Seattle Office
of Emergency
Management

City of Seattle

DISASTER RECOVERY FRAMEWORK

July 7, 2015

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One Thing We Know

We as the community of Seattle will at some point in the future have to recover from a major disaster. We don't know when it will happen, or which of the many identified threats will be the cause of it, or if it will be brought about by an unforeseen threat. We don't know how it will impact our community – whether the destruction will be citywide or concentrated in particular neighborhoods. We don't know how many people will be displaced or jobless, or for how long. We don't know which roadways will be destroyed, which infrastructure will remain standing. We can't predict with precision our particular needs or the specifics of the countless choices we'll need to make, as individuals, as public sector entities, as private and not-for-profit organizations, and as a community.

Knowing what we know and acknowledging what we don't, we still can anticipate the types of devastation that will occur, the magnitude of destruction, and the type of structures and processes we'll need in place to make well-informed, participatory decisions about how to rebuild and support the recovery of our community. In this document and the planning process that led to its drafting, we look to plan, prepare, and strengthen our community for the inevitable. We explore how, among the challenges of recovery, we will communicate and react as well as identify opportunities to build back better, making Seattle more efficient, sustainable, and resilient in future disasters, while maintaining residents' desires for the shape and function of our community.

Knowing that disasters are inevitable, we have invested in this pre-disaster planning effort to strengthen our collective abilities to recover. Through continued planning, coordination, and engagement, we hope to further strengthen the foundation for achieving our **Vision for Recovery.**

Vision for Recovery

Following a disaster, we will restore the community and the economy and rebuild the city. We will balance expeditious recovery with the opportunity to thoughtfully and deliberately build back better, using disaster recovery efforts to make Seattle more resilient, more sustainable, and more aligned with community ideals and aspirations. This will be done by fully engaging and leveraging our whole community and coordinating across all sectors.

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1. INTRODUCTION

1.1 Organization of this Document

Section 1.0 provides the purpose, scope and vision of the framework that will help explain the overall concept of operations by defining how the framework will be used and by whom. This section includes core values and key themes established by the planning committees and should remain front and center throughout the framework and in all aspects of recovery. The final subsection includes information regarding the city's emergency management program and relevant plans and partners. This subsection will serve as a reference guide to link the recovery framework with related city, county, state and federal plans.

Section 2.0, Governance and Coordination, establishes defined roles and a proposed structure intended to be inclusive and have clear decision-making and communication pathways. It demonstrates that many entities play a role in disaster recovery and do so in an autonomous way. Therefore to maximize each resource and provide the most far-reaching circle of services, all activities must be coordinated. The City will engage the entire community in disaster recovery, including individuals and the public, private, non-governmental, and not-for-profit sectors within its governance structure to:

- Leverage **whole community** resources in the most efficient way possible (see **Section 1.4.1**).

- Encourage affected community-members to have a voice in recovery decisions.

- Use a coordinated message (distributed by all entities) to represent disaster recovery activities to the public and to external stakeholders such as the state or federal government.

Section 3.0, Recovery Support Functions, establishes post-disaster strategies and options in seven **Recovery Support Functions (RSFs)**. These are key areas that will require our attention after a disaster. Within each RSF, the Framework also identifies known partnerships and participants as well as Pre-Disaster Preparations: actions, investments, and planning that will make the Seattle community more **resilient** and better prepared for an effective recovery effort.

Each RSF ends with a list of "Potential Reinventions" which identify how, in recovering and rebuilding from a

Resilience is defined in the *National Preparedness Goal* as "the ability to adapt to changing conditions and withstand and rapidly recover from disruption due to emergencies."

> **Recovery Support Functions (RSFs)**
>
> Seattle's Disaster Recovery Framework is structured around seven Recovery Support Functions which are modeled after the National Disaster Recovery Framework (NDRF). By adopting this framework, we will more easily interface with county, state, and federal bodies during the recovery effort. Seattle has somewhat modified this structure to better fit the particular needs of our local community.
>
> 1. Community Coordination and Capacity Building (modified from Community Planning and Capacity Building in NDRF)
> 2. Economic Recovery
> 3. Health, Social Services, and Education (Education added)
> 4. Housing
> 5. Infrastructure Systems
> 6. Natural and Cultural Resources
> 7. Buildings and Land Use Planning (added)

disaster, we may find opportunities to "build back better," advancing Seattle's collective vision for its best possible future.

Recovery Framework Appendices contain the following information:

- Appendix 1: Seattle's Major Emergency Management Documents
- Appendix 2: Community Profile
- Appendix 3: Federal Disaster Assistance Programs
- Appendix 4: Organizations that May Participate in Recovery
- Appendix 5: Pre-Disaster Recovery Preparations
- Appendix 6: Record of Revision

1.2 Purpose, Goal, and Scope

1.2.1 Recovery Framework Purpose

The purpose of this Recovery Framework is to ensure recovery is effective, efficient, and equitable. The Framework establishes a governance structure that can leverage and coordinate the resources, intelligence, and passion of our whole community, including public, private, and not-for-profit organizations. The Framework serves to:

- *Explore options for restoration of critical community functions, services, vital resources, facilities, programs, and infrastructure.*
- *Establish a framework for engaging those that should or need to be involved.*
- *Guide pre-disaster preparations.*

1.2.2 Recovery Framework Scope

This Framework is designed to guide recovery activities both pre-event and post-event. As shown in the recovery continuum (**Exhibit 1**) the work of this framework has already begun. The activation of the recovery governance structure and organization will be guided by the scale of the disaster and the resulting impacts to the community, the need to coordinate multiple resources, and the need for focused leadership on the recovery effort. *In the response phase, the City of Seattle will initiate recovery activities immediately following a disaster event with the activation of Emergency Support Function (ESF) 14 – Long-term Recovery and Mitigation. ESF 14 will begin the work and planning of recovery. For smaller events that require limited coordination with other City departments and outside entities, the work of recovery may be handled within ESF 14. However when the scale and magnitude of the event requires decision making, technical assistance, subject matter expertise, resources, engagement and collaboration from the whole community, a dedicated recovery director and organization will be activated as outlined in the Governance and Coordination section of this framework.*

The Framework is intended to "get a jump on" the recovery operations by outlining potential incident strategies, anticipated priorities, and governance and coordination networks within and among each Recovery Support Function. Post event, the City will assess the uniqueness of the event, and develop specific recovery plan(s) to address the specific impacts. The City must remain flexible pre-event and be ready for a range of possible incidents.

This Framework does not replace existing response, mitigation, and communication plans or organizations, but looks to leverage them within the recovery continuum. This is not an operational recovery plan or Continuity of Governance Plan for the City of Seattle. While the continuing functioning of individual City agencies are addressed in individual Continuity of Operations Plans, this Framework describes the potential roles and responsibilities of City agencies, as well as community players, in recovering Seattle to a fully functioning state following a disaster.

> **Framework ≠ Plan**
>
> This **Recovery Framework** was developed pre-event and will generally frame and guide recovery. Following a disaster, an incident-specific **Disaster Recovery Plan** will be developed to address the specific challenges and opportunities manifested.

1.3 Defining Recovery

1.3.1 The Challenges of Recovery

Successful community recovery can be defined as "the reestablishing of its infrastructure, public services, economy and tax base, housing, social fabric, and a sense of stability… [that creates] a new 'normal' that is better able to withstand the next disaster" (Draft Recovery Pre-Disaster Planning Guidance, FEMA). This new normal will come only after the City has worked through the many challenges of recovery such as dealing with unanticipated impacts, leveraging existing and newly acquired resources, working with the complex system of existing support organizations, making decisions regarding the allocation of competing resources, negotiating differing community desires for restoration, and potentially accounting for the total devastation of one area while at the same time dealing with portions of the community that have returned to normalcy quickly or were never affected.

1.3.2 The Recovery Process and its Relationship to Other Emergency Management Phases

The recovery process is best described as a sequence of interdependent and often concurrent activities that progressively advance a community toward a successful recovery. The symbiotic relationship of planning means that effective preparedness and mitigation planning should lighten the burden of recovery, and similarly, the recovery phase often daylights areas of community vulnerability that can be addressed in other phases.

Decisions made and priorities set early in the response and recovery process by a community will have a cascading effect on the nature and speed of the recovery progress. **Exhibit 1**, below, identifies the recovery phase and its relationship to prior phases of planning, preparedness, and disaster response.

1.3.3 Relationship to Pre-Disaster Planning and Preparations

Even with this Framework in place, there will be substantial need for additional pre-disaster planning and preparations to facilitate community recovery. Additional coordination will be required to continue to advance the initiatives and planning within the RSFs, focus on relationship building among stakeholders for each RSF and continuing the work across government and community lines to make additional recommendations in support of the recovery operations and priorities. **Section 2.2.7** speaks to the role the Community Recovery Task Force will play during this pre-disaster phase and **Section 1.6.4** notes the connections between this Disaster Recovery Framework and the full Seattle emergency management program, including mitigation, preparation, and response plans.

1.3.4 Transition from Response to Recovery Operations

In an emergency the City of Seattle's Emergency Operations Center (EOC) will be activated to coordinate the overall jurisdictional response to a disaster event. Recovery operations begin immediately after a disaster event, concurrent with response operations. Emergency Support Function (ESF) 14 will be activated in accordance to the Seattle Comprehensive Emergency Plan – Emergency Operations Plan and be housed within the Emergency Operations Center (EOC). ESF 14 will begin activating initial recovery functions such as debris clearance, damage/impact assessment, temporary space for displaced government/community functions, inspections for repairs, volunteer and donation management, and initiation of state/federal assistance programs. Recovery operations may remain within the scope of ESF 14 for smaller events and/or federal declarations with limited implementation of **Public Assistance** and **Individual Assistance** only.

Exhibit 1. Recovery Continuum
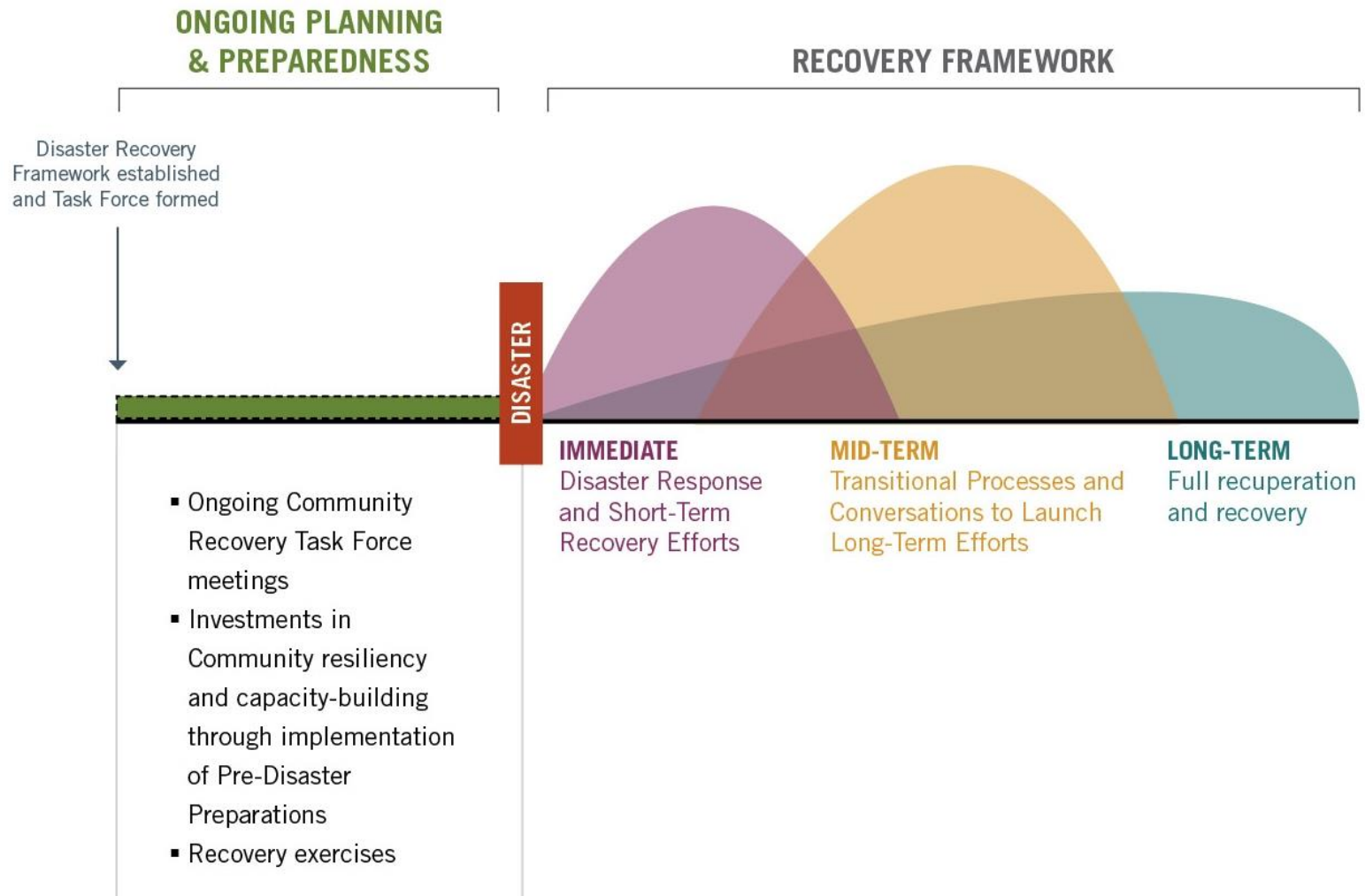
Source: National Disaster Recovery Framework and City of Seattle, 2015

The Mayor's Emergency Executive Board will evaluate and recommend the necessity to further implement the Seattle Disaster Recovery Framework and expansion beyond the ESF 14 elements. The decision to appoint a Recovery Director and implement full or partial activation of the CRTF will be determined in coordination with the Mayor and the Director of the Office of Emergency Management. The factors that may influence this decision are further discussed in **Section 2.2 under the "Recovery Office" heading.**

1.3.5   Authorities and References

The following legal documents provide the City of Seattle and its partners with the authority to conduct and/or support emergency operations. When dictated by the situation, additional ordinances or other emergency regulations may be enacted by City authorities through emergency proclamations.

- Seattle Municipal Code Chapter 10.02.050 - Civil Emergencies.

- Washington State - RCW 38.52.070 - Local organizations and joint local organizations authorized — Establishment, operation — Emergency powers, procedures.

- King County 12.52 Emergency Powers.

- Presidential Policy Directive-8 (PPD-8) National Response Framework.

- National Disaster Recovery Framework.

- National Infrastructure Protection Plan and Critical Infrastructure and Key Resources Annex.

- City of Seattle Comprehensive Emergency Management Plan, 2015.

- Washington State Comprehensive Emergency Management Plan.

- Public Law 93-288, The Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended.

1.4   Overarching Guidance

1.4.1   General Planning Assumptions

The following points describe the underlying assumptions that guided the development of this Framework.

Applicability of this Framework

- Any pre-disaster planning may change or be adjusted to accommodate the actual disaster. Because of the dynamic nature of disasters, all pre-planning must be flexible and ready to take into account the particular realities of a particular event.

- This Framework is developed to account for a catastrophic disaster scenario, but can be used for all other degrees of disasters if needed.

Uneven Geographic and Social Distribution of Impact

- Damage to facilities and infrastructure will likely not be uniform throughout the city. Some portions of the city may be impacted severely, while others may be relatively unaffected.

- Similarly, some populations will be dramatically more affected by the disaster than others. This may be a result of the uneven geographic distribution of impact, or because disasters impact vulnerable populations more than those with greater access to resources and alternative options.

Interdependencies and Competing Needs for Limited Resources Demand a Coordinated Recovery Effort

- To get the city and region moving again, the Seattle community must prioritize housing, jobs, and schools. These activities are interdependent; they are also reliant on the underlying functioning of supporting infrastructure and utilities.

- Given the many and various needs within a recovery operation, limited resources and the wherewithal of a broad range of independent actors must be prioritized and coordinated.

Whole Community Approach: Leveraging Full Resources and Engaging Community Members Appropriately

- Effective recovery will require a **whole community approach** that engages community members actively in shaping recovery and leverages the full resources of Seattle's public, private, not-for-profit, and philanthropic organizations. Public-private, inter-jurisdictional, inter-sector, and inter-RSF coordination will be critical for a successful recovery.

- Recovery will require tremendous financial reinvestment in our community, drawing on a wide variety of funding options and incentives, including federal aid, insurance payments, tax holidays, donations and other creative funding sources, potentially including implementation of new taxes or levies.

- Community consultation will be essential to many aspects of recovery, particularly to significant decisions related to long-term recovery. Other recovery decisions are best made expeditiously to facilitate recovery and will be made without full community consultation.

Regional Dependencies

- The City of Seattle leads recovery activities for its jurisdiction. Support from neighboring jurisdictions and from state and federal agencies will be requested as needed, and the City will participate in regional and state recovery efforts as appropriate.

- Damage to surrounding jurisdictions may affect availability of mutual aid resources during the response phase. This can, in turn delay the city's recovery operations.

1.4.2 Core Values

The **Core Values** below were established by stakeholders during the Phase One planning process that occurred in 2012. These Core

> **Whole Community Approach**
>
> FEMA defines the Whole Community concept as "a means by which residents, emergency management practitioners, organizational and community leaders, and government officials can collectively understand and assess the needs of their respective communities and determine the best ways to organize and strengthen their assets, capacities, and interests."
>
> This concept is embraced and expanded upon in this Framework, which assumes that all affected community members, should have a voice and active role in recovering their community. Moreover, this Framework recognizes that the full recovery of the Seattle will require the combined and coordinated resources, intelligence, and passion of Seattle's public, private, not-for-profit, and philanthropic organizations.

Values should be considered in all aspects of the recovery process.

- **Equity and Diversity.** Respecting and leveraging the diversity of cultures in Seattle to ensure that recovery planning is fair and equitable by applying a race and social justice framework to analyzing situations, evaluating options, and implementing solutions.

- **Civil Rights and Liberties.** A legislative priority for the City and essential to the well-being of any democracy; must be upheld during especially difficult times after a major disaster.

- **Independence and Individuality.** Values that motivate individuals and the community as a whole; achieving self-reliance is an important element of a good recovery and sustainable development goals.

- **Participation and Communication.** It is a City core belief that everyone can have their say in how the City makes decisions through an inclusive, transparent process of governance during disaster recovery. This is an essential part of the **whole community approach** (see **Section 1.4.1**).

> **Build Back Better**
>
> The reconstruction of physical infrastructure is but one aspect of building back better. This term is used as a metaphor for recuperating and improving key aspects of the Seattle community, including social, health, natural, cultural, and economic assets.

- **Neighborhood Identity.** Seattle is a city of neighborhoods where residents and neighborhood business owners take great pride in their community and need to be key influencers on how a neighborhood redevelops.

- **Environmental Quality.** The recognition and preservation of Seattle's environmental well-being will be important to guide decision making post-disaster.

- **Economic Vitality.** A diverse range of businesses, large and small, have sustained a vibrant economy in the region for generations and a robust recovery will require inclusion of the private sector in planning.

- **Mobility.** All modes of mobility are essential to speed recovery of the city, whether by automobile, bus, truck, train, ferry, cargo ship, aircraft, bike or foot. People, companies, and government depend upon a fully functioning transportation system.

- **Resilience and Sustainability.** Resilience refers to creating and utilizing the system, policies, technologies, and other means that can give the city and its inhabitants an enhanced ability to recover quickly from a major disaster and adapt to changing conditions over time. Sustainability refers to the ability to sustain the city's environmental, economic, and cultural qualities over time, including times of crisis and recovery.

- **Innovation.** An important part of Seattle's identity; a disaster recovery strategy should anticipate that technological, social, economic, and environmental innovation will be incorporated.

1.4.3   Opportunities to Build Back Better

While a significant disaster will manifest in terrible physical, community, and personal impacts, it will also present unique opportunities to redesign and rebuild portions of the Seattle community. Long-term recovery must be guided by a focus on *building back better*. This means rebuilding in ways that make Seattle *more resilient to future disasters, more efficient and sustainable, and more in line with the community's values and vision for the future*. Building back better will require more time, effort, thought, and engagement than simply rebuilding to pre-disaster conditions. The need to balance

expeditious recovery with targeted opportunities to build back better is a key tension to be navigated in recovery.

These ideas reinforce the above Core Values and will help guide the overall process:

- **Significant destruction will create opportunities for significant reinvention.** Throughout disaster recovery there is a tension between the need to put things back as quickly as possible to restore normalcy and the opportunity to "build back better." By seizing the opportunity inherent in rebuilding, we can make Seattle more resilient to future disasters, more sustainable, and more aligned with community ideals and aspirations. Significant reinventions that reshape Seattle should be vetted with affected community members, which will require time and sustained community engagement efforts.

- **Rebuilding Seattle may create an opportunity for dense, complete neighborhoods.** Recovery of Seattle's built environment should be guided by the vision and strategies articulated in Seattle's Comprehensive Plan, which emphasizes an urban village strategy. This strategy encourages business and housing growth in particular areas, supported by services, infrastructure and public amenities. These neighborhoods should be well-served by transit and connected to downtown and one another. These ideals should be advanced through disaster recovery efforts when possible, recognizing that a particular event may or may not create significant opportunities to redesign and rebuild. Seattle's single family neighborhoods may in fact fare better than other portions of the city in some disaster scenarios.

- **Transportation and other infrastructure systems can be better integrated.** A rebuilt Seattle should feature transportation, energy, telecommunications, water, wastewater, and other infrastructure that serve Seattle effectively as a system and increase opportunities for energy efficiency.

- **Integrated services.** Effective recovery efforts will entail the coordination and integration of many services, including social, health, and education services, as well as infrastructure, transportation, and utility services. This focused effort during recovery should be leveraged as the foundation for the strategic rethinking for how we deliver services, resulting in more effective, efficient, and sustainable systems.

1.5 Summary of the Planning Process

The Seattle Disaster Recovery Framework (SDRF) provides direction and a governance structure for recovery as the city moves from responding to an incident to recovering from the impacts of the disaster. During recovery from a major or catastrophic incident, there will be many challenges including a reduction in resources at a time when additional resources will be needed. This framework incorporates government and community resources and needs into the planning efforts that range from rebuilding or supporting capabilities that were in place prior to the incident to building new capabilities that are required due to additional needs.

The development of the Framework was conducted in two phases. Phase 1 identified major short- and long-term recovery issues and next-steps towards their resolution. The ten core values the City needs to undertake when conducting recovery came from the Phase 1 planning effort. The initial governance organization chart and decision-making process was a product of the first phase as well. Phase 2 expanded on the recommendations and addressed key policy questions established in Phase 1, leveraging the input of an **Executive Advisory Group** and **Planning Committee**. The Executive Advisory

Group met twice and was charged with thinking expansively and creatively about what challenges and opportunities a significant disaster would present. The Planning Committee met three times to delve into topic specific recovery challenges and strategies, as well as to identify pre-disaster planning preparations. A Core Planning Team was comprised of City staff from the Office of Emergency Management and other key City departments. The Core Planning Team was supported by a consulting team, and had the responsibility of knitting the input provided by the Executive Advisory Group, the Planning Committee, and other stakeholders consulted throughout the process into a cohesive planning document.

The outcomes of Phase 2 include this Recovery Framework and the establishment of the Community Recovery Task Force.

- **The Disaster Recovery Framework** addresses opportunities to increase the community's resilience to the impacts of a major disaster. It includes short- and long-term recovery priorities and provides guidance for the restoration of critical community functions, public services, vital resources, facilities, programs, and infrastructure. The Framework establishes a common playbook and menu of evaluated options to support effective, efficient, and agile recovery efforts, considering what efforts and investments will be needed to repair, reconstruct, rebuild, and reconstitute the essential segments of the community. It will prepare key stakeholders from the public, not-for-profit, and private sectors to work together, with clear roles, responsibilities, and decision-making processes.

- **The Community Recovery Task Force** will engage all possible resources (community, public, private and not-for-profit organizations) into a coordinated effort to make recovery recommendations and maximize service delivery. The Task Force addresses resources for short- and long-term recovery efforts. It is composed of representatives of government, business, not-for-profit organizations, and others. Pre-disaster, the Task Force will meet on an ongoing basis to maintain a current view of recovery priorities and to ensure the group is ready to provide expert advice in a coordinated fashion when a disaster strikes. The Task Force does not replace existing organizations or committees, but endeavors to bring together all related efforts and maximize coordination and service delivery. The role of the Task Force is the explicit focus of **Section 2.**

1.5.1 Contributing Organizations

The development of the Seattle Disaster Recovery Framework was a stakeholder-driven effort with public and private sector organizations providing input, including:

- Alliance for Pioneer Square
- Amazon
- American Red Cross
- Amtrak
- Annie Searle & Associates
- AT&T
- BDS - Planning & Urban Design
- Bill & Melinda Gates Foundation
- BNSF
- Boeing
- Boeing Employees Credit Union

- Capitol Hill Housing
- Cascadia Center for Regional Planning
- Central Waterfront Committee
- Century Link Field
- City of Seattle
- Clipper Vacations
- Crisis Clinic
- Degenkolb Engineers
- Disability Rights Washington
- Downtown Seattle Association
- Economic Development Council

- FEMA Region X
- Forterra
- Fred Hutchinson Cancer Research Center
- Good Business Network
- Guy Carpenter & Company, LLC
- Harborview Medical Center
- HDR
- HPBT Consulting
- Ivar's
- KCTS 9 Television
- King 5
- King County
- KOMO News
- Leadership Council of Puget Sound
- LMN Architects
- Lorig Associates
- Marine Exchange of Puget Sound
- Mercator International
- Muckleshoot
- Museum of History and Industry (MOHAI)
- Northeastern University - Seattle
- Northwest Protective Service, Inc.
- Our Daily Toast
- Pacific Northwest Economic Region
- PATH
- Pierce County Department of Emergency Management
- Plymouth Housing Group
- Public Health - Seattle & King County
- Puget Sound Energy
- Puget Sound Regional Council
- Safeway Stores Inc.
- Salvation Army
- Seattle Academy
- Seattle Animal Shelter
- Seattle Chinese Chamber of Commerce
- Seattle City Light
- Seattle Colleges
- Seattle Heritage Emergency Response Network

- Seattle Housing Authority
- Seattle Metropolitan Improvement District
- Seattle Public Schools
- Seattle Public Utilities
- Seattle University
- Sound Transit
- Southwest Suburban Sewer District, King County
- Starbucks
- State Farm Property & Casualty Insurance
- State of Washington Office of the CIO
- Sustainable Seattle
- Texas A&M University
- Therapeutic Health Services
- Thurston County
- Touchstone
- Transportation Choices
- U.S. Coast Guard
- U.S. Department of Housing and Urban Development
- United Way King County
- University of Washington
- University of Washington School of Public Health
- Urban League
- Visit Seattle
- WA Biotechnology and Biomedical Association
- Washington Association of Sewer & Water Districts
- Washington Federal
- Washington Federation of Independent Schools
- Washington FIRST Coalition
- Washington State Department of Health
- Washington State Emergency Management Division
- Washington State Ferries
- West Seattle Emergency Communications Hubs
- Western Washington University
- Wright Runstad

1.6   Recovery Planning Context

This section describes the relationship of this Recovery Plan with Seattle's full emergency management program and its interconnections with county-, state-, and national-level recovery plans.

1.6.1   Regional, State, and Federal Partners

Through many efforts, committees, and activities, the city's emergency management program actively interfaces with King County Office of Emergency Management, Washington State Emergency Management Division, regional emergency management partners (jurisdictions, counties, etc.) and the Federal Emergency Management Agency (FEMA). Some partnerships are driven by shared responsibility and inter-jurisdictional delivery of services while others were initiated by an opportunity to capitalize on specific grant funding.

Seattle, King County, and Washington State as well as private business all provide services or maintain facilities that serve members of the greater Seattle Metropolitan area. City of Seattle service providers that have service areas or facilities located outside of the incorporated city boundaries include City Light, Seattle Public Utilities, and the Human Services Department.

Community Partners. The Seattle Emergency Management Program works with many community organizations including the American Red Cross, the Crisis Clinic, 211, faith based organizations, and immigrant and refugee groups. Neighborhood preparedness programs exist in all areas of the city and include partnerships with geographic community leaders as well as cultural and religious leaders.

Businesses, both large and small, play an important part in all aspects of our program. We recognize that during response and recovery to a disaster, businesses rely on the government to share critical information with them so they are able to make good policy and operating decisions.

King County. King County provides many regional services and must coordinate with city, state, and private service providers. Some of the regional services that King County provides that serve the City of Seattle include: transit, wastewater, Superior Court, jail, and some services provided by the Sheriff's Office. Public Health Seattle King County is jointly operated by both the City of Seattle and King County.

During an event, should the resources of the City be exceeded, King County may be activated to assist with the coordination of information and provisions of resources. During an event that involves multiple jurisdictions, the County may help with the prioritization among local governments and serve as the coordination and communication link between the local governments at a regional level. The County is also the liaison should state or federal resources be required.

Washington State. Washington State maintains the interstate freeway system and several state roadways and bridges that travel through the City as well as the ferry service which transports thousands of people back and forth across Puget Sound. The Washington State Fusion Center plays an important role in the area of prevention of criminal and terrorist activity and maintains close ties with local law enforcement agencies including the Seattle Police Department who provides staffing resources.

During a disaster event, the State of Washington manages state resources and coordinates information and resources among county and regional entities. The State also serves as the coordination and communication link between the federal disaster response and recovery system. If the Governor

requests and receives a Presidential Declaration of an Emergency or a Major Disaster under Public Law 93-288, a State Coordinating Officer (SCO) will be appointed.

United States. When support requirements cannot be met with city, county or state resources, the State may request assistance from federal agencies that have statutory authority to provide assistance. If the President declares a Presidential Declaration of an Emergency or a Major Disaster under Public Law 93-288, he will appoint a Federal Coordinating Officer (FCO). The FCO will work with the SCO to coordinate and control state and federal recovery efforts in support of local operations. The National Response Framework and National Disaster Recovery Framework provides the mechanism for coordinating delivery of federal assistance and resource to augment efforts of state and local governments overwhelmed by a major disaster or emergency.

1.6.2   County, State, and Federal Recovery Planning

In a major disaster, Seattle's recovery efforts will intersect and interact with King County, Washington State, and federal activities. Recognizing that each level of government has specific roles in recovery that will require coordination across jurisdictions, *the City of Seattle commits to working closely with its major partners, including King County, Washington State, the federal government, and potentially other organizations or jurisdictions* on recovery planning and recovery itself. Specific areas will require active coordination and de-conflicting, including at least the following:

- Support for the recovery of other cities in the region.

- Service delivery when providers cross city boundaries.

- Decision making when transportation or utilities projects cross boundaries (transportation and utilities).

- Individual and organizational participation on recovery task forces and committees.

Seattle is committed to having the City represented on King County and Washington State recovery planning or recovery efforts. This will be critical to represent the interests of the Seattle community and support a robust two-way flow of information.

The SDRF has been developed based on the structure established in the National Disaster Recovery Framework (NDRF), so city and federal activities and actors can readily mesh. The NDRF is a guide produced by the Federal Emergency Management Agency that enables effective recovery support to disaster-impacted states, tribes, territorial and local jurisdictions. It provides a flexible structure that enables disaster recovery managers to operate in a unified and collaborative manner. It also focuses on how best to restore, redevelop and revitalize the health, social, economic, natural and environmental fabric of the community and build a more resilient nation.

Federal recovery program thumbnails are provided in the **Funding and Grants Management** function description on page 22.

1.6.3   Connections to Other City of Seattle Plans

This Recovery Framework was informed by existing City of Seattle planning documents as shown visually below. Following a disaster, this Recovery Framework would inform Recovery Priorities and the development of an incident specific Recovery Plan. This Plan would inform the revising and updating of the City's foundational planning documents.

Exhibit 2. Relationship to Other City Plans

Seattle Comprehensive Plan

Comprehensive Emergency Management Plan (CEMP)
- Seattle Hazard Identification & Vulnerability Analysis (SHIVA)
- Threat & Hazard Identification & Risk Analysis (THIRA)
- All Hazards Mitigation Plan
- Training and Exercise Plan
- Emergency Operations Plan
- Continuity of Operations Plans

Inform the

Seattle Disaster Recovery Framework & Recovery Support Functions
(pre-disaster)

Which sets the stage for

Recovery Priorities

Long-Term Recovery Plan
(post-disaster)

Which determine

Recovery Projects

That may require the updating of

1.6.4 Seattle's Emergency Management Program

Seattle's emergency management program relies on many participants. The City's Office of Emergency Management (OEM), within the Seattle Police Department, has the designated responsibility to manage citywide efforts of emergency management, which include community outreach, partnership development, planning, training, exercises, Emergency Operations Center (EOC) response and recovery. The OEM Director reports directly to the Police Chief and serves as a member of the Police Department Command Staff as well as a member of the Mayor's Cabinet. The Director maintains program awareness and support from the Legislative Branch reporting to various Committee and at times to the full City Council.
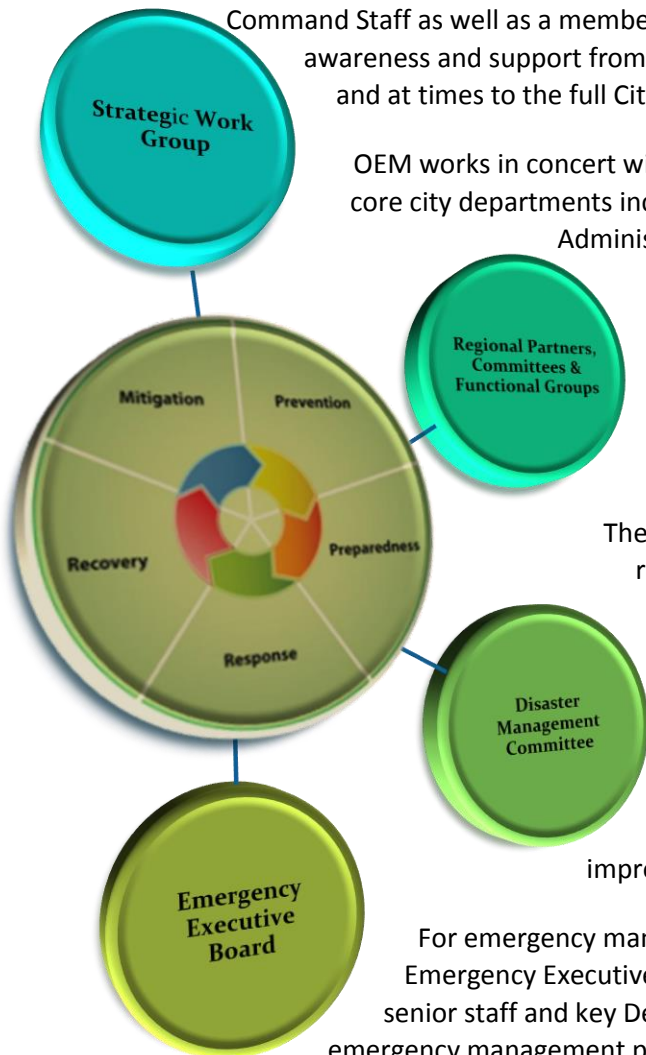
OEM works in concert with emergency management staff dedicated in several core city departments including but not limited to: City Light, Finance and Administrative Services, Fire, Seattle-King County Public Health, Human Services, Parks and Recreation, Police, Public Utilities, Transportation, and Information Technology. This group makes up the Strategic Work Group (SWG) that meets weekly to delve into specific citywide emergency management planning and preparedness efforts.

The Disaster Management Committee (DMC) is comprised of representatives of nearly all City departments including the Legislative Department, and many agencies that play a role in emergency prevention, mitigation, preparedness, response and recovery. Monthly, the DMC meets to advise on overall emergency management capabilities within the City. Along with the SWG, the DMC plans, trains, and exercises for emergency situations and addresses after action improvements and current emergency management issues.

For emergency management policy guidance and direction, the Mayor's Emergency Executive Board (EEB), chaired by the Mayor and made up of his senior staff and key Department Directors, convenes quarterly to discuss emergency management policy issues. During Emergency Operations Center activations, this group or a portion of this group may be convened by the Mayor as needed.

Seattle's emergency management efforts are guided by the Vision, Mission, and Guiding Principles shown on the following page.

Seattle Office of Emergency Management

Citywide Emergency Management Vision

Disaster ready…prepared people, resilient community.

Our Citywide Emergency Management Mission

We partner with the community to prevent, prepare for, respond to, mitigate the impacts of, and recover from disasters.

Emergency Management Guiding Principles

Comprehensive	We consider and take into account all hazards, all phases, all stakeholders and all impacts relevant to disasters.
Progressive	We anticipate future disasters and take preventive and preparatory measures to build disaster-resistant and disaster-resilient communities.
Risk-Driven	We use sound risk management principles (hazard identification, risk analysis, and impact analysis) in assigning priorities and resources.
Integrated	We ensure unity of effort among all levels of government and all elements of the community.
Collaborative	We create and sustain broad and sincere relationships among individuals and organizations to encourage trust, advocate a team atmosphere, build consensus, and facilitate communication.
Flexible	We use creative and innovative approaches in solving disaster challenges.
Professional	We value a science and knowledge-based approach based on education, training, experience, ethical practice, public stewardship and continuous improvement.

Appendix 1 summarizes Seattle's major emergency management documents:

Assessments of Seattle's Hazards and Vulnerabilities

- Seattle Hazard Identification and Vulnerability Analysis (SHIVA).
- Seattle Threat & Hazard Identification & Risk Analysis (THIRA).

Seattle Emergency Management Plans

- Comprehensive Emergency Management Plan
  - o All Hazards Mitigation Plan
  - o Training and Exercise Plan
  - o Emergency Operations Plan (EOP) and incident, support, and Emergency Support Function (ESF) annexes
- Continuity of Operations Plans

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2. GOVERNANCE AND COORDINATION

2.1 Recovery Organizational Structure and Processes for Coordination

This section describes the governance and coordination framework for the City of Seattle's recovery effort. It is intended to organize pre-event planning and ultimately jumpstart the recovery process post-event.

Because a successful and sustainable recovery involves the entire community, the structure is inclusive. The structure recognizes that many entities play a role in disaster recovery and do so in an autonomous way. Therefore to maximize each resource and provide the most far-reaching circle of services, our activities must be coordinated.

> A well-planned and participatory recovery and reconstruction process helps the city reactivate itself, restore and rebuild its damaged infrastructure, and recover its economy, empowering citizens to rebuild their lives, housing and livelihoods.[1]

This structure demonstrates that the City will engage the entire community in disaster recovery, including individuals and the public, private, non-governmental, and not-for-profit sectors, in order to:

- Coordinate public sector, private sector, not-for-profit organizations, and community-based recovery efforts.

- Leverage whole community resources in the most efficient way possible.

- Ensure affected community-members have a voice in recovery decisions.

- Use a coordinated message (distributed by all entities) to represent disaster recovery activities to the public and to external stakeholders such as state or federal government.

2.2 Major Roles

2.2.1 Mayor

The Mayor of the City of Seattle is the elected head of City government and is charged with the direction and control of City operations as provided in the City Charter, the Seattle Municipal Code, and its adopted ordinances. In a disaster, the Mayor will direct disaster recovery operations through the appointed heads of City departments. Under the Mayor's direction, the continuity of government operations and delivery of City services will be maintained. The Mayor will be a unifying voice that, along with the City Council, will inspire, encourage, and properly frame the recovery effort to staff, business leaders, media, and the public.

2.2.2 City Council

The City Council consists of nine elected Councilmembers. The Council is led by its President, who is elected by the Councilmembers. In the absence of the Council President, the President Pro-Tem will lead. The role of President Pro-Tem is rotated amongst the Councilmembers throughout the year on a pre-determined published schedule. In the absence of the Mayor from the City or the unavailability of the Mayor, the Council President or President Pro-Tem serves as Mayor. The Seattle City Council will support disaster recovery efforts through the consideration and adoption of appropriate legislation proposed by the Mayor or initiated by the Council. The Council will work with the Mayor to identify funding resources and develop appropriate fiscal

policies. As the recovery period continues over the post-disaster months and years, Council members will need to advocate for, empathize with, and counsel residents and business owners still struggling to achieve full recovery. City Council members will play a key role in the community engagement strategy, leveraging their relationships and processes for engaging residents of their Council Districts in particular.

2.2.3   City Attorney

The City Attorney is elected by the voters and exercises the powers identified in the Charter, the Seattle Municipal Code, and the City's adopted ordinance. The City Attorney is the lawyer for all elected officials, department heads, and departments. During disaster recovery, the City Attorney and Assistant City Attorneys appointed beneath her or him will furnish legal advice, ordinance drafting and review, contracting, and as requested will assist in the development of recovery documentation. An Assistant City Attorney will be present in the EOC throughout its activation. The City Attorney serves as a member of the Emergency Executive Board.

2.2.4   Emergency Executive Board

The Emergency Executive Board (EEB) is led by the Mayor, who will determine when it will convene. The EEB consists of select department heads, the City Attorney and members of the Mayor's Cabinet and senior staff as directed by the Mayor. The EEB supports disaster recovery operations by aiding the Mayor in policy development, prioritizing recovery efforts, expediting government processes, identifying additional resources and advising the Mayor on the status of the recovery effort.

