

Regional Recovery Framework

Existing Capabilities and Best Practices Memorandum

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RDPO

Regional Disaster Preparedness Organization

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Contents

Introduction	3
The Regional Recovery Framework Project.....	3
Existing Capabilities and Best Practices Methodology.....	4
Summary of Findings	5
Organizational Structure Findings.....	5
Best Practices.....	5
Current Capabilities Supporting Best Practices.....	6
Recommendations	8
Communication Findings	8
Best Practices.....	9
Current Capabilities Supporting Best Practices.....	10
Recommendations	11
Operations Findings	12
Best Practices.....	13
Current Capabilities Supporting Best Practices.....	14
Recommendations	16
Conclusion	19
Appendix A: Best Practices Referenced.....	20
Appendix B: Documents Reviewed	25

Introduction

This Existing Capabilities and Best Practices Memorandum identifies relevant best practices from other cities, counties, and states that have conducted pre- and/or post-disaster recovery planning and operations. This document identifies best practices across short-, mid-, and long-term recovery operations that have been successfully integrated into the recovery processes.

This memorandum captures the relevant administrative, financial, technical, planning, and engagement capabilities at the local and regional level that can be leveraged in post-disaster recovery operations, as well as the appropriate national best practices that can be implemented in pre- and post-disaster recovery planning in the Portland Metropolitan Region.

The findings outlined in this memorandum will be used to inform development of the Portland Regional Recovery Framework. This memorandum provides an understanding of how an identified best practice can be implemented within the Portland Metropolitan Region and includes information about the current capabilities within the Region that can support implementation of these practices.

The Regional Recovery Framework Project

A roadmap back to a strong community after a natural disaster.

Natural disasters can happen anytime, and the Portland Metropolitan Region is working together to determine how to recover quickly, collaboratively, and equitably. The Regional Recovery Framework will provide jurisdictions and counties guidance on how to organize and implement rebuilding, redevelopment, and recovery efforts following a disaster. The project is a collaboration between public, private, and nonprofit sector stakeholders, led by the five-county, multi-state Regional Disaster Preparedness Organization (RDPO)—which spans Clark County in Washington, and Clackamas, Columbia, Multnomah, and Washington counties in Oregon.

The following process is in place to develop the Regional Recovery Framework:

1. **Project Initiation.** The first phase included the identification of stakeholders that will be involved in the planning process and creation of a Stakeholder Engagement Strategy to guide engagement throughout Framework development and after the project into local pre-disaster recovery plan development.
2. **Regional Engagement and Recovery Goals.** The project team worked in this phase to review of the region's local, county, and state plans, policies, and processes that can be leveraged during recovery and hold Stakeholder Engagement Sessions across the region to understand stakeholder priorities for recovering after a disaster. The project team used this information to create a regional recovery vision and goals that will help steer the pre-disaster and post-disaster planning processes.
3. **Determine Recovery Operational Concepts.** The first part of this phase is to build the Existing Capabilities and Best Practices Memorandum (this document) to understand what national and international recovery best practices can be implemented in the region, and how to leverage existing capabilities to meet the recovery goals. During this phase, stakeholders from across the region will meet to determine how to organize local recovery

structures, how to work with the communities to understand their recovery needs, how to prioritize decisions, and how to implement recovery projects efficiently.

4. **Determine Regional Recovery Coordination Concepts.** This phase will include coordination with stakeholders to understand how the local communities and counties will coordinate with each other after a disaster to ensure an equitable recovery process.
5. **Develop Recovery Framework and County Annexes.** During this phase, the project team will use the information identified by the stakeholders throughout the project to develop the Regional Recovery Framework and provide guidance on the local recovery organization and processes before and after a disaster. Additionally, the project team will develop county annexes that provide information each county can use to begin developing its own local recovery plan.

Existing Capabilities and Best Practices Methodology

The Existing Capabilities and Best Practices Memo includes an analysis of national and international recovery planning and operations that align with the recovery vision and goals of the Portland Metropolitan Region. The best practices included in the memo were identified by the project team and are included in Appendix A.

The project team reviewed 69 current plans, policies, and procedures from the local, regional, and state levels in the Portland Metropolitan Region (see Appendix B for full list) to determine how current capabilities related to the best practices identified. The project team then developed recommendations for how the Framework should provide guidance for recovery planning and operations for all jurisdictions and counties within the region based on the identified best practices and the current capability findings.

The Collaborative Planning Team will meet on June 21, 2018, to review these findings and recommendations and provide guidance on how the recovery organization and operations should be described within the Regional Recovery Framework.

Summary of Findings

The sections below include an overview of the identified best practices, the relevant current capabilities, and the associated recommendations in three main areas:

- **Organizational Structure:** How governmental and non-governmental stakeholders can organize to achieve the recovery goals.
- **Communications:** Methods of communication with the whole community and messages to ensure equity in meeting the recovery goals.
- **Operations:** How to make decisions and implement actions to meet the recovery goals.

Organizational Structure Findings

Organizational structure refers to the structure and framework through which all those executing a local recovery plan will function. The themes developed regarding organizational structure include leadership positions, elected official buy-in, and planning processes. Recommendations regarding organizational structure include developing the coordinating structure from the state level down to the local level. Another recommendation is ensuring political buy-in to the framework and recovery process through updates and agreements. The last recommendation includes understanding the integration and connections of the plans within the region that feed into the recovery process and would need to be referenced during short-term, intermediate, and long-term recovery.

BEST PRACTICES

Leadership Positions in the Recovery Structure

A leadership structure is crucial to guiding, coordinating, and making key decisions throughout the recovery process. A complicated organizational structure can have competing goals and priorities. Clear leadership and lines of authority will help organize the process, so all needs are met within a jurisdiction or county. The findings regarding leadership positions include:

- All studied plans recognized that successful recovery efforts require partnerships between government, business, non-governmental organizations, faith-based organizations, and community and neighborhood groups that should be developed prior to disasters and utilized during recovery. St. John the Baptist Parish used a faith-based group already established to serve as the Long-Term Recovery Group which addressed the needs of individuals freeing up government officials to work on infrastructure concerns.
- The Seattle Recovery Framework clearly identifies a Recovery Director and organizational structure as well as roles and responsibilities in Chapter 2, Governance and Coordination. In addition, a Community Recovery Task Force (CRTF) is identified that will help advise the mayor in policy issues related to disaster recovery following a major disaster.
- The state of Oregon plan identifies plan activation levels which provides a good platform for expansion and contraction of a recovery organizational structure. There are four levels of activation, scalable based on the level of assistance required: Level 1 – Standby; Level 2 – Partial; Level 3 – Full; and Level 4, Catastrophic.

