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Recovery Best Practices

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Background & Introduction

As part of West Virginia's long term recovery efforts in response to heavy rains and flooding at the end of June 2016, FEMA National Disaster Recovery Support (NDRS) staff were asked to support a series of informal discussions, led by the West Virginia Department of Commerce.

A common request heard at each discussion was the desire to learn more about how other communities, from across the country, successfully navigated their recovery experiences, so that West Virginia communities might learn from the experience of others. Although there is no best practice found for a disaster exactly mirroring what West Virginia experienced in 2016, many communities nationwide have experienced similar issues and common challenges throughout their own recovery experiences.

Disaster recovery efforts are complex. There are numerous entities and resources involved in all disaster recovery efforts. There are also a seemingly endless list of recovery needs and issues. These factors require an approach focused on effectively coordinating resources to address a multitude of needs that help communities achieve their desired recovery outcomes. A common theme of the best practices presented in this document is effective communication and coordination amongst key stakeholders, the best of which reaches across involved state, local, federal and private organizations. Another commonality of these best practices is the establishment of a central body or office, responsible for the oversight and implementation of recovery efforts, the most effective of which is a gubernatorial founded, directed, and supported effort. In many of the examples below, it is at a governor's direction and vision that the coordination of recovery efforts are established and championed.

Common Success Factors

The [National Disaster Recovery Framework](#) identifies seven success factors for successful disaster recovery. These are:

Effective Decision-Making and Coordination

- Recovery leadership defines roles and responsibilities for all stakeholders and participants.
- Businesses, nonprofits and local community leadership examine recovery alternatives, address conflicts and make informed and timely decisions that best achieve recovery of the impacted community.
- Organizations providing leadership or assistance for recovery establish realistic metrics for tracking progress, ensuring accountability and reinforcing realistic expectations among stakeholders.
- Governments, volunteer, faith-based and community organizations provide assistance to track progress, ensure accountability and make adjustments to ongoing assistance.

Integration of Community Recovery Planning Processes

- Communities engage in pre-disaster recovery planning and other recovery preparedness, mitigation and community resilience-building work.

- Individual, business and community preparation and resilience-building provide a foundation for recovery plans that improve the speed and quality of post-disaster recovery decisions.
- The public-private partnership under the National Infrastructure Protection Plan (NIPP) facilitates broad coordination and information sharing among all levels of government and private sector owners and operators of critical infrastructure.
- The community develops processes and criteria for identifying and prioritizing key recovery actions and projects.
- The community's recovery leadership creates an organizational framework involving key sectors and stakeholders to manage and expedite recovery planning and coordination.
- Recovery authorities revise existing local and state level emergency response contingencies to include recovery planning best practices and other preparedness, mitigation and community resilience-building work.

Well-Managed Recovery

- Well-established, pre-disaster partnerships at the local, state, tribal and federal levels, including those with the private sector and nongovernmental organizations (NGOs), help to drive a successful recovery.
- Recovery stakeholders leverage and coordinate disaster and traditional public- and NGO assistance programs to accelerate the recovery process and avoid duplication of efforts.
- Communities seek out, interface and coordinate successfully with outside sources of help, such as surrounding governments, foundations, universities, nonprofit organizations and private sector entities — a key element in rapid recovery.
- Readily available surge staffing and management structures support the increased workload during recovery, such as code enforcement, planning, communications, grant writing and management.
- Recovery leadership establishes guidance for the transition, including the shift of roles and responsibilities, from response operations, to recovery and finally, a return to a new normal state of community functioning.
- Ensure compliance with architectural standards and programmatic accessibility during recovery.

Proactive Community Engagement, Public Participation and Public Awareness

- Stakeholders collaborate to maximize the use of available resources to rebuild housing, infrastructure, schools, businesses and the social-historical-cultural fabric of the impacted community in a resilient manner; and to provide health care, access and functional support services.
- All community perspectives are represented in all phases of disaster and recovery planning; transparency and accountability in the process are clearly evident.

- Communities create post-disaster recovery plans that can be implemented quickly. Local opinions are incorporated so that community needs are met in a more holistic manner, maximizing the provision and utilization of recovery resources and built upon, or incorporated into, the community master plan.
- Public information is accessible to keep everyone informed throughout the recovery process. This includes providing appropriate aids and services, such as captioning, large print, Braille, interpretation and translated materials, to ensure effective communication with individuals with disabilities and to facilitate access to information for individuals with limited English proficiency.
- Continuous and accessible public information campaigns to community members on various recovery programs and the commitment to short, intermediate and long-term recovery, as well as the overall recovery progress, increase public confidence.