2.2.5   Recovery Director

The Recovery Director (RD) leads the disaster recovery operation. The Recovery Director is appointed by and reports to the Mayor. As soon as possible after the disaster, the RD will be appointed by the Mayor and the Mayor will delegate appropriate authorities. The desire to implement this process as quickly as possible is founded on the experiences of other communities and reflects how critical the RD is to managing an effective recovery.

The RD will be given the authority to execute operational decisions within the recovery operation, recognizing that while other City decision makers will soon be occupied with duties and responsibilities not related to recovery but to the ongoing operation of the City. The Recovery Director must balance expeditious recovery with thoughtful consultation with others at the City and in the community. The Recovery Director must facilitate the recovery across the array of interests and priorities within the city. He/she will execute a collaborative strategy to integrate and coordinate all existing stakeholders responsible for recovery by giving clear, compelling direction to government, and guidance to non-government and community entities to make good choices consistent with shared community values and recovery priorities.

Exhibit 3. Seattle Disaster Recovery Organization
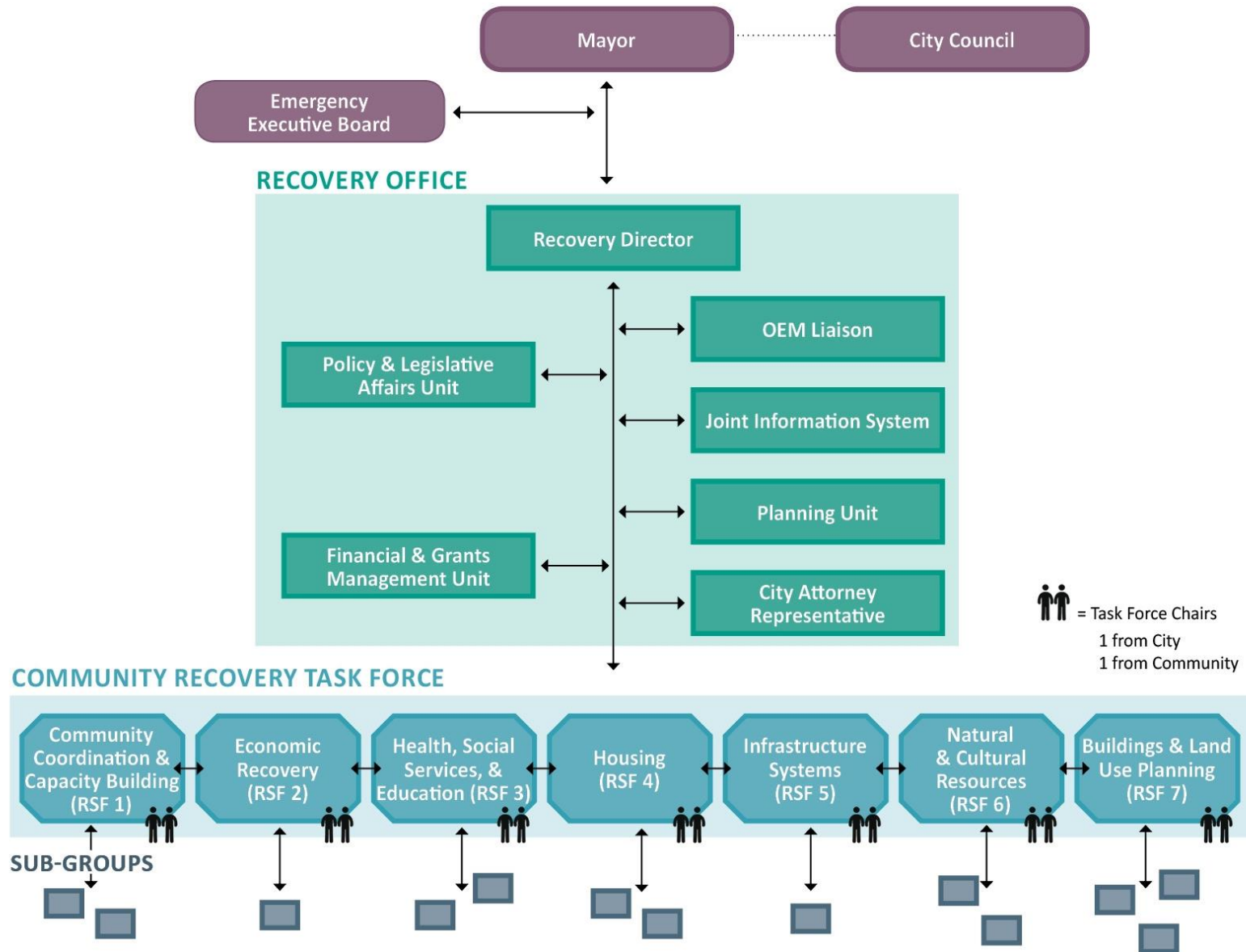
The RD will be appointed by the Mayor post-disaster and will serve full-time and be solely dedicated to the specific recovery effort, until relieved by the Mayor. The RD may be an existing City employee or may be hired specifically to manage the disaster recovery by the creation of an emergency position.

The Recovery Director will serve as the Local Disaster Recovery Manager (LDRM), as defined in the National Disaster Recovery Framework (NDRF). The RD will work alongside Federal, Tribal, State, County, other city and regional governments while facilitating decision-making and leading development and implementation of a disaster-specific recovery plan. In this role, the RD serves as the primary point-of-contact for disaster recovery programmatic and organizational implementation and is authorized to coordinate with the State of Washington/State Disaster Recovery Coordinator (SDRC) and the federal government/Federal Disaster Recovery Coordinator (FDRC).

The RD will provide the leadership and direction to prioritize recovery efforts that reflect the advice and information from the Community Recovery Task Force (see below). The RD must be able to balance difficult and potentially contentious political dynamics and skillfully articulate a path forward. While an appointment should reflect the specific needs and expertise demanded by the particular disaster and recovery needs, the general skill sets and credentials of the individual appointed to this challenging position of the Recovery Director should include the following:

- Experienced in management of large, complex projects.

- Knowledgeable of and experience with disaster recovery.

- Politically astute.

- Aware of whole community concerns and the need to include and consider all community members, including vulnerable populations, person with access and functional needs and those with limited English proficiency into the recovery effort.

- Able to prioritize and articulate rationale for decisions.

- Capable of navigating emotional and contentious dynamics between groups or communities.

- Appreciative of the dynamics of financial contributions and the ability to leverage creative implementation strategies.

- Able to mediate conflict.

- Able to design necessary processes.

The RD will lead the **Community Recovery Task Force (CRTF)** and the **Recovery Office**, which are described below.

The RD may have the authority to solicit expertise or additional resources in particular aspects of recovery to help the Community Recovery Task Force and Recovery Office frame recommendations and actions that will result in the most effective impact.

2.2.6 Recovery Office

The RD will establish, staff, and manage a Recovery Office. The Recovery Office staff will require office space, technology support, and operational and administrative staff. The scope, size, and composition of the office staff will be determined after an event by the RD, in consultation with the Mayor, and be guided by the size/type of the event and resulting issues. The Recovery Office may be integrated in an existing City agency, or established as an independent entity. Considerations that may lead to the establishment of a dedicated Recovery Office include event impacts that require decision making, technical assistance, subject matter expertise, resources, engagement and collaboration with the whole community and many partner entities outside of the City (county, regional, state, federal). The establishment of a standalone Recovery Office will also allow other City entities to focus on their core missions, including the normal management and delivery of public services.

If a Recovery Office is activated, the following functions may be addressed by one person or appropriately sized groups based on the size and scale of the event:

- **Planning** to lead analysis and disaster specific planning. The group will coordinate data gathering and analytic support to synthesize overall and cumulative impacts and status. To support this function, the group will address technology and information management, including GIS analysis, and may convene a Science Committee to address disaster-specific issues and provide guidance based on the best available science. The group will guide and coordinate the creation of post-disaster recovery plans based on this analysis. Finally, it will provide direction for meeting community needs according to the parameters established per the City policy, including the Race and Social Justice Initiative.

- **Financial & Grants Management** to provide financial tracking and procurement systems/controls, establish protocols and direct financial management of the operation. The group will also contain the senior management leadership for grant program operations (i.e., sources to finance recovery and its administration) such as FEMA Public Assistance, Individual Assistance, and Hazard Mitigation, as well as HUD Community Disaster Block Grant – Disaster Recovery programs. This group also will monitor, research, pursue and manage other funding opportunities in support of the RSFs and recovery operations. **Section 2.4** provides additional information related to managing the finances of recovery, and **RSF 4** states the responsibility of the Office of Intergovernmental Relations for coordinating with and advocating to the State Office of the Insurance Commission on behalf of homeowners.

- **Legal Advisory** support, through the City Attorney, to work with each RSF (city departments and community entities) to navigate legal requirements to facilitate recovery and recovery operations.

- **Policy & Legislative Affairs** to work with each RSF (city departments and community entities) to forward new or amended policy and legislative requirements to facilitate recovery.

- **Joint Information System (JIS)** to lead the media monitoring and relations, rumor control, and messaging for the recovery effort. This group will have strong connections with the Seattle media market and coordination with the State of Washington, King County and other government entities. This unit will accommodate whole community communication concerns and the need to include and consider all community members, including vulnerable populations, person with access and functional needs and those with limited English proficiency into the recovery effort. This unit, as established in the response operations phase of the event, will directly transition to support the Recovery Office and recovery operations. In doing so, it will establish a Recovery Communications Strategy to maintain coordinated and effective communications.

- **Project Coordination** to manage and coordinate cross-sector initiatives and keep multiple projects, budgets, and timelines well aligned.

- **Office of Emergency Management Liaison** to maintain continuity and leverage pre-event planning to its fullest extent and ensure a smooth transition from ESF 14 to Recovery Office operations.

2.2.7   Community Recovery Task Force Structure and Functioning

The Community Recovery Task Force (CRTF) is designed to work across government and community lines to plan for and make timely recommendations in support of the recovery operations and priorities. The CRTF is designed to serve as a deliberative body that looks broadly across the many competing needs presented across the community and across the topics and disciplines represented by the each RSF. In this role, the CRTF needs to assess competing demands, facilitate priorities and make thoughtful, balanced, and effective recommendations to the Recovery Director.

The CRTF operates with the authority delegated by the Mayor (pre-event) and Recovery Director (post-event) to plan for and implement the necessary project components and policies to ensure timely and meaningful action during recovery.

The CRTF is made up of the co-chairs from each of the seven RSFs. Additional topic-specific stakeholders may be engaged in sub-groups to address particular, disaster-specific issues. While such sub-groups will be convened on an as-needed and ad-hoc basis following a disaster, the CRTF itself will be formed and will start its work prior to a disaster. This will allow the group to be high functioning prior to a disaster, with strong interpersonal relationships and a track record of working together and making decisions. Tiered term limits will allow time for relationship building and support continuity of Task Force composition.

The CRTF and supporting members of RSF sub-groups are directed to ensure a **whole community approach** (see **Section 1.4.1**) to problem solving pre- and post-event. A primary focus of the CRTF is communication and coordination that:

- Aligns City of Seattle recovery efforts and priorities with those of the community's residents, businesses, and not-for-profits.

- Communicates RSF-specific information <u>up</u>, <u>down</u>, and <u>across</u> so City and community decision makers have a current understanding of the specific issues and needs being experienced by each topical area.

- Communicate overarching recovery priorities <u>across RSFs</u> so decisions made by individual RSFs are informed by and in line with current needs across the community.

2.2.8   Leadership

Within the CRTF, each RSF will be co-chaired by a City department official and a community leader. The co-chairs will be appointed by the Mayor and the Task Force will meet regularly prior to an event (see Section 2.2.11). *The role of the co-chair is to take a neutral approach to convening stakeholders and members of the community to gain input, deliberate, and facilitate recommendations.*

Co-chairs will be experienced professionals who can provide proactive, open, and trusted leadership. Co-chairs will be collaborators and conveners. They will help to marshal and align whole community resources and expertise within each RSF, including government entities (city, county, state and federal), not-for-profit sector (voluntary, faith-based, charities, foundations, philanthropic groups, and professional associations), the private sector, and the community-at-large. They will be able to articulate solutions and challenges presented by the varied programs and personnel within each RSF in support of agreed upon recovery priorities.

City employees will be asked to staff the City positions based on the knowledge they have in their normal city assignment or asked to service a new role based on the skills needed. For example, an appropriate member of the Office of Economic Development may be assigned as a member of the CRTF as RSF 2, Economic Recovery co-chair to support the initiatives related to this RSF, provide continuity with existing programs and pre-event planning activities while also providing the expertise to coordinate partners and new or innovative projects.

City Government Co-Chair Role

- Access City government entities and resources.
- Understand government rule and regulation.
- Be able to articulate the limits of authorities.
- Critically review the situation and proposed solutions drawing on disaster recovery experts or researching lessons learned in other communities.
- Be able to present challenges, needs, and solutions to the Recovery Director and higher authorities as needed (Mayor, EEB, Council) in support of recovery priorities.
- Understand grant requirements (scope, documentation, and time limits).
- Demonstrate and promote creative problem solving using expedited or flexibility within government authority.
- Support proactive integration and communication with the whole community.

Co-Chair Characteristics
✓ Strong Facilitator
✓ Convener
✓ Well-respected
✓ Motivated
✓ Motivator
✓ Innovative
✓ Problem Solver
✓ Solution Oriented
✓ Project Management Skills

Community Co-Chair Role

- Access non-governmental entities and the private sector.
- Understand the capabilities of non-governmental and private entities.
- Access, convene and coordinate groups or groups of groups.
- Be able to articulate the limits of authorities and abilities.
- Be able to present challenges, needs and solutions to the Recovery Director and higher authorities as needed (Mayor, EEB, Council) in support of recovery priorities.
- Coordinate assets to fill gaps not filled by government sources.
- Facilitate donations and charitable contributions.

2.2.9   Structure

The CRTF/RSFs provides a ready and familiar structure for county, state, and federal officials to integrate into. As the CRTF/RSFs closely follows the organization established in the National Disaster Recovery Framework, higher-level government officials can easily become operational elements within the Task Force, supporting operational priorities with higher-level government support, resources, and initiatives. Each RSF should be prepared to receive these external support resources.

The CRTF is organized similar to the NDRF-functional structure, with each RSF having connections to operational elements that support the execution of City and community services and programs necessary for the implementation of recovery priorities as shown in **Exhibit 4.**

Each RSF coordinates operational actions in response to recovery program needs and priorities presented by the RD. The RSFs will be mandated to avoid silos within the RSFs and work collectively to facilitate operational priorities and serve the needs of the community. While RSF Co-Chairs may not

directly manage recovery efforts/projects within their assigned RSFs, they will be aware of issues and programs, facilitate connections with the appropriate county, state, and federal officials, and be able to represent RSF activities/challenges to the RD.

Each RSF may have cause to create **sub-groups**, whether permanent or temporary, to assist the group with its work by gathering information, assessing the current situation, discussing options, identifying funding sources, etc. Primary and support entities are noted in **Appendix 4**.

Exhibit 4. CRTF Recovery Framework
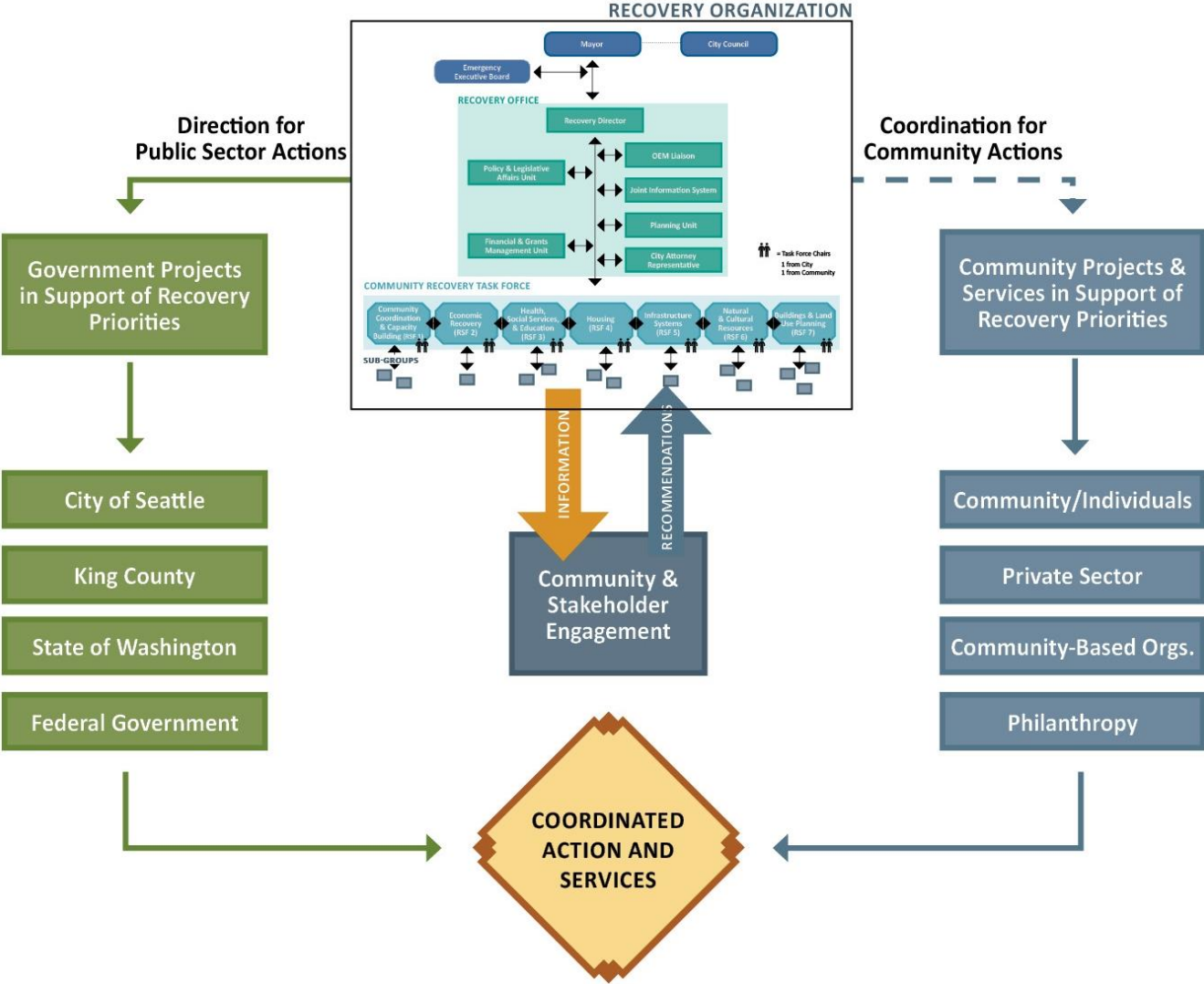
The matrices in **Appendix 4** designate RSF participation by appropriate City departments, offices or divisions and partner entities based on existing programs or skill sets that could be leveraged during recovery operations. Entities are designated with a **Primary (P)** or **Support (S)** role:

- **A Primary designation** is a recommendation that the Co-Chair may be selected from the designated entity for both pre-event CRTF activities/planning and post-event operational leadership.

- **A Support role** indicates that the organization may play an active role in advising, activating, or otherwise supporting the efforts of the CRTF.

The priorities, roles and responsibilities of each RSF are further defined in **Section 3.**

NOTE: Departments and organizations identified as "Task Force Chair Candidates" should be considered preliminary as they have not yet been vetted and appointed.

2.2.10 Communication and Coordination

As noted above, a primary focus of the CRTF is communication and coordination between City of Seattle and community stakeholders within each RSF; across RSFs; and up and down the City's decision making and implementation structure.

- **Recovery Director:** Receives information from the Recovery Office and CRTF to direct City recovery efforts and make recommendations for community partner actions.

- **Recovery Office:** Requests Essential Elements of Information gathered by each RSF (as described in each RSF-specific section that follows) to inform Recovery Office operation and overall recovery planning.

- **Community Recovery Task Force:** Compiles information, assesses, recommends recovery priorities and actions within each RSF, and informs the Recovery Office and Recovery Director of overall RSF actions and needs.

- **Recovery Support Functions.** Horizontal communication and coordination among the RSFs is an extremely important focus of the Recovery Framework. While RSFs support topical specialization and focus, this inter-RSF communication is essential to support ongoing coordination and decision making, reflecting the complex interrelationships among the topics addressed by individual RSFs. Detailed write-ups of each RSF in **Section 3** indicate where coordination with other RSFs is of particular importance.

These communication concepts are further described and illustrated on pages 36 and 37.

2.2.11 Role of the CRTF/RSFs in Pre-Disaster Planning and Preparations

To continue to build on this plan, RSF priorities and partnerships, each RSF and the collective CRTF should meet twice a year to advance the City's recovery posture and preparedness. This commitment to convene, will further mature the recovery operations/functions, advance pre-planning and allow for the opportunity to reconnect relationships, partners and exercise responsibilities. The Office of Emergency Management and the primary agency designated in the **Appendix 4** matrix will initiate communications. It is expected that representative stakeholders should participate in the RSF gathering. The agenda focus will be a continuation of the work to build the content of each RSF in **Section 3. ,** for example membership, priorities, roles and responsibilities, execution strategies, etc.

In addition, whenever possible, the CRTF should participate in training and exercise opportunities to continue to expand their expertise and explore the potential implications of differing scenarios on recovery operations.

2.2.12 Decision-Making and Conflict Resolution

Any decisions made during disaster recovery will balance competing interests and operational realities. Most decisions will involve the allocation of shared and oftentimes scarce resources among the different programs or communities. Recovery decisions have both practical and emotional components. The **whole community approach** (see **Section 1.4.1**) is intended to allow for the opportunity to understand community needs, hear concerns and desires, understand existing resources, smartly request additional resources, and coordinate among entities to maximize the use of resources (both government and non-governmental) to best serve the community.

For this reason, the decision-making process will rely heavily on the leadership provided by the RD. The RD is responsible for coordinating all appropriate actions in line with this plan, existing policies and mandates as well as disaster-specific planning and priorities. The RD will set priorities and make decisions based on information and advice provided by the CRFT/RSFs (who will engage the community) and the Recovery Office staff. The RD will use a whole community approach, leveraging the community planning and engagement strategy (**Section 2.3**).

Although the RD and Mayor have authority over City resources and can request additional state and federal resources, the resources available and implemented by the private sector and not-for-profit entities are under their own control and follow their own agendas. Therefore, the RD will make decisions based on the best interest of the overall operation and the efficient and fair implementation of programs.[1,2]

As acknowledged in Vision for Recovery (page 1), recovery efforts will continually balance the need to recovery expeditiously with opportunities to build back better, taking advantage of recovery efforts to make Seattle more resilient to future disasters, more sustainable, and more aligned with community desires. Such opportunities will likely require more time, the thoughtful engagement of stakeholders, and perhaps more resources than simply attempting to return to the pre-disaster state.

In the inevitable situation of conflict or dissatisfaction, parties will have the opportunity to be heard and participate in the process. Communication about the eventual decision will be regular and often. A transparent process will be the hallmark of the recovery operations.

Characteristics of the City's Approach to Decision-Making and Conflict Resolution

☐ Provide communications prior to decision-making.

☐ Strive to give community members impacted by the event or affected by a recovery action a priority voice in decision-making.

☐ Achieve consensus to the extent possible.

☐ Look to innovative solutions that may be outside the norm.

☐ Do not allow expedited actions to eliminate the opportunity to make future improvement, apply hazard mitigation and implement resilience.

☐ Collaborate on ideas and options to maximize service to affected communities.

☐ Understand that the Recovery Director is the first source of conflict resolution within the Community Recovery Task Force.

☐ Acknowledge that the leadership within private and not-for-profit entities are the decision makers for their own organizations.

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[1] Dale Carnegie, Conflict Resolution and Decision Making.

[2] City of Seattle, Toward a Resilient Seattle, Post-Disaster Recovery Plan Framework.

☐ Recognize that the Mayor and City Council are the ultimate decision makers for the City of Seattle.

2.3   Community Planning and Engagement Strategy

Successful long-term disaster recovery in any community will be contingent on frequent and thoughtful community engagement, shared information about the status of recovery and available resources, and garnering input from community members about the direction and priority to be placed on recovery activities. The importance of community engagement will be particularly important in Seattle given that the voice of the residents is highly valued by the community.

Throughout recovery, choices will be made about when decisions must be made expeditiously and when engagement stakeholders and community members is warranted or required. Throughout this Framework, an emphasis on "whole community" engagement is encouraged for significant decisions made during mid- and long-term recovery that will directly affect community members and meaningfully shape the future of the community. Some more immediate recovery decisions will be made with less consultation to ensure recovery progresses at a visible pace.

Fortunately, Seattle has strong infrastructure in place to communicate with community members, neighborhoods, businesses, and others. Community planning and engagement in recovery will rely on and leverage many of these same mechanisms, including but not limited to neighborhood councils, Council districts, business improvement areas, neighborhood-based schools, community-based organizations, and the City of Seattle's Boards and Commissions. The relationship between these organizations and individual RSFs is noted in **Appendix 4**.

Throughout this Framework, we use the following terms to differentiate between targeted engagement and broader community outreach:

- **Stakeholder**: targeted individuals, entities and established partners with expertise or resources; may be tapped for RSF and/or RSF specific sub-group participation

- **Community**: general community members (may be whole City, affected neighborhoods, or specific sub-populations)

A disaster-specific community planning and engagement strategy will depend on and be influenced by the type of event, damage, and affected areas. The strategy should reflect the geographical, cultural, and economic diversity of the city. A transparent process will be the hallmark of the strategy and all recovery operations. The CRTF/RSFs and Recovery Office are collectively tasked to work across government and community lines to plan for and make timely recommendations in support of the recovery operations and priorities. The Community Coordination & Capacity Building RSF (RSF 1) will support each RSF through communication with the community and execution of the community planning and engagement strategy. The roles and responsibilities of RSF 1 are further expanded in **Section 3.**

With a defined role in the planning process, the community will serve as a conduit to update decisions makers on real-time conditions and challenges throughout the city before and during the recovery process. They will be asked to evaluate the situations (present or anticipated), review community capacity, identify unmet needs, coordinate with RSF groups and co-chairs to identify resources to fill the needs, coordinate to develop a plan of action, and assess the results continually throughout the recovery process.

The planning and engagement strategy will promote and influence a successful recovery built on effective communication with affected communities. The community planning and engagement strategy should ensure that all communication is:

- Relevant, timely, clear, accurate, targeted, credible and consistent.

- Two-way and that input and feedback are sought and considered over an extended time.

- Accessible with universal access to audiences where they live and in diverse situations, including vulnerable populations generally, immigrants and refugees, and those with access and functional needs.

- Addresses a variety of communication needs, and is provided through a range of media and channels.

- Coordinated and consistent with all organizations and individuals.

- Repeated regularly (as information is more likely to reach community members when they are receptive.)[3]

- Realistic to set and manage expectations.

Exhibit 5 demonstrates the process for public participation and community planning and engagement post-disaster.

2.3.1   Methods of Engagement

For a community to be prepared to effectively tackle post-disaster recovery and redevelopment, it needs to be aware of the programs, plans, and projects that are customized to its neighborhood vision and needs. To further support our planning and engagement strategy and connect with those that may not have been able to participate in the community planning and engagement process, the CRTF/RSFs will pursue having one or more champions or mentors for the recovery from various community sectors. These individuals can relay information, strengthen the community's ability to tackle controversial but necessary issues, and maintain confidence and reliable guidance during post-disaster implementation.[4] To support these champions and other messaging, those developing and executing the community planning and engagement strategy will work very closely with the Joint Information System to coordinate and maximize efforts and impacts of messaging. Each will be leveraging the following methods:

Leadership Endorsement. The RD, Mayor, and City Council provide credibility by relaying information, announcing new initiatives and identifying sources (locations and media) of information and services.

Multi-Media Communication. Every form of communication will be engaged. This includes distribution of flyers, print media, billboards, web, TV, radio, ham-radio, and social media. This messaging must comply with Section 508, which states that people with disabilities must have comparable access to information. Additionally, the information needs to be in plain language and translated into the most common languages of affected populations.[5]

Technology Platforms. As above with media resources, acknowledge the use of use diverse technologies, such as iPads and smart phones and geospatial resources. Leverage the local expertise in these technologies to institute innovative avenues to support post-disaster communications and information sharing.

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[3] Queensland Recovery Guidelines. October 2011. www.disasters.qld.gov.au.

[4] Post-Disaster redevelopment Planning, A guide for Florida Communities, October 2010.

[5] NYC Recovery. http://www.nyc.gov/html/recovery

Neighborhood Engagement. Workshops, town-hall meetings, tele-town-hall meetings, special events, surveys, and canvassing will facilitate face-to-face communication. These mechanisms will be used to relay information to, gather information from, and plan along with the community.

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Exhibit 5. Seattle Community Planning and Engagement Strategy

INITIATING THE PROCESS

1. Designate neighborhood planning sectors/areas.
2. Begin community engagement as quickly as possible.
3. Determine a reasonable schedule and time frame.
4. Identify funding sources and budget, as necessary.

ORGANIZING STAKEHOLDER PARTICIPATION

1. Determine the most appropriate structure for stakeholder and community participation.
2. Form RSF/Stakeholder and Community Group(s)

RESEARCH AND ANALYSIS

1. Conduct a needs assessment.
2. Conduct a capability assessment by reviewing neighborhood plans, programs and assessing available financial, programmatic and staffing resources.
3. Perform gaps analysis.
4. Develop basic implementation structure.

PUBLIC PARTICIPATION

FACILITATE INPUT

1. Define and prioritize the set of current and long-term recovery issues relevant to your specific neighborhood.
2. Develop a set of strategies or actions for each issue.
3. Decide the mechanisms by which the issue will be resolved or plan will be implemented.

PLAN DRAFTING AND FINAL

1. Prepare first draft of action plan
2. Revise draft based on feedback and finalize.

2.4   Managing the Finances of Recovery

Critical to the recovery of the City of Seattle, will be its ability to access necessary funds to execute recovery priorities and make the desired repairs, mitigation, and reinventions. Almost any event that requires assistance beyond the capabilities of the City of Seattle will present the opportunity to access funding through federal grant programs or other opportunities from foundations, philanthropy, donations, and potentially other entities. The most prominent form of disaster related funding is from the Federal Emergency Management Agency and the Housing and Urban Development-Community Development Block Grant-Disaster Relief program. All grant programs and disaster reimbursement opportunities will come with grant conditions and project and program management responsibilities. Typical responsibilities include:

- Grant application development and planning

- Cost capture and/or estimation

- Regulatory and legal compliance

- Record keeping and documentation

- Financial tracking (disbursements and other accounting)

- Approval processes

- Reporting

- Attention to time limitations and completion/extension/request deadlines

- Audits

Systems and organization need to be in place to access funds and then manage funds once received. A listing of some currently available grant programs is included in **Appendix 3**. Many of these programs will need to be evaluated in order the find the best ways to maximize funding to the City. The CRTF and representatives from individual RSFs (including partner federal agencies) will be used to access subject matter experts in these grant and reimbursement programs. These individuals can help determine the best mechanisms to leverage all available funding opportunities. The CRTF/RSFs should also be used to develop private-public partnerships and combine potential funding streams to achieve larger impacts. It will be important to utilize a non-government entity to manage and distribute funds. The City itself may also need to look at existing funding streams and redirect funding for recovery purposes.

The **Finance and Grants Management Section of the Recovery Office** (Section 2.2.6) will need to be adequately staffed to account for these opportunities, support the CRTF/RSFs in accessing these opportunities, and have the depth of knowledge to support the City and its departments with guidance and appropriate grants management capabilities.

2.5 Ongoing Maintenance of Recovery Framework

Responsibility for this Framework

The Office of Emergency Management is responsible for reviewing the entire Framework on an annual basis.

The **Community Recovery Task Force (CRTF)**, in its pre-event planning role, continues to advance initiatives and planning within the RSFs, focusing on pre-disaster preparations, relationship building within the RSF, and continuing the work across government and community lines to make additional recommendations in support of the recovery operations and priorities. Each RSF should meet twice a year or as staffing allows. Any additions and changes made in the meetings of each RSF, should be coordinated with the Office of Emergency Management and incorporated into the framework, as noted below.

Revision Schedule

Interim revision should be submitted on an as needed basis.

Formal revision of this framework will be completed every three years. Formal revision should incorporate all interim revisions and include a complete review of all elements. Formal revision requires concurrence by the Director of Emergency Management, Mayor and a Resolution by the City Council.

Revision Process

All revisions must be submitted to the Office of Emergency Management with the following detail: section number and title, page number, and description of change. Revisions will be reviewed and accepted by the Office of Emergency Management. Accepted changes will be recorded on the Record of Revision, **Appendix 6.**

3. RECOVERY SUPPORT FUNCTIONS

Successful recovery recognizes, supports, and builds on community, business, individual, and organizational capacity. Planning for recovery enables city government to build consensus on recovery goals and strategies, gather critical information to inform recovery decisions, define roles and responsibilities, and develop the necessary capacity to efficiently manage recovery operations.[6]

Within each RSF, a variety of stakeholders, including representatives from the public, private, and not-for-profit sectors, community members, and organizations that are currently working on related issues, will be engaged to coordinate the following:

- Disaster-specific recovery and advanced planning

    o Assess RSF sector impacts

    o Connect with the whole community

    o Identify current recovery objectives

    o Analyze potential future requirements

    o Coordinate with interdependent RSFs

    o Develop action plans

    o Develop opportunities to increase a community's resilience for the next event

- Resource management

    o Inventory capabilities

    o Recognize that resources can be provided by a range of stakeholders

    o Advise of additional resource requirements

- Recommend and implement recovery operational decisions

- Information management

    o Promote relevant information exchange

    o Ensure universal access of information to all community members including vulnerable populations, person with access and functional needs and those with limited English proficiency

Each RSF will be co-chaired by a city-department official and a community leader, as outlined **in Section 2.2.7.** Each RSF may have cause to create **sub-groups**, whether permanent or temporary, to assist the group with its work by gathering information, assessing the current situation, discussing options, identifying funding sources, etc. Primary and support entities are noted in **Appendix 4.** A number of the RSFs, particularly Health, Social Services & Education and Infrastructure, have an enormous range of subject areas to address. These and any other RSF may benefit from dividing into sub-groups to tackle specific subject matter challenges and issues and develop solutions.

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[6] UNISDR (2012) How to Make Cities More Resilient - A Handbook for Mayors and Local Government Leaders. Geneva, Switzerland: United Nations International Strategy for Disaster Reduction

Exhibit 6 shows the flow of information among RSFs, the Community Recovery Task Force, and the Recovery Office. This occurs in according to the following sequence:

Step 1

Individual RSFs:

- Evaluate disaster impacts and current needs and capabilities by gathering topic-specific Essential Elements of Information. For most RSFs, these actions are contained in **Goal 1.** For RSF 6, **Goal 1** addresses parks and open spaces; **Goal 3** addresses historic resources; and **Goal 5** addresses arts, cultural, and community assets.
- Recommend RSF-specific recovery priorities.
- Share information across RSFs

Step 2

Individual RSFs:

- Share information with Community Recovery Task Force and Recovery Office.
- Coordinate with other RSFs. Some RSFs have special roles:
  - RSF 1: help coordinate community engagement efforts across all RSFs.
  - RSF 7: help coordinate phasing of supportable recovery efforts from a building and land use perspective.

Step 3

CRTF and Recovery Office:

- Review Essential Elements of Information and recovery priorities from each RSF.
- Coordinate and prioritize across RSFs and geographies, establishing phased recovery strategies citywide.

Step 4

CRTF and Recovery Office:

- Communicate overarching recovery priorities to individual RSFs.

Step 5

Individual RSFs:

- Manage and oversee implementation, engaging City and community partners to advance recovery in a coordinated fashion.

Exhibit 6. Information Flow among Individual RSFs, the Community Recovery Task Force, and the Recovery Office

**RECOVERY OFFICE AND
COMMUNITY RECOVERY TASK FORCE AS A WHOLE**

3 **CRTF and Recovery Office**
- Review Essential Elements of Information and proposed recovery priorities from each RSF
- Prioritize across RSFs, establishing overarching recovery priorities

2 **Individual RSFs**
- Share information with the Community Recovery Task Force and Recovery Office
- Coordinate with other RSFs

CRTF and Recovery Office
- Communicate overarching recovery priorities to individual RSFs **4**

RECOVERY SUPPORT FUNCTIONS

1 **Individual RSFs**
- Evaluate disaster impacts and current needs and capabilities by gathering topic-specific Essential Elements of Information
- Recommend RSF-specific recovery priorities

Individual RSFs
- Implement recovery actions in line with overarching priorities **5**

Community Coordination & Capacity Building (RSF 1) ↔ Economic Recovery (RSF 2) ↔ Health, Social Services, & Education (RSF 3) ↔ Housing (RSF 4) ↔ Infrastructure Systems (RSF 5) ↔ Natural & Cultural Resources (RSF 6) ↔ Buildings & Land Use Planning (RSF 7)

The box below summarizes the nature of the information contained under each header in the following Recovery Support Function sections:

RSF X. TITLE

Brief introduction.

Decision Making Framework. *Describes how information will be shared and decisions made. Notes organizations that may be involved in supporting the work of the RSF and reinforces the coordinating role of the Community Recovery Task Force.*

Planning Assumptions. *Describes likely starting points for disaster recovery.*

Guiding Principles. *Asserts important guidance for how recovery should proceed, identifying approaches and values important to the Seattle community.*

Major Topics Related to Community Coordination and Capacity Building. *Identifies key questions and challenges that should be monitored over the course of recovery.*

Recovery Goals and Strategies. *Organizes potential paths forward for recovery, identifying major Goals, Supporting Strategies, and potential actions or options.*

1.   Goal…

1.1.   Supporting Strategy…

1.1.1.   Potential action or option…

Pre-Disaster Preparations. *Presents recommended actions, conversations, and investments that may be implemented prior to a disaster to better prepare the community for effective and coordinated recovery.*

Exhibit 7 summarizes the major Goals identified for each Recovery Support Function. Each Goal is presented in more detail in the full discussions of individual RSFs on the following pages.

Exhibit 7. Goals Addressed by Each Recovery Support Function

RSF 1 Community Coordination and Capacity Building	RSF 2 Economic Recovery	RSF 3 Health, Social Services, and Education	RSF 4 Housing	RSF 5 Infrastructure Systems	RSF 6 Natural and Cultural Resources	RSF 7 Buildings and Land Use
1. Evaluate community impact and needs and set a citywide community engagement and planning strategy 2. Organize and stand up Assistance Centers 3. Initiate community- and neighborhood-based recovery planning 4. Leverage all possible community resources 5. Respond to unanticipated issues not covered by other RSFs	1. Evaluate needs and capabilities in the business sector and set recovery priorities 2. Facilitate amendment of regulations, codes, and permitting requirements for reopening businesses 3. Connect businesses w/employees, goods, and markets 4. Retain Seattle's largest and highest profile businesses 5. Support small- and medium- businesses 6. Communicate the strength of the Seattle economy	1. Evaluate needs, capabilities, and service gaps and set recovery priorities 2. Advance the restoration of the healthcare system 3. Coordinate social services orgs., prioritizing vulnerable populations 4. Communicate frequently/ consistently with public 5. Coordinate recovery across public/ private educational providers 6. Rebuild Seattle's damaged social and education facilities and systems	1. Evaluate housing needs and capabilities and establish a Housing Recovery Strategy 2. Provide interim housing solutions 3. Enable homeowners and renters to help themselves 4. Ensure the provision of affordable, safe housing for all impacted residents	1. Evaluate infrastructure needs and capabilities and establish a shared Infrastructure Recovery Strategy 2. Restore mobility and critical services	1. Evaluate needs and capabilities of parks and open spaces and set a phased recovery strategy 2. Facilitate the restoration and betterment of natural assets 3. Evaluate damage to historic resources and set short-term priorities 4. Encourage the rehabilitation of damaged historic resources 5. Evaluate the state of arts, cultural, and community assets 6. Connect organizations to recovery	1. Evaluate disaster impacts and identify priority rebuilding and land use concerns 2. Encourage rebuilding in ways that are resilient, sustainable, and in alignment with existing plans and visions 3. Encourage and facilitate rebuilding 4. Engage community members to proactively contribute to planning decision making

RSF 1. COMMUNITY COORDINATION AND CAPACITY BUILDING

The Community Coordination and Capacity Building (CCCB) RSF supports and enhances the abilities of Seattle communities to be strong and cohesive, make recommendations and decisions to restore damaged elements, and take advantage of the opportunities that present themselves during the recovery phases.

CCCB develops and supports the community planning and engagement strategy for the Community Recovery Task Force and the recovery operation. It supports and aligns with all other RSFs and their community planning and engagement needs. The CCCB RSF will engage whole community resources, connect with Seattleites (where they live, work and play) and facilitate, plan for, and support the development of citywide and community-focused recovery needs and priorities. CCCB communicates with and leverages current community resources and capacity, while growing additional capabilities to plan for, manage, and implement disaster recovery activities.

Decision Making Framework

As with other subject matters addressed in the Recovery Support Functions section of this Framework, decision making related to community coordination and capacity building will be made in a coordinated fashion, informing and informed by community-wide recovery priorities. The Recovery Office and Community Recovery Task Force described in **Section 2.** will facilitate communication up and down the City's decision making structure and among the many players engaged across the seven RSFs.

Many individual public, not-for-profit, and private entities play important roles in the functioning of the Seattle community. This existing ecosystem will be leveraged during recovery, with these organizations participating in whatever sub-groups are necessary to support recovery and provide input to and take direction from the Community Recovery Task Force (see **Sections 2.2.7** and **2.2.9** for more information on the functioning of the CRTF and topic-specific sub-groups). **Appendix 4** lists organizations that may contribute to recovery efforts in this area.