Elected Official Buy-In

Buy-in from elected officials is crucial for executing recovery projects. Elected officials will provide legitimacy to the recovery process and socialize recovery projects with their constituents. The findings regarding elected official buy-in include:

- Both Washington and Oregon have enacted legislation or executive orders establishing recovery organizational structures. In Washington State, the Washington Restoration Organization is activated by a Governor's executive order following a catastrophic disaster. It serves as an advisory organization to the Governor's Office. The state of Oregon Recovery Plan is developed under the authority of ORS, Chapter 401.035. In addition, an executive order establishes a Disaster Management Framework to facilitate Oregon's response and recovery actions and provides a flexible instrument for execution of prudent policy and decision making.
- The Seattle Disaster Recovery Framework planning started with senior officials being invited to city hall for a large group briefing on the planning process. The concept of building back in a more resilient fashion was introduced with facilitated breakout sessions and group discussion. This session was attended by high-level government officials and a wide variety of leaders in the community. This established support for the planning process, which ensured appropriate attendance at planning meetings and set the direction of recovery planning.
- A key portion of the development of The King County Regional Disaster Response Plan for Public and Private Organizations was getting buy-in from elected officials. A Regional Policy Committee made up of councilmembers from the planning area agreed to function as the policy level committee for plan development. They were briefed on the plan, as required by the planning process, through a liaison. When the plan was ready to be implemented, the Regional Policy Committee endorsed the plan and assisted in sharing it with their jurisdictions. This bolstered the legitimacy and buy-in for the plan as other elected officials had to formally agree to participate in the plan by signing an omnibus agreement.

Planning Processes

Establishing a planning process will ensure there is continuity between the local recovery plan, and operations contained within it, and the existing plans and processes within the jurisdiction or county.

- The Denver Urban Areas Security Initiative (UASI) All Hazards Regional Recovery Framework contains a crosswalk tool between the Recovery Support Functions (RSFs) within the framework, the Colorado State Plan, and the National Disaster Recovery Framework. The crosswalk helped to make recovery documentation consistent throughout the region.

CURRENT CAPABILITIES SUPPORTING BEST PRACTICES

Using the best practices for organizational structure identified above as a foundation, the planning team has identified current capabilities from the Portland Metropolitan Region's plans, policies, and procedures that support those best practices, including but not limited to an identified

recovery structure, outlining the damage assessment process, and policy to support future growth within unincorporated areas.

The identified plans for this section include The Portland Plan, 2012; Multnomah County Comprehensive Plan, 2016; Multnomah County Damage Assessment (Draft Annex to EOP), 2017; State of Oregon Recovery Plan, 2018; Washington Restoration Framework, 2013; and State of Oregon Natural Hazards Mitigation Plan, 2015. The capabilities identified within each plan are outlined below:

- ***The Portland Plan, 2012:*** The Portland Plan is a strategic plan focusing on increasing the welfare of Portlanders. The core focus areas of the plan include prosperity, education, health, and equity. The plan includes five-year action plan items organized by action areas such as health, public spaces, housing, and sustainability. Each action item is assigned to organizations such as local government departments and bureaus, nonprofits, and business partners. In addition, the plan lays out expectations for implementation including the roles and responsibilities for the lead partners and supporting partners.
- ***Multnomah County Comprehensive Plan, 2016:*** The comprehensive plan is a policy document, which is meant to guide future growth and development in unincorporated areas of the county. The section pertaining to natural hazards contains a list of all relevant local and state planning studies, documents, and laws, which are connected to the hazards presented within the plan. This includes documents such as the Oregon Natural Hazards Mitigation Plan, the Oregon Resilience Plan, and the Multnomah County Hazards Mitigation Plan. Each document includes a description of how it relates to the comprehensive plan and builds a regional connected consistency.
- ***Multnomah County Damage Assessment (Draft Annex to EOP), 2017:*** The annex outlines the goals, objectives, and processes of conducting damage assessments following small to catastrophic events. The annex also supports the debris management plan. The annex clearly describes roles and responsibilities for throughout all phases of an event including recovery as it pertains to damage assessment. The organizations include county departments but also incorporates additional groups and organizations such as neighborhood/community emergency response teams, nonprofit organizations, Northwest Health Preparedness Organization, and electricity and natural gas utilities.
- ***State of Oregon Recovery Plan, 2018:*** The state recovery plan establishes a recovery organization which provides a framework for the State to support recovery activities for large-scale or catastrophic events. The plan describes the state recovery support functions, responsible organizations, roles and responsibilities, and how the state can scale its operations to meet various event recovery needs. The plan exemplifies the concepts of state managed and locally owned recovery. The plan acknowledges that the bulk of recovery action is conducted at the local level and describes the regional approach to recovery. This involves splitting the state into 11 regions which each work to identify local community economic development needs and work to integrate state support to provide solutions for those needs.
- ***Washington Restoration Framework, 2013:*** The Washington Restoration Framework outlines the state's catastrophic event recovery framework. The document describes political leadership activating the plan and actively participating in the recovery planning and execution processes.
- ***State of Oregon Natural Hazards Mitigation Plan, 2015:*** The State Hazard Mitigation Plan describes Oregon's natural hazards, their probability, the state's vulnerabilities, and

its mitigation strategies and implementation capability. The plan is used by local jurisdictions to guide their own mitigation planning efforts. The plan contains a letter to the state legislature recommending implementation strategies of the state resilience plan. One of the recommendations includes the appointment of a Resilience Policy Advisor to the Governor. This position would be permanent and have clearly defined roles and responsibilities such as resilience oversight. This kind of position can implement and ensure the state or regions recovery framework is coordinated and consistent.