Well-Administered Financial Acquisition

- Community stakeholders need to possess an understanding and have access to broad and diverse funding sources in order to finance recovery efforts.
- The community's knowledge and professional administration of external programs greatly aid the recovery progress.
- Funders and resource providers collaborate to provide program flexibility and implement finance planning. Recovery management and program administration collaborate in a post-disaster environment.
- Recovery management programs support the development and maintenance of adequate financial monitoring and accounting systems for new and large levels of investment. Management programs include systems that detect and deter fraud, waste and abuse.
- Federal recovery expenditures maximize the use of local businesses to promote local economic development.

Organizational Flexibility

- Organizational structures for coordinating recovery assistance are scalable and flexible.
- Recovery structures at all government levels evolve, adapt and develop new skills and capacities to address the changing landscape of post-disaster environments.
- Functional and effective intergovernmental relations influence the efficiency of the recovery process.
- Organizational flexibility facilitates the application of laws, regulations and policies in the context of disaster and enhances the government's adaptability to govern in unforeseen incidents.
- Flexible staffing and management structures enhance the adaptability of the governmental structure.
- Increased pre-disaster partnerships help reduce or avoid the challenges of establishing new partnerships in a post-disaster environment.

- Organizational flexibility is compatible with the integrity and accountability of taxpayer funded programs.

Resilient Rebuilding

- The community rebuilds a sustainable future factoring in the ecological, economic, and local capacity considerations.
- The recovery is an opportunity for communities to rebuild in a manner which will reduce or eliminate risk from future disasters.
- Communities can incorporate stronger building codes and land use ordinances. Vulnerable structures can be retrofitted, elevated or removed from harm.
- Community members, businesses and local governments can incorporate risk reduction strategies into governance and local decision-making.

Recovery Best Practices – Examples

The following examples provide information on various disasters, lessons learned, and best practices throughout the country.

Iowa for severe storms and flooding

The State of Iowa sustained disastrous weather events throughout the spring and summer of 2008. From May to August, the state was hit by severe thunderstorms, tornados, hail, and unprecedented floods. These weather events displaced 40,000 Iowans and disrupted the lives of residents in 85 counties.

Best Practices:

- By Executive Order, the governor created a “Rebuild Iowa Advisory Commission” (RIAC) - a 15-member commission tasked with developing and determining priorities and strategies in the statewide recovery process.
- Through the same Executive Order that established the RIAC, the Rebuild Iowa Office (RIO) was also created and provided a consolidated, focused recovery organization and structure that was authorized and supported by state government leaders.
 - Centralized Communications: A role of the RIO was to speak with one voice and provide clear, transparent and consistent communication. This provided valuable information designed to educate the public on recovery progress, provide an outreach mechanism to those needing assistance, and list multiple disaster programs available to individuals, communities and businesses.
 - Constituent Services: The RIO also served as a central office for those impacted to receive program assistance and information. A Constituent Outreach Director was dedicated to handling these calls, while others assisted in finding the information necessary to answer questions. The RIO Constituent Outreach Director worked closely with other federal, state, and local government agencies and service providers gathering accurate and timely recovery program information to offer impacted citizens the best possible information and solutions.
 - RIO staff partnered with FEMA Long-Term Community Recovery planners to provide the most severely impacted community governments with an embedded

liaison to help establish goals, develop and implement recovery plans, and access resources. Initial recovery planning support was provided to 10 of the hardest-hit communities at each community's request to listen to their needs, and help plan their short and long-term recovery goals. RIO community liaisons attended town hall meetings and workshops, helped create partnerships tailored to each community, provided technical assistance on programs and provided strategies on sustainability initiatives.

- Coordination and Information Sharing: Originally organized and lead by FEMA Long-Term Community Recovery for the purpose of information sharing and networking between state, federal and non-governmental organizations involved in the recovery process, these meetings provided agency representatives the opportunity to meet each other, share data and program information, identify and discuss problems, and organize solutions. The RIO soon assumed responsibility for these meetings. As recovery progressed and needs changed, meetings were held less frequently, then information was shared through monthly written reports before discontinuing more than a year later.
- Flood forums and seminars: Eleven flood forums and public input seminars were conducted free to the public at various auditoriums, centers, schools, and libraries. Topics covered were Iowa precipitation, trends in water run-off, work of the Iowa Flood Center, floodplain management strategies, water quality, rural-urban watershed coalition building and a review of state policy issues. These presentations were followed by question and answer sessions that could last up to an hour.

Resource

Iowa Best Practices document, available online here: http://publications.iowa.gov/11080/1/2011-06_Iowa_Disaster_Recovery_Lessons_Learned_final.pdf

Louisiana for Katrina and Rita

Hurricanes Katrina and Rita made landfall along the U.S. Gulf Coast on August 29 and September 24, 2005 with devastating impacts on Louisiana. More than 1,100 lives were lost, 785,000 residents displaced, 215,000 homes and 18,700 businesses destroyed, 220,000 jobs lost, and 100 square miles of wetland destroyed by storm surge.