Planning Assumptions

- Community consultation will be essential to many aspects of recovery, particularly to significant decisions related to long-term recovery.

- Community planning and engagement will address individual neighborhood needs/priorities as well as accommodate vulnerable populations, access and functional needs, immigrant and refugee and social justice issues.

- The Seattle 2035 update of the City's Comprehensive Plan may have initiated community-based planning that resulted in neighborhood plans. These plans should be a reference for any additional recovery planning.

- The extent and type of community planning and engagement will be driven by the impacts of the disaster event on a particular area. City, community and neighborhood resources and support may be available at different times and at differing levels.

- The State of Washington, FEMA, HUD and other Federal agencies offer grant assistance programs to help offset the burden of disaster recovery. It is recognized that the terms and funding levels may vary and change over time in support of or despite community priorities.

- City of Seattle resources will not be sufficient to support recovery from significant events. Seattle will need to leverage whole community resources, including those from the public, private, and not-for-profit sectors within Seattle as well as higher-levels of government for an effective recovery.

- The disaster response will provide an outpouring of support from resources internal to Seattle and external resources from Washington State, the nation as whole and from foreign countries. Government and communities need to be prepared to accept and leverage this support.

Guiding Principles

- Community planning and implementation must be completely open and transparent. Transparency will be a priority that establishes legitimacy and builds and maintains credibility.

- **RSF 1** will coordinate community engagement activities undertaken by other RSFs to ensure that messages are aligned and that activities are not duplicative or competing.

- **RSF 1** will promote a unified "one-message" concept and facilitate the transmission of this unified message by many voices.

- Support from outside the area will diminish over time, while personal and community recovery needs will persist. Effort should be made to cultivate long-term donations and volunteer contributions.

Exhibit 8. Population by Race/Ethnicity

2010 population
by major racial category
and Hispanic/Latino ethnicity

one dot equals five people

- Asian
- Black/African American
- White
- Hispanic/Latino (any race)
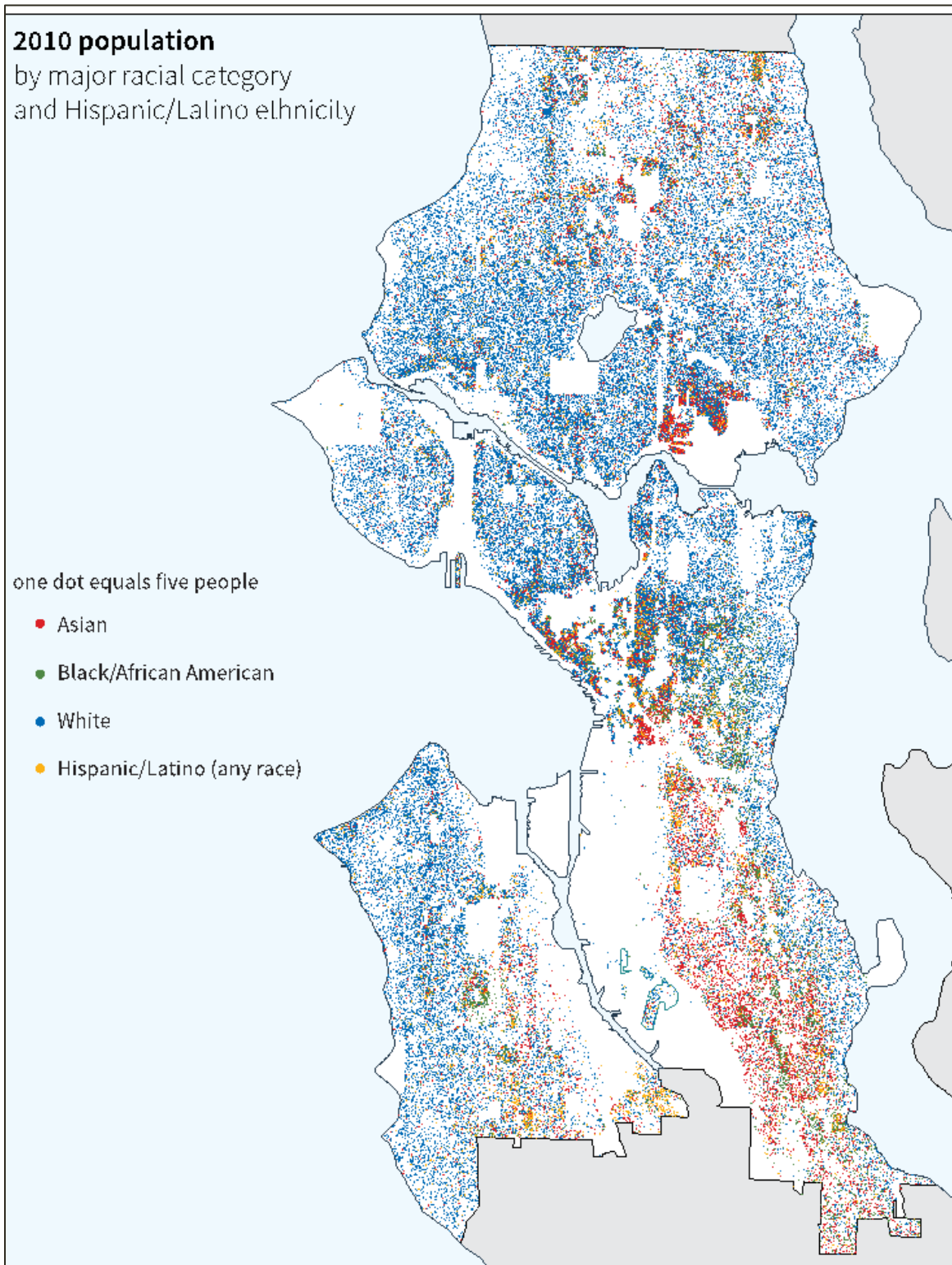
Source: Seattle 2013 Background Report, February 2014

Goals and Strategies Related to Community Coordination and Capacity Building

Immediate	Mid-Term	Long-Term
1. Evaluate community impact and needs and set a citywide community engagement and planning strategy.	**2. Organize and stand up Assistance Centers.**	
1.1 Conduct a community impact and needs assessment. 1.2 Designate neighborhood-planning sectors or areas. 1.3 Plan for a coordinated citywide community engagement and planning effort.	2.1 Coordinate with other RSFs to plan for Assistance Centers. 2.2 Coordinate with Recovery Office staff for all aspects of Center set up and planning.	
	3. Initiate community- and neighborhood-based recovery planning.	
	3.1 Develop engagement plans for affected neighborhood planning sectors/ areas and RSF partners. 3.2 Facilitate community input, problem solving, and the development of neighborhood recovery plans.	

4. Leverage all possible community resources.

4.1 Establish structures to coordinate donated resources, philanthropic giving, and volunteers to support recovery priorities.
4.2 Promote the need for donations and volunteer resources.

5. Respond to unanticipated issues not covered by other RSFs.

5.1 Serve as a ready resource to address unforeseen challenges and opportunities as they arise.

Guiding Questions for Community Coordination and Capacity Building

The following questions should be monitored over the course of recovery as a way of maintaining focus on some of the challenging aspects of recovery that cannot be addressed in advance or answered in an absolute, definitive fashion.

- *How has the disaster affected neighborhoods across the City? How has the disaster impacted coordination with impacted neighborhoods? Consider:*

    o *Geographies.*

    o *Language and culture.*

    o *Relocation of housing and access to transportation.*

    o *Pre-disaster planning networks/efforts.*

- *What meeting locations or resource centers are present and operational in or adjacent to the impacted area(s)?*

- *In coordination with the other RSFs, what information should be gathered/shared rapidly to address critical short-term needs? What RSF information gathering/decisions will benefit from more planning and long-term community engagement?*

- *What decisions can be made at the community level? What ideas must result in recommendations that are sent forward to City leadership for consideration and/or implementation?*

- *How can the rebuilding of neighborhoods examine how services and opportunities can be provided for equitability?*

Recovery Goals and Strategies

1. Evaluate community impact and needs and set a citywide community engagement and planning strategy.

Successful long-term disaster recovery in the Seattle community will be contingent on frequent and thoughtful community engagement, shared information about the status of recovery and available resources, and garnering input from community members about the direction and priority to be placed on recovery activities. The strategy will enact a whole community approach to engage all stakeholders and the entire community. The strategy will outline the most efficient and effective structure to connect with impacted neighborhoods and coordinate and facilitate community engagement activities undertaken by other RSFs.

1.1. Conduct a community impact and needs assessment.

1.1.1. Gather neighborhood-by-neighborhood impact assessment, gathering the **Essential Elements of Information** shown at right.

- Consolidate information from existing sources, i.e., response plans, situation reports and the other RSFs.
- Consolidate impact information and recovery status organized by neighborhood.

1.1.2. Conduct a capability assessment by reviewing neighborhood plans, programs, and assessing available financial, programmatic, and staffing resources.

1.1.3. Perform gap analysis.

1.1.4. Conduct additional vulnerability analysis based on relevance and feasibility.

Pre-Disaster Preparations

1.1.a. Map existing neighborhood structures.

1.1.b. Gather information regarding capability within neighborhoods by reviewing existing neighborhood plans, programs such as the [Community Emergency Hub program](#), and assessing available financial, programmatic, and staffing resources.

> **Essential Elements of Information** related to Community Coordination and Capacity Building
>
> - Status of residents within neighborhoods (sheltering in place, relocated), neighborhood services, utilities and infrastructure.
> - Status (unaffected, damaged, destroyed) of all resources within neighborhoods that may impact the ability to engage in planning.
> - Information accommodation and access needs within affected neighborhoods.
> - Status of existing (pre-disaster) planning efforts.

1.2. Designate neighborhood-planning sectors or areas.

1.2.1. Develop sector/area planning structure based on information from assessment in **Strategy 1**

- Implement flexibility as some RSFs may need to plan based on sector/infrastructure boundaries.

- Target locations that will support connections with audiences where they live and accommodate diverse situations, including vulnerable populations, access and functional needs and immigrant and refugee communities.

1.2.2. Evaluate planning/technical support requirements within each neighborhood planning sector/area, requesting additional community-focused planning support resources and surge needs when necessary.

1.3. Plan for a coordinated citywide community engagement and planning effort.

RSF 1 serves a role to coordinate recovery-related community engagement activities across all RSFs, helping align messages and engagement opportunities that might otherwise conflict or overwhelm community members. This Strategy establishes the foundation for ongoing communications with community members and the community- and neighborhood-based planning addressed in Goal 2.2.2. This effort should be based on the principles established in Section 2.3 and the Recovery Communications Strategy managed by the Recovery Office and Joint Information System.

1.3.1. **RSF 1** should serve as a coordinator of recovery-focused community planning and engagement efforts.

- Coordinate with other RSFs on planning and engagement needs.
- Coordinate a strategic approach with the **Joint Information System (JIS)** and **Recovery Office Planning Unit** (see page 22).
- Accommodate state and federal recovery staff in the planning and engagement strategy.

1.3.2. Establish parameters and requirements for community engagement.

- Insist on universal access and a race/social justice lens, recognizing that it will take consistent and proactive efforts to engage community members. Identify and incorporate the accommodation of all affected stakeholders, including vulnerable populations, persons with disabilities, and individuals with limited English proficiency into the recovery planning and decision making and recommendation process.
- Use quick and low-cost methods to rapidly gather general input about current needs and wants before embarking on more intensive community meetings. For the quick assessment, use tools such as online and print surveys, kiosks, facilitated guides for small group discussions, and other mechanisms.
- Provide guidance to structure meetings as opportunities to 1) share information, 2) receive community/neighborhood input about identified decision points, and 3) continue to gather information about changing needs and gaps as the recovery process advances.
- Coordinate community engagements with the Recovery Communications Strategy (see 22).

1.3.3. Identify and solve for translation, interpretation, and other information access needs based on the linguistic and cultural makeup of affected neighborhoods.

- Leverage the City's Public Outreach and Engagement Liaisons (POEL) system and other pre-identified resources.
- Begin to share information and receive community/public input as available and as needed.

- For disseminating information between neighborhoods, use specialized community groups including the Emergency Communications Hubs that should be active in recovery and others such as cross-country teams, the bike community, or parkour groups.
- Engage members of the arts community in translating information into visual communications pieces.

Pre-Disaster Preparations

1.3.a. Identify language and information access needs and resources, including translation services, artists, and others. Inventory organizations that can assist with different immigrant and refugee populations.

1.3.b. Identify leaders within the community who can help validate the pre-disaster process and continue post-disaster planning and coordination support.

1.3.c. Pre-plan a communications strategy. Determine the best vehicles and when to use specific ones depending on available infrastructure and other factors, considering face to face outreach, email, Twitter, radio, TV, and other media.

1.3.d. Begin educating the public about recovery in advance of a disaster, integrating these messages with other emergency preparedness content. Get information out about who to call for schools, rebuilding homes, funding, and other resources.

2. Organize and stand up Assistance Centers.

*Connecting people with the information and services they need is a critical component of recovery. This Goal focuses on establishing a network of **Assistance Centers** that will be used to connect community members with needed information and services. These Centers may also serve as locations for community-based, non-governmental organizations and volunteers who are involved in neighborhood recovery to engage the community as well.*

*Following a major disaster, FEMA will likely establish one or more **Disaster Recovery Center** (DRC). A DRC functions to provide information about disaster assistance programs administered by FEMA, SBA, and other entities. In the event of a regional disaster the City of Seattle would likely only receive one DRC (perhaps two if bridges limit travel across the Ship Canal). Given this limitation, the City of Seattle aims to augment this federal resource with multiple **Assistance Centers**, which should be coordinated and perhaps co-located with FEMA-established DRCs.*

Each Center should have a little of all resources while specializing in needs specific to the makeup and needs of the neighborhood. Resources and information should address:

- *Consistent information about recovery and infrastructure status.*
- *Information about: housing options, childcare and education options, and health and social service resources.*
- *Individual assistance resources including FEMA, HUD, SBA, insurance, and banking.*
- *Rules, regulations, codes, and permitting for rebuilding, as well as support or guidance in navigating this process.*
- *Recreation, arts, and culture opportunities.*
- *Translation services.*

2.1. Coordinate with other RSFs to plan for Assistance Centers.

2.1.1. Review **Essential Elements of Information** and other information from other RSFs to identify community needs and identify appropriate information and resources.

- Establish a plan for **Assistance Centers** that addresses the need to provide information and resources that are easily accessible to residents and of consistent quality throughout the community.
- Online options for information and service delivery should complement physical locations.

2.1.2. Evaluate specific locations throughout the community for the location of **Assistance Centers,** leveraging existing and used community infrastructure where appropriate. Coordinate with the Department of Finance and Administrative Services, which plays a role in finding appropriate locations for FEMA's Disaster Recovery Centers.

- Send out scouts to identify and evaluate potential locations, beginning with pre-identified options.
- Approach property management companies and large institutions to identify vacant spaces.
- Evaluate options, considering at least the following criteria:
  1. **Accessibility for community member and staff:**
     - o Proximity to where people are living and working post-disaster, including urban villages and active gathering places.
     - o Accessibility via public and private transportation.
     - o Accessibility for all populations, including vulnerable populations, those with access and functional needs, and immigrant and refugee communities who may not want to access services at locations where government is present.

     Opportunities to collocate with other resource centers and service providers including:
     - o FEMA **Disaster Recovery Centers**.
     - o Separate but coordinated **Business Recovery Centers (RSF 2)**.
     - o American Red Cross Multi-Agency Resource Center (MARC) and/or other recovery resource-specific centers.
  2. **Efficiency and functionality of the space, including the ability to serve people efficiently and space and amenity requirements:**
     - o Meeting rooms, office space, waiting areas.
     - o Utilities, including broadband/WiFi.
     - o Parking.
     - o Space for childcare.
  3. **Positive and negative impacts of using this space for this purpose:**
     - o How traffic generated may support or hinder adjacent uses.
     - o The displacement of other potential uses.
  4. **Land use context, including stability and surrounding uses (coordinate with RSF 7):**
     - o Seismic risk, flood risk and geologic hazards (current and under future climate conditions)
     - o Surrounding uses.

The following locations should be considered pre- and post-disaster as potential locations, with larger, more central locations considered as options for **Assistance Centers**:

- Organizations participating in the City's Major Institutions and Schools program.

- Facilities owned by **Seattle Public Schools**.

- Area colleges and universities, particularly those with existing MOUs with the City

- Neighborhood Service Centers.

- Parks and Recreation Community Centers.

- Seattle Public Library's Central Library and neighborhood branches.

- Community Based Organizations such as the Phinney Neighborhood Association or Solid Ground.

- Sites activated during the response or recovery phase, including FEMA Disaster Recovery Centers.

- Large facilities such as Washington State Convention Center or Town Hall.

- Vacant storefronts in shopping malls

> **Seattle Public Schools**
>
> As discussed in **RSF 3**, schools can serve as central community hubs during recovery. The Seattle Parks Department has Memorandum of Understanding with Seattle Public Schools to allow the placement of shelters on school grounds. This approach aligns in with the City's "campus concept" of sheltering, in which community centers adjacent to school property and parks can create a campus environment for a number of services, including sheltering, pet sheltering, tent camping, feeding, showers, assistance centers, and other services.

Pre-Disaster Preparations

2.1.a.   Inventory, evaluate, and prepare potential locations for **Assistance Centers,** coordinating with the Department of Finance and Administrative Services, which plays a role in finding appropriate locations for FEMA's Disaster Recovery Centers.

- Prioritize mitigation investments to ensure these locations are more likely to remain operational following a disaster. Consider establishing specific requirements and funding mechanisms for spaces designated as potential sites. These spaces would likely be useful during response. If so, the transition from response to recovery uses needs to be coordinated.

2.2.   Coordinate with Recovery Office staff for all aspects of Center set up and planning.

2.2.1.   Coordinate with **Recovery Office** to plan for and set up Centers.

- Develop management structure
- Arrange logistical support
- Coordinate with human resources to plan for and establish staffing of Centers.

2.2.2.   Coordinate with the **Joint Information System**, planning, and program areas to ensure the Center has the most updated information from government and non-governmental sources.

3. Initiate community- and neighborhood-based recovery planning.

A participatory and transparent planning process will be the hallmark of Seattle's recovery operations. The CRTF and Recovery Office are collectively tasked to work across government and community lines to plan for and make timely recommendations in support of the recovery operations and priorities. RSF 1 will support each RSF with its responsibility to communicate with the community and execute the community planning and engagement strategy. The community will serve as a resource to update decisions makers on real-time conditions and challenges throughout the city during the recovery process. They will be asked to evaluate their situations (present or anticipated), review community capacity, identify unmet needs, coordinate with RSF groups and co-chairs to identify resources to fill needs, coordinate to develop a plan of action, and assess the results continually throughout the recovery process.

Coordination with RSF 7 will be important given its focus on building and land use planning. The two RSFs must inform and complement each other.

3.1. Develop engagement plans for affected neighborhood planning sectors/areas and RSF partners.

The following steps outline how to plan for engaging community members within neighborhood planning sectors/areas designated in Goal 1.

3.1.1. Establish a preliminary Engagement Plan, building on the parameters and plans established in Strategy 1.3.

- Determine a reasonable schedule and timeframe.
- Leverage quick and easy mechanisms to gather broad information before embarking on more intensive meeting-based engagements.
- Choose meeting dates and locations that are advantageous and consider other community and RSF planning processes.
- Identify funding sources and budget, as necessary.

3.1.2. Solicit the support of community/neighborhood leadership and organize stakeholder participation.

- Identify leaders and mentors within the community/neighborhood who can help validate the disaster information sharing and planning process.
- Determine the most appropriate structure for stakeholder and community/neighborhood participation.
- Form stakeholder and community group(s) and sub-groups as necessary.

3.1.3. Delineate the specific topics or a set of topics relevant to a specific neighborhood.

- Define and prioritize the set of current and long-term recovery issues relevant to the specific neighborhood to be engaged.
  - o Track related City RSF, and state and federal action plans.
  - o Consult with other RSFs as necessary.

- Develop a set of **key questions** and potential investments, actions, and recommendations for each issue.
  - o Consult with program leads (funding program experts, Recovery Director and private sector leadership) on program implementation possibilities, scope, parameters and boundaries. Incorporate both governmental and non-governmental resources.
  - o Identify and track activities executed independently within the community (by non-governmental, private, community or individual) that are not being tracked by **RSFs 2 through 7**.
  - o Identify potential mechanisms by which the issue could be resolved. Support RSF-specific messages and the integration of disaster priorities such as sustainability principles, adaptive re-use of historic properties, mitigation considerations, smart growth principles and sound land use into recovery recommendations, decision making and planning. Prepare these as possible options for consideration, refinement, and augmentation by the community.

> **Key Questions to Address When Identifying Potential Solutions for Community Issues**
>
> - *What activity or type of service is available to fund/support the community issue/challenge?*
>
> - *Is there flexibility in the use of the available funds/support services?*
>
> - *What is the current funding/service level? Are additional funds expected? Can additional funds be solicited?*

Pre-Disaster Preparations

3.1.a. Identify and cultivate partner organizations that can support community-based planning.

- Inventory neighborhood/community planning resources (capability and capacity) that may participate in planning for, managing, and implementing of disaster recovery activities.

- Cultivate community organizations and businesses that will commit to participating in pre-disaster recovery planning and taking an active role in post-disaster recovery.

- Identify sources of skilled planners and facilitators to augment city staff in running community planning processes. Consider faculty and students in area university planning programs.

3.2. Facilitate community input, problem solving, and the development of neighborhood recovery plans.

3.2.1. Engage affected community members in planning recovery actions. For defined neighborhoods, develop draft and final neighborhood recovery plans.

3.2.2. Leverage existing neighborhood plans to jump-start the planning process and encourage reinventions and improvements, as well as rebuilding. Use post-disaster recovery as an opportunity to establish sidewalks where they did not exist, augment parks and open spaces, and make other community improvements.

- Prepare first draft of neighborhood planning sector/area action plan.
- Solicit comments from stakeholders and community members.
- Revise draft based on feedback.
- Finalize or initiate formal adoption process, as appropriate.

Pre-Disaster Preparations

3.2.a.   Create tools and frameworks to solicit, evaluate, and use public input for decision-making. As part of this pre-planning, determine what decisions can legally be made by the community.

4.   Leverage all possible community resources.

Public sector resources, including local, state, and federal recovery dollars will <u>not</u> be sufficient to fund the full recovery of the Seattle community following a significant disaster. The recovery effort must utilize all possible forms of service and assistance from the public, private, and not-for-profit sectors, as well as from philanthropic sources and even individuals. To do so we must cultivate those organizations and persons able to give, requesting targeted giving to assist with filling the innumerable gaps that exist post disaster, and coordinate the use of these resources.

4.1.   Establish structures to coordinate donated resources, philanthropic giving, and volunteers to support recovery priorities.

If a Seattle donations management plan has been adopted prior to a disaster, it will provide more specific direction than the general guidance provided here, though these concepts and roles may still apply.

Note that the Seattle City Charter and Seattle Municipal Code contain provisions that address the receipt of gifts by the City.

4.1.1.   Position one or more non-governmental entities to lead the management of donated funds and volunteer resources. Ensure these organizations have sufficient organizational capacity and strong systems in place to manage and process gifted funds, donations, and volunteers.

4.1.2.   Host a coordinating session for organizations that will receive funds, covering at least the following topics:

- Priority needs.
- Consistent messages (see below).
- Tracking and distribution requirements.

4.1.3.   Identify where volunteers and donated goods can be leveraged to support recovery priorities.

- Consolidate ground level collection of needs and offers of assistance, gathering input from:
  - Co-Chairs of **all other RSFs**.
  - **RSF 3's** Unmet Needs Committee.
  - Neighborhood outreach coordinated by **RSF 1**.
- Engage the **OEM Liaison within the Recovery Office** to connect this information to the City's structures and processes for managing volunteers and donated goods.

4.1.4. Establish a recovery role for willing individuals involved in Block Watch, CERT (Community Emergency Response Teams), Community Emergency Hubs, and SNAP (Seattle Neighborhoods Actively Prepare).

4.1.5. Track and administer volunteer efforts and donated goods per the City's processes for doing so.

Pre-Disaster Preparations

4.1.a. Inventory community philanthropies, foundations, and other likely sources of donated goods or funds.

4.1.b. Continue planning efforts around donations management and volunteer management, respectively.

4.2. Promote the need for donations and volunteer resources.

4.2.1. Move quickly to communicate a coordinated message about how best to support the Seattle recovery effort.

- Work with the Joint Information System to develop messaging regarding the specific needs for donated resources.
- Hold a meeting with media representatives to coordinate media-initiated requests for donations.
- Coordinate through the Office of Intergovernmental Relations to leverage assistance through Seattle's Sister City program.
- Assume in communications that donations for the community should come in the form of cash donations to pre-identified non-profit organizations, unless a specific request is made. This may reduce the volume of unsolicited donations of food, clothing, household goods, etc., that don't meet the community's needs or are difficult to deliver.

4.2.2. Launch a streamlined fund to capture monetary donations. Explore options for sources of matching dollars to solicit additional giving, and seek support from:

- Individual donors.
- Seattle's many philanthropies and foundations.
- Seattle-based businesses and community organizations.
- Out-of-area organizations that may have an affinity for or connection to Seattle.

4.2.3. Promote awareness of volunteer opportunities and needed donations, being very specific in the attributes desired. Promote opportunities via:

- The City's website.
- **Assistance Centers**, libraries, and other public places.
- Organizations and communities of interest focused on the topic area (see **Appendix 4** for a list of potential organizations).

Pre-Disaster Preparations

4.2.a. Work with volunteer coordination groups to prepare for a large event. Identify the resources they would need to coordinate a large influx of volunteers.

5. Respond to unanticipated issues not covered by other RSFs.

RSF 1 is well-positioned to address unanticipated issues that do not squarely fall within the scope of responsibility of other Recovery Support Functions. In doing so, RSF 1 may raise awareness of the issue and seek to find an appropriate lead.

5.1. Serve as a ready resource to address unforeseen challenges and opportunities as they arise.

Potential Reinventions Related to Community Coordination and Capacity Building

A. **Use the disaster to institutionalize closer partnerships between the public and private sectors, with both contributing appropriately and to the best of their abilities for the good of the Seattle community.**

RSF 2. ECONOMIC RECOVERY

The Economic Recovery RSF facilitates the recovery process and restores community self-sufficiency and vitality. It presents goals and strategies to sustain, restore, and expand the economic opportunities within Seattle. It will engage private sector partners that are key to restoring the basic necessities of jobs, services, and revenue generation.

Decision Making Framework

As with other subject matters addressed in the Recovery Support Functions section of this Framework, decision making related to recovering Seattle's economic recovery will be made in a coordinated fashion, informing and informed by community-wide recovery priorities. The Recovery Office and Community Recovery Task Force described in **Section 2.** will facilitate communication up and down the City's decision making structure and among the many players engaged across the seven RSFs.

Many individual private, not-for-profit, and public sector entities comprise and support Seattle's economy. There are also a good many regional and sub-regional coordinating bodies that serve both ongoing and emergency response functions. This existing structure will be leveraged during recovery, with these organizations participating in whatever sub-groups are necessary to support recovery and provide input to and take direction from the Community Recovery Task Force (see **Sections 2.2.7** and **2.2.9** for more information on the functioning of the CRTF and topic-specific sub-groups). **Appendix 4** lists organizations that may contribute to recovery efforts in this area.

Planning Assumptions

- Without active support, 40% of businesses that are closed for more than three days will eventually fail.

- Some businesses will recover quicker and more easily than others, based on pre-disaster preparedness, overall resource capacity, and the impact of the disaster. While large businesses rarely fail or leave after major disasters, those that leave are unlikely to return. Many small businesses are underinsured and lack the necessary cash reserves to continue operating after a disaster.

- Temporary recovery-related businesses such as inspections, construction, and other trades that emerge post-disaster will be key to rebuilding. It will be challenging to regulate them and make sure they are legitimate.

- Economic recovery is a key link to restoring the basic necessities of jobs and housing. To keep residents in Seattle, we will have to restore economic activity, as well as the housing, services, and functions addressed in other RSFs. Without jobs, people will leave the community to seek employment elsewhere. This will be true of individuals with a wide range of circumstances, from those with little savings to highly employable technology workers who will find it relatively easy to find work elsewhere.

- Freeing people of other concerns so they can go back to work will be a priority. We will need schools, medical clinics, and public safety functions restored before people feel safe leaving their families and returning to work.

- Getting utilities working is critical. Without power, internet, water, etc. businesses cannot operate.

- Seattle's Duwamish industrial area is a large employment center and the source of about one-third of the City's sales and B&O tax revenues. Port operations and private import/export uses are critical to the economic stability of the City and the Puget Sound region. The area is a liquefaction zone, and most of the structures there were built prior to current building codes, meaning that many structures and businesses in the area could be significantly compromised by an earthquake. This vulnerability is addressed in this RSF and in RSF 7, related to land use.

Guiding Principles

- It will be important to retain Seattle's large businesses, both for their economic contributions to the community in terms of jobs and tax revenues and for their symbolic importance of the health of the Seattle economy.

- Seattle is an integral part of the regional economy. More than one-third of workers who live in Seattle work outside the city, and nearly two-thirds of the workers in Seattle-based businesses live outside the city. Many Seattle-based businesses are dependent on access to a supply chain or market that extends beyond the region. In a major disaster, Seattle must support the recovery of the region's economic base, not just businesses that are located within Seattle's city boundaries.

- The nearly 95,000 businesses with fewer than 50 employees in the greater Seattle-Bellevue-Tacoma area will require substantial assistance to recover. The region's small and independent businesses are not only significant contributors to the economy; they are also crucial and valued components of Seattle's neighborhoods and cultural character.

- The private sector holds significant financial resources, as well as other assets, to leverage in recovery, not the least of which is the creative problem solving abilities of Seattle entrepreneurs and employees. Leveraging these resources will be critical to a robust recovery.

- Arts and culture are addressed in a separate RSF; however they are direct contributors to the City's economy and should be considered in Economic Recovery as well.

Exhibit 9. 2012 Covered Employment*
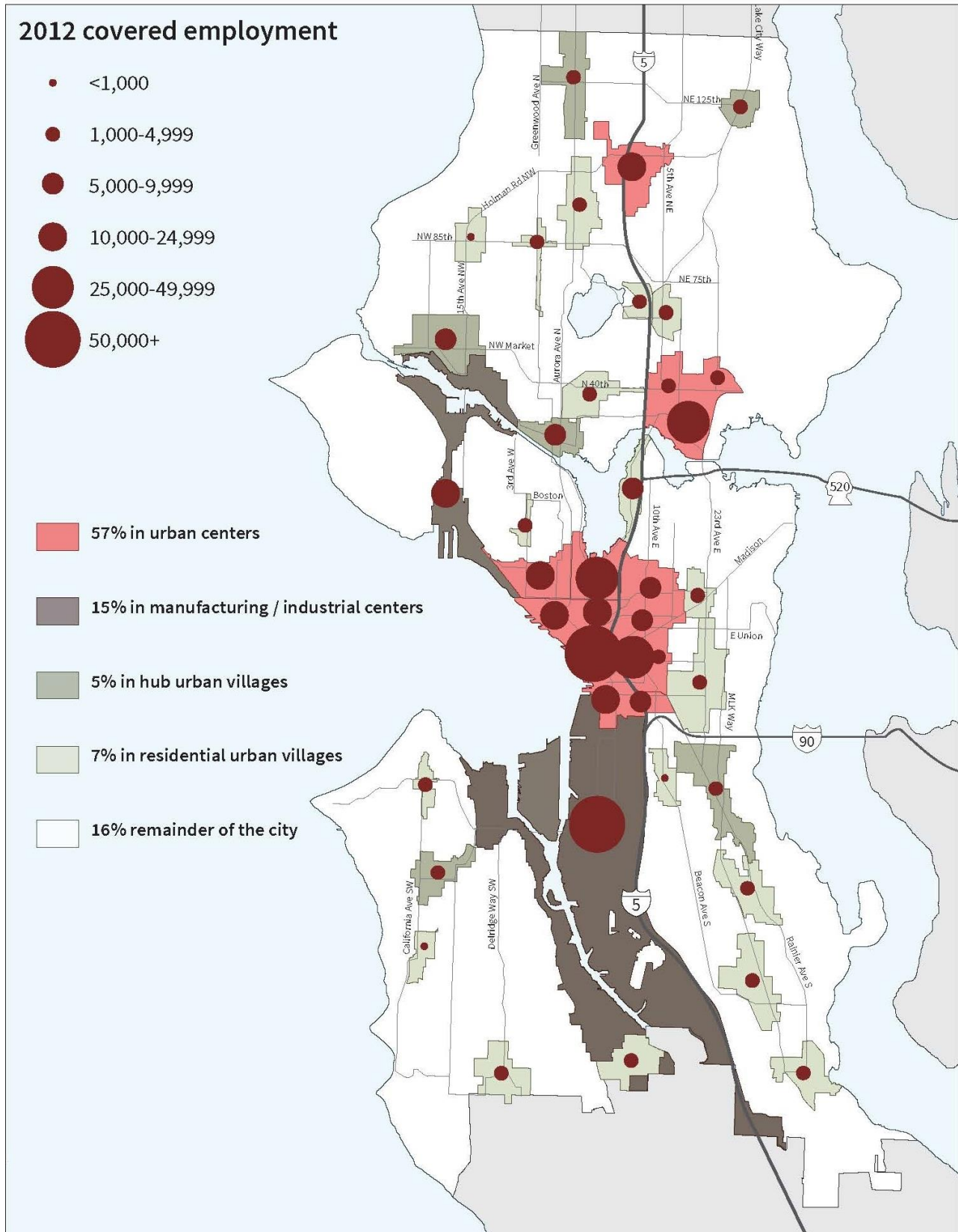
Source: Seattle 2013 Background Report, February 2014

* Covered employment refers to positions covered by the Washington Unemployment Act and does not include the self-employed, proprietors and corporate officers, military personnel, and railroad workers.

Goals and Strategies Related to Economic Recovery

Immediate	Mid-Term	Long-Term

1. Evaluate needs and capabilities in the business sector and set recovery priorities.

1.1 Engage members of City business networks in gathering information, solving problems, and communicating with businesses.

1.2 Facilitate information flow between businesses and infrastructure holders.

1.3 Establish and communicate economic recovery priorities.

2. Recommend and facilitate amendment of regulations, codes, and permitting requirements for reopening disaster-impacted businesses.

2.1 Facilitate expedited procedures and authorities to support business operations.

3. Connect businesses with employees, goods, and markets.

3.1 Establish a system of posting needs and available resources.
3.2 Leverage the local workforce for recovery activities.
3.3 Facilitate business access to capital.
3.4 Promote local goods and services through a "buy local" campaign, citywide and regionally.

4. Retain Seattle's largest and highest profile businesses.

4.1 Use personalized outreach to retain marquee businesses and industries.
4.2 Offer incentives to retain critical components of the Seattle economy.

5. Support Seattle's small- and medium-sized businesses.

5.1 Open virtual and physical Business Recovery Centers to support small- and medium-sized businesses.
5.2 Identify temporary, shared, or virtual spaces for businesses and service providers to operate.

6. Communicate the strength of the Seattle economy and its recovery.

6.1 Establish a coordinated communications strategy to promote the strength of the Seattle economy and share positive stories.

Guiding Questions for Economic Recovery

The following questions should be monitored over the course of recovery as a way of maintaining focus on some of the challenging aspects of recovery that cannot be addressed in advance or answered in an absolute, definitive fashion.

- *How has the disaster affected businesses across the city? How has the disaster impacted coordination with impacted businesses? Be attuned to variations by geography, business size and sector, and the socio-demographics of the business owners.*

- *What services for small- and medium-sized businesses will be most critical to offer through Business Recovery Centers?*

- *How can we best retain Seattle's high profile businesses? How can we retain the regional businesses that Seattle businesses and residents depend on?*

- *How can we facilitate identifying needs and sharing available resources among small and large businesses?*

- *What are some ways we can be sure to continually be thinking about the regional economy as a whole, rather than just focusing on the needs of Seattle-based businesses? How can we engage the full supply chain in recovery?*

- *How can we balance meeting the needs of both large and small to medium-sized businesses with limited resources and staff without appearing to prioritize one sector over another?*

- *What are some ways that we can coordinate and encourage synergy between economic recovery and infrastructure recovery? These two pieces will go hand in hand, especially in the first months and years post-disaster.*

- *How can we balance the desire for rapid business recovery with the importance of maintaining important health and safety regulations? How can we encourage small business creativity while maintaining effective regulations?*

Recovery Goals and Strategies

1. Evaluate needs and capabilities in the business sector and set recovery priorities.

1.1. Engage members of City business networks in gathering information, solving problems, and communicating with businesses.

1.1.1. Create a forum for convening Seattle's many business leaders, associations, and labor organizations, leveraging their ability to gather information from and share information and resources with their member businesses. Consider regular meetings of this group during the recovery phase to maintain a current understanding of recovery status and needs.

1.1.2. Prioritize gaining a clear understanding of infrastructure needs to inform **Strategy 1.3.** during the response phase and/or early in recovery.

1.1.3. Identify businesses willing to assist their peers or other businesses in their cluster, including suppliers and downstream users of their goods or services. (See **Goal 5** below related to small- and medium-sized businesses.)

1.1.4. Compile available private resource assets to use in advancing **Goal 3**.

1.1.5. Compile public and private data from various sources to assist with decision making, gathering information on available buildings, workforce, and equipment that may be used to assist recovery.

1.1.6. As soon as possible, conduct a study on the economic impact of the disaster, examining at a minimum the **Essential Elements of Information** noted at right.

> **Seattle Business Networks**
>
> Partner with organizations to tap resources of peers in neighboring communities or elsewhere in the world.
>
> - **Regional:** Economic Development Council of Seattle and King County, Workforce Development Council of Seattle-King County, Greater Seattle Business Association
>
> - **Geographically Focused:** Seattle Neighborhood Business Improvement Areas, Merchants Associations, and Chambers of Commerce
>
> - **Industry sector- or cluster-specific:** Aerospace, Maritime, Manufacturing, Healthcare, Clean-tech, Financial Services, Biotechnology and Life Sciences, International Trade, Information Technology, Leisure, Hospitality, and Retail Services, Transportation, Logistics, and Distribution

> **Essential Elements of Information** related to Economic Recovery
>
> - Projected tax revenue impacts.
>
> - Jobs and wages impacts.
>
> - Business impacts.
>
> - Infrastructure impacts.
>
> - Public and private property impacts.

1.2. Facilitate information flow between businesses and infrastructure holders.

Business recovery will be dependent on the functioning of the key infrastructure needed by businesses to operate. A clear understanding these business needs will be communicated to the public and private holders of infrastructure (RSF 5).

1.2.1. Engage business networks and major employers with infrastructure holders (**RSF 5**) in examining transportation and infrastructure interdependencies that impact business supply chains.

1.2.2. Use existing networks and **Business Recovery Centers** to communicate information to Seattle businesses, describing the current status and expected timeline for infrastructure recovery. Do not undermine confidence in the recovery effort by being overly optimistic in predicting infrastructure recovery timelines.

1.3. Establish and communicate economic recovery priorities.

1.3.1. Use the information collected above to identify priority needs and inform business recovery priorities. This may include:

- Providers of daily goods (grocery and drug stores) and basic services may be prioritized within each neighborhood. Identify opportunities for mobile retail (leveraging the food truck model) for providing grocery, pharmacy, and other needs.
- Businesses that serve as suppliers or consumers for other businesses are essential links in Seattle's economy.
- Small- and medium-sized business make up a significant share of the City's employment and tax base and are most vulnerable to short-term cash flow interruptions.
- Anchor businesses may be determined to be key to retaining the City's reputation and long-term tax base.

1.3.2. Brief the full **Community Recovery Task Force** on the recovery status and needs of Seattle businesses. Discuss competing needs and establish economic recovery priorities based on their potential positive impact.

1.3.3. Communicate these economic recovery priorities to focus decision making and resource allocation on areas of highest need.

Pre-Disaster Preparations

1.3.a. Incorporate economic resilience concepts into local and regional economic strategies, plans, programs, and initiatives.

1.3.b. Inventory and identify gaps in resources within the region to support economic recovery operations, including:

- Mutual aid agreements with other jurisdictions and key private sector vendors.
- Personnel to perform inspections, including those trained by private businesses (structural, food safety).

1.3.c. Communicate with key partners, including business networks noted above, banks, and the City's large businesses, describing the role they can play in recovery. Consider asking organizations to sign up as recovery partners, continuing to educate and cultivate this group prior to a disaster.

1.3.d. Establish pre-determined business and economic priorities based on their ability to support the population and spur recovery in other sectors.

- Identify businesses that are likely to be most vulnerable during recovery.
- Identify business that will be required for the recovery operation.
- Identify the "anchor businesses," companies that will have an easier time rebuilding and are large employers.

1.3.e. Develop a list of best practices to support business access to needed resources to keep them running post disaster. Address topics such as centralized temporary housing for employees, access to key inputs, access to capital, leveraged resource sharing, etc.

2. Recommend and facilitate amendment of regulations, codes and permitting requirements that may slow the speed of reopening disaster-impacted businesses.

The rebuilding of the Seattle economy will depend on heavily on connections to RSF-7, which deals with construction permitting. Other permits as well as regulatory compliance must be followed in order for a business to operate. These range from federal, state, county, and local regulations.