RECOMMENDATIONS

- 1. Create a Clear Governance Structure.** Identify a recovery manager within the government structure with authority to make financial and project decisions and clear reporting to the county administrator, city manager or mayor. Identify Recovery Support Functions to identify priorities and projects within their areas, with identified leaders to coordinate with each other and the recovery manager to ensure efficient communication and coordination around recovery priorities and project implementation.
 - Identify a regional group to coordinate on recovery priorities among all five counties to ensure equitable recovery across the Portland Metropolitan Region.
 - Ensure coordination and compliance with state and federal recovery structures.
- 2. Obtain Political Buy-In.** Obtaining buy-in from elected officials is essential to implementing the recovery plan. Officials should be engaged in the planning process early and receive updates throughout plan development. This includes officials at the state, county, and local levels. The following recommendations will help to build buy-in and agreement.
 - Build an Agreement Template. Create an agreement template to present to elected officials upon the completion of their local recovery plan. The agreement will declare their support for the actions and implementation of the plan.
 - Create a political buy-in matrix. With such a large and diverse region, it is essential to maintain a matrix or database of all elected officials at the regional level who have supported the plan. This includes their name, jurisdiction or organization, and contact information should the RDPO, or the local recovery planners, need to contact those elected officials.
- 3. Leverage Current Regional Groups.** Currently region wide planning and policy groups exist such as the RDPO, Metro policy committee, and the Metro transportation that can be leveraged to support long-term recovery planning. Through combining the representatives and disciplines from these groups a regional long-term recovery committee can be developed to oversee post-disaster recovery pre-planning and long-term recovery operations.

Communication Findings

Communications pertain to the methods through which the recovery organization will gather and share information with the public, elected officials, and other stakeholders. The themes developed regarding communications include communication structures, communication methods and tools, and progress promotion, all of which can help to ensure a smoother recovery process with the public more satisfied through transparency. Recommendations for communications during the recovery process include ensuring all areas of the community are engaged throughout the

recovery planning and execution processes including the private sector and community organizations focused on equity. Another recommendation includes establishing a regional planning and status portal so the recovery processes and status can be conveyed to the public and stakeholders. The final recommendation is to incorporate a Joint Information System into the recovery framework so Public Information Officers (PIOs) can provide elected officials, stakeholders, and the public accurate and current information regarding recovery processes.

BEST PRACTICES

Communication Structures

Establishing a coordinated communication function is essential for an efficient communications process with stakeholders, officials, and the broader community.

- The Seattle Recovery Framework and other recovery plans include a Joint Information System (JIS) in their organizational framework to facilitate the communications function.
- In Louisiana, the public information function for recovery operations was established early and maintained through recovery, providing information to the public, employees, and the community in general, using multiple media methods.
- Expectations of elected officials, staff, and community members can be managed through transparency, status updates, and regular communication.

Communication Methods and Tools

Having redundant and diverse communication methods and tools will increase outreach and visibility from stakeholders, officials, and the broader community.

- Louisiana public officials maintained websites and attended community events to keep their communities updated on project status. Smaller, low priority but highly visible projects were completed to demonstrate that the local government was working towards recovery goals. High priority projects continued as well and the progress of those were shared with the community.
- Louisiana parishes sought community input discovering that non-structured solicitation didn't work. As a result, they provided recovery ideas and asked groups to suggest possible modifications. They took pieces of the ideas and feedback and incorporated many of them into projects. The process was explained clearly and achieved buy-in from the community.

Progress Promotion

Sharing progress is important to improve the morale of recovering communities. Promoting project milestones will help improve project visibility and assure communities that progress is occurring on the road to post disaster redevelopment.

- St John the Baptist Parish, Louisiana, shared success with the public by having a one-year celebration and dedication of a landmark recognizing those who were impacted by Hurricane Isaac and those who helped with recovery. This celebration also included a reminder that the long-term recovery processes was not over, and the community would be asked to participate in future efforts.

CURRENT CAPABILITIES SUPPORTING BEST PRACTICES

Using the best practices for communications identified above as a foundation, the planning team has identified current capabilities from the Portland Metropolitan Region's plans, policies, and procedures that support those best practices, including but not limited to mitigation efforts to reduce loss of life, strategies for reducing carbon emissions, and best practices in recovery for those with access and functional needs.

The identified plans for this section include the Oregon Resiliency: A Progress Report; The People's Plan, 2017; City of Portland and Multnomah County Climate Action Plan, 2015; Multnomah County Multi-Jurisdictional Natural Hazards Mitigation Plan, 2017; The Oregon Resilience Plan, 2013; and Disabilities, Access and Functional Needs Inclusive Planning: Summary of Guidance, Best Practices, and References, 2016. The capabilities identified within each plan are outlined below:

- ***Oregon Resiliency: A Progress Report:*** This website provides a report on accomplishments five years after publication of the Oregon Resilience Plan in 2013. The status report is organized by business and workforce continuity, coastal communities, critical and essential buildings, transportation, energy, information and communications, and water and wastewater systems. Each of these areas include recommendations presented in the resilience plan and their current status. The website is easy to navigate and provides a good snapshot of where current recommendations stand in terms of implementation.
- ***The People's Plan, 2017:*** This plan discussed goals and strategies for building community health and resilience within the Portland African American Community. Recognizing the difficulty of addressing these issues within a community that has been confronted with continuous barriers, community engagement and input to the plan was offered in non-traditional ways. Five simple questions were asked in visioning sessions that helped inform the planning process and goals. In addition, there was a robust engagement process with the community. The planning team held and participated in 26 community events fostering visibility and buy-in from the community.
- ***City of Portland and Multnomah County Climate Action Plan, 2015:*** The Climate Action Plan outlines strategies for reducing carbon emissions by 2050 and preparing for the impacts of the changing climate. To facilitate education and engagement regarding the plan, actions describe partnering with local community organizations to leverage community-based programs such as libraries and health clinics. Partnering with these local organizations will help to ensure that outreach is culturally appropriate and tailored for each community. This will help effectively reach marginalized communities that might not typically get to participate in the planning engagement process.
- ***Multnomah County Multi-Jurisdictional Natural Hazards Mitigation Plan, 2017:*** The Natural Hazards Mitigation Plan describes mitigation efforts to reduce the loss of life and property through lessening the impacts of disasters. The plan describes the multi-jurisdictional approach and its benefits including improved communication, comprehensive mitigation approaches, sharing of data, and alignment of hazard awareness. Explicitly describing the benefits of a regional approach can enhance the message of integrating the whole community into emergency planning.
- ***The Oregon Resilience Plan, 2013:*** The goal of the Oregon Resilience Plan is to present the effects on the state's infrastructure following a catastrophic earthquake, recommended

timeframes to restore functions, and recommendations to reach overall resilience targets. There is a focus on private sector utilities and business owners that played a part in the drafting of the plan. This focus allows the plan to provide a more relatable perspective through which to communicate the effects of disasters through the lens of a community member.