Best Practices:

Governor Blanco created the Louisiana Recovery Authority by executive order on October 17th, 2005 to help:

- Secure funding and other resources
- Establish principles and policies for redevelopment,
- Lead long-term community and regional planning efforts,
- Ensure transparency and accountability, and
- Communicate progress, status and needs of the recovery to officials, community advocates and the public.

Federal, state and local departments and agencies partnered to provide community recovery assistance across 25 impacted parishes. The established Louisiana Recovery Authority (LRA) was key in establishing the credibility of the long term recovery assistance with local communities.

Local parish leadership and the communities at large, worked with combined Federal and State initiatives, sponsored by the LRA. These efforts led to detailed project plans and goals, many of which are complete, and many more are still a work in progress.

Resources

- Louisiana Speaks: <http://www.cpex.org/louisiana-speaks/>
- Pre-Disaster Recovery Planning Guidance for States, February 23, 2016: <https://www.fema.gov/media-library/assets/documents/128572>.

Texas for Ike

On the heels of Hurricane Rita, Hurricane Ike slammed into the Texas Gulf Coast with winds of 100 mph and a storm surge of 17 feet. Many of the impacted communities were still recovering from the previous storm.

Best Practices

The State of Texas in response to multiple storms, established a high-level Governor's Commission to review policy issues. A tactical-level recovery organization was not formed. The federal recovery teams worked directly with state agencies, county judges (county executives), Councils of Government, and local officials to engage in recovery planning support in five communities and counties.

Local champions, sponsors, and in multiple cases, a dedicated recovery manager was identified. These efforts and leaders served their respective communities well, but did not receive the benefit of coordinated state action and prioritization of federal assistance where limited funds existed.

Resource

FEMA "Lessons in Community Recovery Seven Years 2011". Available online: https://www.fema.gov/pdf/rebuild/ltrc/2011_report.pdf

Mississippi for Katrina

Hurricane Katrina made landfall near Pearlington, Mississippi on August 29, 2005. Impacting more than a third of Mississippi's population and killing 230. Over 60,000 homes were seriously damaged or destroyed as well as infrastructure and the natural environment of the Mississippi Gulf Coast.

Best Practices:

- Governor Barbour appointed a Commission on Recovery, Rebuilding and Renewal that was privately funded, non-profit organization.

- Mid-October the Commission held a six-day “charrette” to establish a design and plan for the recovery.
- In 2006, the Governor established the Office of Recovery and Renewal, with the responsibility for designing the State’s various recovery programs.

Resources

- Mississippi Renewal Forum: <http://mississippirenewal.com/info/archiveindex.html>
- Pre-Disaster Recovery Planning Guidance for States, January 23, 2017: <https://www.fema.gov/media-library/assets/documents/128572>

New Jersey for Sandy

Hurricane Sandy made landfall, as a post tropical depression, on the New Jersey coast on October 29, 2012, damaging or destroying more than 346,000 homes and businesses, eroding hundreds of miles of shoreline and beaches, and generating statewide losses in excess of \$35 billion. On November 28, 2012, Governor Christie established a Governor’s Office of Recovery and Rebuilding (ORR) tasked with coordinating the long-term recovery efforts across State government and federal, local, private partners.

Best Practices:

- Executive order directing the State Comptroller to conduct reviews of all procurements and to publish a “recovery dashboard” to the public.
- With a Congressional allocation of Community Development Block Grant for Disaster Recovery (CDBG-DR), the Governor’s ORR developed an Action plan that had three priorities:
 - Housing Recovery
 - Economic Development
 - Planning and Infrastructure
- ORR teamed with New Jersey Department of Community Affairs (DCA) as the lead agency for housing recovery.
- ORR with New Jersey Economic Development Authority (EDA) to support the impacted businesses with their recoveries.

Resources

- Governor’s Office for Recovery and Rebuilding: <http://nj.gov/gorr>
- Pre-Disaster Recovery Planning Guidance for States, January 23, 2017: <https://www.fema.gov/media-library/assets/documents/128572>

Vermont for Irene

Flooding from storms affects many communities across the country, causing billions of dollars of damage annually. Climate change projections suggest that storms will likely become more frequent and stronger in many regions of the country. In light of these trends, many communities

want to improve disaster recovery and long-term flood resilience planning. “Flood resilience” means taking measures to reduce community vulnerability to flooding and support long-term recovery after a flood. Communities throughout Vermont faced this reality when Tropical Storm Irene hit in 2011, devastating infrastructure, communities, and lives.

Best Practices

In 2012, in the wake of Irene, the state of Vermont requested Smart Growth Implementation Assistance from EPA and FEMA. Smart Growth is an urban planning and transportation theory that concentrates growth in compact walkable urban centers to avoid sprawl. The assistance focused on incorporating smart growth principles into state policies, local development regulations, and Hazard Mitigation Plans to increase community flood resilience.