2.1. Facilitate expedited procedures and authorities to support business operations.

2.1.1. Identify alternative means to meet existing City regulations and code requirements. Identify other government regulations that are causing hurdles and work directly with leadership contacts to address and develop mitigation strategies.

2.1.2. For a limited period of time, consider reducing or relaxing fees, rules, and regulations that will make it challenging for businesses to recovery:

- Consider granting temporary fee waivers.
- Consider expedited permitting and licensing processes.
- Consider temporary tax abatement strategies.
- Consider allowing businesses to operate outside of the usual permitting processes where legally possible (e.g.., a "sidewalk" project) or to self-certify for initial building safety evaluations as part of an Advisory Tagging effort (for example, using Safeway's safety inspection staff, or Amazon's building inspectors).
- Implement an expedited claims and appeals process.

2.1.3. Monitor possible price gouging and fraud reports to determine the need to implement any new practices or regulations.

Pre-Disaster Preparations

2.1.a. Lay the groundwork for modifying procedures and authorities following a disaster.

- Understand the unique needs and requirements of small and large businesses.

- Identify rules, regulations, codes, and permits that could impact business recovery; Develop process to grant temporary waivers.

- Develop a streamlined, consolidated permitting and inspection process.

- Harmonize the process between the City and the County, working closely with County representatives to make sure both are in alignment on these revisions. Include Washington State processes in the review, as appropriate.

2.1.b. Examine the need for price gouging regulations after a declared disaster.

- Identify potential commodities and services where price gouging could occur (example, (fuel, building supplies, contractors, food, etc.) and study the potential impacts to the community and economy.

- Develop regulations to implement during declared disasters (example, not allowing businesses to charge more than 10% above normal prices for a period after a disaster).

3. Connect businesses with employees, goods, and markets.

3.1. Establish a system of posting needs and available resources.

3.1.1. Prioritize the creation of virtual and physical bulletin boards for companies and individuals to post their needs and available resources.

- Companies may require employees with specific skills, access to particular resources or inputs, space to conduct their operations, or needed equipment.

- Companies may post available staff they could loan to other companies during the recovery, goods that may be used by other firms, or the availability of space and spare equipment.

- Individuals may post available capacity and skills.

- In addition to using online tools, these postings may be done physically in the **Business Recovery Centers** described in **Strategy 5.2.** , below.

3.1.2. Make direct requests for contributions from major companies and others to identify which can contribute resources such as building inspectors, construction contractors, roofers, plumbers, property management, etc. who can respond to physical damage.

3.1.3. Identify staff or volunteers to manually review available and needed resources, seeking opportunities make matches and facilitate connections.

3.2. Leverage the local workforce for recovery activities.

3.2.1. Create a system to identify and facilitate the use of disaster recovery jobs as transitional work until previous jobs return.

- Using business leader contacts and business association networks, identify employment opportunities during the recovery period.

- Design a system of quick worker retraining for employees who have lost their jobs, enabling them to find employment in the recovery effort itself.

- Promote recovery job openings.

- Provide outreach to the public about these recovery job opportunities.

3.2.2. Provide trainings for individuals who are underemployed or unemployed, building their skills in areas needed by recovering businesses.

Pre-Disaster Preparations

3.2.a. Engage public, private, and not-for profit workforce development and retraining organizations in exploring their role in recovery and developing a workforce resiliency strategy.

3.2.b. Develop a list of resources, such as small business incubators.

3.3. Facilitate business access to capital.

3.3.1. Launch a campaign to facilitate an infusion of capital.

- Seek resources to provide capital to retain employees during downtime and restore business operations.
- Use donated contributions to provide a temporary stipend to small businesses after a disaster for cash flow purposes to sustain and retain businesses in Seattle.
- Work with FEMA, SBA, Washington State, and other community agencies (Washington CASH, Craft 3, etc.) to provide opportunities for operational and capital funding. This will require conversations about how to navigate the Washington State Constitutional restriction around the gift of public funds and no lending by municipalities.

3.3.2. Work with insurance companies to expedite insurance settlements. The Office of Intergovernmental Relations (OIR) can assist by coordinating with and advocating to the State Office of the Insurance Commissioner.

3.3.3. Work with financial institutions and community development corporations to provide short-term bridge loans to cover expenses.

Pre-Disaster Preparations

3.3.a. Engage banks, insurance companies, and other financial institutions to understand their post-disaster processes and discuss how the **Community Recovery Task Force** can help them help our local businesses.

3.3.b. Investigate relevant state or federal grant and loan programs.

3.4. Promote local goods and services through a "buy local" campaign, citywide and regionally.

3.4.1. Consider procurement policies to offer local businesses priority when bidding. These programs could serve as a foundation for a community program to identify and prepare local businesses to provide products and services (e.g., building materials) that are often in demand following a major natural disaster.

3.4.2. Evaluate the potential benefits and negative impacts of a "buy local" campaign, balancing the desire to support local businesses with a desire to not alienate out-of-area enterprises. If supported, launch a campaign to facilitate business awareness and stimulate the local economy.

4. Retain Seattle's largest and highest profile businesses.

High-profile businesses and organizations will play a major role in helping to promote and facilitate a rapid recovery. It will be important to make a coordinated and high-profile effort to retain Seattle's largest and highest profile businesses.

4.1. Use personalized outreach to retain marquee businesses and industries.

4.1.1. Engage leaders in the City and business community in targeted outreach to decision makers at Puget Sound-based businesses, encouraging them to remain in the region and understanding their recovery needs, with a focus on Seattle businesses

4.1.2. As soon as possible, restore the "open for business" tourism message by looking to implement additional tourism opportunities that may be present post-disaster, accommodating visitors' desires to see the site and reflect on the occurrence.

- Leverage private community partners in this effort.

4.2. Offer incentives to retain critical components of the Seattle economy.

4.2.1. Consider offering incentives to help businesses remain in Seattle such as tax credits and/or tax relief, expedited permitting, fee waivers, and facilitated access to loans or other resources, such as technical assistance and business planning support.

Pre-Disaster Preparations

4.2.a. Establish a list of businesses and clusters most critical to retain in Seattle for their economic contributions and symbolic importance. Continue to cultivate individual relationships within these companies and explore what their highest priority needs might be following a disaster.

5. Support Seattle's small- and medium-sized businesses.

Small- and medium-sized businesses with fewer than 100 employees are the backbone of the Seattle economy, constituting nearly half of the jobs in the city. Small businesses may be particularly vulnerable to the disruptions caused by a disaster and special attention must be provided to ensure these organizations have maximum opportunity to rebuild and thrive post disaster.

5.1. Open virtual and physical Business Recovery Centers to support small- and medium-sized businesses.

5.1.1. Create an online **Business Recovery Center** and evaluate the opportunity for physical Centers in a central location or distributed throughout affected neighborhoods. **Business Recovery Centers** may be established in libraries, Community Centers, or available commercial or public spaces or could be co-located with **Assistance Centers** (see **RSF 1, Goal 1.3.d**). Leverage/engage business groups and neighborhood business districts to support the Business Recovery Centers. Invite local, regional, state, and federal partners to co-locate and provide information at the Centers. The following services could be delivered through these Centers:

- WiFi, public access computers and printers, and meeting space.

- Information on business support programs and resources, including loans, grants, and assistance, as well as applications in multiple languages and facilitative application support.

- Expedited process for permits – e.g. building permits, health, and occupancy.

- Pick-up or drop-off locations for supplies or finished products.

- Technical assistance or consulting, provided by volunteers and individuals from non-impacted businesses.

- Marketplace for a physical bulletin board for businesses and individuals to post their needs and available resources.

- Information on business status and needs should be collected from users of these services to better inform the shared understanding discussed in **Goal 1**, above. Include personalized outreach to small businesses and their representative groups to spread the message that Seattle values them.

5.1.2. Broadly promote the availability and abilities of these Centers.

- Establish a hotline number and website where businesses can go for information regarding the Recovery Center services.

- Promote awareness via the business networks convened in **Strategy 1**, above.

- Use social media as appropriate.

- Send home information via schools and daycares, reaching the parents of children enrolled in these institutions.

- Include mention in utility billings.

- Post flyers in neighborhoods and on neighborhood blogs and newspapers.

Pre-Disaster Preparations

5.1.a. Pre-identify sites and potential Business Center resources in areas across the city, including locations such as Chambers of Commerce; shared workspaces and co-working locations such as Impact Hub, Office Nomads, WeWork, and others; malls; and mobile trailers. (See list of potential Assistance Center locations in RSF 1.)

5.1.b. Encourage businesses to have a Business Continuity Plan and appropriate insurance coverage in place before a disruption. This plan should help businesses plan for when to reopen after a disaster, saving their resources until market demand returns, as well as how to reopen, with consideration of how they might modify their offerings to match post-disaster conditions. According to FEMA, 75% of businesses that do not have Business Continuity Plans fail within three years of a natural disaster.

- Create and distribute simple recovery plan templates and other tools for use by small- and medium-sized businesses. Encourage businesses to create their disaster recovery plan by giving out acknowledgment for those who have done so to place in their windows – "I am disaster ready" or "Certified Resilient Business."

- Explore ways to make insurance (especially earthquake) more affordable.

- Promote the importance of mitigation and available City support.

- Develop business recovery plans for each neighborhood or business district to best fit their unique needs. Pilot one first, learn, and replicate.

5.1.c. Evaluate recommendations and guidance developed for establishing business recovery centers, such as at: www.restoreyoureconomy.org.

5.2. Identify temporary, shared, or virtual spaces for businesses and service providers to operate.

5.2.1. In the short-term, use public spaces such as community centers, libraries, schools, co-working centers, or the Convention Center as a shared space.

5.2.2. As soon as feasible, transition away from public spaces by facilitating the use of vacant offices or buildings as shared space for office workers, light manufacturing, or other uses. This will allow public spaces to return to their normal use and generate revenue for private property holders.

- Identify potential places and link potential managers (likely from among the business networks activated in **Strategy 1**) with landowners or property managers.
- Expedite permitting and problem solving.
- Help promote awareness of these shared spaces.

5.2.3. Encourage "pop up businesses" whereby businesses that do not use their facilities at certain times of the day lend or lease their space to other businesses.

5.2.4. Facilitate tele-community and virtual workspaces to allow companies to run without need for physical spaces.

Pre-Disaster Preparations

5.2.a. Identify and prepare sites that may be used as shared workspaces in areas across the city, both public and private. May need to consider regional locations.

6. Communicate the strength of the Seattle economy and its recovery.

6.1. Establish a coordinated communications strategy to promote the strength of the Seattle economy and share positive stories.

6.1.1. Use a variety of media and voices to communicate.

- Communicate Seattle's commitment to retaining its existing businesses and relate how recovery efforts are helping individual businesses, large and small.
- Address negative information, rumors, and inaccurate information.
- Leverage positive stories and leadership voices from within the business community itself, as well as public sector leaders.
- Describe how the City and its private sector partners are going to support the economy (infrastructure improvements, supply chain focus, etc.).

6.1.2. Continuously update status on social media sites, website, and the press to let customers and employees know the current status and plans to resume operations.

6.1.3. Create a "catalyst project" and rally media attention and community around it.

6.1.4. Create external messaging that lets regional, state, national, and international communities know Seattle is open for business.

Pre-Disaster Preparations

6.1.a. Lay the groundwork for a communications strategy to encourage businesses to remain in Seattle. Determine best voice and method for communicating these messages.

6.1.b. Cultivate relationships with a few Settle business leaders willing to announce their company's commitment to remaining in Seattle following a disaster.

6.1.c. Encourage suppliers to demonstrate how their continuity capabilities can also be a competitive requirement for future business by providing more confidence in their capacity to deliver.

6.1.d. Establish hard copy and electronic contact lists of primary and alternate suppliers (and competitors). Establish contingency contracts with alternative suppliers.

Potential Reinventions Related to Economic Recovery

A. Use the disaster as an opportunity to expand and diversify business enterprises in the City.

- Attract new business or industry to Seattle by marketing the improvements being made to Seattle's infrastructure and transportation system.

- Reexamine the highest and best use of our waterfront for maritime activities and explore a full spectrum of options for the best future for the Port of Seattle.

- Following recovery, identify, and promote new businesses, clusters, and expertise that have developed, incorporating these in new or existing economic development cluster strategies.

RSF 3. HEALTH, SOCIAL SERVICES, AND EDUCATION

The Health, Social Services, and Education RSF is focused on the services necessary for a healthy community. This multi-faceted RSF addresses multiple sectors:

- **Health**, including public health functions, behavioral health, and the healthcare systems.

- **Social services**, including a range of social supports from shelters and food banks to a myriad of supports for vulnerable populations.

- **Education**, including childcare, public and private K-12 schools, and higher education.

This RSF will look to restore, expand, and optimize service provisions for the whole community.

Decision Making Framework

As with other subject matters addressed in the Recovery Support Functions section of this Framework, decision making related to recovering Seattle's health, social services, and education systems will be made in a coordinated fashion, informing and informed by community-wide recovery priorities. The Recovery Office and Community Recovery Task Force described in **Section 2.** will facilitate communication up and down the City's decision making structure and among the many players engaged across the seven RSFs.

Many individual public, not-for-profit, and private entities comprise Seattle's health, social services, and education systems. There are also a good many regional and sub-regional coordinating bodies that serve ongoing and emergency response functions.

It is expected that a **Multi-Agency Task Force (MATF)** will be established to address interrelated challenges and needs experienced during the recovery phase of a significant incident. The structure and organizational composition of the MATF will depend upon the specific needs by the event, potentially including issues related to Health, Social Services, and Education, as well as topics specific to other RSFs, such as housing and employment. This structure will be leveraged during recovery, with the MATF and participating members contributing to whatever sub-groups are necessary to support recovery and provide input to and take direction from the Community Recovery Task Force (see **Sections 2.2.7 and 2.2.9** for more information on the functioning of the CRTF and topic-specific sub-groups).

Appendix 4 lists organizations that may contribute to recovery efforts in this area and **Section 1.3.2** describes the transition from response to recovery.

FEMA's Individual Assistance (IA) program will be a key resource in supporting **RSF 3**. Additional information on this program is contained in **Appendix 3**.

Planning Assumptions

- People across the community will be impacted differently and have very different needs at different stages in the recovery. There will be no one solution and individual recovery will go through ups and downs.

  o Some populations will experience a greater degree of adverse impacts and have fewer resources to recover. Some will be physically injured, others will be traumatized. Care for the newly injured, as well as those who were already vulnerable or in care at the time of the event, will be very challenging.

  o The population, including city staff will be overextended and stressed throughout the recovery. Cascading impacts will cause different portions of the community to experience crises at different times. If recovery is difficult and key infrastructure and services remain disrupted, losses and trauma may

increase over time. This will likely be particularly true for vulnerable populations. For some residents, the best solution may be to help them relocate outside the city, or even the area.

- The demand for social, behavioral, medical, and human services will increase dramatically after a disaster, far outstripping the availability of resources within the Puget Sound.

   o At the same time that community need is increased, a catastrophic disaster will disrupt the delivery of government, nonprofit social services, and healthcare services.

   o The disruption of private sector suppliers will have implications on the ability of service providers to operate effectively.

   o The capacity of nonprofit resource providers may also drop dramatically as some of them will close due to damaged facilities, loss of staff members, loss of volunteers, loss of funds or other impacts due to the disaster.

   o The need for behavioral health supports will vary by phase of recovery. Typically needs spike immediately following a disaster, but may be addressed rapidly through a post-disaster force social cohesion and the presence of intensive response and recovery supports. Needs then drop away, but return later as individuals continue to be plagued by disaster-related challenges and emotional processing of the event. Fewer supports may be available at this time and many individuals may be unaware of their need or unwilling to seek out behavioral health support. Programs and planning will be needed to assist in doing indirect behavioral health care and encouraging people to seek care.

- Thousands of volunteers will descend on Seattle to provide assistance immediately following a disaster. Over the course of long-term recovery, the number of volunteers will diminish. Continuing to channel volunteer efforts and donations in the recovery phase will be a challenge and an opportunity. This is addressed in **RSF 1, Strategy 4.2.**

- If there are multiple dead, injured and/or missing people, Public Health will establish a Family Assistance Center as a point of contact and coordination.

- Healthcare systems contribute to the economic viability of Seattle and as large employers, continuity of operations and restoration of healthcare services will be critical.

- Funding of needed services will be essential. Some current funding sources will be lost, while demand for services is likely to increase. There will also be new and increased opportunities for funding and fundraising as well, which the city and the community need to be prepared to facilitate, coordinate and leverage.

- Schools serve multiple roles in the community. However, the primary purpose and focus of schools is education. If children are not in school or childcare, there disruptive impacts to parents' ability to work and provide housing and food for their families. This also disrupts the recovery of the community's economy as a whole.

- The demand for seats in individual schools will be impacted by many factors, including damage to housing, where temporary housing is placed, and the availability of restored transportation, utilities, and support services. This may cause population for some schools to decrease dramatically, while others see a significant increase in demand.

Guiding Principles

- Treat all people with dignity and respect. Equity, race, and social justice considerations should be imbedded throughout the recovery response. Health, social services, and education services need to be provided in a way that removes barriers and addresses functional needs and universal access.

- Recovery efforts should prioritize service to vulnerable populations, including children, the elderly, the chronically ill, and the underserved.

- Coordinate and leverage public and private resources across systems to strengthen health services, human services and education services. The post-disaster dislocation of community members will require a flexible, systems approach to providing the best service possible across systems, geographies and ages. It may be necessary to coordinate different providers *within* each system, leveraging the assets of both public and private schools, for instance, to provide educational services to Seattle's children. It may also be necessary to integrate service delivery *across* systems, raising awareness of or directly providing social and health services in an integrated fashion, perhaps using neighborhood-based schools as an effective way to reach people in their neighborhoods.

- Many public systems are dependent on resources and supplies provided by the private sector; engagement of these private businesses in recovery coordination efforts will be essential.

- Strive for maintaining community cohesion. Keep communities and their support systems together. Keep families together, including pets. Ideally, shelters and temporary housing will be close to their homes and communities so that people will be able to support recovery into their homes and lives. However, depending on the situation, this may not be feasible.

- Find ways to reduce the stress, time, cost, energy, and frustration of accessing services: streamline processes, have convenient hours and locations, co-locate services, provide supportive services to enable access (e.g. childcare, wheelchairs), have public transportation, etc. Services should be should be coordinated across jurisdictional boundaries where possible.

- The City of Seattle provides some health and social services beyond the city limits. Where Seattle has such external responsibilities, they will be reflected in recovery efforts.

- Restoration of the education system is a high priority. Care must be taken to maintain a priority focus on education while leveraging the physical assets and connections to families the education system can offer in support of community recovery.

- Returning students to the classroom and a structured environment is one of the best ways to get the community functioning again.

- Ensure that the needs of refugees and immigrants are addressed. As a **Sanctuary City**, Seattle is committed to protecting individuals and families located here. Additional emphasis will be needed to ensure that this population of people is included in recovery and that while federal programs might not support them, that the City works to provide resources when and where available.

> **Sanctuary City**
>
> A community which has established a policy to not use city resources or funds to enforce federal migration laws by asking about or tying service delivery to an individual's immigration status.

Goals and Strategies Related to Health, Social Services, and Education

Immediate	Mid-Term	Long-Term
1. Evaluate needs, capabilities, and service gaps in the health, social services and education systems and set recovery priorities.	**5. Coordinate recovery actions across public and private educational providers at all levels.**	
1.1 Coordinate information gathering. 1.2 Gather Essential Elements of Information related to Seattle's health, social services, and education systems. 1.3 Evaluate needs, identify priority services for vulnerable populations, and share recovery priorities with the Community Recovery Task Force, other RSFs, and key partners.	5.1 Establish a coordinated plan for restoring K-12 education, drawing on the assets and abilities of both the public and private school systems. 5.2 Maximize access to childcare. 5.3 Assist Seattle Public Schools in reestablishing the public K-12 education system. 5.4 Restore the educational mission of Seattle's educational institutions and leverage them as powerful assets in recovery.	
2. Expedite restoration of the healthcare system to support physical and mental health and wellbeing.	**6. Rebuild Seattle's damaged healthcare, social services, and educational facilities and systems.**	
2.1 Establish a stable regulatory environment for hospitals. 2.2 Prioritize the recovery of individual healthcare facilities based on conditions and identified and foreseen community needs. 2.3 Bridge across healthcare facilities and systems to share access to resources, staffing, funding.	6.1 Coordinate rebuilding activities and planning with building, land use planning, and housing through shared work plans.	

3. Coordinate service delivery, meeting changing healthcare and social services needs and prioritizing services for vulnerable populations.

3.1 Regularly refresh the Essential Elements of Information related to health, social services, and education
3.2. Facilitate a coordinated approach to addressing priority needs, including services for vulnerable populations.

4. Communicate frequently and consistently with the public to promote health and raise awareness of available resources.

4.1 Leverage the CRTF, particularly RSF 1 and the Joint Information System, to coordinate messages across RSFs and with other regional players.
4.2 Raise awareness of available health and social services resources via all possible channels.

Guiding Questions for Health, Social Services, and Education

The following questions should be monitored over the course of recovery as a way of maintaining focus on some of the challenging aspects of recovery that cannot be addressed in advance or answered in an absolute, definitive fashion.

- *What is the post-disaster residential population of Seattle? What is the demographic makeup of that population? Where are the populations located?*

    o *Has the number of children and age breakdown changed? What is total demand for pre-school and school capacity? What is demand within different regions of the community and relative to the capacity of operational school facilities? What is demand at various levels of the system, from pre-school to K-12, to higher education, across both public and private schools?*

    o *Is there an influx of response and recovery workers needing resources, food, and accommodation? How is this prioritized?*

- *Who are the most vulnerable in this disaster at this time?*

- *What new health risks have been generated by the disaster, either directly or indirectly, that will affect people in the near future? Is the slow pace of recovery or continuing disruption of normal functioning likely to lead to particular impacts among specific populations?*

- *What environmental health risks have been create or exacerbated by the disaster? What health risks are likely to emerge over time if infrastructure, housing, drinking water, food supply, and other factors remain disrupted?*

- *What health services are missing or overloaded?*

- *What behavioral health issues are being manifested by survivors and responders? How are these changing over time?*

- *What are post-disaster needs for human services, behavioral health, and medical care? How do these vary by sub-geography, economic stature, language ability, medical condition, and other factors?*

- *How can we leverage expertise and resources from elsewhere in the region, across the nation, or elsewhere in the world? How can we leverage the role and assets of the private sector, particularly with regard to healthcare?*

- *Which populations may best be served by relocation elsewhere? Which populations may best stay in Seattle?*

- *How can we best reach people with needs? How can we create access to needed services in as streamlined and effective manner as possible to support individuals and families in need and accelerate community recovery? How can we support people who need behavioral health support but are not independently seeking such assistance?*

- *How can technology, such as electronic health records and telemedicine, be used for the delivery of healthcare?*

- *What are the highest and best uses of our schools at various phases of response and recovery? How can they assist recovery efforts while returning as quickly as possible to their educational mission?*

    o *How can we leverage school facilities? Schools' access to families for communication purposes?*

- o *How can higher education institutions support workforce development needs? How can the research and practical capabilities of instructors and students be brought to bear on recovery challenges? How can we leverage high school and higher education students as volunteers?*

- *What is needed for schools to reopen, thinking of inspections and permits, infrastructure and utilities, transportation access for teachers and students, and the availability of food and other supplies?*

- *How can we best support reopening of childcare facilities? How can we most easily reach providers to understand their needs and provide resources?*

- *How can the long-term rebuilding of our health, human services, and education systems be rebuilt in line with our vision for Seattle?*

- *How can we break down silos and work across sectors to improve health outcomes by rebuilding our community in a way that supports health? How can strong neighborhoods and walkable communities incorporate services such as healthcare and behavioral health, along with transit and grocery stores to reduce the distances people need to travel to access services?*

Recovery Goals and Strategies

1. Evaluate needs, capabilities, and service gaps in the health, social services and education systems and set recovery priorities.

1.1. Coordinate information gathering.

While these fields have different monitoring and surveillance tools and mechanisms, this information may be gathered in a coordinated fashion, with resident surveys incorporating questions that address multiple topics.

1.1.1. Leverage neighborhood-based networks and recovery organizations, including **Assistance Centers**, schools, and others, to gather needed information from members of the public. Coordinate this community engagement with **RSF 1**.

1.2. Gather Essential Elements of Information related to Seattle's health, social services, and education systems.

1.2.1. The following general categories, as well as the **Guiding Questions** above constitute the **Essential Elements of Information** related to health, social services, and education. They focus on *capabilities* (based on the status of facilities, supporting infrastructure and inputs, and staff availability) and *current and foreseen community needs*. This information should be gathered in a way that allows reporting based on geographic sub-areas and the identification of the high-priority needs that are not being met.

- The functional status of the public health system and information related to current and emerging public health threats, addressing disease surveillance, food borne illnesses, water quality, and zoonotic and vector-borne diseases.
- The functional status and capacity of the social services system, including staff, facilities, and supplies.
- The ability of institutions such as hospitals, jails, independent and assisted living centers, places of worship, and others to meet the needs of their population and perhaps others.
- The capacity of surrounding areas to address needs that cannot be met by Seattle-based providers.
- The ability of persons with needs to travel to service locations, including those with limited mobility under normal circumstances.
- The needs of sick and injured people, including their needs, recuperation, and support for re-entry into the community. The capacity of the healthcare system to meet those needs, including the status of utilities and transportation access, the availability of medical and non-medical staff, and access to key services such as pharmacy and mortuary. Many needs will be *ongoing*, occurring after a disaster just as they do without a disaster. Examples include:
  - o Drug treatment programs.
  - o Dialysis.
  - o Birthing.
  - o Funerals.
  - o Chronic diseases and injuries.

- o Normal accidents and injuries.

- o Prescription refills.

- The **behavioral health** needs of the population, monitoring this throughout recovery, not just immediately following the disaster, as well as the capacity of providers to meet those needs. Many of these needs will *increase after a disaster*, including depression, domestic violence, and substance abuse counseling.

- Community needs for **social services** and the capacity of social service agencies to meet those needs. Many of these needs will *increase after a disaster*:

  - o Social services for people who have never required help in the past but now need help due to the loss of their livelihood or possessions.

  - o Domestic violence shelters and support services, including Child Protective Services.

  - o Shelters, food banks and meal programs, hygiene centers, and support services.

  - o Extended family assistance and reunification.

- Demand for **supporting and linking services** will likely increase or manifest in demand for new, disaster-related services.

  - o Linking services such as referral services, interpreters, and translators.

  - o Financial assistance, financial services, financial education, and fraud protection.

  - o Disaster case management.

  - o Replacement of documents, including state-issued identification which may be required to access many social services and financial assistance.

  - o Financial assistance for the replacement of uniforms, tools, occupational supplies, or other items that may be required to return to work.

  - o Disaster food stamps.

  - o Access and assistance to apply for disaster assistance programs such as FEMA Individual Assistance, Small Business at (SBA) Disaster Loan Program, DSHS disaster programs, and IRS disaster assistance and emergency relief.

- The post-disaster condition of educational institutions across the City, including public and private schools, from pre-school to higher education. This should include student demand by geographic sub-area, grade level (including childcare), and particular needs; the availability of teaching and administrative staff; the physical condition of school buildings and related infrastructure, including utilities and transportation access; and current non-educational uses of school facilities related to response or recovery efforts. Communicate the post-disaster behavioral health needs of children, teachers, and staff.

Pre-Disaster Preparations

1.1.a. Continue to refine and formalize the **Essential Elements of Information** related to health, social services, and education outlined above.

1.3. Evaluate needs, identify priority services for vulnerable populations, and share recovery priorities with the Community Recovery Task Force, other RSFs, and key partners.

1.3.1. Compile the above information and develop recommended recovery priorities focused on the needs of vulnerable populations.

- Leverage the Multi-Agency Task Force and utilize skilled facilitators to support these conversations.

1.3.2. Communicate system status, identified needs, and priorities to the **Community Recovery Task Force** and **Recovery Director**. Specific connections include:

- **RSF 7**, as geographically-concentrated public health threats may affect which areas of the community are targeted for the near-term recovery of housing, employment, and other uses.
- **RSF 5**, as restoration of power, water, and sewer services may alleviate some public health threats.
- **RSF 1** and the **Joint Information System**, for communication with the public.

1.3.3. Coordinate with **RSF 1**.

- Identify ongoing community engagement efforts to gather or share information (**RSF 1, Goal 1**).
- Address gaps and funding needs by coordinating targeted fundraising; soliciting volunteer resources and donated goods or services; and applying any CDBG funds that the City qualifies for (**RSF 1, Goal 4**).

1.3.4. Share relevant information with healthcare providers to facilitate resource sharing and collaborative problem solving (**Goal 2**).

1.3.5. Share relevant information with social service to facilitate resource sharing and collaborative problem solving (**Goal 3**).

1.3.6. Share relevant information with educational organizations to facilitate resource sharing and collaborative problem solving (**Goal 5**).

2. Expedite restoration of the healthcare system to support physical and mental health and wellbeing.

The public health and medical care systems are critical components of a region's ability to recover from a disaster. Restoring a fully functioning public health and medical system will likely be a long-term effort.

When entering a recovery period, both systems will have experienced significant challenges in protecting the public and providing medical care to those injured in a disaster. Major damages may have been inflicted on the medical infrastructure with hospitals and other medical facilities suffering physical damage that limits their functioning by capability or capacity. Medical staff and their families will be expected to have also been impacted by a disaster and medical personnel's availability can be significantly disrupted due to pressing family and housing issues.

The health system cannot recover on its own because of the extensive interdependencies it has with the critical infrastructure systems that support its functioning. Transportation, electrical power, communications, water and sewer are only a few of the systems that are required to maintain public health and restore a fully functioning continuum of medical care.

Recovery for healthcare will also be significantly driven by state and federal policies. The healthcare system is reliant on state and federally-managed reimbursements, under normal operating conditions and with regard to disaster-specific federal reimbursement, and is subject to strict regulatory requirements that may require flexibility during post-disaster operations.

2.1. Establish a stable regulatory environment for hospitals.

2.1.1. Obtain a waiver from the provisions of the Emergency Medical Treatment and Active Labor Act (EMTALA) for the City and the region to enable the continuation of medical care in circumstances that would not normally meet the standards required by standard medical regulations.

Pre-Disaster Preparations

2.1.a. Enter into conversations with regional and national healthcare regulators to determine under what circumstances EMTALA might be waived and the process and procedures for requesting such a waiver for disaster response and recovery operations.

2.1.b. Review existing plans and procedures for the provision of additional security at medical centers. These discussions should include local law enforcement and National Guard representatives.

2.2. Prioritize the recovery of individual healthcare facilities based on conditions and identified and foreseen community needs.

2.2.1. Gather and review status information from healthcare providers, identifying facility conditions, infrastructure status, and the availability of staff and other key inputs.

2.2.2. Prioritize support for the restoration of specific medical facilities based on:

- Geographic distribution relative to current population density and short- and medium-term priorities for recovery, coordinating with **RSF 7**.
- The ability to maintain or restore supporting infrastructure (coordinate with **RSF 5**).
- The specialized needs of the community as identified in **Strategy 1.3.** and as foreseeable given the realities of post-disaster conditions.

2.2.3. Use creative solutions to address gaps in facility-based coverage of the community.

- Consider mobile delivery of health, pharmacy, and social services.
- Consider telemedicine options.
- Locate service providers directly in neighborhood-based facilities, including **Assistance Centers**, schools, and other locations.
- Leverage Seattle's many small clinics and private practices.

2.2.4. In coordination with critical infrastructure providers (**RSF 5**), prioritize the restoration of those systems that support the safety and welfare of the general public and the functioning of the healthcare system continuum. Electrical power and water systems are of particular concern.

2.2.5. Coordinate with private businesses that provide key parts of the supply chain serving the healthcare system, including

- Pharmaceuticals, blood banks, mortuaries, medical waste disposal, and other specialized providers.
- Meals, linens, and cleaning services.
- Fuel and transportation services.

Pre-Disaster Preparations

2.2.a. Suggest methods of communicating with Seattle's network of large and small healthcare providers.

2.2.b. Annually review critical infrastructure system statuses to stay informed of new risks and challenges that might have been identified to the existing system.

2.2.c. Conduct a joint review of hospital essential service providers like pharmaceuticals, fuel, transportation services, linens, and other products to identify single points of failure and understand the true nature and capacity of providers who may have multiple contracts to multiple hospitals.

2.3. Bridge across healthcare facilities and systems to share access to resources, staffing, and funding.

2.3.1. Facilitate resource sharing among healthcare providers including staff, volunteers, supplies, and facilities.

Pre-Disaster Preparations

2.3.a. Review mutual aid agreements among healthcare providers within the region and across state and national borders.

2.3.b. Establish a system for the use of emergent medical volunteers from within Washington State or from out of state to incorporate them into the medical care systems when and where possible based on Washington State licensing standards.

2.3.c. Utilize the Pacific NorthWest Border Health Alliance for the provision of medical staff resources beyond the borders of Washington State and reach into Canadian provinces that may have assets and not be responding to or recovering from the same event that has impacted the City of Seattle.

3. Coordinate service delivery, meeting changing healthcare and social services needs and prioritizing services for vulnerable populations.

Social services are currently delivered by various levels of government agencies and nonprofit organizations. A catastrophic disaster will drastically disrupt the delivery of these services primarily in two ways. First, transportation and other infrastructure disruptions will limit the ability of staff and clients to reach their agency, thus the agencies will need to find alternate ways to deliver service, if possible. Second, most not-for-profits have limited financial reserves and may not be able to restart their services, leaving significant gaps in the safety net.

More intergovernmental coordination will be needed among the State of Washington, King County, the City of Seattle, and neighboring jurisdictions since each provides a variety of services that have regional missions. With recovery, we will need to transition from the response phase of the disaster to one where higher level coordination is accomplished among governments and human service organizations. This will ensure that services are prioritized and delivered in the most efficient manner for the most vulnerable, including children, the elderly, the chronically ill, and the underserved.

3.1. Regularly refresh the Essential Elements of Information related to health, social services, and education.

3.1.a. Maintain a current, shared understanding of the health and well-being of the Seattle population, appreciating and, when possible, anticipating changes in need for service as the population experiences different phases of post-disaster recovery. As noted in the Planning Assumptions and Guiding Principles, individual and community need for health (physical and behavior) and social services supports will change over time during recovery. The disaster may create or exacerbate environmental health challenges that will manifest in different populations in different ways over time. The need for behavioral health support may peak, dip, and later reappear. These fluctuations require constant monitoring and adjustments in service delivery.

3.2. Facilitate a coordinated approach to addressing priority needs, including services for vulnerable populations.

3.2.1. Re-establish case management for youth and Aging and Disability Services clients that have been displaced.

3.2.2. Prioritize services for vulnerable populations, including:

- Services for youth.
- Support for people with disabilities.
- Low-income individuals and families.
- Refugees and immigrants.
- Resource to address language and communication barriers.

3.2.3. If more hygiene centers, shelters, food programs, or other resources are needed, seek to suspend the Community Notification Process and issue temporary use permits.

3.2.4. Leverage the existing human services infrastructure provided or facilitated by the City of Seattle, King County, Seattle-King County Public Health, and other partners.

- Some contracts already have requirements in their contracts with social service agencies as to their disaster recovery plans.
- A priority of the City is to make sure not-for-profit service agencies are able to continue to do their work. Priority for resource allocation will need to be addressed. Advocate that state and federal grant program administrators maintain funding to support providers returning to service, even if they are temporarily unable to continue serving clients for a period of time. This may be contrary to specified terms and outcome requirements in the underlying contracts.

3.2.5. Leverage the Multi-Agency Task Force and Unmet Needs Committee to foster collaboration, identify duplication of services, and redirect services to address community needs, prioritizing services for vulnerable populations.

- Share prioritized needs with regional and statewide providers, actively soliciting assistance from direct service providers, philanthropies (**RSF 1**), and neighboring jurisdictions, the state, and the federal government (**Recovery Office**).
- Identify and productively redirect the resources of agencies that cannot function as normal given infrastructure disruption or a decrease in demand for their services.

- Identify agencies with multiple locations or national affiliates that may able to share resources with more disrupted organizations.

Pre-Disaster Preparations

3.2.a. Continue to expand existing human services delivery infrastructure described in **Strategy 3.2.1** which is already pursuing many important pre-disaster activities:

- Identify which organizations would be appropriate to include on Multi-Agency Task Force Committees (e.g. Children's Services, Health and Human Services, etc.).

- Encourage disaster recovery planning, training, and exercises.

- Inventory existing regional systems and identify opportunities to leverage resources and services across sectors.

- Establish MOUs with regional service providers, neighboring jurisdictions, and others to facilitate post-disaster collaboration and resource sharing.

- Build capacity for post-disaster coordination and collaboration among Seattle and regional health and human services providers.

- Research best practices from elsewhere in the country and hold regular meetings or symposia on post-disaster services recovery.

- Ensure agency contracts have a clause to allow for potential modification of a contract in case of a disaster.

- Seek funders who will guarantee funding to restart the post-disaster operations of specific agencies.

- Establish a generic prioritized list of needed resources and additional capacity, updating it annually so funders and planners understand existing gaps in service and post-disaster priorities.

3.2.b. Develop a co-location template. For the highest priority service providers, determine their essential requirements to move to an alternate location or co-locate with another organization. Using the 211 database, map the location of providers to identify those that are already collocated by neighborhood and who might be able to work together.

4. Communicate frequently and consistently with the public to promote health and raise awareness of available resources.

4.1. Leverage the Community Recovery Task Force, particularly RSF 1 and the Joint Information System, to coordinate messages across RSFs and with other regional players.

4.1.1. Ensure coordinated and accurate messages are disseminated by all parties, including:

- Public Health Seattle King County.

- City and County departments involved in social services.

- Private, not-for profit, and religious healthcare and social service providers.

4.2. Raise awareness of available health and social services resources via all possible channels.

4.2.1. Use existing outreach and education strategies and forums to disseminate messages and engage with the community on recovery activities, Use all tools and channels available, including:

- **Recovery Centers**, schools and community centers.

- City and County staff, including public safety personnel, Parks and Recreation staff, and others who can be mobilized to be present in affected communities.
- Religious organizations.
- Traditional and social media.
- Posters, flyers, and door knockers.
- Volunteers and recruited groups as diverse as bicycle messengers, running clubs, and others.

4.2.2. Publicize the Substance Abuse and Mental Health Services Administration (SAMHSA) Disaster Distress Helpline as a free community resource.

Pre-Disaster Preparations

4.2.a. Establish protocols and tools for sharing information among providers and with residents.

- Build on 211's database to provide up-to-date information on available services, new eligibility requirement s or location.

5. Coordinate recovery actions across public and private educational providers at all levels.

This Goal helps advance the restoration of key elements of Seattle's education system, from pre-school to higher education.

- *Pre-school care is a critical element in many families' ability for parents to work outside the home. Promoting the reestablishment of childcare resources is a basic element in returning the community to a functioning status. Much of what will be needed is for critical infrastructure to be functioning. Water, sewer and electrical power are basic elements needed for the many large and home based childcare providers to function.*
- *Seattle Public Schools provides K-12 education for the majority of Seattle's school age children. Restoring the functioning of schools will be key to returning parents to work and moving the community towards recovery.*
- *Seattle's higher education institutions are important community assets for both their educational mission and the resources and expertise that they can bring to bear in recovery.*

In some areas of the city and region school facilities are likely to be heavily used in response because they are distributed/neighborhood-based, large, well-built to withstand earthquake, or are prioritized utility recovery. They may be used in response and short-term recovery as shelters, **Assistance Centers***, or other purposes. Schools will continue to function as a community resource in recovery, but play a critical role and need to be returned to their primary function as soon as possible to facilitate their parent's return to work, return to normalcy, etc. Getting children back in school will benefit children academically and help their mental health. It will also help parents return to work by creating a safe place for their children. Depending on the time of year, it would be very desirable to get schools back to their education mission within a target of two months. Expediting the recovery process means we need to address moving ongoing response and recovery activities out of schools and into other facilities.*

It is also important to take a **whole community approach** *(see* **Section 1.4.1***). While today the public and private school systems operate independently, there is the opportunity for schools to join hands and assist one another in returning children to school. This might entail public school children attending private schools or vice versa. While this is not the norm today, a catastrophic disaster creates opportunities for new partnerships considered impossible based on pre-disaster operating norms. The educational system is currently segmented with pre-school, elementary, junior high and high school seen as separate functions. One alternative to consider is looking*

at the education system as a whole, from small childcare providers (home- and center-based) to large elementary and secondary institutions and inclusive of community colleges and universities.

5.1. Establish a coordinated plan for restoring K-12 education, drawing on the assets and abilities of both the public and private school systems.

While the mixing of funding and other resources between public and private schools is not part of schools function today, a crisis of the magnitude of what is envisioned will create needs that cannot be met when trying to function by today's standards. Public and private schools need to be open to new forms of collaboration across a wide spectrum of functions and issues.

5.1.1. Establish a coordinated plan to get as many children back in school no matter where they are.

- Consider creative options to scale the system based on demand and available facilities. While overall demand may be reduced, with some families leaving the city, demand for individual schools or clusters of schools may exceed operational capacity.
    - Consider options in which schools are combined to accommodate demand of a potentially much smaller population, e.g. put elementary, middle, and/or high on the same campus.
    - Consider year round school, longer school days, or extended school years if there has been a loss of school facilities due to disaster damages requiring the consolidation of schools.
- Consider families who are displaced outside of their neighborhoods due to damages to their homes. Establish a mechanism to allow families whose children typically attend a school in an adjacent neighborhood or across town to send them to a neighborhood school where the family is currently living. This will likely occur naturally, but administrators at individual schools need to be given the flexibility to accommodate emergent situations driven by housing and transportation challenges that families face.