- ***Disabilities, Access and Functional Needs Inclusive Planning: Summary of Guidance, Best Practices, and References, 2016:*** This document, commissioned by the RDPO, outlines best practices collected nationally regarding emergency planning and recovery for people with disabilities and others with access and functional needs. The report outlines best practices in community engagement including recommendations of common country-wide groups to include in the planning process such as AmeriCorps, Community Emergency Response Teams (CERT), and Medical Reserve Corps. These organizations can be valuable resources in the planning processes to ensure inclusive planning, recovery and resilience activities. The summary identifies specific actions and relations these organizations have with individuals with disabilities and others with access and functional needs.
- ***Regional JIS Plan, 2013:*** The plan identifies how the Public Information Officers (PIOs) in the Portland Metropolitan Region will coordinate to conduct crisis communications. The plan outlines both local and regional coordination and operational concepts, including providing operational checklists by position.
- ***Regional Public Information Plan, 2016:*** The plan identifies procedures for PIOs to coordinate to provide crisis communications within the operation of a regional JIS. The plan provides a full concept of operations and roles and responsibilities for the positions within this regional structure. The plan provides procedures on how to transition from local to regional JIS operations, including decision points and guidance for enhanced coordination during an emergency.

RECOMMENDATIONS

1. **Engage the Whole Community During Recovery Planning and Operations.** While developing the Regional Recovery Framework, community stakeholders across the region should be engaged. This project included stakeholder engagement sessions conducted across the five counties to collect ideas for and solicit feedback on the Regional Recovery Framework. This must also be carried throughout in county and jurisdictional pre- and post-disaster recovery planning efforts. Critical, non-governmental groups to engage throughout the planning processes include:
 - a. Private sector business owners – The private sector plays a crucial role in the economic recovery process. Ensuring they are aware of the tools and services available to them will help hasten community recovery. The private sector can also provide non-traditional funding streams and assistance during recovery.
 - b. Community Organizations – This includes local organizations that focus on equity as well as organizations that focus on emergency response and recovery such as Community Emergency Response Teams (CERT). Communicating with these organizations will help build buy-in for the plan at the local level and further support the effort to ensure equity is accounted for and applied throughout the pre-disaster planning and post-disaster operations. In addition, these organizations can assist

with socializing and building awareness of the framework through outreach and community events.

- c. Organizations Focused on Vulnerable Populations – Incorporating vulnerable population organizations through all aspects of planning is vital to ensuring effective recovery operations for everyone following an incident. Further, agencies and organizations focused on vulnerable populations can support the effort to socialize the recovery plan within the communities they serve through appropriate communication methods.
2. **Leverage the Planning Portal.** The existing RDPO planning portal is active at the following website: <https://www.portlandoregon.gov/rdpo/76170>. The planning portal can be leveraged throughout the Framework development process to provide awareness of local recovery planning processes in the region. During the planning process, the website can provide the latest news, a general overview of the Framework, status updates, engagement events, and a place to provide feedback. This portal will provide transparency throughout the planning process and allow those who will use or be affected by the recovery plan to feel involved in the process even if it is just through knowing the current status of development. Once the Framework is established, the planning portal can be used for additional outreach such as serving as a portal for planning tools and templates for jurisdictions and counties. It can also host post-disaster recovery tools such as damage estimate forms and helpful post-disaster tips.
3. **Incorporate a Joint Information System into the Recovery Process.** The goal of this function would be to provide the public, elected officials, and stakeholders with crucial information during the recovery process. This would provide guidance for jurisdictions and counties to implement PIOs during the recovery process. The PIO would manage a team of information officers to ensure current and accurate information is being communicated and providing transparency throughout the recovery process. This function would remain during long-term recovery and could provide regular updates through newsletters, websites, and events.
4. **Build Upon Existing Engagement Processes.** Most of the counties within the region currently have their own community engagement processes. These processes should be leveraged to build a guidance with recommendations for engaging the whole community at the local level so that all municipalities within the region have access to engagement strategies.

Operations Findings

The operations focus discusses actions taken during the pre-planning and recovery processes and tools to further enhance and facilitate the execution of recovery goals following a disaster. The operations themes include regional consistency, inclusive planning, incorporating resilience, and recovery actions. The major recommendations include:

- Incorporate a “Build Back Better” (BBB) concept in recovery projects to enhance resilience. This can be implemented through development of a toolkit for officials to assist with incorporating BBB concepts when applicable. Some common BBB applications include incorporating green spaces and sustainability into recovery projects.
- Develop a robust recovery matrix for the region denoting the roles and responsibilities during short-term, intermediate, and long-term recovery of the diverse group of officials,

departments, government organizations, private sector, community organizations, and the public.

- Develop guidance on debris management practices that can be shared across the region to enhance consistency and coordination of debris removal, storage, reuse, and disposal.
- Provide a local recovery plan template and associated tools based off the regional framework to local jurisdictions. Using the template would help to streamline and coordinate operations throughout the region as all participants are working within the same framework and have the same organizational structure.

BEST PRACTICES

Regional Consistency

Building consistency among plans at the local and regional level will facilitate recovery operations as those executing their plans will be working within the same Framework and have similar plan structures.

- Both the Los Angeles and Bay Area UASI regions created planning templates for local jurisdictions that support and are complementary to regional and state plans and frameworks. The intent is to increase the efficiency of regional recovery by having organizational consistency in the plans.

Inclusive Planning

Planning documents should be inclusive and account for all members of the community. This includes community groups that are often underrepresented in plans such as minority groups and individuals with access and functional needs.

- Current regional planning documents reflect the need to be inclusive of minority groups, diverse cultures, those with access and functional needs, and other under-represented groups in planning efforts before and following a disaster. The plans all reflected community goals of increasing equity among typically underrepresented communities.

Incorporating Resilience

Including resilience in recovery projects will ensure the community is rebuilding stronger and will have a lower risk of similar damages in a future disaster.

