.
4. The top planning tools used during recovery were identified as: (1) None, (2) Changing/modifying the zoning ordinance, (3) Financial incentives, (4) Revising building codes, (5) Temporary use allowances.
5. Key funding mechanisms used to address recovery needs include FEMA Hazard Mitigation Assistance, FEMA Individual Assistance, FEMA Public Assistance, and state disaster-related assistance, followed by HUD Community Development Block Grant-Disaster Recovery.

Key Findings: Post- and Pre-Disaster Recovery Planning Measures Involvement in Post- and Pre-Disaster Recovery Planning

1. Over half of respondents, or 60 percent, have not ever participated in the development of a pre- or post-disaster recovery plan.
2. For respondents that had participated in a post-disaster recovery plan, the five most frequently included components are community participation, infrastructure and transportation reconstruction, housing recovery, economic redevelopment, and disaster recovery funding.
3. Plans most often used to inform the post-disaster recovery plan include the hazard mitigation plan, the comprehensive plan, the capital improvement plan, and the debris management plan.
4. The five most frequently included elements of the pre-disaster recovery plan are supply and logistics, community participation, anticipating disasters, mitigation, and sheltering. The least commonly included components were equity, health needs, historic preservation, and intermediate- to long-term housing.
5. Key challenges to the pre-disaster recovery planning process are estimates of predicted damage impacts, data access and data sharing, limited funding, lack of knowledge on steps in the recovery process, and identifying disjointed and/or duplication of efforts.

Recommendations

The survey findings provide insight into what planners need in order to participate more effectively in disaster recovery. Several recommendations are clear from the results.

The majority of respondents would like to learn disaster recovery planning through a workshop, seminar, or conference. We recommend conducting training that best fits with this strong respondent preference.
Respondents are “barely knowledgeable” about the funding that is specifically available for post-disaster recovery (e.g. FEMA Hazard Mitigation Assistance grants, FEMA Public Assistance, HUD CDBG-DR). Additional marketing and outreach are needed to enhance awareness.

As for technical support, most of the respondents have adequate technical support in Geographic Information Systems (GIS) and limited technical support in water modeling software. They are unlikely to have technical support in recovery-related analysis software, such as Hazus from FEMA, Urban Footprint, or statistical analysis software. Stronger connections with and training of technical staff within the planning team is advised, particularly regarding training in Hazus and statistical analysis.

Respondents also frequently report having access to parcel data, population projections, sensitive environmental area data, and hazard zone data, but not to disaster-focused data such as social vulnerability data or disaster mitigation options. These data should be made more widely available and this type of analysis should be built into the training and guidebook. Very few respondents have participated in pre- or post-disaster recovery planning. There is a large need for increased planning efforts in these areas.

Many respondents indicated that they used no planning tools in the pre-disaster recovery plan. This result highlights a prime opportunity for increased guidance and training.

- When asked about the likelihood of revising plans based on the experience during the disaster, the least likely plan type to be revised was the historic preservation plan. This type of plan was generally ignored by respondents, throughout, suggesting that they currently see little connection between disasters and historic preservation.
- APA should encourage more opportunities for networking between APA membership and recovery/disaster professionals, thereby improving coordination and enhancing social capital in the communities they serve. This may be accomplished by advertising ways for local professionals to collaborate and promoting social networking with these groups.
- The least commonly included components in pre-disaster recovery plans were equity, health needs, historic preservation, and intermediate-to-long-term housing. These absences—particularly equity, health, and housing—represent potentially important omissions that may have lasting and compounding consequences, especially for marginalized communities. Communities should address them more effectively in their pre-disaster planning.
- Planning agencies, public works, state/federal partners, and utilities are the groups most commonly involved in pre-disaster recovery planning. Yet, when asked who should lead recovery, respondents most frequently said emergency managers. There is substantial disconnect between those few who have completed recovery plans and what the majority of respondents think about recovery. APA could provide guidance on the role that all these other players can have during recovery, potentially creating quick “cheat sheet” reference guide for planners looking for collaborators, expertise, social networking and/or partnership activities.
- A positive finding is that all respondents who had done some form of pre-disaster recovery planning stated that they used some existing plan during that process. This
contrasts with those who participated in post-disaster recovery planning, where some respondents indicated that no existing plans helped guide their process. This finding speaks both to the value of pre-disaster recovery planning as an important process for enhancing plan integration, and to the need for post-disaster recovery planning efforts to better reflect this by including plan review in the process.

### Conclusion

Local communities continue to tackle the task of recovery under emergency circumstances after a flood, earthquake, hurricane, or other disaster has already occurred. This tends to compromise the ability of communities to seize opportunities to rethink the pattern of development and plan ahead for a safer future. Nonetheless, the dawning awareness that our communities must do better has stirred huge interest spurred, in part by the Planning Advisory Service report 576, *Planning for Post-Disaster Recovery: Next Generation* and enhanced by issues like climate change, suggests that the new products associated with this project will trigger an explosion of interest in new best practices and further elevate the state of the art.

Because the costs of natural disasters continue to rise, and the need for better recovery planning has become more urgent, it is imperative that planners have resources and tools that provide “at-your-fingertips” on-the-job support. The most effective way to do this is to revisit and retool the leading publications and documents in this rapidly evolving field. Planning Advisory Service report 576 remains the leading text for planners, and, as evidenced by the findings of the study described in this report, additional resources are needed to augment and bring the report into focus.