5.1.2. Facilitate problem solving across public and private school systems.

- Encourage capacity pooling and resource sharing to accommodate children, without school or school system boundaries getting in the way.
- Establish pathways for coordinating efforts between public and private schools.

Pre-Disaster Preparations

5.1.a. Continue to develop recovery plans that bridge public and private school systems.

- Establish forums for public and private school systems to brainstorm how they might cooperate together to reestablish the Seattle education system without regard for the traditional operating methods that exist today. Work to eliminate institutional and funding barriers that may otherwise limit the ability for cooperative efforts when disasters strike.
- Determine how to fund public, not-for-profit, and private schools so they can deliver basic service to school age children.
- Ascertain how State requirements and labor requirements may be temporarily amended if it is necessary to hire temporary teaching staff.
- Coordinate preparedness efforts and recovery planning among public and private school buildings in the same neighborhood.

- Train school systems in the PsySTART Rapid Mental Health Triage and Incident Management System so it can be implemented effectively in response and recovery.

5.1.b. Include the education sector in disaster trainings and exercises run by the City of Seattle. Provide a variety of scenarios so school administrators and schools systems at all levels can explore ways in which they might prepare for, respond to, and recover from a disaster.

5.1.c. Develop a post-disaster curriculum or more general guidance for how to interact with and educate students following a disaster, making it available to public and private school teachers.

5.2. Maximize access to childcare.

5.2.1. Engage the City of Seattle Department of Education and Early Learning, which holds contracts with many childcare providers, in a troubleshooting role as childcare providers seek to recover and accommodate post-disaster demands while adhering to licensing requirements.

- Promote awareness of open licensed providers.
- As capacity and staffing requirements allow, encourage providers to accept children who can no longer access the center they attended prior to the event.
- As capacity and staffing requirements allow, encourage providers who typically serve the employees of large institutions to accept children from the general population.

5.2.2. Prioritize actions that aid the reopening of childcare providers.

- Engage the Washington State Department of Early Learning, requesting possible accommodations for some licensing requirements and allowing childcare centers to reopen if they are safe.
- Ensure childcare facilities are included in prioritized permitting (**RSF 7**) and infrastructure (**RSF 5**) planning.
- Give providers with information about what to do: how to get permitted to open, how to communicate needs, etc.

Pre-Disaster Preparations

5.2.a. Give pre-k providers information about what to do in recovery: how to get permitted to open, how to communicate needs, etc.

5.3. Assist Seattle Public Schools in reestablishing the public K-12 education system.

5.3.1. Leverage City of Seattle resources and the efforts of other RSFs to support the reopening of Seattle Public Schools. Efforts might include:

- Expedited inspections and waivers of non-safety related requirements (**RSF 7**).
- Prioritization of infrastructure recovery (**RSF 5**).
- Transportation solutions for students, teachers, and staff.
- The provision of food or other supplies.
- Set up of trailers or other temporary structures.

5.4.   Restore the educational mission of Seattle's educational institutions and leverage them as powerful assets in recovery.

5.4.1.   Encourage community colleges to coordinate with local high schools to best accommodate the needs of students, leveraging the Running Start program.

5.4.2.   Leverage and develop training programs at the colleges, universities, and trade schools to help residents develop skills needed in the recovery. Partner with human services to include and prioritize programs for people experiencing multiple barriers to employment and living wage careers.

5.4.3.   Call on higher education institutions to serve as a resource to the broader community, considering their:

- Facilities and other capital resources. Consider secure buildings with operating utilities as possible locations for **Assistance Centers** or **Business Recovery Centers**.
- Research and innovation capabilities.
- Volunteer capacity, considering student bodies and staff.

5.4.4.   While prioritizing schools' educational mission, leverage their connections to children and families.

- Use existing school facilities off hours to provide services that promote the health and wellbeing of the community. See the sidebars below and on page 49.
- Maximize the ability to use school land by placing portable buildings on schools campuses for the delivery of wrap-around services.

Pre-Disaster Preparations

5.4.a.   Encourage Seattle's community colleges, public and private colleges, and universities to work together to become more disaster resilient and seek ways to be supportive of one another and their neighborhoods when disasters strike.

5.4.b.   Prepare Seattle Public Schools facilities and grounds.

- Prioritize hardening schools and other mitigation efforts.
- Conduct pre-event survey of school properties to identify potential sites where portable buildings might be a possible solution to space needs for the delivery of services.

5.4.c.   Identify social service agencies that are already collocated in neighborhoods.

> **Neighborhood Schools as Recovery Resources**
>
> The City of Seattle is organized by neighborhoods and many of the community activities that take place throughout the city are centered on schools. Schools themselves are used intensely for only a portion of the 24 hour day. Other community activities focused on recovery functions might be collocated on school property during the recovery phase to provide more services to the immediate neighborhood around individual schools. The collocation of services might occur physically in the school buildings themselves or on school property. The driving need to collocate services with schools is the anticipated inability to move around the city because of transportation disruptions due to an earthquake.
>
> The above concept leverages schools as a physical neighborhood resource for "wrap around services" for children and families: space, resources (locating complementary services, e.g., childcare, family support, medical, mental health) and access to information. The intent is not to usurp the educational focus of schools, but to enhance the total community recovery by providing an accessible, central place for people to be engaged by a variety of services that will hopefully assist in the recovery of the body, mind and spirit of the neighborhood around a school.
>
> Disasters are traumatizing experiences for adults and children; it might be possible to incorporate recovery services for children in the schools, using schools as a way to help children deal with the loss and change associated with the disaster. This will require identifying and addressing gaps through coordination and integration among education, healthcare and community based service organizations.
>
> Basic medical services provided at school locations might also include dental; minor injury or illness and infections. This concept may naturally flow out of the disaster and the need for locally based centers for information and services during the response phase and then continuing on into the recovery period. These services described above can be provided after the educational day is completed.
>
> See page 49 for additional information.

6. Rebuild Seattle's damaged healthcare, social services, and educational facilities and systems.

6.1. Coordinate rebuilding activities and planning with building, land use planning, and housing through shared work plans.

6.1.1. Coordinate with **RSF 7** and **RSF 4** to prioritize the certification and re-occupancy of schools and how schools factor into post-disaster land use. As described in **RSF 7**, seek to create walkable communities, designed to include easy access to schools, healthcare, daily goods and groceries, and transportation infrastructure.

6.1.2. Seek opportunities to establish an integrated system of health, social service, and educational facilities as part of intentionally designed neighborhoods that support health and well-being. These concepts are addressed below, under "Potential Reinventions Related Health, Social Services, and Education."

Potential Reinventions Related to Health, Social Services, and Education

A. Seek to create an integrated neighborhood-based education system and a network of social and human service.

As we rebuild our education system and health and social services system, we should reduce the siloing of services as much as possible. We should seek to create one access point through which community members can access multiple services. There is potential to use neighborhood schools and other facilities, such as community centers, as the pivot point for collocating medical and mental health services along with other social services.

We should also seek to build back with an integrated school system that looks more holistically at constructing neighborhood-based schools, with preschool, elementary, middle, and high school capacity – smaller schools with smaller classroom sizes. Colleges and universities can be part of this effort by being intentionally integrated within neighborhoods. As an example, secondary education can be linked with university and business research and biotechnology resources.

B. Look for opportunities to improve the coordination of social service delivery through the collocation of services, data portability, and other means.

Recipients of social services frequently participate in multiple programs that address different challenges and risk factors. Reinventing Seattle's network of social service agencies may create an opportunity to strengthen the connections among programs, with the goal of providing more effective and efficient services for those with multiple needs.

C. Establish a holistic approach to restoring the healthcare system.

Healthcare needs are best addressed through a community health strategy. Rebuilding our healthcare system may create an opportunity to develop an integrated system that aligns with community composition and needs. One such opportunity would be to reduce the concentration of medical facilities concentrated on First Hill in Seattle and accelerate the distribution of medical clinics providing basic medical services to neighborhoods.

D. Facilitate better health outcomes and reduce disparities.

Proactively address the social determinants of health in a comprehensive manner to lead better long-term health outcomes. Integrate across sectors and establish partnerships among the healthcare, social service, education, and community development fields to address the built environment and other social determinants to improve the health of children and the community overall.

RSF 4. HOUSING

The Housing RSF is fundamental to reestablishing personal security, self-sufficiency, and the ability of individuals to focus on other basic necessities. This RSF establishes a data- and priority-based citywide Housing Strategy with connections to appropriate support services. It facilitates access to housing assistance and both interim and permanent housing solutions, by drawing on housing resources including the public and private sectors, as well as design, construction, labor, materials, logistics, inspections, and financing.

Decisions about the locations, types, and intended duration of housing solutions will impact access to jobs, infrastructure requirements, human services, and long-term land use planning, therefore coordination of housing strategies with other RSFs is vital to reaching citywide recovery goals.

Planning Assumptions

- Housing damage and recovery needs may vary considerably across the city (i.e., neighborhood by neighborhood). Single family, low density developments are likely the least vulnerable to severe damage from an earthquake.

- Under a natural disaster scenario, the inability to find desirable, affordable housing will likely be the most significant reason residents leave Seattle.

- Residential neighborhoods will need access to transportation, education, healthcare, jobs, and services to return to a fully functioning state. Recovery or establishing a new normal in housing could take 15-20 years.

- Many displaced residents will have to move multiple times before finding long-term housing. In Christchurch, New Zealand, some people had to move three or four times because of aftershocks.

- Different populations will face different challenges.

  o As of the 2010 US Census, just over 50% of Seattle's housing stock was renter-occupied. Even if many residents leave Seattle following a disaster, we will likely still have more housing demand than supply. This will increase rent costs, perhaps significantly. Typical FEMA Housing Assistance provides limited rental assistance to non-home owners therefore specific local strategies may be necessary to address the gap in resources for renters.

  o Condominium owners can face particular challenges as rebuilding investments require the approval of a specified percentage of owners, many of whom may be dispersed elsewhere in the country following a disaster.

  o About 10% of property owners currently have earthquake insurance. If the hazard is not covered by basic homeowners insurance, as is the case with an earthquake, there will be many people who lose their homes and they will be unable to purchase a new one or rebuild.

  o Individuals and families with little savings and low incomes will face great challenges finding affordable housing and weathering disruptions in income. Prior to a disaster, affordable housing for low income individuals and families is already very difficult to come by. This shortage will be exacerbated by reduced incomes, increased rents, and loss of housing stock, with more affluent renters significantly more able to secure housing.

- Mitigating the risks of climate change requires substantial changes to how we use energy. Redevelopment of large portions of our housing stock and related infrastructure would create the opportunity to significantly enhance building energy efficiency and develop community scale distributed energy and water systems.

Guiding Principles

- Try to keep communities together through initial stages of recovery: our civic and cultural society will be important throughout the rebuilding process. Some communities are based on geographic proximity (neighborhoods), and others are based on common interests or other unifying factors.

- It is very likely that housing costs will increase dramatically following a natural disaster that significantly reduces the available housing stock. A great focus must be put to monitoring and addressing this major barrier to retaining Seattle's residential population.

- Address the needs of vulnerable populations. Where resources are scarce, prioritize efforts to help those who possess fewer resources with which to help themselves.

- Housing reconstruction must be coordinated with development of infrastructure and public services.

- Enhance resilience to future disasters by redeveloping housing stock in safe locations, serviced by sustainable, distributed energy, and water systems.

- Maximize use of existing, undamaged rental stock for both temporary and long-term housing.

Exhibit 10. Development of Housing Units
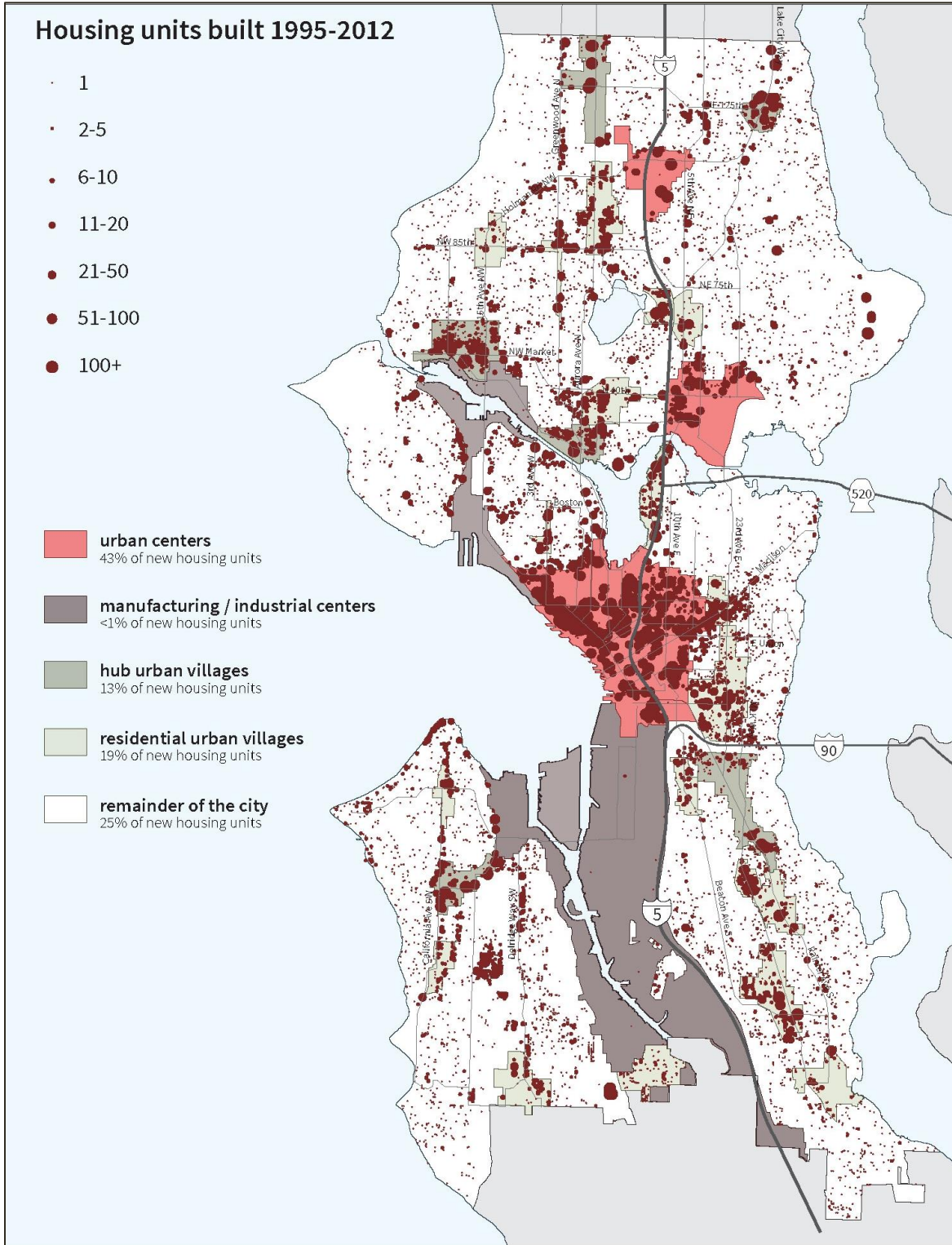
Source: Seattle 2013 Background Report, February 2014

Goals and Strategies Related to Housing

Immediate	Mid-Term	Long-Term
1. Evaluate housing needs and capabilities and establish a Housing Recovery Strategy.	**3. Enable homeowners and renters to help themselves.**	

Immediate

1.1 Establish a baseline housing inventory and maintain up-to-date information on the status of housing recovery.
1.2 Coordinate interdependencies among RSFs and establish a prioritized Housing Recovery Strategy.
1.3 Engage the region's full array of resources to provide housing following a disaster.

3.1 Facilitate the process of moving residents from temporary to interim and/or permanent housing.
3.2 Enable individuals and families to identify housing solutions for themselves.
3.3 Facilitate access to capital and construction resources to repair and rehab homes.
3.4 Help people guard against fraud and unsafe housing conditions.

2. Provide interim housing solutions based on the needs and priorities of the impacted neighborhoods.

4. Ensure the provision of affordable, safe housing for all impacted residents.

2.1 Provide flexibility and resources to help residents remain in their homes if they are deemed safe enough.
2.2 Explore the use of a range of creative options to provide interim housing.

4.1 Address rental affordability by bridging the federal disaster assistance gap for renters through local programs and assistance.
4.2 Regulate and facilitate the rebuilding of the City's housing stock.
4.3 If necessary, use incentives to encourage private development, particularly of multi-family housing in line with the City's Comprehensive Plan.
4.4 Consider developing public and/or private low- and moderate-income housing.

Housing-Related Questions to Ask and Answer

- *What is the post-disaster residential population of Seattle? The need for housing may change dramatically following a disaster, with the potential for substantial populations to leave the city, seeking jobs and more stable lives elsewhere.*

- *How has the disaster affected access to housing differently across the city? How has the disaster impacted housing affordability? Consider:*

  o *Geographies.*

  o *Renters and home owners.*

  o *Single family and multi-family dwellers.*

  o *Varying household sizes and housing unit features.*

  o *People at different economic levels.*

- *What can be done to limit extreme increases in housing prices that may drive residents from Seattle? How can technical assistance, policy levers, and other means best be brought to bear to maintain housing affordability for as many current residents as possible?*

- *In addition to the physical building, what other elements are necessary for people to have a "home"? Consider utility service, transportation access, schools and social services, and other factors.*

- *What decisions need to be made rapidly to address critical short-term needs? What decisions will benefit from more consideration, evaluation, or community engagement?*

Recovery Goals and Strategies

1. Evaluate housing needs and capabilities and establish a Housing Recovery Strategy.

Begin housing recovery by establishing an ambitious and realistic citywide housing strategy to prioritize the best use of limited resources, create additional resources, and activate new solutions. A baseline housing needs assessment will determine the extent of post-disaster impact and chart a realistic path to recovery. Coordination with related RSFs and engagement with both public and private sector actors will be key to reaching desired outcomes citywide.

1.1. Establish a baseline housing inventory and maintain up-to-date information on the status of housing recovery.

Baseline housing inventory and impact assessment should help determine the extent of disaster impacts to housing and help to identify key objectives for recovery. It will be critical to maintain a current understanding of both the physical state of housing stock and the economics of the housing market. As noted in the Planning Assumptions, a reduction in available housing stock will cause a spike in housing costs. The inability to find affordable housing may be the single greatest contributor to residents leaving Seattle following a disaster. Monitoring, modeling, and rapid policy intervention.

1.1.1. Collect **Essential Elements of Information** on housing needs. Coordinate with the **Recovery Office**, **RSF-1**, and **ESF 6** to gather information on housing status from utility providers, neighborhood organizations, inspectors, and other response partners

- Leverage Seattle DCI's Rental Registration and Inspection Ordinance (RRIO) to inform this inventory and assessment.

1.1.2. Coordinate with **RSF-1** to collect information from residents about their needs, housing status, and ongoing activities related to housing within their neighborhoods.

1.1.3. Continue to monitor and model housing costs following a disaster, using this information to inform actions in Strategy.

1.1.4. Use the information above to quantify the level of impact and expedite the Presidential Disaster Declaration required to deploy HUD recovery resources (see **Appendix 3**).

> **Essential Elements of Information on Housing**
>
> - Total residential population by housing status (unaffected, damaged, destroyed)
> - Supply and demand for housing by location, type (e.g., single or multi-family home, number bedrooms, etc.), affordability, and recovery status.
> - Status of neighborhood services and infrastructure.

Pre-Disaster Preparations

1.1.a. Evaluate current housing stock and associated risk exposure by mapping and modeling the vulnerability of Seattle's existing housing, considering location, age, construction type, and other risk factors. Use this to inform pre-disaster planning activities advanced under **RSF-7** and to anticipate disaster impacts to Seattle's housing stock.

1.1.b. Prepare housing survey tools in advance of a disaster.

- Develop a housing status survey to collect information from residents and neighborhood organizations. Survey and other instruments can be administered through or in coordination with **RSF 1**.

- Establish relationships, including data sharing agreements or MOUs, with utility providers, community-based organizations, and private sector actors to facilitate baseline housing inventory gathering and information sharing.

1.2. Coordinate interdependencies among RSFs and establish a prioritized Housing Recovery Strategy.

1.2.1. Coordinate with other RSFs regarding:

- Community engagement and two-way communication to determine resident needs (**RSF 1**).
- Targeted needs for volunteer efforts and donated goods (**RSF 1**).
- The availability of health and human services, including status of schools (**RSF 3**).
- Priorities and schedules for transportation and infrastructure repair by neighborhood (**RSF 5**).
- Readiness/suitability (safety, zoning) for rebuilding and reinvestment (**RSF 7** and **RSF 2**).
- Presence or need for passive and active recreation facilities (**RSF 6** and **RSF 7**).
- Availability and location of support or connected services/resources (jobs, schools, transportation, childcare).

1.2.2. Based on prioritized needs and resources, and in coordination with other RSFS per above, establish a Housing Recovery Strategy to guide a phased approach.

1.3. Engage the region's full array of resources to provide housing following a disaster.

1.3.1. Engage regional partners to encourage information and resource sharing. Collaborate to address needs related to the supply of housing, materials, labor, and other resources.

- Work with government finance and grant experts to explore funding options (rules, limits, opportunities).
- Work with housing developers and trade associations to mobilize labor for reconstruction and rehabilitation activities.
- Work with large employers to facilitate provision of housing and related needs for their employee (**RSF 2**).
- Work with manufacturing and wholesale trade organizations to provide equipment and materials for recovery and rebuilding. Communicate needs and business opportunities via **RSF 2**, Economic Recovery.
- Work with community-based and volunteer organizations such as Habitat for Humanity (**RSF 1**).

1.3.2. Communicate gaps in funding and other resources to the Community Recovery Task Force. Prioritize funding or resource requests, desired policy changes, or new authorizations.

Pre-Disaster Preparations

1.3.a. Engage the network of regional housing partners in continued recovery planning on the topics listed in **Strategy 1.3.1**.

1.3.b. Develop pre-approved standard housing plans that can be quickly permitted. These units should be energy and water efficient and meet climate action plans.

2. Provide interim housing solutions based on the needs and priorities of the impacted neighborhoods.

Many residents will be housed in short-term structures during the disaster response phase with support from ESF 6 Mass Care, Housing, and Human Services. RSF-4 should focus on enabling residents to move to interim and permanent housing solutions through rehabilitated/reconstructed properties, access to new resources, or through the creative development of temporary settlements. Strive to enable existing communities and neighborhoods to stay together.

2.1. Provide flexibility and resources to help residents remain in their homes if they are deemed safe enough.

2.1.1. Communicate with residents who are or can shelter-in-place safely about potential structural hazards, available inspection resources, and repair programs (**Joint Information System**).

2.1.2. Expedite inspections and permitting (**RSF 7**).

2.1.3. Leverage government programs (FEMA, USACE) and community partners (businesses, volunteers, trade associations, insurance adjustors) to provide inspections and small repairs (**RSF 7**).

2.1.4. Prioritize providing mortgage and debt counseling to residents facing post-disaster financial challenges.
   - Leverage qualified community partners and volunteers to provide this service.

2.1.5. Work with banking industry to suspend foreclosures. Consider ways to enhance existing FHA post-disaster foreclosure moratoria or provide short-term mortgage revisions while homeowners wait for disaster assistance.

> **Federal Funding for Housing Repairs and Rebuilding**
>
> - FEMA makes its determination for individual assistance based on the severity of the damage and the amount of uninsured losses. For a city like Seattle, that will be significant.
> - Roofing and emergency repair programs are funded by FEMA and administered by the US Army Corps of Engineers. Seattle may undertake its own program and seek funds reimbursement.
>
> Additional information on federal disaster aid programs may be found in **Appendix 3**.

2.1.6. Consider supportive policy (e.g., property tax incentives) to landlords to prevent evictions and help renters remain in their homes.

2.1.7. Support existing shelters, group homes, affordable housing providers, and other supportive housing facilities (e.g., homes for the elderly) to ensure that they are operational and able to serve their existing populations. Leverage state and federal social service funding where available.

Pre-Disaster Preparations

2.1.a. Coordinate with government agencies and community partners to identify resources to carry out inspections and small repairs. Existing programs include American Red Cross Emergency Housing Repair

and FEMA/USACE Temporary Roofing and Emergency Repair programs, as well as the Office of Housing's non-emergency Home Repair Loan Program.

2.1.b. Promote actions renters, homeowners and landlords can take related to building safety and mitigating hazards, such as seismic retrofitting, to minimize damages.

- Consider supporting state legislation requiring a real estate disclosure of natural hazard risks indicating whether property falls in earthquake fault zones, potential liquefaction areas, and whether older homes (constructed before 1990) are fastened to their foundations.

- Include a voluntary inspection program whereby city inspectors assist in determining the structural risk to existing homes

- Encourage homeowners to retrofit their homes. Offer subsidies and consider offering zoning incentives (e.g., allowing greater development of accessory dwelling units) to incentivize homeowners.

- Include earthquake resiliency of rental units in rental unit inspection program that is being designed (it would require Council action to include earthquake resiliency in the Rental Registration and Inspection Ordinance).

2.2. Explore the use of a range of creative options to provide interim housing.

2.2.1. Options may include:

- Modular/pre-fab homes that are pre-built elsewhere and assembled on-site.
- Rehabilitation/retrofit of government owned property.
- Rehabilitation/retrofit of other units (e.g., bank owned properties).
- Dormitories, school sites, or institutions.
- Temporary structures such as trailers or mobile homes, shipping containers, yurts, or "living building" options.

> *Critical Questions to Address*
>
> - *Do we want to house populations in FEMA trailers or other large-scale temporary housing?*
> - *If so, where? How can this be done as effectively as possible?*

Pre-Disaster Preparations

2.2.a. Explore options for interim housing, including those produced locally and those developed by the FEMA joint Housing Solution Group (e.g., Alternative Housing Pilot Program).

3. Enable homeowners and renters to help themselves.

As much as possible, resources should be directed toward enabling residents to find their own solutions. Two-way communication between residents and recovery teams is necessary to understand housing needs and limitations faced in by those seeking to permanently resettle. RSF 4 should collect and distribute this information to support coordination among City agencies, other public recovery efforts, and private actors. These strategies support both residents who are able to remain in their homes and residents who will need to seek new interim and long-term housing solutions. Financing and public safety issues related to housing will also need to be addressed.

3.1. Facilitate the process of moving residents from temporary to interim and/or permanent housing.

3.1.1. Communicate with displaced residents regularly and specifically regarding short-term housing solutions and progress to permanent housing (**Joint Information System, RSF 1**).

- Provide printed and electronic housing resource guides that describe how to access short- or medium-term housing, how to transition to long-term housing, how to access grants and financing, etc. Target materials toward both homeowners and renters.
- Understand resident locational needs and preferences regarding proximity to work, schools, and social support.

3.1.2. Provide targeted outreach to homeless, transitional, and immigrant communities. Coordinate with and support City and not-for-profit organizations already working with these populations (see **RSF 3**).

3.1.3. Help people with pets or service/companion animals find appropriate housing.

3.1.4. Address the complementary needs for furniture and other household items (e.g., linens, kitchen equipment, sanitation supplies). Work with local businesses to supply common household goods to residents.

Pre-Disaster Preparations

3.1.a. Coordinate with **RSF 1** about communications strategies and preparing materials related to known sources of housing assistance

3.1.b. Pre-identify areas likely to be suitable for short- and long-term housing development based on predicted hazards and current uses (e.g., large structures, government-owned properties, etc.).

3.2. Enable individuals and families to identify housing solutions for themselves.

3.2.1. Promote the use of HousingSearchNW.org to allow people to search for or advertise rentals.

- Ensure housing listings identify important residential needs such as accessibility features, Section 8 or income qualified rentals, senior housing, pet allowances, and multi-lingual management.

3.2.2. Provide information to residents about other peer-to-peer networks that can be used to advertise and find housing (e.g., Airbnb, Craigslist, etc.).

Pre-Disaster Preparations

3.2.a.   Coordinate with state and local government agencies and
HousingSearchNW administrators to identify the modifications and
support required to manage significant increase in site users post-
disaster.

3.3.   Facilitate access to capital and construction resources to repair and rehab homes.

3.3.1.   Provide information and checklists via all possible channels, with
hands on assistance offered in **Assistance Centers**, libraries,
Neighborhood Service Centers, etc. (**Joint Information System, RSF 7**)

- Provide assistance for homeowners navigating permitting, smart
design, and construction, perhaps leveraging volunteer architects
(e.g., housing design resource centers used after Superstorm
Sandy) (**RSF 7**).

- Help homeowners file insurance claims. Leverage state resources and enlist the help of the Office of
the Insurance Commissioner, as needed, with the help of the Office of Intergovernmental Relations.

- Help homeowners apply for SBA Loans and FEMA disaster assistance.

- Include information on **assistance for non-citizens** about
opportunities for assistance.

3.3.2.   Address potential financial roadblocks to reconstruction.

- Work with insurance agencies to improve the timeliness of
insurance adjustor inspections and enable the licensing of
inspection surge staff.

- Work with local and national finance institutions to expedite the
release of insurance checks, provide loan modifications to
severely damaged or destroyed properties, and finance/subsidize
home repair loans for qualified borrowers.

- Leverage funding available for energy efficiency improvements to support reconstruction and
investments in homes, leveraging the Office of Housing's HomeWise Program and other options.

3.3.3.   Implement expedited plan review and permitting processes (**RSF 7**).

3.3.4.   Consider options for developing and implementing a post-disaster financing program implemented by
community partners. Prioritize streamlining the application process (perhaps using existing insurance
claim documentation), assessing damage, and distributing funds directly to homeowners. Assist Recovery
Office in assessing local funding resources and financing methods.

Pre-Disaster Preparations

3.3.a.   Develop guides/toolkits for homeowners and housing associations detailing available programs, eligibility
requirements, and steps to take to receive assistance. Leverage FEMA and HUD materials on accessing
financing. Encourage condominium owners to establish mechanisms for coordinating decisions so
recovery is expedited.

> *HousingSearchNW.org*
>
> State, county, and local governments support this free rental housing resource site. It serves as a comprehensive resource for finding short- and long-term housing, and includes information about physical and language accessibility, pets, and alternative living facilities. The State of New Jersey used a similar tool following Hurricane Sandy.

> **Assistance for Non-citizens**
>
> FEMA offers assistance for households containing children or other members who are US citizens, regardless of the immigration status of all residents. Locally-funded programs do not have to take immigration status into account.

3.3.b. Engage local and national finance organizations (banks, credit unions, CDFIs, etc.) toward developing flexible financing instruments for homeowners post-disaster.

3.3.c. Engage with insurance companies to understand how post-disaster homeowner claims can be expedited.

3.4. Help people guard against fraud and unsafe housing conditions.

3.4.1. Provide clear guidance to contractors and trade organizations about building codes and permit requirements (coordinate with **RSF 7**).

3.4.2. Encourage homeowners to employ licensed contractors. Establish a public education campaign to raise homeowners' awareness of reconstruction scams and unscrupulous practices by contractors who may prey on people desperate to repair their homes (coordinate with **Joint Information System**).

3.4.3. Support the efforts of the Better Business Bureau and other consumer protection efforts.

3.4.4. Identify rehabilitated rental housing that has passed post-disaster inspections to help expedite occupancy and ensure that renters are informed of the housing safety.

Pre-Disaster Preparations

3.4.a. Maintain a publicly available list of certified contractors.

3.4.b. Promote up-to-date understanding of seismic building standards, permitting processes (**RSF 7**), and preparation for rapid post-disaster activity among contractors and trade organizations.

3.4.c. Seek changes to state condo laws requiring disaster recovery plans for buildings.

3.4.d. Coordinate with the City's existing rental inspection program.

4. Ensure the provision of affordable, safe housing for all impacted residents.

*Some neighborhoods and communities will suffer significant housing loss. Identify the needs of those areas/communities and work with land use (**RSF 7**), infrastructure (**RSF 5**), and planning staff (**Recovery Office, OPCD**) to prioritize appropriate residential redevelopment for those communities. Federal disaster programs provide varying levels of support and flexibility for use in rebuilding. Options to subsidize private or public residential development vary by program and should be explored based on the types of housing required.*

4.1. Address rental affordability by bridging the federal disaster assistance gap for renters through local programs and assistance.

4.1.1. Provide relief and flexibility to landlords to diminish the need to increase rents and evictions. Consider tools such as:

- Relaxed requirements, allowing renters to remain in units so long as they meet minimum safety requirements
- Tax breaks or subsidies for building and unit improvements or to maintain rental affordability.

4.1.2. Provide aid for renters. Carefully explore the pros and cons of various options, including:

- Using **HUD Disaster Funding** for rental assistance.
- Requesting an expansion or modification of the use of Section 8 housing vouchers (HUD). This strategy would have to be approached carefully: if income limits are relaxed, more households to qualify for supported housing and the most vulnerable families with the lowest income will face increased competition for limited affordable housing.
- Increasing rent subsidies available for qualified individuals and families. Leverage local philanthropy and businesses to raise these funds as public funding will not be sufficient.
- Instituting a **rent cap** on increases, to be phased out over a defined time period.

4.2. Regulate and facilitate the rebuilding of the City's housing stock.

4.2.1. Coordinate with **RSF 7** regarding land use and rebuilding objectives identified within **Goals 1, 2, and 3**.

4.2.2. Proactively increase capacity to monitor and regulate reconstruction of the City's housing stock. This may require substantial increases in some disaster scenarios.

4.2.3. Work to increase the supply of rentable units.

- Invest in short- and medium-term rental housing.
- Expedite and encourage development of replacement multi-family housing.

4.2.4. Provide clear guidance for property owners, developers, and contractors regarding building codes and permitting processes. In particular, ensure that the impacts of any code changes are communicated early and clearly (**RSF 7**).

4.2.5. Leverage multiple funding sources including FEMA Disaster Assistance, HUD Community Development Block Grants, and volunteered resources (**Recovery Office**)**.**

- Incentivize rebuilding that incorporates energy efficiency, the reuse of materials (including disaster debris), and other smart design features.

4.2.6. Support and prioritize development projects for neighborhoods with major housing stock losses according to the citywide Housing Recovery Strategy established in **Goal 1**.

- Promote redevelopment sites and funding sources, coordinating with **RSF 7** to identify areas suitable for residential development.

HUD Disaster Funds

HUD disaster funds can be used to subsidize individual home rehabilitation and reconstruction directly. The City can decide to distribute these funds directly to:

- Homeowners who can then hire contractors to rehabilitate their properties
- Approved contractors who are rehabbing properties in the city.

Anecdotal evidence from Hurricane Sandy seems to favor the first option, whereas the second option may be ideal for a short-term rapid repair program.

Rent Caps

If landlords receive public dollars for disaster repairs, with appropriate City legislation, rents may be capped until the resources are paid back or forgiven over a period of ten years. Several programs administered through the Office of Housing establish a similar precedent.

- Coordinate housing development with infrastructure recovery (**RSF 5**) to expedite permitting and construction processes (e.g., ROW permits handled through SDOT, sanitation connections through SPU, etc.).

4.3. If necessary, use incentives to encourage private development, particularly of multi-family housing in line with the City's Comprehensive Plan.

4.3.1. Incentivize multi-family housing in areas designated for that use in the Comprehensive Plan. Prioritize:

- Larger units for families.
- Units that support multi-generational households and aging-in-place for seniors.
- Development affordable to multiple income levels.
- Housing downtown and in other transit connected locations.
- Workforce housing in proximity to major job centers.

> *Critical Questions to Address*
>
> - *Does the City want to incentivize private development to rebuild the housing stock?*
> - *Does the City want to invest in public residential development (Strategy 4.4.)?*

4.3.2. Consider incentives for housing that utilizes distributed, net zero capable energy and water systems.

4.3.3. Explore the use of tax breaks, zoning allowances, or other development regulation to incentivize developers to build in areas requiring significant rebuilding.

4.4. Consider developing public and/or private low- and moderate-income housing.

4.4.1. Utilize Seattle Housing Levy, HUD Community Development Block Grant Disaster and/or HOME Investment Partnerships Assistance (administered by Seattle's Office of Housing) to ensure provision of adequate and affordable housing.

- This funding is specifically targeted to communities that are predominantly low- and moderate-income and can be used to fill the gaps in housing recovery not met by other sources.
- This funding can also be used to match other federal funding sources.

4.4.2. Consider options for using HUD emergency assistance to develop public housing (via Seattle Housing Authority).

- Consider residential development in concert with the construction of other public facilities (e.g., community centers, libraries, etc.). Engage SHA and other affordable housing providers (see Office of Housing for list) in determining needs and options.

Pre-Disaster Preparations

4.4.a. Stay up to date with FEMA and HUD financing programs. Toolkits covering baseline needs assessment and numerous housing programs (for homeowners, rentals, buyouts, affordable housing, etc.) are maintained by HUD.

4.4.b. Pre-identify programs and priorities for post-disaster development proposals to expedite applying and receiving funding following the event.

Potential Reinventions Related to Housing

A. Where opportunities exist, seek to advance the Comprehensive Plan focus on urban villages with strong linkages to transportation and infrastructure (RSF 7).

- Identify target densities and urban forms, creating a post-disaster land use plan that leverages the urban village concept to accommodate population and provide affordable, transit-linked housing options.

- Take advantage of areas that have significant damage to redevelop those areas into walkable communities with services located near where people live and work. Align schools to meet this model.

B. Provide for diverse housing needs across the city, including the varying levels of affordability, household sizes, and need for services.

- Encouraging the building of homes and neighborhoods that contribute to the health of the family and minimize environmental hazards.

RSF 5. INFRASTRUCTURE SYSTEMS

Infrastructure is a cornerstone to community recovery, consisting of many of the underlying structures, facilities, and services that support the operation of society. This RSF presents a coordinated and strategic approach to restoring services in the short- and medium-term, while rebuilding infrastructure systems in a thoughtful way over the long-term in ways that will make Seattle more resilient, more efficient, and higher functioning. Infrastructure systems include the sectors and systems related to roads and bridges, public transportation, rail, gas, electric, communications, potable water, and wastewater. "Restoration" refers to resuming the delivery of services in the short- or medium term, while "rebuilding" describes the much longer-term process of reconstructing damaged capital infrastructure.

Planning Assumptions

- In the event of a major earthquake or other natural disaster, significant disruptions are expected to occur to every type of infrastructure due to interdependent relationships that link the functioning of one infrastructure to others. There may be parts of the city that become un-buildable due to disaster damage, such as liquefaction, landslides, or hazardous materials incident. These will be identified by RSF 7.

- While the restoration of some services (particularly communications and electric power) may occur relatively quickly in most areas of the city, the full rebuilding of infrastructure damaged in a natural disaster may take many years.

- Debris, whether building materials, vegetative debris or other type, can greatly impede mobility and service restoration if not removed and managed as quickly as possible. A large-scale debris removal operation will start during the disaster response phase and continue into recovery.

- Cross-sector/jurisdiction coordination will be required for rebuilding many infrastructures, particularly those sharing underground utility corridors. Building relationships and establishing trust for information sharing prior to the disaster will be vital.

- There will be many challenges and barriers to rapid recovery: funding; property rights; scale and availability of construction resources; permitting process; environmental concerns; and the need for labor and trades.

- For some infrastructure systems and fixed facilities, pre-planning around specific sites is possible. We will draw on such plans in developing specific post-disaster plans.

- Rebuilding aging infrastructure creates an opportunity to redesign the structure and function of systems to be more resilient and more efficient. This is supported by FEMA Public Assistance Alternative Procedures, which allow for funding for the mitigation of future hazards rather than requiring that damaged infrastructure be rebuilt to their pre-disaster state.

Guiding Principles

- The City's **Mitigation Plan** should be used to guide rebuilding efforts with resiliency in mind.

- Seattle City Light and Seattle Public Utilities and other infrastructure providers serve a much larger population that extends beyond City of Seattle Residents. The City will consider this broader service base when working to address infrastructure recovery.

- Infrastructure repair must be coordinated to address interdependencies, avoid tearing up the same stretches of roadway multiple times, and make most efficient use of limited resources.

- Prioritization of reconstruction projects will be needed due to a lack of funding, labor, and materials. Prioritization may be based on:

  o Priorities held by infrastructure holders, which typically include the criticality of lifeline infrastructure and serving areas with greater population.

  o Interdependencies with other infrastructures.

  o Estimated stability of the sub-area (**RSF 7 Buildings and Land Use**).

  o City and neighborhood plans.

  o Other factors as determined.

- We will prioritize the rapid restoration of lifeline infrastructures and critical services required to support basic needs (communications, IT, electrical power, natural gas and water/sewer, transportation). We should take more time to redesign and rebuild whole infrastructure systems, with careful planning and investment that allows modernization of whole systems and individual components, coordination with city and neighborhood planning, and engagement of the community and stakeholders. The need to both "go fast" (rapid restoration) and "go slow" (careful planning and modernization of whole systems) will require a phased approach to infrastructure recovery.

- We need to build back Seattle's infrastructure with the future in mind, including impacts of climate change, growth, technological advances, disasters, etc. Building resilience into the design and construction of new infrastructure will help mitigate future impacts from disasters. See specific ideas in **Strategy 0,** below.