- A common planning goal is to “Build Back Better” to increase resiliency from future risk when possible. This can be accomplished using long-term planning projects and priorities that may already be included in comprehensive plans, strategic plans, or land-use plans. Long term projects must be well planned and prioritized to incorporate resilience. Jurisdictions that have experienced major or catastrophic disasters have discovered there will be pressure to make things better fast.
- Several plans recognize the importance of utilizing subject matter experts, attorneys, and risk managers in planning efforts before and after the disaster to streamline resilience efforts and ensure all areas of risk are accounted for.

Recovery Actions

To help ensure an efficient and equitable recovery, comprehensive tracking and management processes need to be established. This includes operations such as managing volunteers, executing partnerships, and keeping track of documentation.

- During Hurricane Isaac, St John the Baptist Parish was the first community to use processes identified in the Federal Emergency Management Agency (FEMA) National Disaster Recovery Framework (NDRF). They worked closely with FEMA and modified concepts to meet their organizational and community needs. The NDRF and assistance from FEMA personnel provided an organizational framework and guidance as they developed their recovery plan following the event.
- In St. John the Baptist Parish, a Citizens Advisory Committee—which included private business and industry as well as government and citizen groups—was established following the event to help define and prioritize projects and advise the Parish on policy issues.
- Louisiana parishes as well as the New Orleans Redevelopment Authority discussed leveraging or combining various recovery funding streams including those intended for the disaster as well other funding streams to build better and stronger projects. This included approaching local leaders and major businesses to assist with funding projects.
- Following the Tohoku earthquake and tsunami, there was an immense amount of debris. Due to the sensitive nature of removing personal property, community leaders communicated and coordinated displaced residents regarding the removal of debris on their property. Flags were used to denote the wishes of home owners regarding removing debris. The removed debris was separated into materials that could be recycled and those that could not.
- Following Hurricane Isaac, hundreds of volunteers from church groups and other non-profit human service groups came to help rebuild homes and assist with other community needs in Louisiana over the course of a year. The Long-Term Recovery Group, comprised mostly of volunteer organizations, provided guidance and managed the housing of volunteers.
- The need to document all decisions and actions is identified in multiple plans. Lack of proper documentation has been shown during real events to delay or reduce financial reimbursement.

CURRENT CAPABILITIES SUPPORTING BEST PRACTICES

Using the best practices for operations identified above as a foundation, the planning team identified current capabilities from the Portland Metropolitan Region's plans, policies, and procedures that support those best practices, including but not limited to guidance on county growth, expansion of green spaces, reduction and disposing of waste, and management of debris flow recovery.

The identified plans for this section include the Clark County Comprehensive Plan, 2015; Metropolitan Greenspaces Master Plan, 1992; Metro's Regional Solid Waste Management Plan, 2018; Multnomah County Disaster Debris Management Plan, 2016; City of Portland and Multnomah County Climate Action Plan, 2015; RDPO Disaster Debris Management Framework Executive Summary, 2014; Washington County Emergency Operations Plan Version 3.0, 2017;

and Washington County Comprehensive Framework Plan for the Urban Area, 2017. The capabilities identified within each plan are outlined below:

- **Clark County Comprehensive Plan, 2015:** The Comprehensive plan provides a framework and guidance for county growth within 20 years. The plan provides valuable information to reference while considering resilience and recovery projects. This includes policies which lay out land use and environmental regulations. Referencing plans with similar elements during recovery and recovery planning will ensure that past goals and projects can be incorporated and local policies are followed.
- **Metropolitan Greenspaces Master Plan, 1992:** The Greenspaces Master Plan outlines the goals and framework for enhancing the region's greenspaces. While not explicitly describing recovery operations, this plan can be a great reference tool during recovery operations as implementing greenspaces is recognized as a best practice in resilience and recovery planning. This plan can be referenced for projects and potential partner organizations during the recovery processes including land trusts, conservancies, local environment, and wildlife departments.
- **Metro's Regional Solid Waste Management Plan, 2018:** The Solid Waste Management Plan describes the regional policy and program direction for reducing and disposing of waste. In addition, the plan describes enhancing these capabilities and increasing sustainability of the waste disposal process. The plan was built with public involvement and buy-in through multiple community meetings, forums, and online portals for feedback. The plan also outlines the preferred practices of solid waste management which can be adopted for recovery and resilience processes pre- and post-disaster. The preferred practices include:
 1. Reduce the amount of solid waste generated.
 2. Reuse material for its originally intended purpose.
 3. Recycle or compost material that cannot be reduced or reused.
 4. Recover energy from material that cannot be reduced, reused, recycled or composted so long as the energy recovery facility preserves the quality of air, water and land resources.
 5. Landfill solid waste that cannot be reduced, reused, recycled, composted or from which energy cannot be recovered.
- **Multnomah County Disaster Debris Management Plan, 2016:** The Disaster Debris Management Plan provides a framework for how the county will manage debris following a disaster. Debris management is an essential piece of short-term recovery and the plan outlines the roles and responsibilities for county departments, state agencies, federal agencies, and local municipalities. The plan also mentions the role the private sector plays in debris management including debris hauling and monitoring. Understanding the expectations of the diverse components of debris management is an important piece of short-term and intermediate disaster recovery.
- **City of Portland and Multnomah County Climate Action Plan, 2015:** The Climate Action Plan outlines strategies for reducing carbon emissions by 2050 and preparing for the impacts of the changing climate. The plan describes the two advisory groups that assisted with the development of the plan. A steering committee comprised of technical experts and community representatives reviewed the plan throughout development. Equity was identified as an overarching goal in the Portland plan and was acknowledged in the previous Climate Action Plan. To address the focus of equity within the plan, an

Equity Working Group was formed and was comprised of participants from local community organizations with a focus on advancing equity. The Equity Working Group reviewed the previous plan and 2015 Climate Action Plan to identify gaps and missed opportunities regarding equity and how best to incorporate it into the plan. The contributions included best practices for integrating equity, metrics to measure equity, equity specific objectives, and implementation strategies.