Resource

EPA Smart Growth, Planning for Flood Recovery and Long-Term Resilience in Vermont:
<https://www.epa.gov/smartgrowth/planning-flood-recovery-and-long-term-resilience-vermont>

Alabama for tornadoes

April 2011 brought two devastating tornado outbreaks to 31 communities. Federal assistance in the form of long term recovery was deployed to the five most impacted communities for recovery planning assistance. The communities requiring targeted assistance suffered serious losses of housing, business, health facilities, and public infrastructure.

Best Practices

In a response to better organize teams, Governor Robert Bentley signed an executive order on June 13, 2011 which named the Alabama Department of Economic and Community Affairs (ADECA) to be the coordinating agency under his direction for long term recovery efforts. For the first time, FEMA piloted the NDRF in Alabama to test some of the concepts months before the NDRF was officially adopted.

A working relationship across the communities, state, federal, NGO, and private partners was developed and grew between the NDRF entities and ADECA, as both learned to navigate the increased Federal resources and direction in coordinating efforts across the relevant federal agencies.

This disaster was a significant learning process for the federal teams; today’s federal resources have benefited and the ongoing lessons learned are reflected in each succeeding federal recovery operation.

Resource

FEMA “Lessons in Community Recovery Seven Years 2011”. Available online:
https://www.fema.gov/pdf/rebuild/ltrc/2011_report.pdf

Williamson, WV for economic development

In 2012, concern over their town's economic and health problems caused citizens to form Sustainable Williamson – a “living lab” for implementing new ideas to improve the long-term health of their community. Since then, the town has added new jobs and businesses. The group maintains a keen focus on developing a stronger economy, as well as on health and other priorities.

Since 2012, Sustainable Williamson has been able to fund most of its activities with approximately \$5 million in grants from government agencies and private charities. Volunteer labor, including many Vista volunteers over the years, has been and continues to be another significant resource.

Williamson is much like many towns in West Virginia that were struggling before the June 2016 flood disaster and face even greater challenges now. Williamson's experience show that over the long-term, given people who champion the effort, problems can begin to be solved, resources can be accessed, life can be better.

Best Practices

- Many new jobs at the health center were made possible thanks to grants, resulting in the center needing a bigger space. The owner of a nearby building was persuaded to renovate to accommodate the clinic, which improved the town's appearance and enabled the landlord to increase his rental income considerably. Furthermore, a private owner of pulmonary clinics decided to open a new branch nearby, bringing in more jobs and income and saving residents from a long drive to reach a specialist.
- A two-day workshop in 2012, facilitated with technical help from EPA and a contractor, kicked off Williamson's sustainability initiative by bringing together stakeholders from government, churches, non-profits and businesses. They focused on identifying obstacles and opportunities to make Williamson a more sustainable community. They then developed the plan that they have been using since. It has “six components of regenerative communities: health; food systems; integrated education; sustainable construction and tourism; and energy optimization. The program increased capacity when it was able to hire coordinators for each of these programs.
- Agricultural business is another area where Sustainability Williamson has been focused. “Revenues to growers and the number of suppliers increase every year. More people are growing, selling and eating fresh, healthy food,” McCormick said. The farmer's market is being expanded with a “food hub” that will include a community kitchen for local entrepreneurs to produce value-added products.
- Also in support of entrepreneurs, the initiative has created a space to help connect them with resources, using, for example, contests where entrepreneurs present their business ideas and the winning pitch receives a cash award.
- Meanwhile, the “Healthy in the Hills” program has helped hundreds of people learn to manage their diabetes, make healthier food choices and lose weight. In 2012 Williamson won the “Culture of Health” Award from the Robert Wood Johnson Foundation.

- In the tourism sector, there has been discussion about opening a campground, possibly to be run by the city to increase revenue. Cleaning litter from the waterways is another potential project. “We could put a lot of people to work doing that,” he said.

Resources

- For more about Williamson’s sustainability initiative, visit www.sustainablewilliamson.org or contact Darrin McCormick at 304-235-3400.
- An excellent article and video about these efforts can be accessed here: <http://www.rwjf.org/en/library/articles-and-news/2014/06/coh-williamson-wv.html>.

Conclusion

A foundational best practice to deal with rapid change is collaboration. All of the case studies in this document have that in common. The requirement that all change-stakeholders coordinate with everyone else’s efforts is vital for both efficiency and effectiveness. The opportunities to partner and coordinate efforts allow all to make the best use of limited resources. No matter who is the champion or sponsor, there needs to be a leader that communicates and coordinates all relevant activities to align priorities, communicate the vision, direct the resources and achieve the best possible solutions that serve the people of West Virginia.