Goals and Strategies Related to Infrastructure Systems Recovery

Immediate	Mid-Term	Long-Term

1. Evaluate infrastructure needs and capabilities and establish a shared Infrastructure Recovery Strategy.

1.1 Gather and regularly share infrastructure status information.
1.2 Facilitate coordination among public and private infrastructure holders.
1.3 Establish a coordinated Infrastructure Recovery Strategy.

2. Restore mobility and critical services without losing the opportunity to implement creative solutions.

2.1 Remove and dispose of debris.
2.2 Prioritize short-term roadway repairs and provide a wide range of transportation choices to increase mobility until long-term recovery can be addressed.
2.4 Restore communications, power, water, and waste water per the plans of individual infrastructure holders and according to the overarching priorities established in the Infrastructure Recovery Plan.

3. Use post-disaster rebuilding as an opportunity to rethink, redesign, and update Seattle's infrastructure.

3.1. Employ a bold, forward thinking approach to rethinking about the integration of individual infrastructure systems in a single, well-planned integrated system.
3.2. Modernize infrastructure systems during rebuilding.

Infrastructure-Related Questions to Ask and Answer

The following questions should be monitored over the course of recovery as a way of maintaining focus on some of the challenging aspects of recovery that cannot be addressed in advance or answered in an absolute, definitive fashion.

- *How has the disaster affected infrastructure systems across the City? How has the disaster impacted coordination with impacted systems?*

- *How can we facilitate strong collaboration and coordination across RSFs and among various infrastructure holders?*

- *What decision-making structure can we put in place to be sure we are continually updating our priorities among different infrastructure sectors as new issues arise?*

- *How can we facilitate rapid restoration of services while using rebuilding opportunities to improve our infrastructure systems, making them more resilient, more efficient, and more aligned with future growth?*

- *What are our primary priorities in rebuilding? How has this shifted and how can we be sure to take into account new and emerging housing and population trends?*

- *What health implications do we need to consider first when approaching water and wastewater infrastructure rebuilding needs? How can we coordinate those needs and balance them with building back in a more efficient way?*

- *How can we build back better? How can we integrate infrastructures? How can we update and establish the infrastructure of the future, facilitating the movement of goods and people and providing energy and communications in a sustainable, low-carbon manner? How do we rebuild to be more resilient, considering climate change?*

Recovery Goals and Strategies

1. Evaluate infrastructure needs and capabilities and establish a shared Infrastructure Recovery Strategy.

Through establishing forums for communication and the establishment of an Infrastructure Recovery Strategy, the intention of this Goal is to coordinate infrastructure recovery efforts across sectors to support community recovery and to minimize disruptions caused by infrastructure repair efforts. Public and private infrastructure holders have established restoration and reconstruction priorities, typically focused first on critical facilities and then on areas with the greatest population. Within this context and without hampering independent recovery efforts by individual infrastructure holders, there may be reasons to prioritize the restoration of services or rebuilding of infrastructures for certain geographic areas or targeted customers or customer types. Given complex interdependencies, the Infrastructure Recovery Plan must be developed in coordination across infrastructure holders and with the input of other RSFs:

- *RSF 7 is responsible for assessing the stability of the land base and establishing a Post-Disaster Land Use Recovery Plan to focus efforts in a phased and supportable recovery.*

- *RSF 2 may identify priority businesses, business sectors, or business districts that are deemed essential to community recovery.*

- *RSF 3 addresses the recovery of health, social services, and education services, and may identify priorities that depend on the restoration of utilities and mobility.*

- *RSF 4's focus on recovery of Seattle's housing stock and may identify recovery priorities for Seattle's residential communities.*

Communication and coordination across these RSFs will seek to align and phase potential recovery priorities so they are achievable and supportable given complex underlying interdependencies.

In addition to coordinating across RSFs and among infrastructure holders, the Infrastructure Recovery Strategy must balance the rapid restoration of essential services with the need to build back better and stronger, which will take significant planning, resource investment, and time.

Finally, on a very practical level, the coordination furthered through this Goal must establish schedules that integrate repairs of multiple infrastructure systems. If roadways and neighborhoods are to be disrupted for the repair of one infrastructure system, other systems should be repaired at the same time. This coordination will lead to greater resource efficiency and minimize community disruption from repair efforts.

1.1. Gather and regularly share infrastructure status information.

1.1.1. Gather and analyze impact and **Essential Elements of Information** from individual infrastructure holders and from the engagement efforts of other RSFs.

1.1.2. Consolidate this information into a comprehensive and accessible summary to promote a shared situational awareness and inform the coordinated, cross-sector Infrastructure Recovery Strategy to be developed in **Strategy 1.2.**

1.1.3. Coordinate with **RSF 1** and the **Joint Information System** to communicate infrastructure status and realistic recovery timelines to residents and business or property owners.

Pre-Disaster Preparations

1.1.a. Establish information sharing agreements with public and private utility holders that extend into the recovery phase.

1.1.b. Build agreements, processes, and technological supports to ensure that infrastructure-related GIS systems and City staff can work coordinate and share information easily.

> **Essential Elements of Information** related to Infrastructure Systems
>
> - Operational capacity of infrastructure systems.
>
> - Demand for services based on residential, business, and other activity in sub-geographies across the city.
>
> - Timelines, equipment, and staffing needed for repairs.

1.2.	**Facilitate coordination among public and private infrastructure holders.**

1.2.1. Coordinate with other RSFs to understand:

- Areas of the city that are stable and suitable for redevelopment and reinvestment (**RSF 7**).
- Community engagement activities and neighborhood planning being conducted (**RSF 1)**.
- Access and utility needs for designated **Assistance Centers** (**RSF 1**).
- Business needs (**RSF 2**).
- Infrastructure needs for critical health and social services facilities, including schools, hospitals, and other providers (**RSF 3**).
- Access and utilities for currently inhabited and planned housing capacity (**RSF 4**).

1.2.2. Serve as a communications hub to coordinate the recovery efforts of public and private infrastructure holders by facilitating coordinated planning across infrastructures:

- Convene workshops with public and private sector infrastructure holders to facilitate communication and coordinated restoration and rebuilding efforts across sectors. Use these sessions to develop and implement the **Infrastructure Recovery Strategy** discussed below.
- Establish an advisory and coordinating **Transportation Coordination Working Group** comprised of traditional and non-traditional transportation providers (see **Strategy 2.2.4**). Meet regularly to plan, coordinate, and share information. Be sure to address the transportation needs of vulnerable populations, including low-income, elderly, and disabled individuals.
- Establish a utility **"Right Of Way" Working Group** to share restoration plans, critical customers/facilities lists and collectively think through utility corridors, identifying priority corridors and manage recovery in coordinated way with transportation, water, wastewater power, pipelines, etc.

1.3.   Establish a coordinated Infrastructure Recovery Strategy.

1.3.1.   Leverage decision support tools and modeling to evaluate recovery options and priorities.

1.3.2.   Leverage the shared situational awareness and understanding of the interdependencies among infrastructures developed under Strategies 1.1. and 1.2. to align infrastructure restoration and rebuilding priorities in a shared **Infrastructure Recovery Strategy** that addresses restoration of services in the short- and medium-term and long-term rebuilding in the long-term. See **Goal 0** and the **Potential Reinventions** section below related to long-term recovery.

- Coordinate with private infrastructure holders to integrate their plans and priorities in the overarching Strategy.
- Take guidance from existing plans for future investment in infrastructure, as well as infrastructure-specific recovery plans.
- Work with SDOT to utilize the Transportation Annex of the Puget Sound Catastrophic Disaster Coordination Plan to facilitate a coordinated regional recovery in alignment with existing City, regional, and State transportation plans.
- Engage affected First Nations to address sacred and historical sites and artifacts that may be affected by long-term recovery activities. As damage assessments are completed in the months and years following a large-scale natural disaster, consult First Nations before invasive and potentially destructive repair and reconstruction begins.

1.3.3.   Communicate infrastructure restoration and rebuilding schedules, with other Recovery Support Functions, adapting priorities and timelines in an iterative fashion as changing circumstances require.

Pre-Disaster Preparations

The following list of pre-disaster preparations is notably long and complex due to the many infrastructure sectors that are addressed individually, as well as some overarching considerations that bridge multiple infrastructures.

1.3.a.   Inventory, evaluate, and strengthen existing infrastructure-specific plans and priorities.

- Inventory current recovery related plans and arrange regular cross-sector coordination/briefings and exercises of these plans.
- Support those areas that don't have plans and work to help organizations develop plans where needed.
- Conduct infrastructure-specific recovery tabletop exercises to evaluate gaps and planning needs.
- Regularly inventory and review related infrastructure exercise findings that have occurred previously in the Puget Sound region.

1.3.b.   Strengthen the capacity for cross-sector and cross-jurisdiction coordination based on a strong understanding of regional recovery interdependencies and formal and informal connections among individuals, organizations, and sectors.

- Inventory mutual aid agreements among lifeline infrastructures and develop model agreements to address gaps.
- Identify critical facilities and nodes and critical relationships between infrastructures. Identify potential points of failure and cascading impacts based on varying scenarios.

- Plan regular cross-sector exercises and activities to allow stakeholders to identify cross-sector/cross-infrastructure interdependencies and potential cascading failures impacting the region.

- Develop a "Recovery Yellow Pages" with a list of resources and contacts for each infrastructure or service.

- Continue to create opportunities to strengthen individual and organizational relationships, including those in the private sector. Use planning and exercises to engage a wide range of people and organizations across sectors.

- Engage suppliers of wire, pipes, building materials, heavy equipment, water, portable toilets, and other resources that will be needed during recovery.

- Develop a plan to provide basic services and shelter for recovery workers required to restore infrastructure systems across the city.

1.3.c. Incorporate infrastructure resilience planning in City and regional policy making and planning.

- Incorporate disaster mitigation and recovery in the City's Comprehensive Plan. Begin policy discussions about rebuilding infrastructure differently in hazard-prone areas, such as liquefaction zones, slide areas, and flood prone locations. This relates to work to be advanced by **RSF 7**.

- Examine possible policy changes by the Puget Sound Regional Council to help build resilience into regional transportation planning.

- Make hardening and retrofitting infrastructures to withstand potential disasters such as earthquakes, including a key criteria in setting Capital Improvement Program priorities.

1.3.d. Inventory potential infrastructure funding mechanisms and identify funding gaps.

- Analyze what we would anticipate receiving from the federal government if a catastrophic incident occurred and identify gaps.

- Pre-identify or prepare potential projects for immediate requests for federal assistance following a disaster. Coordinate this effort with specific recommendations from the **Mitigation Plan**.

- Consider developing a fund to address recovery needs before a disaster happens. Explore the feasibility, for example, of a Catastrophic Risk Insurance Fund, with cities partnering to help offset costs.

- Explore opportunities for public-private Improvement Districts for funding.

- Examine the use of insurance, grants, and other funding sources used in other disasters. Further research the restrictions and implications of using federal funding.

1.3.e. Advance transportation infrastructure recovery planning.

- Review City modal plans for all transportation infrastructure.

- Coordinate with WSDOT and the Puget Sound Regional Council to discuss recovery efforts.

- Work with Sound Transit, King County Metro, King County Transportation, WSDOT, and other transportation agencies to examine coordination strategies.

- Coordinate with US Coast Guard's Marine Transportation System Recovery Unit (MTSRU) in workshops and exercises.

- Develop a strategy to use waterways for the transport of people and goods and to utilize maritime transportation assets to assist during the recovery efforts. For example, explore options for the

short sea shipping of goods and people and using waterborne transportation for debris removal or receiving large infrastructure components for recovery.

- Coordinate with the Port of Seattle on restoration of priority business lines and identify potential assets and capacity to assist during the recovery.

- Evaluate potential transportation disruptions associated with damage to the Hiram M. Chittenden Locks between Lake Washington and Puget Sound and develop potential solutions.

- Work to streamline permitting processes for right of way disruptions, developing a centralized process.

1.3.f.   Pre-identify critical facilities and staging areas for recovery efforts.

- Review existing utility restoration and recovery plans.

- Identify critical facilities and ensure they are addressed by restoration and recovery plans across all infrastructures.

- Identify temporary staging areas for supplies and equipment required for recovery efforts.

1.3.g.   Advance communications infrastructure recovery planning.

- Work with telecommunications and IT companies to pre-identify critical assets and equipment for the region. Preplan communications infrastructure repair recovery so it can occur in tandem with recovery of transportation corridors.

- Evaluate and, where appropriate, implement policy recommendations from IT and communications providers to improve resilience and speed recovery, including such issues as improved backup power at cell towers and added cell tower capacity.

- Pre-establish agreements with cellular providers to provide temporary assets across the city to allow communications at strategic locations.

- Coordinate with the US Postal Service on a plan for distributing mail and develop plan to include other recovery specific information and updates for citizens.

- Coordinate with IT providers to ensure capacity for the extra load that may be encountered following a disaster as people work from home.

1.3.h.   Advance energy infrastructure recovery planning.

- Examine energy assurance plans and work with Seattle City Light and other energy providers to identify priority customers.

- Communicate with priority customers and other infrastructure owners to work to develop a regional energy restoration plan. Include other critical energy providers such as Puget Sound Energy, Bonneville Power Administration, Seattle Steam, refineries, fuel storage, and pipelines.

- Examine fuel distribution and supply for critical services providers during recovery effort.

- Explore the feasibility of building a spur off the Olympic Pipeline ingress north of the ship canal to avoid liquefaction soils in south downtown, provide redundant fuel service to the city, and to serve Fishermen's Terminal with fuel.

1.3.i.   Advance water and wastewater infrastructure recovery planning.

- Develop a plan for the temporary distribution of potable water across the city while water infrastructure is repaired or rebuilt.

- Establish a mapping program that tracks the operational status of water and wastewater conveyance lines. Seattle has a variety of pipes depending on when they were installed. Pre-identify types of wastewater conveyance pipelines now in use and appropriate alternatives, installing earthquake resistant pipe when repairs are made.

- Work with the Port to develop a strategy to receive large pipe components during rebuilding of the wastewater system.

- Evaluate alternatives to and establish policy direction for the potential bypassing wastewater into local water bodies at locations that will be the least detrimental to the environment. Coordinate with King County Wastewater to predetermine emergency bypass locations.

- Develop a plan for providing portable or compostable toilets for residents and businesses, perhaps using kits. Coordinate the pickup of waste from portable units. Convene public health, solid waste, and wastewater stakeholders to establish strategies and roles for addressing this issue. Establish a post-disaster code that allows portable and compostable toilets to meet sanitation requirements to allow building occupancy (coordinate with **RSF 7**).

2. Restore mobility and critical services without losing the opportunity to implement creative solutions.

Immediately following a disaster, emphasis will be placed on restoring infrastructure services and mobility, allowing people to return to their homes, resume work, and move about the community as needed. This short-term priority must be balanced with the longer-term objective of taking advantage of rebuilding opportunities to ensure Seattle's infrastructure is more resilient, efficient, and carefully planned in an integrated way across systems.

2.1. Remove and dispose of debris.

Initial debris removal efforts to clear the Right of Ways for life safety purposes during response will continue into recovery in a large-scale event. Debris removal during recovery is important to improving mobility, protecting property and the environment as well as restoring economic activity. Debris removal also provides a visual cue to the community that progress is being made in recovery.

2.1.1. Continue or stand up multi-department and agency debris management operations per the City's Debris Management Plan. Ensure debris removal is coordinated with transportation and other infrastructure systems, such as the port.

2.1.2. Coordinate with **RSF 7** to verify the most appropriate debris staging locations for the event based on the pre-identified list of sites.

2.2. Prioritize short-term roadway repairs and provide a wide range of transportation choices to increase mobility until long-term recovery can be addressed.

Natural disasters may significantly impact Seattle's transportation infrastructure. While it may be important to limit mobility during the response period, short-term recovery may be aided by a variety of creative means to increase the ability of residents and businesses to move about the region.

2.2.1. Use **Appendices D and E** of the *Regional Transportation Recovery Plan* to prioritize and implement the restoration of the roadway portion of the transportation system.

2.2.2. Consider alternative uses for existing transportation infrastructure.

- Enable pedestrian or bicycle transportation on roadways or trails if vehicular travel is limited due to street damage.
- Coordinate with Seattle Parks to use urban trails for limited vehicular transportation until roads are repaired.

2.2.3. If road capacity is constrained, limit access by private vehicles and expand existing public transit options.

- Develop new transit routes or services to better serve prioritized areas, adding capacity where needed.
- Consider expanding bike share opportunities if vehicular mobility is constrained.

2.2.4. Engage the transportation **assets of private companies**, including those that specialize in transportation and those with vehicles that may be put to temporary use.

- Explore options to integrate private transit operators (Amazon, Google, Microsoft, and others) into Metro and Sound Transit planning and capacity.
- Explore using boat owners, organizations, and businesses, including the Victoria Clipper, Ride the Ducks, Argosy Cruises, and others to facilitate cross water transport of people and goods.
- Engage Amtrak, Clipper Vacations, Greyhound, Kenmore Air, Ride the Ducks of Seattle, and others in transporting people and goods to and from Seattle, requesting reduced fares and increased capacity on high-demand routes, including to and from neighboring communities in the region.

> ### *Transportation by Water*
>
> Seattle's waterways may be an effective way to move people and goods around the City if land-based transportation infrastructure is significantly disrupted. One vision, to be explored, is for a mosquito fleet with docks around Lake Washington, Lake Union and the Ship Canal, Elliott Bay, and north and south along the Puget Sound.
>
> Water-based transportation may be the best option to get pilots dockworkers to work navigating and unloading freight vessels. This would need to be planned with USCG and ILWU and coordinated with **RSF 2**.

2.2.5. Consider limiting access to affected areas by personal vehicles if greater access is needed by the shared resources listed above.

Pre-Disaster Preparations

2.2.a. Engage in pre-disaster exploratory conversations with stakeholder groups mentioned in **Strategy 2.2.4**.

2.3. Restore communications, power, water, and waste water per the plans of individual infrastructure holders and according to the overarching priorities established in the Infrastructure Recovery Plan.

Pre-Disaster Preparations

2.3.a. Develop a rapid restoration tool kit for critical infrastructures as a temporary strategy until long-term recovery can be addressed. Use the **Regional Transportation Prioritization Recovery Toolkit** as a starting point and work to tailor the tool for critical infrastructure. See item **0**, above.

Using Private Transportation Assets

RCW Title 38, Chapter 38.52 Emergency Management, has provisions that may help facilitate use of private resources following a disaster declaration, including those outlined in:

- 38.52.080 Outside aid — Rights and liabilities;
- 38.52.110 Use of existing services and facilities — Impressment of citizenry; and
- 38.52.390 Contracts or work on cost basis for emergency management activities.

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3. Use post-disaster rebuilding as an opportunity to rethink, redesign, and update Seattle's infrastructure.

A catastrophic natural disaster will bring countless challenges but also provides an opportunity to update and modernize many aspects of the city's infrastructure. Potential re-invention of many of the city's transportation, energy and water systems could be built to improve resilience, decrease reliance on carbon-based energy sources, enhance the economy and improve citizens' quality of life in the future.

3.1. Employ a bold, forward thinking approach to rethinking about the integration of individual infrastructure systems in a single, well-planned integrated system.

3.1.1. If the magnitude of destruction allows, take time to convene the best thinkers from across the globe and redesign Seattle's infrastructure from the ground up, integrating visionary systems thinking in long-term rebuilding aspects of the **Infrastructure Recovery Plan**. See the **Potential Reinventions** section on page 117 for additional consideration of this potential opportunity.

3.2. Modernize individual infrastructure systems during rebuilding.

3.2.1. Modernize Seattle's transportation network.
- Make most improvements in the existing transportation system as opportunities arise. Examples include:
  - Retrofit and modernize bridges.
  - Examine load thresholds and update where appropriate.
  - Separate pedestrians and bikes from traffic.
  - Establish grade separation for trains and freight traffic.

- o Reestablish rights of way where they have been encroached upon and acquire where appropriate.
- Seize opportunities to develop a coordinated multi-modal transportation system that integrates auto, transit, bicycle, and pedestrian modes for the safe, efficient, and sustainable movement of people and goods.

3.2.2. Modernize Seattle's water and wastewater systems.

- Expand the implementation of low impact development techniques and technologies.
- Where possible attempt to separate the combined sewer and surface water system with separate underground infrastructure for storm water.
- Relocate portions of the sewer conveyance pipelines and pumping facilities to avoid future sea rise impacts.
- Where feasible use alternative energy to power electrical pumps to move water and wastewater.
- Identify opportunities to deploy localized water storage options.
- Seek opportunities to maximize the function of the stormwater management system; for example, take a block by block approach rather than site by site.
- Explore the possibility of installing reclaimed water lines where feasible, such as those built into the Brightwater Treatment Plant.

3.2.3. Modernize and diversify Seattle's energy systems.

- Explore the use of in-pipe turbines to generate electric energy from the water and wastewater systems.
- Develop an expanded smart grid system.
- Develop and expand district energy systems in downtown and other areas of the city, maximizing the use of low-carbon energy sources like sewer heat recovery.
- Use smart grid technology that supports two-way movement of power and distributive generation.
- Ensure our rebuilt energy systems incorporate the use of local, renewable options solar and geothermal.
- Encourage energy storage to maximize benefit from onsite renewable energy sources in building planning and codes.

3.2.4. Modernize communications and IT infrastructure.

- Add capacity and redundancy to regional communications and IT systems.
- Increase bandwidth and connectivity across the city.

Pre-Disaster Preparations

3.2.a. Implement mitigation, hardening, and increased resilience strategies in everyday infrastructure restoration planning and projects using current or new funding streams. These types of actions include:

- Incorporating technology advances.
- Undergrounding utilities.
- Pursuing additional funding whenever possible to implement mitigation, hardening, and increased resilience strategies.
- Considering future climate conditions such as changes to sea level, precipitation, and temperature when replacing critical infrastructure today so that it will function as intended in the future.

Potential Reinventions Related to Infrastructure Systems

A. Establish a multi-modal transportation network and integrated infrastructure systems.

- Align infrastructure reinvestment with desired redevelopment according to the City's Comprehensive Plan (see **RSF 7**). Coordinate and align investment in various infrastructures around areas of anticipated growth and a vision of a robust, resilient, and sustainable future.

- Use a disaster as an opportunity to rethink rather than simply rebuilding existing roadway infrastructure. Establish a technologically advanced, resilient, and low-carbon transportation system for the efficient, effective, and sustainable movement of people and goods.

- Don't be afraid to explore opportunities to reshape Seattle's transportation infrastructure in big ways, including the undergrounding or lidding of I-5 running through the city.

B. Embed low-carbon, climate resilient goals in infrastructure rebuilding and reinvestment.

- Use low-carbon materials and design for energy and water efficiency, water reuse, and on-site power generation and storage, when practicable.

- Leverage opportunities to foster low-carbon strategies across infrastructure systems, i.e. when creating a significant heat source, seek opportunities to capture that heat for energy.

- Consider future climate conditions when siting and designing infrastructure.

- Protect and enhance ecosystem services and ecosystem integrity to foster the resilience of natural systems.

- Prioritize green stormwater infrastructure as the preferred stormwater management approach.

C. Develop distributed, local-area energy and water systems to provide resiliency to neighborhood cores and improve overall resource use efficiency.

Seattle Office
of Emergency
Management

CITY OF SEATTLE CEMP – DISASTER RECOVERY FRAMEWORK
RSF 6. NATURAL AND CULTURAL RESOURCES

RSF 6. NATURAL AND CULTURAL RESOURCES

The Natural and Cultural Resources (NCR) RSF is focused on maintaining Seattle's identity by preserving its natural, historic, and cultural resources and leveraging them to facilitate personal and community recovery. The RSF looks to protect, conserve, preserve, rehabilitate, and utilize resources essential to Seattle's character, sense of place, and quality of life.

Given many competing resource needs, it will be challenging to prioritize attention to Seattle's natural and cultural resources during recovery. For a time, the City's parks and open spaces may be seen primarily as a recovery asset, used to site temporary housing, businesses, or even debris. However, recovery and a return to "normalcy" will be marked in large part by the natural and cultural assets that define Seattle now as a remarkable and vibrant community with a high quality of life. It is critical therefore that we devote the effort and resources necessary to fully recover these treasured aspects of our community.

Decision Making Framework

As with other the Recovery Support Functions addressed in this Framework, decision making related to recovering Seattle's natural and cultural resources will be made in a coordinated fashion, informing and informed by community-wide recovery priorities. The **Recovery Office** and **Community Recovery Task Force** described in **Section 2.** will facilitate communication up and down the City's decision making structure and among the many players engaged across the seven RSFs.

Planning Assumptions

- In addition to vacant lots, parks and open space may need to be repurposed temporarily to support recovery efforts.

- Damage to Seattle's parks, open spaces, and natural areas will be distributed unequally around the community. Outdoor recreation facilities may need to be repaired and reconnected. Coastal and lake waterfront recreational facilities and beaches may require repair or recovery from disaster-related pollution. Areas where barren ground has been exposed will need to be re-vegetated to prevent erosion and invasive species, and to beautify the landscape.

- Damage can occur to the environment, including fish and wildlife habitat, as the result of disaster response and repairs.

- Damage to historic resources will be distributed unevenly around the city. In some incidents and in some neighborhoods, damage may be relatively superficial, while in other events or locales, destruction could be wholesale and unrecoverable.

- Most major cultural institutions with collections in Seattle (including archives, libraries, and museums) have disaster plans with a section on salvage priorities.

Guiding Principles

- Environmental protection is an important recovery priority. Regulations and permitting processes designed to protect the environment continue to apply in a post-disaster situation and should be honored and adhered to.

- Seattle's character and identity is deeply tied to its natural and cultural resources. Full recovery of the community cannot happen until losses are healed, mourned, or, in some places, replaced.

- The amount of open space and parkland should be retained, or increased. Areas within the city that do not have sufficient open space should be considered for additional open space where possible.

- We must balance the use of parks and open spaces for active and passive recreation with the need to use parks and open spaces to stage recovery activities. Seek to restore parks and open spaces to recreation uses as quickly as possible.

- Exercise and access to the outdoors will be essential for restoring the physical and mental health of people of all ages. Care should be taken to preserve open spaces in areas across the City. Similarly, community gatherings and celebrations can be important markers of a return to normalcy. Art, music, and public gatherings can be used to acknowledge, process, and ultimately move beyond the disruption to our community caused by the disaster.

- We should rebuild parks with a focus on serving the whole community, balancing the needs and desires of specific interest groups with infrastructure that supports a broad range of activities and serves as broad range of users. Make sure parks are welcoming to all. To ensure this is the case, the City will need to ensure all cultural communities, including youth, older adults, and immigrant and refugees are able to participate effectively in the process.

- Streams and waterways and culverts providing drainage and open space will require repair and reconnection. This may create opportunities to daylight streams and waterways that have been forced into underground culverts, improving the natural environments within the city.

- Protecting fish and wildlife is not only a matter of environmental regulation, but is also a cultural value.

- Historic resources must remain intact and in context to retain their historic status and therefore cannot be reproduced or relocated. While preservation of Seattle's historic resources is important to retaining an important element of the community, significantly damaged historic districts or individual landmarks may not be able to be rehabilitated. In some cases, less damaged portions of districts may be retained while adjacent areas may be unrecoverable in a way that retains their historic character.

- Many of Seattle's historic resources are in private ownership. The City's role will be to engage owners and remind them of their responsibilities as the owners of historic resources. The City will not have direct control over the resources or sufficient resources to subsidize the repair of many historic resources.

- Historic and cultural assets, including historic buildings and sites, music, and the arts help define Seattle and are important contributors to Seattle's economy and job base. They must be a priority in recovery and can be used to strengthen and restore the vitality and prosperity of the Seattle community following a disaster.

- We must balance the retention and restoration of historic and cultural resources with the need for recovery to proceed quickly and within available funding.

- Disaster recovery can be used as an opportunity to strengthen the connection of neighborhoods with arts and natural resources.

- Seattle needs to continue to be seen as a cultural/tourism destination during recovery.

- Neighborhood stakeholders should be actively included in the planning and development phases of recovery for natural, cultural, and historical treasures and areas.

Goals and Strategies Related to Natural and Cultural Resources

Immediate	Mid-Term	Long-Term
1. Evaluate needs and capabilities of Seattle's parks and open spaces and set a phased recovery strategy.	**2. Preserve and facilitate the restoration and betterment of Seattle's natural assets.**	
1.1 Maintain an up-to-date understanding of the recovery status of the City's parks and open spaces and establish a phased recovery strategy. 1.2 Identify environmental compliance requirements and available personnel assets.	2.1 Engage in recovery actions that conserve, rehabilitate, and restore natural and environmental assets. 2.2 Rebuild in ways that improve Seattle's parks and open spaces.	
3. Evaluate damage to historic resources and set short-term priorities.	**4. Encourage the rehabilitation of damaged historic resources.**	
3.1 Assess the post-disaster condition of Seattle's historic resources and coordinate with other parties. 3.2 Take timely action to protect public safety and stabilize damaged historic resources.	4.1 Understand and augment available financial and personnel resources. 4.2 Launch a campaign to support the preservation of privately held historic resources by sharing information and resources with resource owners. 4.3 Rehabilitate City-owned resources.	
5. Evaluate the state of Seattle's arts, cultural, and community assets, identifying roles each sector can play in recovery.	**6. Connect arts, culture, and community organizations to the recovery effort and normalization process.**	
5.1 Gather and consolidate status information. 5.2 Identify resource needs and engage local, regional, national, and international supporters. 5.3 Identify roles each sector can play in supporting recovery efforts.	6.1. Use arts and culture to help the community reflect, heal, celebrate, and reenergize the economy.	

Guiding Questions for Natural and Cultural Resources

The following questions should be monitored over the course of recovery as a way of maintaining focus on some of the challenging aspects of recovery that cannot be addressed in advance or answered in an absolute, definitive fashion.

- *Ensuring parks and cultural sites are available following a disaster will encourage people to stay and give them a sense of stability. After a disaster, what natural and cultural assets and related recovery projects can be used to inspire the population of Seattle? How can this be done early, in the short- and medium-term timeframe following a disaster?*

- *How has the disaster affected how people feel about their City? How has the disaster impacted the day to day life of people?*

- *How as the disaster impacted sports and recreation, which can be very important to some youth and adults? Others may feel it is a lower recovery priority. How can we balance the need to provide access to parks and open spaces to support a healthy community during recovery with the demand for using parks and open spaces as temporary housing sites, staging grounds for debris removal, and other recovery needs?*

- *How can we protect vulnerable and valued resources, ecosystems and habitats? How can we restore damaged ecosystems and enhance environmental quality?*

- *How can we encourage tourists to continue to visit Seattle to experience its cultural and natural assets?*

- *What decisions need to happen in the short- to mid-term? What decisions can wait for more consideration, evaluation, or community engagement in the long-term?*

- *How can we use disaster recovery to advance the community's vision and desired future? Are there opportunities to expand water access, or increase neighborhood access to arts and cultural facilities?*

Recovery Goals and Strategies

1. Evaluate needs and capabilities of Seattle's parks and open spaces and set a phased recovery strategy.

Seattle's parks and open spaces may serve a variety of vital roles in disaster recovery. This Goal focuses on understanding the status of these resources and developing a thoughtful, phased plan that balances recovery logistics needs with the importance of offering passive and active recreation opportunities to post-disaster populations across the community.

1.1. Maintain an up-to-date understanding of the recovery status of the City's parks and open spaces and establish a phased recovery strategy.

1.1.1. Establish a current understanding of the status of individual parks and open space areas across the City. Map this status against recovery needs and priorities from other RSFs.

1.1.2. Establish a phased plan identifying parks and open spaces that should be targeted for use as passive or active recreation space or temporarily repurposed for recovery efforts, including the siting of housing, businesses, debris, staging equipment, or other recovery-related needs. In developing this plan:

- Be guided by current parks and land use plans.
- Seek fully representative input from residents, understanding their needs for access to active and passive recreation opportunities within their ability to travel about the city.
- Strive to provide access to active and passive recreation spaces for residents across the City. This access will be very important to support recovery of individual and community health and wellbeing.
- Strive to make any non-recreation uses temporary and reversible as participation in sport and recreation is an important aspect of community wellbeing.
- Use parks and open spaces as a location for disaster- and recovery-related art and events.

1.1.3. Identify temporary locations for athletic competitions and other ways to preserve social and economic benefits of recreational and professional sports in the community (coordinate with **RSF 2** with regard to professional sporting events).

Pre-Disaster Preparations

1.1.a. Prepare parks and open spaces for potential recovery uses.

- Pre-designate open space for specific recovery uses, including temporary housing, staging supplies or debris, or other uses. Locations should take into consideration population in the area and transportation access. Engage with the Seattle Park's Department on current plans for the temporary repurposing of parks and coordinate potential sites for recovery operations. Prepare for post-disaster use of suitable parks for temporary housing or emergency facilities by installing water wells and septic systems for future use and platting temporary structure locations.

- Consider widening and strengthening selected pedestrian trails that could be used as alternate traffic access around damaged vehicle infrastructure (RSF 5).

- Strengthen and enhance recreational docks and harbors to improve performance during a disaster and possible post-disaster use.

- Fortify known potential landslide locations and/or areas of erosion.

- Develop a process to inventory open spaces and vacant land throughout the city.

1.2. Identify environmental compliance requirements and available personnel assets.

1.2.1. Identify and seek to resolve environmental personnel gaps in number or expertise and be prepared to train volunteers.

1.2.2. Be proactive in advising and supporting other Recovery Support Functions in the implementation of environmental requirements.

2. Preserve and facilitate the restoration and betterment of Seattle's natural assets.

Without access to clean water and land, Seattle will not thrive. Protecting and recovering the natural environment is essential for healthy and functioning ecosystems to support biodiversity, community health, and economic prosperity. The community will need to prioritize air quality, land use (RSF 7), water and waterways, and waste management to ensure the community is living in a healthy environment.

2.1. Engage in recovery actions that conserve, rehabilitate, and restore natural and environmental assets.

2.1.1. Communicate the importance of adhering to environmental regulations and permitting processes to recovery workers, business and property owners, infrastructure holders, builders and construction workers, and others. Coordinate these messages with the JIS and other RSFs.

2.1.2. Ensure proper cleanup of the natural environment from contamination resulting from the disaster and take steps to avoid further damage as the result of disaster repairs.

2.1.3. Properly mitigate disaster impacts to parks and open spaces, including non-recreation, recovery logistics uses described in 1.1. .

2.1.4. Clean up rivers and waterways and reconstitute wetlands within City limits.

2.1.5. Identify damage and restore and improve Seattle's tree canopy.

2.2. Rebuild in ways that improve Seattle's parks and open spaces.

2.2.1. Increase and better utilize open space, especially in areas with identified deficits such as the Downtown corridor.

2.2.2. Consider converting disaster-prone areas to parks or open spaces (RSF 7).

2.2.3. Take advantage of opportunities to daylight streams during rebuilding.

Pre-Disaster Preparations

2.2.a. Advance the current vision and priorities for improving the City's existing parks and open space network.

3. Evaluate damage to historic resources and set short-term priorities.

Since 1970, Seattle has established eight historic districts: Ballard Avenue; Columbia City; Fort Lawton; Harvard-Belmont; International District; Pike Place Market; Pioneer Square; and the Sand Point Naval Air Station. The appearance and historical integrity of structures and public spaces within each district are regulated by a citizens board and/or the Landmarks Preservation Board in accordance with processes and criteria established by City ordinance. In addition, more than 450 individual sites, buildings, vehicles, vessels, and street clocks are designated landmarks distributed throughout the city. Each is subject to protection by city ordinance.

3.1. Assess the post-disaster condition of Seattle's historic resources and coordinate with other parties.

3.1.1. Gather information Citywide on the post-disaster condition of Seattle's historic resources.

- Request survey assistance from the Washington Department of Archeology and Historic Preservation as offered in past disasters.
- Ensure damage inspection should include staff qualified in the structural assessment of historic buildings (see **Strategy 4.1.2**).
- Review damage assessments of individual resources and aggregate this information to understand damage by neighborhood and asset type across the city.

3.1.2. Coordinate and plan for inter-dependencies among RSFs and ensure coordination with related City and partner recovery efforts.

- Coordinate rehabilitation permits and minimize right of way impacts with other agencies, including the Department of Construction and Inspections, the Seattle Department of Transportation, and public and private utilities.
- Share assessment data and short-term recovery priorities with the Recovery Office and Community Recovery Task Force to facilitate cross-RSF coordination.
- Be proactive in advising and supporting other Recovery Support Functions in the implementation of historic preservation requirements.

Pre-Disaster Preparations

3.1.a. Evaluate and mitigate risks faced by Seattle's historic resources.

- Conduct a vulnerability assessment of the City's historic and cultural assets, identifying their location and relative risk to natural disasters.
- Share inventories and maps of at-risk resources, including historic districts and landmarks with other RSFs
- Identify, prioritize, and implement mitigating measures for City-owned properties.
- Leverage zoning/building codes, historic preservation regulations, and incentives to encourage the retrofitting of privately owned historical and culturally important buildings.

3.2. Take timely action to protect public safety and stabilize damaged historic resources.

3.2.1. Protect public safety by identifying structures or areas for which access should be restricted.

3.2.2. Encourage property owners to protect and stabilize resources until they can be evaluated and rehabilitated.

- Protect resources from additional damage due to aftershocks or recovery efforts such as debris removal, staging of equipment or supplies, and the placement of temporary housing.
- Physically stabilize damaged buildings at risk of falling down.

3.2.3. Immediately following a disaster, remind private or institutional owners of historic assets of their legal obligations and notifying them that physical changes to their properties still require approval. Encourage them to not make hasty decisions or inappropriate repairs that damage the historical integrity of the building. Raise awareness of the importance of proper documentation of repairs to satisfy FEMA requirements for reimbursement.

3.2.4. Expedite administrative certificates of approval for stabilizing repairs until a permanent fix can be implemented.

4. Encourage the rehabilitation of damaged historic resources.

4.1. Understand and augment available financial and personnel resources.

4.1.1. Inventory and augment funding available for the preservation of heritage assets.

- Augment public resources by encouraging Seattle's foundations, businesses, and residents to support the retention and recovery of beloved Seattle assets. Coordinate asks of organizations and individuals not typically focused on historic preservation via **RSF 1** and the **Community Recovery Task Force**.
- Draw on the resources of state and national organizations and their constituencies devoted to historic preservation.
- Activate organizations in each city neighborhood that could lead or contribute to historical and cultural resources recovery.

4.1.2. Identify and seek to resolve historic preservation personnel gaps in number or expertise.

- Ensure the city's network of historic landmark volunteers and engineers are being used during recovery.
- Engage Historic Seattle, the Washington Trust for Historic Preservation, the National Trust for Historic Preservation, the American Planning Association, American Institute of Architects, and other groups to bring in structural engineers and other contract resources from outside the region if necessary.
- Leverage the expertise and resources of past association and board members.

Pre-Disaster Preparations

4.1.a. Convene cultural organizations and philanthropy around recovery issues.

- Discuss protection of historical and cultural assets and structures and how disasters might impact them.
- Establish which organizations could lead historical and cultural resources recovery.
- Create a database of personnel and resources that can support assessment and restoration of historic and cultural resources.

4.2. Launch a campaign to support the preservation of privately held historic resources by sharing information and resources with resource owners.

4.2.1. Convene related parties at the neighborhood level in an energetic campaign to preserve and restore historic resources. Charge staff of the Historic Preservation Program with proactively engaging resource owners by going door to door in landmark districts and contacting owners of registered landmarks. Convening appropriate stakeholders, including:

- Historic resource owners, encouraging supportive individuals to lead and engage their peers.
- Neighborhood-based chambers, associations, and groups, as well as neighborhood and community leaders.
- Staff of the Office of Planning and Community Development, Office of Economic Development, and Office of Housing.
- Volunteers and professionals involved in historic preservation.

4.2.2. Inform private owners of historic buildings of the options and resources available to them. Make this information available via **Assistance Centers** (**RSF 1**), the web, and other venues.

- Minimize the change of improper repairs that damage the historic integrity of buildings, by reminding historic resource owners of their legal obligations. Encourage timely action by outlining a suggested timeline for steps a private owner should take in addressing damaged historic properties.
- Promote incentives and resources available to owners of historic resources.
- Raise awareness of building contractors and other providers with expertise and experience working with historic structures.
- Share ideas about adaptive reuse and other strategies to support the restoration of damaged historic resources.

4.3. Rehabilitate City-owned resources.

4.3.1. Protect the historic integrity of City-owned resources, rehabilitating or adaptively reusing them to the fullest extent resources allow.

4.3.2. Prioritize restoration of at least one high-profile Seattle icon (such as the Space Needle, which is privately owned, or the Aquarium, Seattle Center Armory, or Volunteer Park and Seattle Asian Art Museum, which are publically owned) to symbolize Seattle's recovery.

5. Evaluate the state of Seattle's arts, cultural, and community assets, identifying roles each sector can play in recovery.

Seattle's arts, cultural, and community assets, including its libraries, archives, and museums, can play important roles in recovery. The physical spaces of libraries and museums may be of practical use as community gathering places and should be considered as potential sites for Assistance Centers. Organizations within these disciplines may also serve to document the disaster and the support the recovery of the community by providing creative outlets and distractions from the daily challenges of post-disaster life.

5.1. Gather and consolidate status information.

5.1.1. Gather status information on the full range of Seattle's arts, cultural, and community resources, including:

- Seattle Public Libraries.
- Museums, art galleries.
- Performing arts venues.