- ***RDPO Disaster Debris Management Framework Executive Summary, 2014:*** The summary outlines key issues related to a study to assist with the development of a regional disaster debris management framework. One key piece developed was a Debris Disaster Management Planning Toolkit. The planning toolkit was designed to help local jurisdictions build and adapt their own debris management frameworks. This tool helps to ensure greater coordination across the region as the debris management plans will be relatively uniform and easier to fit into a regional framework.
- ***Washington County Emergency Operations Plan (EOP) Version 3.0, 2017:*** The EOP outlines the county's approach to emergency management and short-term recovery. The plan addresses short-term recovery actions to be taken by the county and mentions how the county will transition into a long-term recovery strategy once initial recovery actions are completed. Despite long-term recovery being out of scope of the plan, it does include a robust short-term recovery annex. The annex is a valuable tool to quickly assess initial recovery actions by function, the primary and secondary organizations tasked with executing that function, and the location of related information in the EOP annexes. A matrix like this provides an easily understood overview of the actions and associated roles and responsibilities for short-term recovery.
- ***Washington County Comprehensive Framework Plan for the Urban Area, 2017:*** The comprehensive plan addresses policies and strategies regarding growth and development issues in the regional urban growth boundary of the county. While the plan does not explicitly describe recovery actions it assigns roles and responsibilities for serving growth. The identified county departments and local municipalities would be instrumental during recovery. The plan outlines essential services and the responsible organization identified as the long-term provider. Being able to quickly identify the responsibilities for these essential services will be an important piece of short-term and long-term recovery.

RECOMMENDATIONS

1. **Identify Response to Recovery Communication and Transitions.** To ensure efficient and equitable recovery, the recovery organization needs to commence making decisions that will impact short-term, intermediate, and long-term recovery in the immediate aftermath of disaster. The recovery organization needs to have a good understanding of its roles and responsibilities after the disaster, and how to communicate with, coordinate with, and eventually transition authority from the response entities in the jurisdiction or county.
2. **Implement the Build Back Better (BBB) Concept.** Where applicable, implement goals to incorporate additional resilience into construction. There will be a natural tendency to have the reconstruction process commence and complete as fast as possible so citizens

and business can return to normal. Local officials will need to be adept at managing public expectations, providing updates, and communicating the benefits of resilience.

- **Use a Balanced Approach.** A BBB approach will not likely be able to address all aspects of the recovery process. Thus, local officials will need to determine a balanced approach between recovery projects that should be completed as swiftly as possible and those that can incorporate resilience.
 - **BBB Toolkit.** Developing a BBB toolkit will help local officials understand the BBB concept and how to convey it to their constituents and stakeholders. The toolkit can provide information such as:
 - How to assess a project to incorporate a BBB concept.
 - Recommendations for typical BBB projects and applications.
 - A guide on how to communicate BBB concepts and provide information to the public.
 - A tool for prioritizing all recovery projects. This will help determine which projects might be a good fit for BBB.
 - **Incorporate Greenspaces and Sustainability when Applicable.** Methods to incorporate sustainability practices and greenspaces in recovery and resilience building should be included in the framework guidance. The regional framework can provide guidance on project prioritization, strategies for communicating with the public, typical sustainability and greenspace projects, and local policies that might affect these projects.
3. **Build a Robust Recovery Matrix.** A recovery matrix will help ensure jurisdictions and counties have a comprehensive idea of the recovery process and how various organizations are integrated. Using the short-term recovery matrix in the Washington County EOP as a base, the intermediate and long-term recovery phase should be added. In addition, the various stakeholders in charge of executing the recovery functions should be organized by state, county, department, jurisdiction, and private sector.
 4. **Incorporate Debris Management.** Removal and disposal of disaster related debris is essential for short-term and intermediate recovery. The progress of debris management after a disaster can impact how recovery projects are prioritized and implemented. Providing guidance to county governments to develop or edit their debris management plans for consistency will streamline the cleanup process.
 5. **Provide a Local Planning Tool.** After the Framework is complete, it is critical that local jurisdictions and counties have the guidance necessary to build their own recovery plans. This can be accomplished by providing a tool in alignment with the Framework, which can include a standardized structure and tools and forms such as updating status and assigning local roles and responsibilities.
 6. **Leverage Existing Plans to Inform Recovery Planning and Projects.** With such a vast network to implement recovery actions, it is essential to maintain a database and list of all the important planning documents and authorities that inform the Regional Recovery Framework and the local recovery plans. Regional and local plans should be used as a first place to identify recovery goals and projects. The planning group can create a map or chart depicting all the plans in the region which can be accessed to provide additional information to assist with intermediate and long-term recovery. This way a comprehensive

plan matrix can be maintained within the region and updated regularly. Some state, county, and local plans to be included in this matrix would be:

- Recovery Frameworks
- Emergency Operation Plans (EOPs)
- Debris Management Plans
- Hazard Mitigation Plans
- Land Use and Development Plans
- Transportation Plans
- Housing Plans
- Comprehensive Improvement Plans
- Strategic Plans
- Resilience Plans
- Climate Action Plans
- Community Vision and Redevelopment Plans

Conclusion

Organizational structure, communications, and operations were the three major areas of focus identified for development of the Regional Recovery Framework. Using best practices identified through global research into recovery and resilience practices and firsthand experience, as well as current capabilities collected through reviewing regional planning and recovery documentation, recommendations for effective post-disaster recovery operations were developed. The recommendations identified in this document will serve as the foundation of the Regional Recovery Framework, serving as a first step towards an ongoing goal of preparing the Portland Metropolitan Region to efficiently and effectively recover from a natural disaster.

Appendix A: Best Practices Referenced

Best Practice	Reference	Page Number
Organizational Structure		
<p>All studied plans recognized that successful recovery efforts require partnerships between government, business, non-governmental organizations, faith-based organizations, and community and neighborhood groups that should be developed prior to disasters and utilized during recovery. St. John the Baptist Parish used a faith-based group already established to serve as the Long-Term Recovery Group which addressed the needs of individuals freeing up government officials to work on infrastructure concerns.</p>	<p>Trip Report, Disaster Recovery Louisiana, 2013</p>	<p>5</p>
<p>The Seattle Recovery Framework clearly identifies a Recovery Director and organizational structure as well as roles and responsibilities in Chapter 2, Governance and Coordination. In addition, a CRTF is identified that will help advise the mayor in policy issues related to disaster recovery following a major disaster.</p>	<p>City of Seattle Disaster Recovery Framework, 2015</p>	<p>5</p>
<p>The state of Oregon plan identifies plan Activation Levels which provides a good platform for expansion and contraction of a recovery organizational structure. There are four levels of activation, scalable based on the level of assistance required: Level 1 – Standby; Level 2 – Partial; Level 3 – Full; and Level 4, Catastrophic.</p>	<p>State of Oregon Recovery Plan, 2014</p>	<p>5</p>
<p>Both Washington and Oregon have enacted legislation or executive orders establishing recovery organizational structures. In Washington State, the Washington Restoration Organization is activated by Governor’s executive order following a catastrophic disaster and serves as an advisory organization to the Governor’s Office. The State of Oregon Recovery Plan is developed under the authority of ORS, Chapter 401.035. In addition, an executive order establishes a Disaster Management Framework to facilitate Oregon’s response and recovery actions and provides a flexible instrument for execution of prudent policy and decision making.</p>	<p>2017 Oregon Revised Statutes</p>	<p>6</p>

Best Practice	Reference	Page Number
<p>The Seattle Disaster Recovery Framework planning started with senior officials being invited to city hall for a large group briefing on the planning process. The concept of building back in a more resilient fashion was introduced with facilitated breakout sessions and group discussion. This session was attended by high-level government officials and a wide variety of leaders in the community. It established support for the planning process, which ensured appropriate attendance at planning meetings and set the direction of recovery planning.</p>	<p>City of Seattle Disaster Recovery Framework, 2015</p>	<p>6</p>
<p>A key portion of the development of The King County Regional Disaster Response Plan for Public and Private Organizations was getting buy-in from elected officials. A Regional Policy Committee made up of councilmembers from the planning areas agreed to function as the policy level committee for plan development. They were briefed on the plan, as required by the planning process, through a liaison. When the plan was ready to be implemented, the Regional Policy Committee endorsed the plan and assisted in sharing it with their jurisdictions. This bolstered the legitimacy and buy-in for the plan as other elected officials had to formally agree to participate in the plan by signing an omnibus agreement.</p>	<p>King County Regional Disaster Plan For Public and Private Organizations in King County, 1999</p>	<p>6</p>
<p>The Denver UASI All Hazards Regional Recovery Framework contains a crosswalk tool between the RSFs within the framework, the Colorado State Plan, and the National Disaster Recovery Framework. The crosswalk helped to make recovery documentation consistent throughout the region.</p>	<p>Denver USASI All-Hazards Regional Recovery Framework, 2012</p>	<p>6</p>
Communication		
<p>The Seattle Recovery Framework and other recovery plans include a JIS in their organizational framework to facilitate the communications function.</p>	<p>City of Seattle Disaster Recovery Framework, 2015</p>	<p>9</p>
<p>In Louisiana, the public information function for recovery operations was established early and maintained throughout recovery, providing information to the public, employees, and the community in general, using multiple media methods.</p>	<p>Trip Report, Disaster Recovery Louisiana, 2013</p>	<p>9</p>
<p>Expectations of elected officials, staff, and community members can be managed through transparency, status updates, and regular communication.</p>	<p>Comprehensive Plan Review (See Appendix B)</p>	<p>9</p>

Best Practice	Reference	Page Number
Louisiana public officials maintained websites and attended community events to keep their communities updated of project status. Smaller, low priority but highly visible projects were completed to demonstrate that local government was working towards recovery goals. High priority projects continued as well and progress was shared with the community.	Trip Report, Disaster Recovery Louisiana, 2013	9
Louisiana parishes sought community input discovering that non-structured solicitation didn't work. As a result, they provided recovery ideas and asked groups to suggest possible modifications. They took pieces of the ideas and feedback and incorporated many of them into projects. The process was explained clearly and achieved buy-in from the community.	Trip Report, Disaster Recovery Louisiana, 2013	9
St John the Baptist Parish, Louisiana shared success with the public by having a one-year celebration and dedication of a landmark recognizing those who were impacted by Hurricane Isaac and those who helped with recovery. This celebration also included a reminder that the long-term recovery process was not over, and the community would be asked to participate in future efforts.	St. John the Baptist Parish News Release – Hurricane Isaac Recovery is a Team Effort in St. John Parish, 2013	10
Operations		
Both the Los Angeles and Bay Area UASI regions created planning templates for local jurisdictions that support and are complementary to regional or state plans and frameworks. The intent is to increase the efficiency of regional recovery by having organizational consistency in the plans.	Bay Area Urban Areas Security Initiative, Template – Disaster Recovery Framework and Recovery Support Function Guide, 2015	13
Current regional planning documents reflect the need to be inclusive of minority groups, diverse cultures, those with access and functional needs, and other under-represented groups in planning efforts before and following a disaster. The plans all reflected community goals of increasing equity among typically underrepresented communities.	Comprehensive Plan Review (See Appendix B)	13
A common planning goal is to “Build Back Better” to increase resiliency from future risk when possible. This can be accomplished using long-term planning projects and priorities that may already be included in comprehensive plans, strategic plans, or land use plans. Long term projects must be well planned and prioritized to incorporate resilience. Jurisdictions that have experienced major or catastrophic disasters	Comprehensive Plan Review (See Appendix B)	13

Best Practice	Reference	Page Number
<p>have discovered there will be pressure to make things better fast.</p>		
<p>Several plans recognize the importance of utilizing subject matter experts, attorneys, and risk managers in planning efforts before and after the disaster to streamline resilience efforts and ensure all areas of risk are accounted for.</p>	<p>Comprehensive Plan Review (See Appendix B)</p>	<p>13</p>
<p>During Hurricane Isaac, St John the Baptist Parish was the first community to use processes identified in the FEMA National Disaster Recovery Framework (NDRF). They worked closely with FEMA and modified concepts to meet their organizational and community needs. The NDRF and assistance from FEMA personnel provided an organizational framework and guidance as they developed their recovery plan following the event.</p>	<p>Trip Report, Disaster Recovery Louisiana, 2013</p> <p>St. John the Baptist Parish News Release – St. John the Baptist Parish Establishes Long Term Recovery Group, 2012</p>	<p>13-14</p>
<p>In St. John the Baptist Parish, a Citizens Advisory Committee—which included private business and industry as well as government and citizen groups—was established following the event to help define and prioritize projects and advise the parish on policy issues.</p>	<p>Trip Report, Disaster Recovery Louisiana, 2013</p>	<p>14</p>
<p>Louisiana parishes as well as the New Orleans Redevelopment Authority discussed leveraging or combining various recovery funding streams including those intended for the disaster as well other funding streams to build better and stronger projects. This included approaching local leaders and major businesses to assist with funding projects.</p>	<p>Trip Report, Disaster Recovery Louisiana, 2013</p>	<p>14</p>
<p>Following the Tohoku earthquake and tsunami, there was an immense amount of debris. Due to the sensitive nature of removing personal property, community leaders communicated and coordinated displaced residents regarding the removal of debris on their property. Flags were used to denote the wishes of homeowners regarding removing debris. The removed debris was separated into materials that could be recycled and those that could not.</p>	<p>After Great Disasters, How Six Counties Managed Community Recovery</p>	<p>14</p>
<p>Following Hurricane Isaac, hundreds of volunteers from church groups and other non-profit human service groups came to help rebuild homes and assist with other community needs in Louisiana over the course of a year. The Long-Term Recovery Group, comprised mostly of volunteer organizations, provided guidance and managed the housing of volunteers.</p>	<p>Trip Report, Disaster Recovery Louisiana, 2013</p>	<p>14</p>