5.1.2. Review damage assessments of individual resources and aggregate this information to understand damage by neighborhood and sector type across the city.

5.1.3. Share this assessment information with other RSFs and the Community Recovery Task Force.

5.2. Identify resource needs and engage local, regional, national, and international supporters.

5.2.1. Coordinate with **RSF 1** to leverage supporters of Seattle arts and cultural organizations, including:

- Large local donors and endowments.
- National donors and endowments.

5.3. Identify roles each sector can play in supporting recovery efforts.

5.3.1. Engage libraries staff to assist the general public in locating information and mobilizing and distributing information.

5.3.2. Make best use of libraries and museums' physical spaces.

- Prioritize the reopening of libraries, which can serve as critical information and internet access hubs, as well as comfortable places for disaster victims.
- Take advantage of the large public spaces afforded by museums.

5.3.3. Request large organizations in each sector to communicate recovery needs and requests to their peer organizations.

Pre-Disaster Preparations

5.3.a. Engage local arts and cultural programs and organizations in discussing their role in disaster recovery.

- Identify organizations that could play a leadership role in representing the needs of the community and coordinating productive recovery efforts.

- Encourage arts and cultural organizations to plan for continuity of operations, preservation of valuable items or resources, and recovery of normal operations.

6. Connect arts, culture, and community organizations to the recovery effort and normalization process.

Best practices during recovery include showcasing arts and culture in the community. Connecting arts and culture to the community is an essential part of keeping people in the community after the event as well as assisting with the healing process after a disaster. Arts and culture are also an important piece of the economy in Seattle. It will be important for the Seattle Office of Arts and Culture to be engaged in this recovery process along with the Seattle Arts Commission.

6.1. Use arts and culture to help the community reflect, heal, celebrate, and reenergize the economy.

6.1.1. Identify ways that sectors or individual organizations can support recovery by focusing on their key strengths and mission. For example, there may be ways to:

- Engage grassroots arts and cultural programs in community healing, engagement, and recovery.
- Engage youth in recording the disaster and recovery process through school curriculum, before and afterschool programming, and community-based arts programs.
- Charge libraries, archives, and museums with documenting the disaster and recovery, encouraging them to actively involve residents in the process.
- Leverage existing mobile programming such as library bookmobiles, to bring arts and culture to neighborhoods and community gatherings.
- Co-locate arts and cultural programming shops that offer daily goods or basic services, bringing these resources directly to residents.
- Reactivate school-based arts and cultural programming as quickly as possible, giving students a creative way to express or distract themselves from the impacts of the disaster (**RSF 3**).
- Activate abandoned structures and vacant shop windows for visual displays.
- Work with RSF 7 to identify appropriate vacant lots and other outdoor sites to locate creative community projects and create gathering spots.

> **Activating Abandoned Structures and Vacant Shop Windows**
>
> Storefront Seattle activates empty storefronts, underutilized urban spaces, and blank windows by placing art installations and creative pop-up projects in these spaces. This stimulates vitality, light, and neighborhood engagement in otherwise overlooked areas of our streetscapes. Christchurch's Gap Filler initiative demonstrates the importance of this work in a post-disaster setting. The program temporarily activates vacant sites with creative projects, supporting recovery by fostering a more interesting and healthy built environment.

6.1.2. Encourage neighborhood business districts to leverage their cultural resources and support culturally-based businesses and tourism (**RSF 2**).

Potential Reinventions Related to Natural and Cultural Resources

A. **Use disaster recovery as a way to enhance Seattle's parks and open spaces.**

- Identify opportunities to convert lands no longer appropriate for current uses to add to Seattle's inventory of parks and open spaces, with corresponding resources to remediate and manage the property.

- Increase equity of access to parks and open spaces throughout the City, addressing areas with identified deficits including the Downtown corridor.

> **Christchurch Approach**
>
> The aim of the Natural Environment Recovery Program is to restore healthy and functioning ecosystems to support biodiversity and economic growth, and enable safe opportunities for outdoor recreation and social and cultural activities.

- Reconnect lakes and waterways with the natural streams and creeks that run through the City to Puget Sound, daylighting waterways when rebuilding allows.

- Make optimal public use of Seattle's waterfronts, increasing visual and physical connections.

B. **Use rebuilding as an opportunity to enrich Seattle's character and cultural assets' potential including new Seattle icons that draw on the symbolic power of the disaster itself.**

RSF 7. BUILDINGS AND LAND USE PLANNING

Seattle's land use planning and development policies, plans, and regulations govern the ongoing development of the City and will have a profound impact on the placement and rebuilding of residential, commercial, public, and other uses before and after a disaster. The use of these tools requires careful coordination and balance of the rights of private landowners and the vision of the Seattle community. The development of Seattle's Comprehensive Plan sets much of the guiding policy. More detailed plans and regulations such as the Land Use Code and transportation and housing plans, must align with the comprehensive plan.

The pre-disaster preparations and post-disaster recovery actions outlined below seek to integrate disaster resiliency and recovery planning into those existing processes and mechanisms, not to circumvent or supplant them. This RSF will function as the primary liaison with the Office of Planning and Community Development (OPCD) and will coordinate recovery planning needs of other RSFs with existing city planning processes. The building and land use planning guidance provided in this RSF should align with and support the goals and priorities in other RSFs related to neighborhoods (**RSF 1**), housing (**RSF 4**), economic/business recovery (**RSF 2**), and infrastructure (**RSF 5**).

Decision Making Framework

As with other subject matters addressed in the Recovery Support Functions section of this Framework, decision making related to recovery land use planning will be made in a coordinated fashion, informing and informed by community-wide recovery priorities. The Recovery Office and Community Recovery Task Force described in **Section 2.** will facilitate communication up and down the City's decision making structure and among the many players engaged across the seven RSFs.

As noted in **Strategy 1.3.** , below, **RSF 7** will play a central role in determining where and when recovery should occur based on the stability of the land base and the availability of key support services. The latter must be determined in coordination with other RSFs. It will be extremely detrimental to engage in the rapid restoration of infrastructure, facilities, and services in geographies that are subject to additional disruption or that cannot be supported with essential infrastructure or services. To avoid this misstep, prior to setting recovery priorities and plans, **RSFs 1 through 6** should coordinate with **RSF 7** to ensure recovery is phased in a supportable way across the community.

Planning Assumptions

- Post-disaster land use planning will be informed by:
  - Changes in the size and locations of critical and hazardous areas and extent of effects on land forms.
  - Remapping of environmentally critical (slopes, flood, etc.) and shoreline areas.
  - The extent and location of damaged and lost building stock.
  - Net loss of buildable lands by land use category (e.g., Industrial, Commercial, Residential, Parks and Open Space) and by types of businesses to determine services that may no longer be available.
  - The functional status of infrastructure and utilities, which will contribute significantly to where residential and commercial uses may be resumed.
- Post-disaster land use planning will affect the ability to rebuild neighborhoods; transportation, utilities, and other infrastructure; and schools, hospitals, and other facilities.
- Land use changes can have significant effects, including financial and social effects, on existing residents and businesses and should be carefully considered. Some existing land use policy may require significant
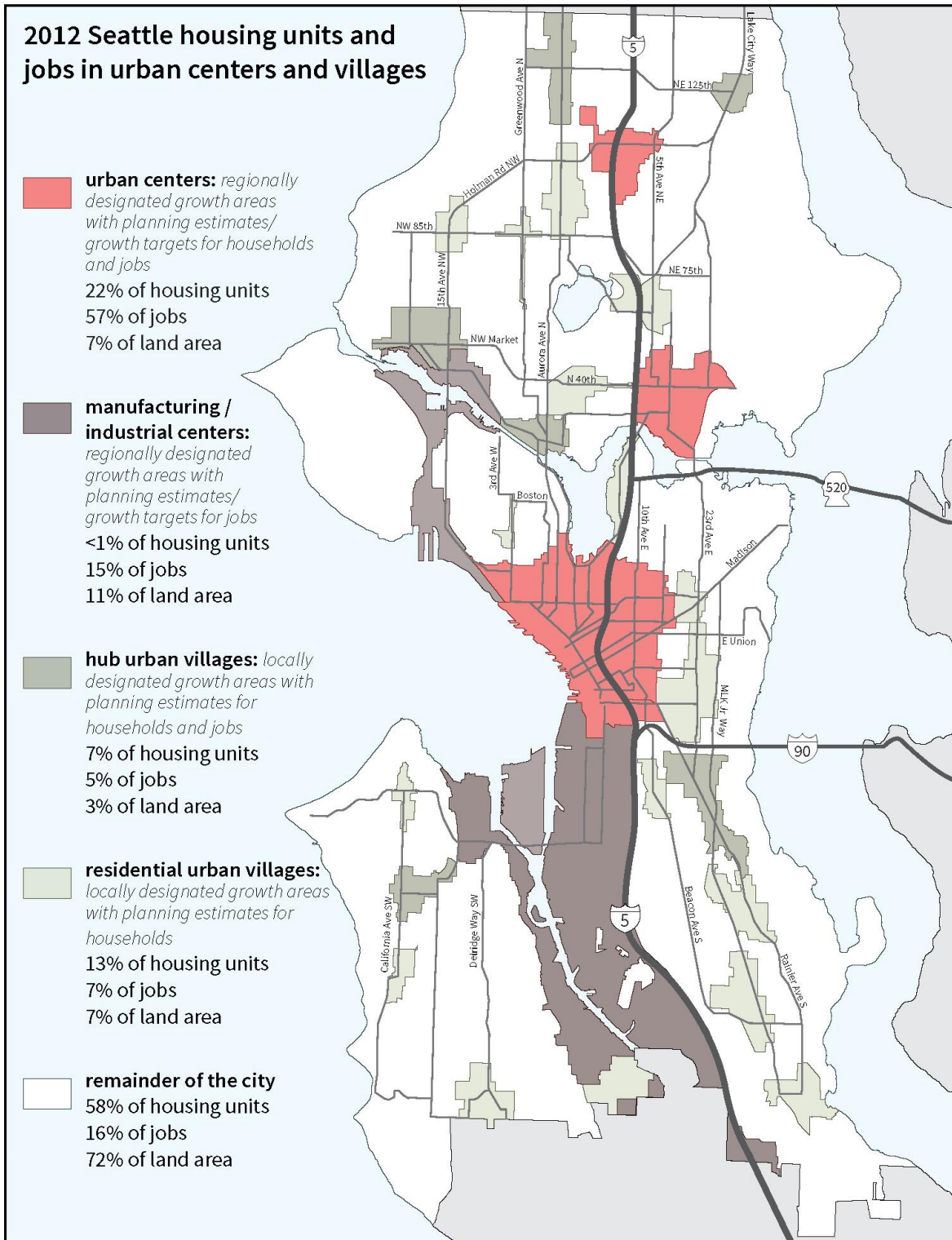
change—either in the short-term or permanently—to support recovery efforts. Land use changes that effect individual residents and businesses roll up to effect the overall community health and ability to recover

- Rebuilding in environmentally sensitive and high hazard areas such as geologic and flood hazard zones should be carefully considered to reduce future social, financial, and environmental costs. Historic or cultural significance should be factored into these decisions, as should potential impacts of future climate conditions.

- Temporary locations for business and residences have the potential to become permanent; therefore, the range of factors considered for permanent siting should also be considered when selecting temporary sites.

- Hazards that may affect the post-disaster use or "buildability" of land include: earthquake aftershocks undermining the stability of liquefiable soils; landslides affecting steep slopes; sea-level rise and wave action impacting waterfront property; and polluted areas resulting from hazardous materials spills.

- Some existing land will be seriously degraded as the result of earthquake damage, including industrial and Port of Seattle facilities. Historic neighborhoods and unreinforced masonry buildings will also be especially vulnerable.

Guiding Principles

- Recovery land use planning should align with the major directions expressed in the Comprehensive Plan: the core values—Community, Environmental Stewardship, Economic Opportunity and Security, and Social Equity—urban village strategy, and neighborhood planning. These planning concepts should serve as the starting point of long-term recovery planning.

- Build resilience into the design and construction of new or rehabilitated buildings to mitigate future impacts from disasters.

Exhibit 11. Seattle Urban Villages

Source: Seattle 2013 Background Report, February 2014

Goals and Strategies Related to Buildings and Land Use Planning

Immediate	Mid-Term	Long-Term
1. Evaluate disaster impacts and identify priority rebuilding and land use concerns.	**2. Encourage rebuilding in ways that are resilient, sustainable, and in alignment with existing plans and visions.**	
	2.1 Rebuild in safer locations that are in line with long-term planning goals.	
	2.2 Incorporate structural and non-structural hazard mitigation into the rebuilding process.	
	2.3 Encourage public and private development that emphasizes resiliency, energy efficiency, and social equity.	
	3. Encourage and facilitate rebuilding.	
1.1 Assist in mapping and assessing disaster impacts in a rapid and rigorous post-disaster assessment of impacts to buildings and lands.	3.1 Provide support and guidance to residents throughout the rebuilding process.	
1.2 Establish a phased Post-Disaster Land Use Recovery Strategy.	3.2 Establish programs to help with repairs to expedite basic building operations.	
	3.3 Ensure rebuilding permits can be processed in an expedited manner.	
1.3 Engage other RSFs to identify their planning needs and priorities related to land use.	**4. Engage community members to proactively contribute to planning decision making.**	
	4.1 Support neighborhood participation in decision processes.	
	4.2 Target investments strategically and equitably to support citywide recovery.	

Buildings and Land Use Planning Related Questions to Ask and Answer

- *To what degree does the City's Comprehensive Plan remain relevant to the post-disaster environment? General visions, goals, and strategies should carry forward, but location-specific strategies may need to be amended, such as geographic priorities for investments or locations of new community development.*

- *What building uses need to be re-established quickly in order to facilitate citywide recovery?*

- *Which locations are suitable for rapid recovery or short term recovery functions? Which locations can be developed more intentionally and gradually through a longer planning process with more community involvement?*

Lessons Learned from Christchurch, New Zealand

The 2010 earthquake and continuing aftershocks in Christchurch provide useful lessons for disaster recovery planning in Seattle. Our cities share similar vulnerabilities due to the proximity of major fault lines, the presence of soft soils and fill material in parts of the city, and the location and importance of historic structures. Several challenges in recovery were identified through the Christchurch experience, which provide useful lessons for Seattle's long-term recovery planning.

- Accurately and rapidly assess the stability of subareas within the city and their suitability for recovery. Determining the extent and stability of liquefaction zones is limited by the proliferation of large and small aftershocks.

- Balance the existing use rights of property owners with recovery plans which may significantly re-vision development in heavily-impacted parts of the city.

- Post-disaster resources may not match interest in "building back green". Limitations in construction resources and technical expertise required to construct custom green infrastructure.

- Communicate timely and accurate information with the public.

Recovery Goals and Strategies

1. Evaluate disaster impacts and identify priority rebuilding and land use concerns.

1.1. Assist in mapping and assessing disaster impacts in a rapid and rigorous post-disaster assessment of impacts to buildings and lands.

Office of Planning and Community Development (OPCD) and Seattle Department of Construction and Inspections (Seattle DCI) assessment activities should already address identification of liquefaction zones, other environmental hazards (e.g., unstable slopes, contaminated areas), and severity of damage to buildings and infrastructure. RSF 7 actions should bring forward local knowledge obtained through the recovery process (e.g., neighborhood centers, see RSF 1) and help direct data collection toward the needs and priorities of the recovery process.

1.1.1. Establish a **Science Committee** if appropriate as a way to assemble experts to evaluate and make recommendations regarding the future stability of buildings and the underlying land base and to make strategies for wise reinvestment and reuse. See page 22.

1.1.2. Use **Assistance Centers** to verify disaster impacts and collect information from residents and businesses about neighborhood damage, challenges, and needs. Gather **Essential Elements of Information** related to buildings and land use.

1.1.3. Evaluate how the disaster impacted different building forms to inform potential changes to the building code.

1.1.4. Based on the best available science, model the future stability of the land base to inform the feasibility and timeline for reinvestment. Update the identification of hazardous areas (e.g., liquefaction zones) where development might be restricted, informed by an assessment of how the disaster impacted different areas of the city. This should also assess areas at risk of flooding currently and those anticipated to be at increasing risk due to changing climate conditions. Conduct ongoing monitoring as necessary, as conditions change or new issues emerge.

Essential Elements of Information related to Building and Land Use

- Net loss of buildable lands by land use category (e.g., Industrial, Commercial, Residential, Parks and Open Space) based on an understanding of:
  - 'Hardest-hit' areas where pre-existing land uses may no longer be relevant.
  - Areas with minimal or no damage which may be able to resume pre-disaster functioning quickly and possibly absorb uses dislocated by the disaster.
  - Areas suitable for long-term debris collection, beginning with those identified in the City's Debris Management Plan.
- The extent and location of damaged and lost building stock.

1.1.5. Compile and distribute information for use by other RSF, City, business, and community actors.

- Share assessment data and maps with all stakeholders to facilitate development of citywide comprehensive and land use plans.

Pre-Disaster Preparations

1.1.a. Advance the technical and contractual foundation needed for a rapid and sufficiently rigorous post-disaster assessment of the stability and suitability for rebuilding of sites and sub-geographies across affected areas.

- Work with state and local government agencies (e.g., OPCD, Department of Ecology, utilities) to identify and maintain relevant land use, environmental, projected sea level rise, and seismic hazard datasets.

- Engage other RSFs as well as City staff (OPCD, SDOT, other agencies) in planning for post-disaster data gathering and analysis efforts.

- Identify private sector contractors and service providers (e.g., satellite imagery providers) to expedite data gathering. Consider establishing contracts or MOUs to expedite post-disaster action.

- Engage state and local government agencies in developing analyses and criteria for post-disaster land use designation. Consider the application of existing critical area, shoreline management, and other designation criteria to a post-disaster environment.

1.1.b. Continue to study post-disaster assessment and planning experiences from other municipalities to understand and apply lessons learned.

1.2. Establish a phased Post-Disaster Land Use Recovery Strategy.

Intensive coordination is necessary to phase and prioritize investment in infrastructure, housing, educational services, parks, etc. with other RSFs and the Recovery Office. Ongoing land use recovery planning should ensure well-timed and effective public investments in rebuilding. Existing plans should be used as a guide to recovery planning goals, but will need to be modified to account for the needs of the population, new hazards and opportunities.

1.2.1. Based on the assessment conducted in **Strategy 1.1.** , establish a **Recovery Land Use Strategy** that:

- Limits or prohibits redevelopment in areas of the City that are unsafe or unstable.
- Expedites redevelopment and reinvestment in designated priority areas based on clear criteria that includes:
  - o Immediate safety and stability, including an assurance that the reconstruction of infrastructure and buildings will not be disrupted or destroyed by ongoing shifts in the land due to the disaster.

> *Critical Questions for Discussion*
>
> - *How should priority areas for development be identified?*
> - *What social, economic, and environmental factors should the recovery team consider in designating targets?*

o   Long-term suitability accounting for future hazard risks.

o   The ability to restore transportation access and infrastructure systems to the area.

o   The ability to restore health and social services to the area.

o   Social equity.

o   Demand for rebuilding by residents and businesses ready to return.

o   Potential to spur further development or support citywide goals.

This strategy must be developed in coordination with other RSFs and the Recovery Office to align land use planning with the rebuilding of transportation and other infrastructure, as well as schools, hospitals, and other facilities. These interdependencies and phased recovery priorities for specific sub-geographies should be reflected in post-disaster recovery plans.

Pre-Disaster Preparations

1.2.a.   Maintain up-to-date information on the distribution of land uses.

1.2.b.   Pre-identify potential suitable locations for post-disaster facilities and land uses, including:

- **Assistance Centers** (RSF 1).

- Temporary and long-term residential use.

- Commercial and industrial/manufacturing uses. This is particularly important given the vulnerability of Seattle's Duwamish industrial area, a significant contributor to the regional economy, to liquefaction and earthquake damage.

- Debris management and recovery infrastructure.

- Emergency facilities.

1.3.   Engage other RSFs to identify their planning needs and priorities related to land use.

RSF 7 will play a central role in determining where and when recovery should occur based on the stability of the land base and the availability of key support services. The latter must be determined in coordination with other RSFs. It will be extremely detrimental to engage in the rapid restoration of infrastructure, facilities, and services in geographies that are subject to additional disruption or that cannot be supported with essential infrastructure or services. To avoid this misstep, prior to setting recovery priorities and plans, RSFs 1 through 6 should coordinate with RSF 7 to ensure recovery is phased in a supportable way across the community.

2. Encourage rebuilding in ways that are resilient, sustainable, and in alignment with existing plans and visions.

Seattle's Comprehensive Plan centers on four values: Community, Environmental Stewardship, Economic Opportunity and Security, and Social Equity. These values should be reflected in both recovery planning and the ongoing rebuilding process. Recovery land use planning is also an opportunity to "build back better" and in ways that are more equitable, environmentally appropriate, and resilient to future challenges. Reconstruction of the building stock offers an opportunity to protect against future disaster damage through hazard mitigation.

2.1. Rebuild in safer locations that are in line with long-term planning goals.

2.1.1. Use community feedback (**RSF 1**) to provide input to OPCD in ranking areas for future development according to hazard level, existing infrastructure services, and unmet community needs (e.g., for housing, employment, transportation).

2.1.2. Pursue opportunities to increase resiliency, efficiency, and functioning of the Seattle community by concentrating development and increasing density in areas pre-identified through the City's land use planning processes.

2.1.3. Discourage further growth in hazardous areas.

- Revise the land use code changes, including use of incentives, to encourage growth in "safer" areas and those pre-identified through the City's land use planning processes.
- Consider TDR and/or buy-out programs to retreat and relocate uses away from hazardous areas. Coordinate with Recovery Office on potential use of FEMA Disaster Assistance funds.

Pre-Disaster Preparation

2.1.a. Encourage Seattle planners to use the SHIVA (Seattle Hazard Identification and Vulnerability Analysis) as an input and consideration when conducting long-range planning through the City's Comprehensive Plan update process.

- Ensure that current functional plans seek to locate new critical facilities in safer locations.
- Engage the Seattle community in thinking about post-disaster land use options through the Comprehensive Plan update process, e.g., "If a disaster were to occur within the next twenty years…"
- Engage multiple City partners in planning for post-disaster "no-rebuild" zones and for potential "receiving" areas that could house displaced uses. Facilitate discussion about the legal, policy, community, and economic issues likely to be encountered during recovery.

2.1.b. Identify and mitigate existing critical facilities located in potentially hazardous areas. Encourage the upgrade of critical facilities/infrastructure (including key nodes in each neighborhood) to an operational instead of a life safety standard. The City's **All Hazards Mitigation Plan** can serve as a guide.

2.2. Incorporate structural and non-structural hazard mitigation into the rebuilding process.

2.2.1. Educate and incentivize private property owners to incorporate hazard mitigation into building repair and reconstruction.

2.2.2. Incorporate appropriate hazard mitigation into the repair of public buildings

Pre-Disaster Preparations

2.2.a. Continue to develop and improve the **Seattle All Hazards Mitigation Plan** to serve as a source of information and prioritization of hazard mitigation strategies post-disaster.

2.3. Encourage public and private development that emphasizes resiliency, energy efficiency, and social equity.

2.3.1. Encourage or incentivize sustainable building practices, including energy efficiency, hydrologic impact, and use of renewable materials.

- Provide information on best practices and resources for sustainable building practices highlighting the environmental impacts as well as life cycle cost savings.
- Leverage sustainable technology subsidies through EPA, State Dept. of Ecology, public utilities, etc. Consider establishing a fund for corporations to contribute to promote "building back green."
- Engage university and professional design communities in generating ideas through competitions, service learning, and community projects/events highlighting sustainable building practices.
- Integrate green and open spaces into design. Consider methods to reclaim natural areas, daylight creeks, and include large and small gardens.

2.3.2. Consider development of district energy programs in suitable neighborhoods.

- Coordinate with existing private district energy utilities on rebuilding their systems and consider establishing co-operative and/or public models.
- Redeveloped district energy systems should establish closed loop hot water systems in place of steam systems, wherever possible.
- Engage private district energy utilities and foundations to identify high density areas with significant opportunities for waste heat capture and reuse in buildings.
- Incorporate district energy utilities into infrastructure planning in their existing service areas and in other priority neighborhoods with significant waste heat sources for capture and reuse.

2.3.3. Continue to refine tools to ensure equitable redevelopment. Consider standards for alternative housing structures, community re-investment initiatives, impact and linkage fees to ensure the development of affordable housing, commercial space, and amenities for a broad range of residents, family types, and income groups.

- Consider the use of incentives and other development guidelines to promote the development of affordable commercial space to support the restoration of small businesses.

2.3.4. Proactively communicate the importance of maintaining ADA accessibility standards for all new development, stressing that building regulations apply post-disaster as they would during normal circumstances.

Pre-Disaster Preparations

2.3.a. Inventory resources and incentives to encourage green and accessible rebuilding. Engage architects and other building professionals to help generate a list of resources, people, and materials for simple, cost-effective environmental practices, including the collection, storage, and re-use of salvageable material.

2.3.b. Consider potential legislative changes to support and expand tax incentives for sustainable building.

3. Encourage and facilitate rebuilding.

3.1. Provide support and guidance to residents throughout the rebuilding process.

Post-disaster rebuilding is a complicated and expensive process, particularly for people with limited resources or who are not used to dealing with permit processes and contracting, such as homeowners, small businesses, and populations who were already vulnerable pre-disaster. Without adequate resources and guidance, many people may be unable to remain in their communities or may simply choose to walk away. Targeted support to landowners is important to encourage rebuilding which will provide the necessary economic, residential, and social services to support all residents through the process of re-establishing functional communities.

3.1.1. Assist **RSF 1** activities to decentralize assistance sites, establishing **Assistance Centers** within neighborhoods.

- Provide financial counseling and inform residents about existing programs and protective regulations.
- Assist in the filing and processing of insurance and assistance claims (**RSF 2** and **RSF 4**).

3.1.2. Provide toolkits targeted to specific communities (e.g., small businesses, homeowners) with information about inspection and permitting, available resources and financing options, and opportunities for engagement with neighborhood and citywide planning processes.

Pre-Disaster Preparations

3.1.a. Maintain and collect recovery plan documents and guidance from other organizations (FEMA, Small Business Administration, etc.). Develop accessible guides summarizing that information for multiple communities. Consider need to translate documents for multiple languages spoken in Seattle.

3.2. Establish programs to help with repairs to expedite basic building operations.

3.2.1. Coordinate with FEMA, USACE, and the American Red Cross to facilitate deployment of rapid repair programs.

3.2.2. Establish rules that allow property owners to occupy buildings that are structurally sound, but lacking in other basic needs like water, sanitation, and electricity that can be provided via temporary means, such as portable toilets, shared water supplies, generators, etc.

- Address the ability to issue permits for temporary structures (e.g. modular housing, sanitation facilities, and other temporary structures). Regulations should consider street use permits (e.g. equipment/trailer on the street), length of time, and type of structures (e.g., trailers, tents, etc.).

*P*r*e-Disaster Preparations*

3.2.a. Maintain up to date information on the requirements and processes to deploy federal rapid repair programs.

3.2.b. Prepare draft ordinances permitting temporary or incomplete structures.

3.2.c. Establish draft guidelines and inspection regulations to allow minimally damaged housing and businesses to continue to operate.

3.3. Ensure rebuilding permits can be processed in an expedited manner.

Current building review processes are likely to be overwhelmed by the demand for permitting post-disaster. In addition to expanding the capacity to issue building permits, it is important that they be prioritized to areas that are suitable to resilient development goals and that permitting requirements reflect safety, design, and resilience standards. Accurate and timely communication with the public is key to ensuring that businesses and homeowners can build back quickly and in accordance with city planning guidelines and regulations.

3.3.1. Communicate realistic and timely information about changes to permitting and building regulations to prevent ambiguity about rebuilding process.

- If it is not possible to give specific guidance for individual areas within the city, describe how Seattle DCI will respond based on certain characteristics or criteria.

3.3.2. Leverage relationships with other agencies through the Washington Intrastate Mutual Aid System, the Emergency Management Assistance Compact, and other avenues to ensure sufficient capacity to process City permits.

- Consider allowing licensed professionals from the private sector (e.g., architects, engineers) to serve as permit examiners.

3.3.3. Collaborate effectively with appropriate county, state, and federal agencies to facilitate permit processing. Leverage opportunities to streamline environmental permitting at different levels.

- Utilize the existing MOU between the Washington State Departments of Ecology, Fish and Wildlife, and Transportation, as well as the Washington State Association of County Engineers, to streamline environmental permitting.
- Create centralized process to coordinate city, county, and state permitting.
- Prioritize permit review in areas already undergoing recovery operations (e.g., ROW or other infrastructure rehabilitation) to concentrate construction activities and minimize redundant operations. Coordinate with **RSF 5** to facilitate reconstruction concurrent with infrastructure restoration.
- Prioritize permit review for projects serving vulnerable populations and for short-term recovery projects aiding those most impacted by disaster (**RSF 3, RSF 4**).

3.3.4. Consider use of planned action ordinances or other planning tools to allow for expedited development in prioritized districts.

3.3.5. Consider co-locating some permitting staff offices with **Assistance Centers** to be able to respond to local needs more quickly, particularly in rapidly re-developing areas.

Pre-Disaster Preparations

3.3.a. Develop a surge plan and establish backups to mutual aid mechanisms for additional inspection and permitting capacity.

- Pre-establish a cadre of emergency inspectors (e.g., insurance claims adjustors, trade professional organizations) and a methodology to augment them with outside volunteers that will flow into the region.
- Support continued development of state-wide volunteer program for building safety inspections.
- Ensure standing contracts are in place for private contractors with appropriate expertise.
- Prepare training materials for use in rapid training of surge/temporary recovery staff. Engage the Washington Association of Building Officials and other relevant NGOs in compiling training materials.
- Develop orientation materials for surge staff (mutual aid/volunteers/contractors) to work effectively for Seattle DCI.
- Utilize disaster planning efforts to engage City agencies and other actors in post-disaster surge preparations, trainings, and exercises.

3.3.b. Discuss collaboration goals and mechanisms with county, state and federal permitting agencies. Explore the need for boosting county and state surge capacity.

3.3.c. Prepare draft standards for temporary or alternative building types (e.g., shared housing, pre-permitted plans for modular structures). Establish guidelines for deviating from development standards in low-risk areas.

- Prepare draft recovery ordinances authorizing a process to issue emergency repair and temporary use permits for recovery actions.

- Consider introducing Disaster Recovery Design Review Process to the city's existing Design Review program.

3.3.d. Maintain vigilance in staying current with seismic standards.

- Consider updating requirements for existing unreinforced masonry (URM) structures.

3.3.e. Establish SEPA planned action ordinances in advance of a disaster to facilitate post-even reconstruction.

4. Engage community members to proactively contribute to planning decision making.

The City of Seattle has a strong tradition of community participation in decision-making, from citywide policy review processes to neighborhood-level planning and programs. This experience is valuable to the recovery process. Community engagement processes ranging from the formal (e.g., public meetings) to the more informal (neighborhood-level community actions) should be encouraged throughout recovery.

4.1. Support neighborhood participation in decision processes.

Collaborative, neighborhood-level planning is already an important part of Seattle's planning processes. This will be especially important through post-disaster response and recovery activities. Engage communities through neighborhood centers to develop visions, plans, goals, and strategies at the neighborhood level.

4.1.1. Ask neighborhood-based community and business organizations, schools, and individuals to identify areas of concern and propose temporary or permanent public spaces, amenities, etc. Do not rely solely on pre-existing organizations; new associations may also form during the disaster and post-disaster recovery process.

4.1.2. Make special efforts to engage historically under-represented communities in affected areas.

4.1.3. Engage schools, civic organizations, major institutions, and other stakeholders to provide programming within their neighborhoods. Consider the creation of a neighborhood matching fund to support local projects. Community-led projects may include:

- Local needs assessment and neighborhood visioning
- Neighborhood improvement projects (e.g., gardens, debris clearing, construction activities)

- Social and arts projects (e.g., public art, neighborhood documentary, local journalism)

Pre-Disaster Preparations

4.1.a. Develop disaster recovery-focused community development toolkits that give community members practical ideas about how to support the recovery of their neighborhood.

4.2. Target investments strategically and equitably to support citywide recovery.

Some neighborhoods will be "harder hit" than others. Particular attention should be paid to existing low-income and/or historically underserved areas where risk of abandonment and long-term displacement may be significant. On the other hand, some areas will recover very quickly, requiring small interventions to return to pre-disaster functioning. Strong recovery in these areas may help to further catalyze citywide recovery. Investment priorities need to balance supporting communities that are recovering slowly with those that are less impacted. Ongoing information collection by Assistance Centers and planning-level assessments can help identify areas for targeted intervention.

4.2.1. Identify potential key nodes within neighborhoods to function as developable urban cores.

- Coordinate with county and state actions to prioritize public safety and infrastructure investments (e.g., transportation projects).
- Seek to strategically locate "transitional businesses" (**RSF 2)** to support re-developing areas.
- Consider the siting of significant multi-family housing development to generate economic and social activity (**RSF 4**).

4.2.2. Consider use of land banks and other mechanisms dedicated to preserving the character of neighborhood business nodes in line with community needs and preferences, in particular small businesses that serve particular ethnic communities.

- Explore legal restrictions on national chains in neighborhood business districts as has been done in San Francisco.
- Identify public development authority-like model for land banking potential directly following a disaster.

4.2.3. Identify eligible areas and projects to receive HUD Community Development Block Grants for Disaster Recovery. Coordinate across City organizations (Office of Housing, Human Services) to plan CDBG projects.

4.2.4. Balance importance of open space as areas of staging (e.g., debris) with needs for community gathering and recreation during the recovery process. Coordinate with Parks Department actions.

- Consider the importance of parks and open space in contributing to neighborhoods post-disaster and long-term when identifying sites for debris staging. Do not concentrate debris staging in particular neighborhoods.

4.2.5.   Encourage and fund arts groups to enliven and enrich disaster-impacted neighborhoods. **(RSF 6)**

Pre-Disaster Preparations

4.2.a.   Understand HUD CDBG project requirements and pre-identify potential communities or projects for assistance.

4.2.b.   Engage existing community and neighborhood associations in emergency and disaster recovery preparation.

Potential Reinventions Related to Buildings and Land Use Planning

A.   Rethink Seattle's land use to maximize resiliency, efficiency, and realization of the Seattle community's Vision.

- Consider the multiple values of public open space.

- Consider the environmental functions and values of the City's waterways along with the potential long-term impacts of climate change.

B.   Rebuild with a focus on urban villages.

- Create and preserve unique neighborhoods with local services and commercial offerings.

- Link these villages through multimodal transit.

- Support the health of individuals and communities through the built environment, designing for safe and convenient walking or bicycling.

- Promote the establishment of health centers, grocery stores, and businesses in each neighborhood.

- Establish educational facilities as centers for a variety of community and health services in neighborhoods.

- Establish resiliency at a neighborhood level by promoting district systems (water, stormwater, and energy), local services, and hazard-aware long-term planning.

C.   Examine opportunities to maximize functioning of Seattle's waterfront.

- Critically examine the vision for the future of the Port of Seattle and the use of the waterfront. Engage stakeholders and community members in exploring the full range of options. Encourage regional port dialogues on future opportunities. Work with the Port of Seattle to better understand business lines and recovery priorities after a major disaster.

APPENDICES

- Appendix 1: Seattle's Major Emergency Management Documents

- Appendix 2: Community Profile

- Appendix 3: Federal Disaster Assistance Programs

- Appendix 4: Organizations that May Participate in Recovery

- Appendix 5: Pre-Disaster Recovery Preparations

- Appendix 6: Record of Revision

Appendix 1   Seattle's Major Emergency Management Documents

Assessments of Seattle's Hazards and Vulnerabilities

Seattle Hazard Identification and Vulnerability Analysis (SHIVA). The Seattle Hazard Identification and Vulnerability Analysis (SHIVA) identifies Seattle's hazards and examines their consequences so we can make smart decisions about how best to prepare for them. It provides information regarding potential impacts of hazards to the people, economy, and built and natural environments of the City of Seattle. The SHIVA provides a foundation for all of the City of Seattle's disaster planning and preparedness activities.

Major findings of the SHIVA include:

- Earthquake is ranked as the number one hazard for Seattle, not because of frequency but because of potential destruction.

- Snow and ice storms rank second. Individually they are less damaging than a powerful earthquake, but they are much more frequent.

- Infrastructure failure is the third biggest risk due to infrastructure's dependence on networked computer systems that are exposed to attack. The chance of successful, large scale attack is small, but its consequences would be severe.

- A combination of resource concentration, geography and lack of reserve capacity in our transportation system will make access to critical resources a challenge in a disaster.

- Our most vulnerable people live toward the outskirts of the city and along the Rainier Valley.

- Climate change will exacerbate most of the hazards Seattle could experience.

Below is a listing in rank order of the primary natural and human-caused hazards affecting the City as identified in the SHIVA (2014 update). Additional information and analysis may be found in the SHIVA which is posted on the Seattle Office of Emergency Management website at www.seattle.gov/emergency.

1. Earthquake
2. Snow and Ice Storm
3. Infrastructure/Cyber
4. Windstorm
5. Power Outage
6. Terrorism
7. Disease Outbreak
8. Flooding
9. Excessive Heat
10. Fire
11. Tsunami and **Seiche**

12. Landslide
13. Transportation Incident
14. Water Shortage
15. Social Unrest
16. Hazardous Material Incident
17. Volcano Hazards
18. Active Shooter

> **Seiches** are standing waves in water bodies caused most often by seismic waves or atmospheric pressure. They can occur at great distances (100s or 1000s of miles) from an earthquake epicenter. Because they are *standing* waves they move vertically more than horizontally.
>
> City of Seattle Office of Emergency Management website

Any one of the hazards could lead to catastrophic impacts for residents, visitors, and businesses in Seattle. A catastrophic incident usually involves cascading impacts or long-term consequences. For example, an earthquake could cause major damage from the shaking that occurs. Roadways, rail lines, and bridges could all be damaged as well as marine terminals and airport runways causing major transportation disruptions. Additional hazards may be triggered by the earthquake including landslides and tsunamis or seiches resulting in cascading impacts to the entire community. Infrastructure may also be severely impacted because of downed or broken wires, fiber optic cables, and broken water or sewer lines.

Seattle Threat & Hazard Identification & Risk Analysis (THIRA). The City of Seattle's Threat and Hazards Identification and Risk Assessment (THIRA) was developed in 2012 and is intended to be a complimentary chapter to the State of Washington THIRA and the Urban Area Security Initiative (UASI) THIRA. The intention of the THIRA, like the SHIVA, is to guide planning. The THIRA is structured around a scenario-based analysis of a limited set of hazards, exploring the gap between expected consequences and existing capabilities.

The purpose of the product and process is to strategically focus our efforts and investments in building capabilities necessary to prevent, mitigate, protect, respond to and recover from the types of threats and hazards to which the City is significantly vulnerable. The 2012 version of the THIRA covers 4 of the 18 threats and hazards faced by the City of Seattle which cumulatively most tax our local capacity. With enough time and adequate planning resources, it is our intent to apply the same type of assessment to all 18 threats and hazards identified in the SHIVA.

In future renditions of our THIRA, Seattle hopes to work with State and Federal counterparts to better define the mitigation and prevention capabilities. For instance, if our mitigation and prevention efforts are successful – the scope and magnitude of some threats or hazards change substantially. **Exhibit 12**, below and online illustrates Seattle's earthquake hazards and lifeline infrastructure.