Best Practice	Reference	Page Number
The need to document all decisions and actions is identified in multiple plans. Lack of proper documentation has been shown during real events to delay or reduce financial reimbursement.	Comprehensive Plan Review (See Appendix B)	14

Appendix B: Documents Reviewed

The following list includes all of the documents reviewed for the

Document Title
2018 Port Transportation Improvement Plan, 2018
2035 Portland Comprehensive Plan, 2016
After Great Disasters, How Six Counties Managed Community Recovery
American Planning Association, Planning for Post-Disaster Recovery: Next Generation, 2014
Baltimore UASI Jurisdictional and Regional Recovery Planning Project Overview (White Paper)
Baltimore UASI Recovery Planning Effort (Power Point)
Bay Area Urban Areas Security Initiative, Template – Disaster Recovery Framework and Recovery Support Function Guide, 2015
City of Portland Basic Emergency Operations Plan, 2016
City of Portland Climate Action Plan, 2015
City of Portland Mitigation Action Plan, “The Map,” 2016
City of Seattle Disaster Recovery Framework, 2015
Clackamas County Comprehensive Plan, 2001
Clackamas County Emergency Operations Plan, 2017
Clackamas County Natural Hazards Mitigation Plan, 2012
Clackamas County Transportation System Plan, 2013
Clark County 20 Year Comprehensive Growth Management Plan 2015 - 2035
Coalition of Communities of Color, Communities of Color in Multnomah County: An Unsettling Profile, 2014
Columbia County Comprehensive Plan, 2013
Denver UASI All-Hazards Regional Recovery Framework, 2012
Disabilities, Access and Functional Needs Inclusive Planning: Summary of Guidance, Best Practices, References, Prepared for RDPO, 2016
Disabilities, Access and Functional Needs Inclusive Planning: Summary of Findings for the City of Portland and Clackamas, Washington, Multnomah, and Clark Counties, Prepared for RDPO, 2016
DRAFT Solutions and Stakeholders Matrix
From Disaster to Renewal, The Centrality of Business Recovery to Community Resilience
Greater Portland Export Initiative, Portland Region Westside Freight Access & Logistics Analysis, 2013

Document Title
Los Angeles Regional Recovery Guidance for Emergency Planners, 2012
Metro 20 and 50 Year Regional Population Employment Range Forecasts, 2009
Metro 2018 Regional Transportation Plan Factsheet, 2017
Metro 2018-21 Metropolitan Transportation Improvement Program, 2017
Metro 2040 Growth Concept Map, 2014 (Map)
Metro Regional Snapshot, Brownfields, 2017
Metro Regional Snapshot, Housing, 2015
Metro Regional Snapshot, Jobs, 2016
Metro Regional Snapshot, Transportation, 2017
Metro Regional Solid Waste Management Plan, 2018
Metro Regional Transportation Systems Management Plan, 2010
Metro's Role in Housing, 2017
Metropolitan Greenspaces Master Plan, 1992
Multnomah County Climate Action Plan, 2015
Multnomah County Comprehensive Plan, 2016
Multnomah County Damage Assessment Plan DRAFT, 2017
Multnomah County Disaster Debris Management Plan, 2016
Multnomah County Disaster Recovery: A Framework Plan DRAFT, 2012
Multnomah County Multi-Jurisdictional Natural Hazards Mitigation Plan, 2017
National Disaster Recovery Framework, Second Edition, 2016
New York City Urban Post-Disaster Housing Prototype (online only)
Oregon Natural Hazards Mitigation Plan, 2015
Oregon Resiliency: A Plan Progress Report (online only)
Port of Portland Columbia Multimodal Corridor Study, 2012
Port of Portland Marine Terminal Master Plan 2020
Port of Portland Rail Plan, 2013
Portland African American Leadership Forum, The People's Plan, 2017
Portland Business Alliance Jobs and Economy Survey, 2018
Portland Central City Plan, 2017
Portland Metropolitan Region Emergency Public Information Concept of Operations (ConOps) Plan, 2009
Portland Urban Area Regional Emergency Public Information Joint Information Center (JIC) Manual, 2013

Document Title
Putting on a Resilience Lens, BoCo Strong Resilience Assessment for Boulder County
RDPO Disaster Debris Management Regional Executive Summary, 2014
Resilient Washington State, A Framework for Minimizing Loss and Improving Statewide Recovery after an Earthquake, 2012
State of Oregon Recovery Plan, 2014
State of Washington, Washington Restoration Framework, 2013
The Local and Regional Economic Impacts of the Port of Portland, Fiscal Year 2015
The Oregon Resilience Plan, 2013
The Portland Plan, 2015
TriMet Future of Transit (online only)
TriMet Transit Investment Priorities (online only)
Washington County Comprehensive Plan, Volume II, 2017
Washington County Emergency Operations Plan Version 3.0, 2017
Washington County Natural Hazard Mitigation Plan, 2017
Washington State Enhanced State Hazard Mitigation Plan, 2013
Wellington (New Zealand) Regional Emergency Management Office, Community Resilience Strategy, 2012
When Disaster Strikes: Promoting Resilience Through Prevention, Preparation and Intervention, 2017 (webinar)