Exhibit 12. Seattle's Earthquake Hazards and Lifeline Infrastructure
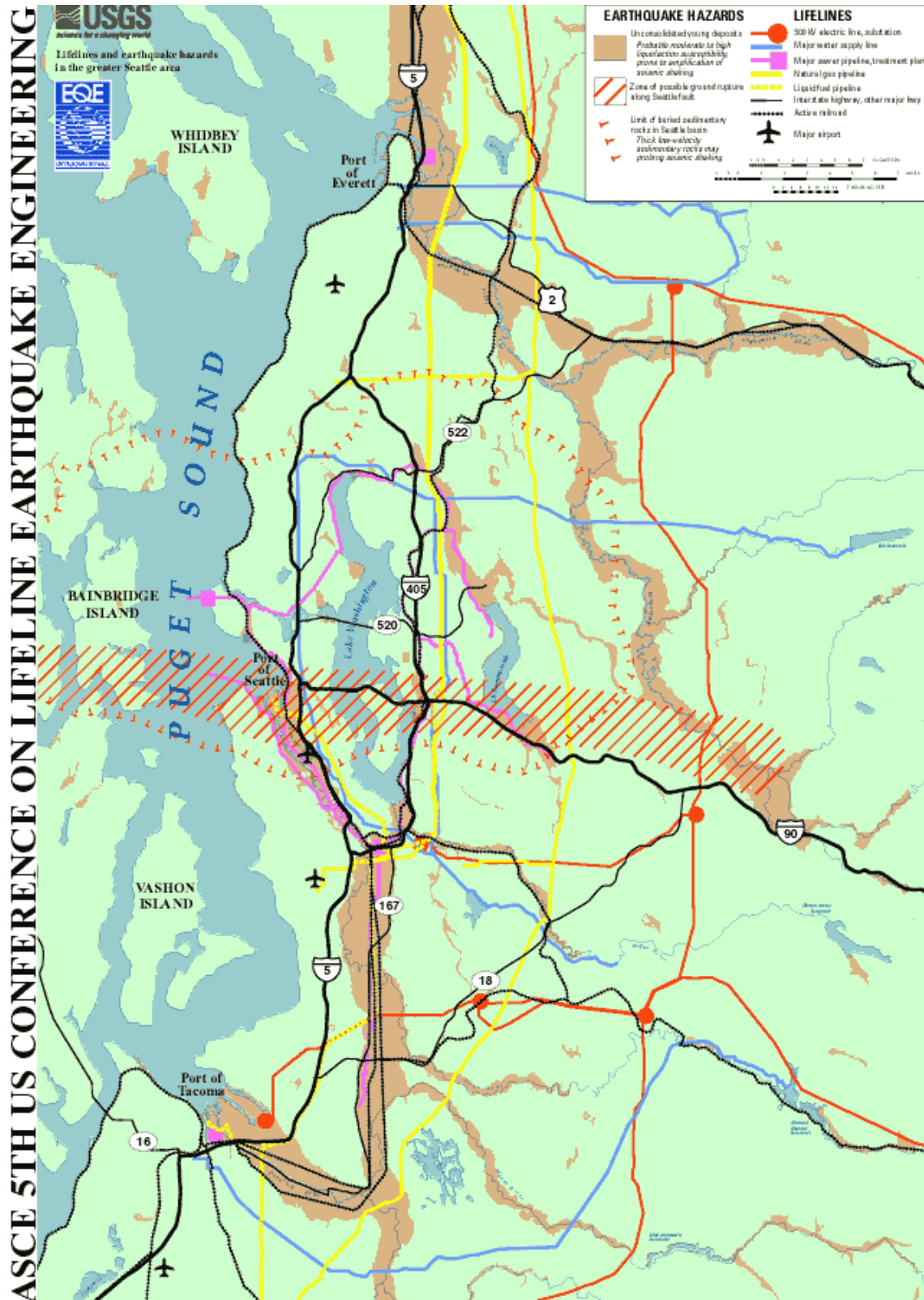
Source: U.S. Geological Survey

Seattle Emergency Management Plans

This Recovery Framework is part of a family of City of Seattle plans that address various topics and phases of emergency management.

Comprehensive Emergency Management Plan. The Comprehensive Emergency Management Plan (CEMP) is an all-hazards plan describing how the City of Seattle's emergency management system is organized and managed so that it may prevent, mitigate, protect, respond to and recover from the types of threats and hazards to which the City is significantly vulnerable. Through a series of documents, the CEMP describes how City departments coordinate emergency management related actions, resources, and activities with other federal, state, county, regional, private-sector and nongovernmental organizations. The CEMP contains several plans, briefly described below:

All Hazards Mitigation Plan. The City of Seattle All-Hazards Mitigation Plan (Seattle HMP) is the guiding document for the City's hazard mitigation program. Mitigation measures occur prior to an incident and are an attempt to lessen the impacts of an incident on the community. The Seattle HMP assists planners in determining where investments should be made to strengthen the community. These investments may involve making changes in building codes, conducting public education, reinforcing existing structures, and developing other initiatives intended to decrease or eliminate vulnerabilities. It should be noted that mitigation is an ongoing process; The Seattle HMP is updated regularly to reflect actual conditions, meet current standards, and incorporate lessons learned.

Training and Exercise Plan. The Office of Emergency Management coordinates the development and maintenance of a multi-year Training and Exercise Plan to ensure that critical skills are developed and maintained and that plans are validated and improved through drills and exercises.

Emergency Operations Plan (EOP). As soon as an incident occurs, the emergency response begins. The EOP describes how the City will respond to save lives, protect property, and stabilize the incident. The EOP is intended to enhance coordination among the many departments and organizations that may be involved in response so that unity of effort may be achieved. Three types of annexes support the EOP:

1. **Incident Annexes.** Some hazards may require more detailed planning due to their frequency of occurrence, scale of potential impacts, or complexity of the response. The -citywide emergency management program currently provides incident annexes for Earthquake, Winter Storm, Pandemic Disease, and Terrorism.

2. **Support Annexes.** Some activities provide support to response and recovery operations and may be implemented in a number of different scenarios. Currently, support annexes have been created for Alert and Warning, Evacuation, and Military Assistance.

3. **Emergency Support Function (ESF) Annexes.** Federal, state, and local responders organize response operations by emergency support function (ESF), which provides a structure for coordinating common functions. Each annex lists the roles and responsibilities that constitute a particular function and designate a City department as the lead. Also listed in each annex are those departments, organizations, and partners that play a supporting role.

4. **Seattle Disaster Recovery Framework (SDRF).** Using guidance provided by FEMA's National Disaster Recovery Framework (NDRF), the Seattle Disaster Recovery Framework (SDRF) provides guidance and a governance structure for recovery as the city moves from responding to an incident to recovering from the impacts of the incident. During recovery from a major or catastrophic incident, this framework supports government and community resources and needs with an organization and through planning efforts that address the rebuilding of capabilities that were in place prior to the incident as well as building new capabilities.

Continuity of Operations Plans. While the severity and consequences of many emergencies cannot be predicted, effective contingency planning can minimize the impact to the community. Continuity of Operations (COOP) plans are written and exercised so that agencies are able to continue performance of essential functions under all conditions. The City of Seattle requires that all City Departments with essential functions develop a Continuity of Operations Plan. These plans are updated regularly and address the following:

- Identification of essential functions and personnel

- Identification and protection of vital records

- Identification and protection of critical systems

- Alternate facilities

- Communication methods

- Lines of Succession and Delegation of Authority

Appendix 2 Community Profile

With an estimate 2013 population of more than 650,000, Seattle is the largest municipality in the Pacific Northwest. During workdays the influx of commuters causes the population to grow to over 750,000. These totals swell even higher when tourists are added.

In terms of landmass, Seattle is an 84 square-mile area that sits between Puget Sound to the west and Lake Washington to the east. Most of Downtown Seattle and major critical infrastructure is located in the narrowest section of town. This results in many major transportation routes and services competing for land where there is the least amount of area. Damage to this area would cause delays and essentially cut the city in half.

Economy. The Seattle Metropolitan Statistical Area accounts for 1.9 million jobs and has an estimated gross metropolitan product of $218.8 billion. The city benefits from several major industry leaders with large operations in Seattle. Major Industries include aerospace (the Boeing Company), information and communications technology (Microsoft, Amazon and Real Networks), clean technology, healthcare and marine technology. Seattle also features the largest private foundation in the country, the Bill and Melinda Gates Foundation with an endowment of $36 billion dollars.

Seattle is one of the most trade dependent cities in the U.S. One in three jobs relies on international trade. The Port of Seattle has seen cruise ship growth in recent years, with eight major cruise lines using the Seattle facilities in 2012 and 196 sailings with 885,949 passengers in 2011.

The Seattle-King County area attracts more than 8.8 million overnight visitors each year. Major venues for conferences, conventions and special events include the Washington State Convention and Conference Center, a wide variety of local hotels, the Bell Harbor International Conference Center, CenturyLink Field Events Center, and the Seattle Center. The city is also home for several professional sport teams: the Mariners at Safeco Field (seats 54,000), the Storm at Key Arena (17,459), the Reign at Memorial Stadium (12,000), and the Seahawks and Sounders at CenturyLink Field (seats 67,000).

Downtown Seattle has an employee population around 200,000. This figure represents over 40% of all employees in Seattle and about 20% of those in King County, the state's most populous county. The services sector comprises about 60% of jobs in Downtown Seattle. Examples of services include personal, business, amusement and recreation, health, legal, and social services. Government is the second largest sector Downtown with 14% of the total jobs. Downtown is home to about 60% of the government jobs located in Seattle, including city, county, state, and federal positions.

Small businesses employ more than 70% of Seattle's workforce and contribute 35% of the city's business tax revenues, totaling $55.4 million. Local neighborhood business districts serve as the location and incubators for many of the city's small businesses.

Health and Human Services. There are 23 hospitals in King County, 13 of which are located in Seattle. Of that number, one is a psychiatric hospital and two provide long-term acute care. Seattle has the only Level 1 Trauma Center for a four-state region which also serves as a major tertiary referral area for five states in the Pacific Northwest; including pediatrics, burn, transplant, trauma, bone marrow, cancer care, and other specialties.

Seattle is home to the main campuses of three major universities: the University of Washington, Seattle Pacific University, and Seattle University. In addition, the Seattle Community College system, which has a combined enrollment of around 54,000, operates three campuses located in West Seattle, Capitol Hill, and Northgate. The total combined student population for all of these universities and colleges is approximately 100,000. Seattle public schools (K-12) also serve more than 49,800 students in 95 different schools and there are 122 private

schools serving over 23,700 students. Seattle has a diverse school population; students come from over 90 countries, and more than 129 languages are spoken in the schools.

Seattle is home to many people who could be extremely vulnerable in the event of a serious disaster; the elderly, children, people with mental and physical disabilities, and those who are limited or non-English speakers. According to 2012 Census data, 24% of the population of Seattle spoke a language other than English at home; of those, 48% spoke Asian and Pacific Island languages and approximately 22% spoke Spanish. 13.8% of the population is over the age of 62. 9% report some sort of disability.

Housing. Half of Seattle's housing units were built prior to the 1949 adoption of building codes that introduced seismic standards. Requirements for bolting homes to foundations were implemented in Seattle in the mid-1960's. The majority of Seattle's housing units were constructed before the city upgraded its seismic codes in 1992. Buildings constructed to earlier codes are generally not required to upgrade to the most recent code.

The Seattle Department of Construction and Inspection is in the process of performing a comprehensive survey of un-reinforced masonry (URM) buildings. This is a second effort aimed at refining an earlier study that indicated there are roughly 800 to 1,000 URM structures in the City, mostly in older sections such as Pioneer Square.

Age of Housing Stock		
Year Built	Units Total	%
Built 1990 to 2000	24,488	9.47%
Built 1980 to 1989	23,266	9.00%
Built 1970 to 1979	25,762	9.97%
Built 1960 to 1969	31,644	12.24%
Built 1950 to 1959	36,297	14.04%
Built 1940 to 1949	32,507	12.57%
Built 1939 or earlier	84,546	32.75%
All Years	**258,510**	**100%**
Source: U.S. Census Bureau, Census 2000		

In addition, a number of not-for-profit organizations provide housing and other essential services to vulnerable populations, many of which are also located in Pioneer Square and the Downtown areas. Several shelters, food banks and community clinics serve Seattle's homeless, low-income, mentally and physically disabled people. The Seattle Housing Authority (SHA) is a public corporation that provides affordable housing to nearly 23,000 people in the City of Seattle. It owns and operates approximately 9,000 units of housing for low-income families, seniors, and people with disabilities.

52% of housing available is used as rental property. It is also important to note that many Seattle households are "under-housed" in that they are living in homes not designed for the number of residents they currently hold. This situation may be exacerbated by a disaster and a loss of current housing stock.

Infrastructure Networks. Seattle like all major cities has extensive systems and networks required to maintain the health, safety, and economy of the city. Many infrastructures and industrial areas are located in liquefaction zones such as the Duwamish Valley and Interbay areas. Networked infrastructures in these areas are more vulnerable to seismic impacts and could have severe cascading impacts across the region in the event of an earthquake.

The City's interdependent lifeline systems include transportation, power, water, sewer, natural gas, liquid fuel, telephone services, fiber-optic networks, cellular services, and cable services. This complex system of infrastructure is comprised of a mix of public and private sector assets and resources. Transportation, water and wastewater service, and electricity are provided by public agencies, including Seattle Public Utilities, Seattle City Light, Seattle Department of Transportation, and Washington Department of Transportation. Other infrastructure such as natural gas, telecommunications, fuel, and cellular services are privately owned and operated. These companies include; Puget Sound Energy, Olympic Pipeline, Century Link, AT&T, Verizon, T-

Mobile, and Sprint. Many of these public and private infrastructures cross city boundaries and are shared with other jurisdictions beyond city limits.

Seattle has over 150 bridges operated and maintained by the Seattle Department of Transportation. Within the city limits, there are six bridges connecting north Seattle with the rest of the city. Four of these bridges are "bascule" design and can be opened for marine traffic; the other two are "fixed-span" bridges with a limited clearance. Another four bridges lead in and out of West Seattle, two of which are the "bascule" type, one that is "fixed-span" and the last a "swing" type. Three Washington State Department of Transportation (WSDOT) "floating" bridges cross Lake Washington, one leading to Evergreen Point that draws open to marine traffic and two parallel "fixed-spans" that connect to Mercer Island via I-90.

Natural and Cultural Resources. Seattle Parks and Recreation (Parks) manages over 430 parks and open areas in its approximately 6,200 acre system. This system includes 224 developed parks, 185 athletic fields, 130 neighborhood play areas, nine swimming beaches, 18 fishing piers, four golf courses, 22 miles of boulevards, and 24 miles of shoreline. Other Parks facilities include 145 outdoor tennis courts, an indoor tennis center, 26 community centers, a conservatory, eight indoor and two outdoor swimming pools, 27 wading pools, nine public beaches. There are 193 miles of waterfront, 53 of which are tidal.

Seattle has a rich cultural history that is important to the community. The history and community make for an atmosphere that brings people to the city. Historic and cultural assets, including historic buildings and sites; music, and the arts help define Seattle and are important contributors to Seattle's economy.

Buildings and Land Use. The highest residential densities occur in older sections north of the I-90 freeway, such as Capitol Hill. Other dense areas include portions of the Denny Regrade, the south slope of Queen Anne Hill, and parts of the University District.

In 1992, the State passed the Growth Management Act in an attempt to check urban sprawl. Seattle's response to the Act has been to promote greater density in clustered "Urban Villages" (**Exhibit 13**) with its comprehensive plan, Towards a Sustainable Seattle. Utilizing this strategy will improve the City's infrastructure and encourage development in a way that reduces the area's vulnerability to hazards.

There is a slight overlap between landslide-prone areas and the extreme eastern edge of the Eastlake and South Lake Union urban villages. Liquefaction prone areas overlap with centers and villages in parts of Downtown, the U-District, South Park, Eastlake, and South Lake Union.

The city's two manufacturing/industrial centers (Duwamish and Interbay) are almost entirely underlain by liquefaction zones. While the city's goal is to increase employment in these areas, most of the new employment is expected to be fairly low density. No housing is permitted in these areas.

Seattle has been proactive in adopting laws and regulations, including local zoning and building codes, aimed at improving Seattle's disaster resistance. The adoption of the 2006 International Building Code (IBC) in 2007 is the latest update.

Exhibit 13. Seattle Urban Villages
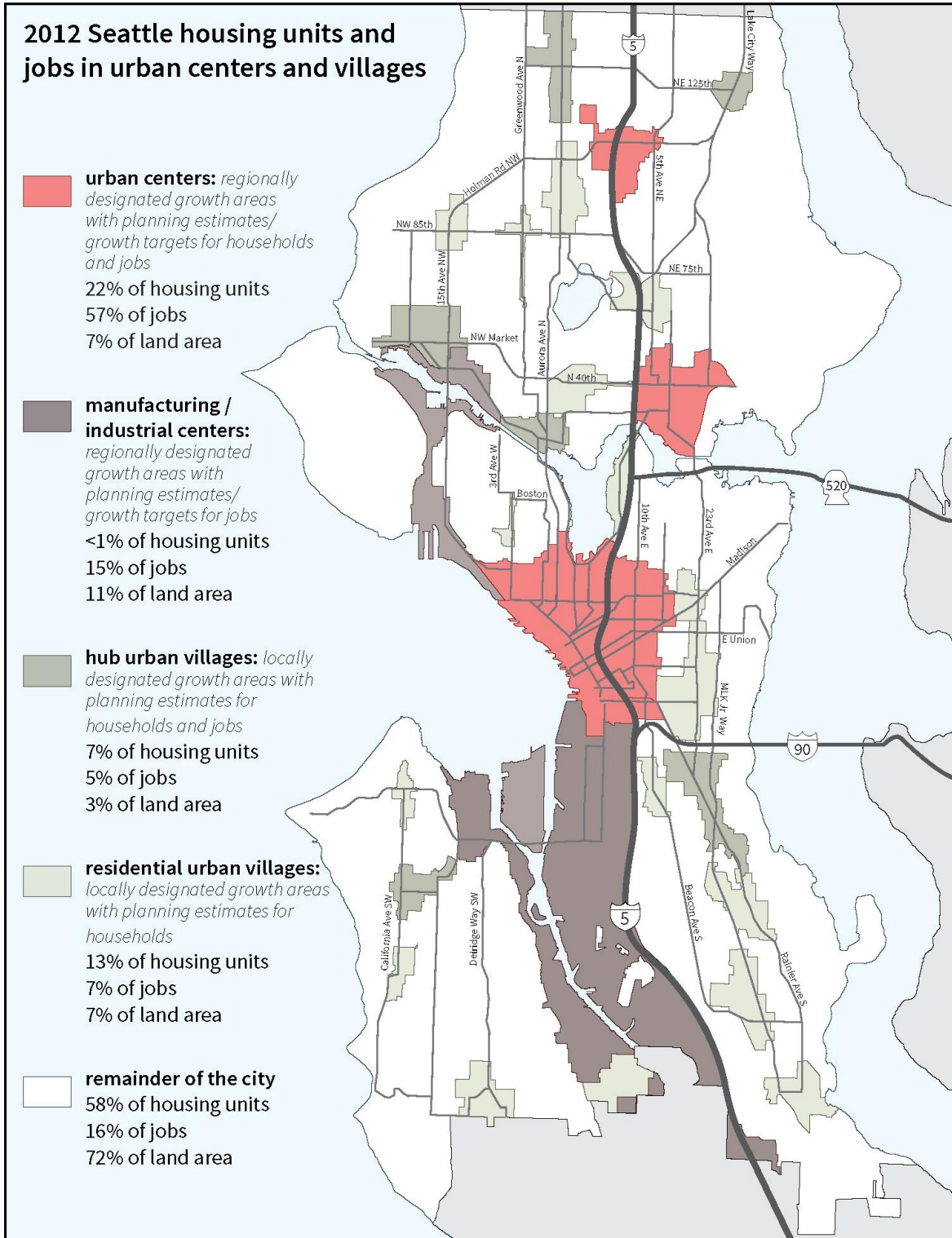
Source: Seattle 2013 Background Report, February 2014

Appendix 3 Federal Disaster Assistance Programs

This resource summarizes key federal disaster assistance programs. These programs and eligibility criteria change from time to time. For the most current information about assistance program eligibility and rules, refer directly to the Federal guidance (website provided) or State and Federal Coordinating Officers.

Federal Emergency Management Agency (FEMA)

Reference: www.fema.gov

FEMA disaster assistance is divided into three forms: individual and public assistance, and hazard mitigation. Individual assistance consists of services provided to individuals and businesses. Public assistance provides assistance to government entities and certain not-for-profit organizations. Hazard mitigation provides funding for State and local communities to help prevent future damage. These programs are only available after an Emergency or Major Disaster Declaration. They will be managed jointly by the State of Washington and the Federal Emergency Management Agency (FEMA), and coordinated with the City of Seattle, Office of Emergency Management.

Individual Assistance

FEMA Individual assistance is a group of five programs that may provide the following:

- Cash awards or direct assistance to individuals and families in an area where property has been damaged or destroyed and whose losses are not covered by insurance. It is meant to help with critical expenses that cannot be covered in other ways. This assistance is not intended to restore damaged property to its condition before the disaster.

- Grants to a State or other Federal agency to provide essential services in the disaster-impacted community or communities.

The following FEMA Programs are available by calling the FEMA registration line (800-745-0243; TTY users contact TRS for a connection) or online at http://www.fema.gov/assistance/register.

- **Individuals and Households Program**

  o *Replacement.* Money is available to homeowners to help with replacement of their home if destroyed in the disaster and not covered by insurance. The goal is to help the homeowner with the cost of replacing their destroyed home.

  o *Other than Housing Needs.* Money is available for necessary expenses and serious needs caused by the disaster. This includes disaster-related medical and dental costs, disaster-related funeral and burial costs, clothing, essential household items (room furnishings, appliances), tools (specialized or protective clothing and equipment) required for citizens' jobs, necessary educational materials (computers, school books, supplies), fuels for primary heat sources (heating oil, gas, firewood), cleanup items (wet/dry vacuum, air purifier, dehumidifier), repair to disaster damaged vehicles, moving and storage expenses related to the disaster (moving and storing property to avoid additional disaster damage while disaster-related repairs are being made to the home), other necessary expenses, or serious needs as determined by FEMA and the State.

- **Legal Services.** FEMA, through an agreement with the Young Lawyers Division of the American Bar Association, provides free legal assistance to low-income disaster survivors.

- **Crisis Counseling.** The Crisis Counseling Assistance and Training Program (CCP) is designed to provide supplemental funding to states for short-term crisis counseling services to people affected by major disasters. The program consists of two grant programs; Immediate Services and Regular Services. The State must apply for and justify the need for each program.

- **Disaster Case Management.** Similar to Crisis Counseling, the State must apply for and justify the need for the program and, if approved, a grant will be made to the State.

Public Assistance

The objective of the FEMA Public Assistance (PA) Grant Program is to provide assistance to states, local governments (City of Seattle), and certain nonprofit organizations through supplemental federal disaster grant for the cost of emergency operations and the repair, replacement, or restoration of disaster-damaged publicly owned facilities and the facilities of certain Private Nonprofit (PNP) organizations. This is a cost-share program where the federal share of assistance is not less than 75% of the eligible cost for the emergency measures and permanent restoration. The grantee (the State of Washington) determines how the non-federal share (up to 25%) is split with the sub grantees (eligible applicants- City of Seattle).

Hazard Mitigation

Following a Presidential Disaster Declaration, the Governor needs to request the activation of the Hazard Mitigation Grant Program (HMGP). The program's purpose is to fund projects which are cost-effective and which substantially reduce the risk of future damage, hardship, loss, or suffering resulting from a major natural disaster throughout the state.

The HMGP fund represents up to 15% of the estimated disaster expenditures. The federal contribution can be up to 75% of the cost of the hazard mitigation project approved for funding, with applicants providing match funding through a combination of either state, local or private sources. Section 404 funding may not be used to fund any mitigation project that might be eligible under public assistance or other federal programs, although it might be used to complement or enhance mitigation funded under individual or public assistance.

Community Disaster Loan

Reference: https://www.fema.gov/community-disaster-loan-program

A Community Disaster Loan (CDL) is available to provide funds to any eligible jurisdiction in a designated disaster area that has suffered a substantial loss of tax and other revenue. The jurisdiction must demonstrate a need for financial assistance to perform its governmental functions. Loans are up to 25% of the local government's annual operating budget for the fiscal year in which the major disaster occurs, up to a maximum of $5 million. A CDL has no cost-sharing requirement.

Small Business Administration

Disaster Loans

Reference: http://www.sba.gov/category/navigation-structure/loans-grants/small-business-loans/disaster-loans

The U.S. Small Business Administration (SBA) can make federally subsidized loans to repair or replace homes, personal property or businesses that sustained damages not covered by insurance. The Small Business Administration can provide three types of disaster loans to qualified homeowners and businesses:

- *Home disaster loans* to homeowners and renters to repair or replace disaster-related damages to home or personal property.

- *Business physical disaster loans* to business owners to repair or replace disaster-damaged property, including inventory, and supplies.

- *Economic injury disaster loans* to small businesses and to small agricultural cooperatives to assist them through the disaster recovery period.

Federal Highway Administration

- *Highway Repair, Title 23.* This program is implemented when the Administrator of the Federal Highway Administration (FHWA) concurs that a natural disaster or catastrophic failure has caused widespread damage to highways on the Federal Aid System. This program, commonly referred to as the emergency relief or ER program, supplements the commitment of resources by States, their political subdivisions, or other Federal agencies to help pay for unusually heavy expenses resulting from extraordinary conditions.

  Funds for the ER program are authorized annually under 23 U.S.C. 125. Congress has periodically provided additional funds for the ER program through supplemental appropriations. Approved ER funds are available at the pro-rata share that would normally apply to the Federal-aid facility damaged. For Interstate highways, the Federal share is 90%. For all other highways, the Federal share is 80%. Emergency repair work to restore essential travel, minimize the extent of damage, or protect the remaining facilities, accomplished in the first 180 days after the disaster occurs, may be reimbursed at 100% Federal share. It is the responsibility of individual States to request ER funds. A notice of intent to request ER funds filed by the State Department of Transportation with the FHWA Division Office located in the State will initiate the ER application process. States are required to submit an application for ER funding to FHWA within two calendar years of the date of the disaster. The application must include a comprehensive list of all eligible project sites and repair costs.

  Reference: http://www.fhwa.dot.gov/programadmin/erelief.cfm

Department of Housing and Urban Development

- **Community Development Block Grant – Disaster Recovery Program.** HUD provides flexible grants to help cities, counties, and states recover from Presidentially-declared disasters, especially in low-income areas, subject to availability of supplemental appropriations. In response to Presidentially-declared disasters, Congress may appropriate additional funding for the Community Development Block Grant (CDBG) program as Disaster Recovery grants to rebuild the affected areas and provide crucial seed money to start the recovery process. Since CDBG Disaster Recovery (CDBG-DR) assistance may fund a broad range of recovery activities, HUD can help communities and neighborhoods that otherwise might not recover due to limited resources. HOME Disaster Recovery grants also can provide an important resource for providing affordable housing to disaster victims.

- CDBG-DR funds are made available to states, units of general local governments (City of Seattle), Indian tribes, and insular areas designated by the President of the United States as disaster areas. These communities must have significant unmet recovery needs and the capacity to carry out a disaster recovery program (usually these are governments that already receive HOME or CDBG allocations).

  Grantees may use CDBG-DR funds for recovery efforts involving housing, economic development, infrastructure and the prevention of further damage to affected areas. Use of CDBG-DR funding cannot duplicate funding available from the Federal Emergency Management Agency, the Small Business Administration, and the US Army Corps of Engineers.

  Eligible activities must meet at least one of three program national objectives: benefit persons of low and moderate income, aid in the prevention or elimination of slums or blight, or meet other urgent community development needs because existing conditions pose a serious and immediate threat to the health and

welfare of the community where other financial resources are not available. CDBG-DR grants primarily benefit low-income residents in and around communities that have experienced a natural disaster. Generally, grantees must use at least half of Disaster Recovery funds for activities that principally benefit low-and moderate-income persons. HUD does not provide CDBG-DR funding directly to individuals or organizations.

Reference: https://www.hudexchange.info/cdbg-dr/

U.S. Army Corps of Engineers (USACE)

- **Public Law 84-99 (Section 5 of the Flood Control Act of 1941) (PL 84-99).** Under PL 84-99, the USACE provides assistance for emergency preparation, flood fighting and rescue operations, and restoration of flood control works. Relevant recovery programs include:

  o The Disaster Preparedness element which includes coordination, planning, training, and exercises with key local, state, Tribal and Federal stakeholders/partners under USACE statutory authorities and in support of the Federal Emergency Management Agency. It provides for the purchase and stockpiling of critical supplies and equipment for flood fighting efforts and the inspection of levees and other flood risk management projects to ensure they are providing reliable flood risk management reduction.

  o The Rehabilitation Program provides for the inspection and rehabilitation of Federal and non-Federal flood risk management projects damaged or destroyed by floods and coastal storms.

  o The Restoration Program provides for the inspection and restoration of Federal Coastal Storm Damage Reduction projects damaged or destroyed by floods and coastal storms.

  o Drought Assistance may be provided to drought distressed areas. Drought assistance includes technical assistance, well drilling in limited circumstances, and transportation (but not purchase) of water to drought distressed areas to make up for inadequate supplies of water.

  o Emergency Water Assistance may be provided when a locality is confronted with a source of contaminated water causing or likely to cause a substantial threat to the public health and welfare of the local inhabitants. Emergency Water Assistance includes technical assistance, purchase of water, transport of water to local water points, delivery of bulk or bottled water to community-level distribution points, temporary connection of a new water supply to the existing distribution system, installation of temporary filtration.
  Reference:
  http://www.usace.army.mil/Media/FactSheets/FactSheetArticleView/tabid/219/Article/475476/emergency-response.aspx

Other Non-Disaster Specific Programs

The above entities have programs specifically called up or funded during disasters. The programs listed below are examples of programs that may be leveraged <u>at any time</u> should the eligibility criteria be met. These programs may provide financial or technical assistance. Existing State and Federal programs should be considered (by pursuing existing funding OR requesting special appropriations) when looking to leverage the impacts or provide additional assistance after a disaster event. Note: These programs will not fund projects already funded by the entities above, however they could be used to compliment traditional disaster funding or fund projects or initiatives ineligible for the usual disaster assistance programs.

Because there are so many federal and state funding sources, the best way to find these possible opportunities is to engage all of the Federal, State and local departments and other partners within each RSF. Those who currently participate or benefit from existing programs are an excellent source of information. As noted below these sources could be leveraged through normal grant pathways or by engaging political mechanisms to request special or additional appropriations.

- **Department of Commerce, Economic Development Administration.**

    Disaster recovery: http://www.eda.gov/about/disaster-recovery.htm

    Investment Programs: http://www.eda.gov/about/investment-programs.htm

    o **Public Works:** Empowers **distressed communities** to revitalize, expand, and upgrade their physical infrastructure to attract new industry, encourage business expansion, diversify local economies, and generate or retain long-term, private sector jobs and investment.

    o **Economic Adjustment:** Assists state and local interests in designing and implementing strategies to adjust or bring about change to an economy. The program focuses on areas that have **experienced or are under threat of serious structural damage to the underlying economic base**. Under Economic Adjustment, EDA administers its Revolving Loan Fund (RLF) Program, which supplies small businesses and entrepreneurs with the gap financing needed to start or expand their business.

    o **Partnership Planning:** Supports local organizations (Economic Development Districts, Indian Tribes, and other eligible areas) with **long-term planning efforts**.

    o **University Centers:** A partnership of the federal government and academia that makes the varied and vast resources of universities available to the economic development community.

    o **Local Technical Assistance:** Helps fill the knowledge and information gaps that may prevent leaders in the public and nonprofit sectors in **distressed areas** from making optimal decisions on local economic development issues.

- **Department of Commerce, National Oceanic and Atmospheric Administration (NOAA).**

    Under the Magnuson-Stevens Fishery Conservation and Management Act, the Commerce Secretary can declare a fishery disaster, which makes it possible for Congress to appropriate funds to provide economic assistance to fishing businesses and communities, including fishermen, **affected by a disaster** and to support other activities addressing the disaster.

    Funding example: http://www.noaanews.noaa.gov/stories2014/20140226_disasterfunding_fish.html

- **Environmental Protection Agency (EPA).**

  http://www.epa.gov/ogwdw/dwsrf/pdfs/manual_dwsrf_programoperationalmanual.pdf.

  EPA's Drinking Water State Revolving Fund (SRF) programs provide grants to States to capitalize State loan funds, which States use to provide loans to communities to support infrastructure projects that protect water quality or **provide safe drinking water**.

Federal Initiatives

Examples of Federal entities that are addressing disaster impacts through their own initiatives:

- The **U.S. Fish and Wildlife Service** is working with The Nature Conservancy to repair extensive shoreline erosion by using natural materials and "living shoreline" techniques, making this important salt marsh better able to withstand future storm impacts.

- **Federal Housing Administration (FHA) and Federal Housing Finance Agency (FHFA)** introduced consistent and coordinated policies to institute a moratorium on foreclosures of government-backed loans in disaster-affected areas. FHA and FHFA offered those with Federally-backed mortgages a forbearance period of up to 12 months, the ability to modify their mortgages, and, in many cases, the opportunity to obtain streamlined mortgage refinancing through FHA's Streamline Refinance program.

  To address the issue of delayed disbursement of insurance funds, **FHFA and FHA** established a working group of lenders to review and propose unified policies and processes that could be adopted by the lenders and financial institutions for approving the release of insurance claim funds.

- **SBA Small Business Development Centers** (SBDCs) provide a vast array of technical assistance to small businesses and aspiring entrepreneurs through professional business advisors. Services provided by SBDCs help small businesses thrive. They include the development of business plans, manufacturing assistance, financial packaging and lending assistance, and procurement and contracting aid.

- **Department of Treasury** has encouraged and facilitated steps by grantees and other funders to support Community Development Financial Institutions (CDFIs). CDFIs have the ability to leverage significant private resources to support small businesses and reach vulnerable populations.

- **Department of Labor** (DOL)'s Employment and Training Administration (ETA) regularly shares best practices with other States, including New Jersey's Talent Network efforts. ETA's regional office also will share best practices relating to Hurricane Sandy rebuilding with other States.

Appendix 4 Organizations that May Participate in Recovery

This resource identifies organizations that may contribute to each Recovery Support Function. These lists were generated by stakeholders during the planning process and should not be seen as a comprehensive census of organizations. Rather it is a working starting point that should be expanded upon before and during recovery. Creativity should be applied to identifying additional public, private, and not-for-profit organizations beyond the "usual players" that can contribute to an effective whole community approach to recovery.

Key for the lists on the following pages

= category

^ = Participated in Phase 1

* = Participated in Phase 2

NOTE: In the current draft, "Task Force Candidates" are preliminary as they have not yet been fully vetted and appointed.

RSF 1 – Community Coordination and Capacity Building		
	Categories	**Entity**
Task Force Chair Candidates		
	1) City of Seattle	
		Department of Neighborhoods
	2) Community Organization	
		To be determined
Support		
	Federal	
		Federal Emergency Management Agency (FEMA) (NDRF lead)
	State of Washington	
		Department of Commerce
		Department of Social and Health Services
		Military Department
		Department of Archaeology and Historic Preservation
		Department of Employment Security
		Department of Revenue
		Office of Indian Affairs
		Office of the Insurance Commissioner
		State Chief Information Officer*
	King County	
		Office of Emergency Management (King County) – Communications Team
		Office of Civil Rights and Open Government
		Office of Equity and Social Justice
		Public Health – Seattle & King County
	Regional Public Sector Entity	
	City of Seattle	

RSF 1 – Community Coordination and Capacity Building

Categories	Entity
	Community Technology
	Customer Service Bureau
	Department of Parks and Recreation
	Seattle Department of Construction and Inspection ^*
	Department of Transportation (SDOT) ^
	Fire Department
	Human Services Department^
	Mayor's Office of Senior Citizens
	Office of Civil Rights
	Office of Economic Development
	Office of Immigrant and Refugee Affairs
	Office of Planning and Community Development^*
	Police Department Community Outreach Section^
	Public Outreach and Engagement Liaisons (Dept. of Neighborhoods)
	Seattle Center
	Seattle Public Library^
City of Seattle Boards and Commissions	
	Board of Park Commissioners
	City Neighborhood Council
	Commission for People with DisAbilities
	Ethics and Elections Commission
	Human Rights Commission
	Immigrant and Refugee Commission
	Lesbian Gay Bisexual Transgender Commission
	Mayor's Council on African-American Elders
	Seattle-King County Advisory Council for Aging and Disability Services
	Women's Commission
	Youth Commission
Community Partners	
	American Red Cross*
	Asian Pacific Directors Coalition

RSF 1 – Community Coordination and Capacity Building

Categories	Entity
	Bill and Melinda Gates Foundation*
	Churches, Synagogues and Houses of Worship #
	Coffee shops/ Breweries/ Co-ops#
	Colleges and Universities#
	Community Based Councils
	Community Event Planners#
	Conflict resolution experts#
	El Centro de la Raza^
	Fisher Communications^
	Habitat for Humanity
	Hospitals#
	Hyper-local media (West Seattle Blog, Cap Hill News, etc.)#
	Insurance companies #
	KCTS 9 Television*
	Media#
	King County 2-1-1
	Leadership Council of Puget Sound*
	Local media #
	Northwest Association of Independent Schools
	Organizations that work with Vulnerable and At Risk Populations#
	Our Daily Toast*
	Outdoor equipment retailers
	Philanthropy Now
	Public engagement consulting firms#
	Rebuilding Together
	Salvation Army*
	Seattle Foundation
	Seattle Parks Foundation
	Seattle Public Schools^*
	South East Economic Development
	Sustainable Seattle*
	Technical Advisors#
	United Way King County*
	Voluntary Organizations Active in Disaster (VOAD)
	Vulnerable and At Risk Populations#

RSF 1 – Community Coordination and Capacity Building

Categories	Entity
	Banks and Financial Institutions#
	Washington State Convention Center^
	West Seattle Emergency Communications Hub*
Tribal Government	
	Office of Intergovernmental Relations – Tribal Relations

RSF 2 - Economic Recovery		
	Categories	**Entity**
Task Force Chair Candidates		
	1) **City of Seattle**	
		Office of Economic Development
	2) Community Organization	
		To be determined
Support		
	Federal	
		Department of Commerce (NDRF Lead)
		Small Business Administration
	State of Washington	
		Department of Commerce
		Office of State Treasurer
		Department of Labor and Industries
		Department of Transportation
		Military Department
		Department of Archaeology and Historic Preservation
		Department of Revenue
		Office of the Insurance Commissioner
	King County	
		Office of Economic and Financial Analysis
		Office of Performance, Strategy, and Budget
	Regional Public Sector Entity	
		Consumer Protection Agencies
		Economic Development Council of Seattle and King County*
		Port of Seattle – sea port and airport^
		Puget Sound Regional Council
	City of Seattle	
		Business Improvement Areas #
		Department of Finance and Administrative Services
		Department of Information Technology
		Department of Transportation (SDOT) ^
		Human Services Department^
		Office of the Mayor

RSF 2 - Economic Recovery

Categories	Entity
	Public Health Seattle King County*
	Seattle Consumer Affairs Unit
	Seattle Public Utilities
City of Seattle Boards and Commissions	
	Freight Advisory Board
Community Partners	
	Alliance for Pioneer Square ^*
	Banks and Credit Unions #
	Business Districts #
	Business Incubators #
	Central Waterfront Committee*
	Chamber(s) of Commerce, including ethnic chambers#
	Community Capital Development
	Colleges and Universities #
	Contingency Planners and Recovery Managers (CPARM)
	Downtown Seattle Association*
	Grocery stores #
	Hotel Industry #
	Iconic businesses, such as Ivar's#
	Incubators and Start Ups #
	Insurance Industry#
	Manufacturers and Industry #
	Major Businesses like Costco, Amazon*, Microsoft, Boeing^*, Starbucks *, etc.
	Marine Exchange of Puget Sound*
	Neighborhood Associations #
	Northwest Protective Services*
	Office Supply Companies#
	Pacific Northwest Economic Region (PNWER)±*
	Professional Societies and Service Organizations (e.g. Rotary, Kiwanis) #
	Restaurant Industry #
	Retail Liaisons#
	RIMS (The Risk Management Society)

RSF 2 - Economic Recovery

Categories	Entity
	SeaTac Airport
	Seattle Metropolitan Chamber of Commerce
	Seattle Chinese Chamber of Commerce*
	Seattle Good Business Network*
	Seattle Metropolitan Improvement District^*
	Seattle Minority Business Development Agency
	Seattle Minority Professional Network
	Seattle sports teams (e.g. Sounders, Seahawks, Mariners)
	Sustainable Seattle*
	Telecommunications companies #
	Visit Seattle* and other tourism promotion organizations
	WA Biotechnology and Biomedical Association*
	Washington CASH
	Washington FIRST Coalition*
	Workforce Development Council of Seattle King County
	WorkSource

RSF 3 – Health, Social Services, and Education	
Categories	**Entity**

Task Force Chair Candidates

1) City of Seattle	Human Services Department^
	Department of Education and Early Learning (City of Seattle)
2) Community Organization	
	To be determined

Support

Federal	
	Department of Health and Human Services (NDRF Lead)
State of Washington	
	Department of Early Learning
	Department of Social and Health Services
	Office of the Superintendent of Public Instruction
	Health Care Authority
	Department of Health
King County	
	Department of Community and Health Services
	Mental Health Care Providers #
	Office of Equity and Social Justice
	Public Health – Seattle & King County
Regional Public Sector Entity	
	Area Agency on Aging for Seattle and King County
	King County Metro Transit
	Region 6 Hospitals – Seattle and King County
	School Board
City of Seattle	
	Department of Finance and Administrative Services, incl. Animal Shelter
	Department of Neighborhoods
	Department of Parks and Recreation
	Seattle Department of Construction and Inspection ^*
	Fire Department

'

RSF 3 – Health, Social Services, and Education	
Categories	**Entity**
	Office of Civil Rights
	Office of Housing
	Office of Immigrant and Refugee Affairs
	Office of Planning and Community Development^*
	Police Department
	Seattle Center
	Seattle Public Library^
	Seattle Public Utilities
City of Seattle Boards and Commissions	
	Commission for People with DisAbilities
	Families and Education Levy Oversight Committee
	Human Rights Commission
	Lesbian Gay Bisexual Transgender Commission
	Seattle-King County Advisory Council for Aging and Disability Services
	Women's Commission
	Youth Commission
Community Partners	
	American Red Cross*
	Area Agencies on Aging #
	Asian Pacific Directors Coalition
	Catholic Archdiocese
	Catholic Community Services
	Chamber(s) of Commerce#
	Childcare Resource and Referral Network
	Children's Advocacy Centers #
	Colleges and Universities
	Crisis Clinic^*
	Disability Rights Washington ±*
	Faith-based Organizations #
	Food Lifeline^
	Fred Hutchinson Cancer Research Center
	Greater Church Council of Seattle
	Grocery stores and farmers markets #

RSF 3 – Health, Social Services, and Education	
Categories	**Entity**
	Head Start
	Home School Association
	Hospitals and medical centers #
	Human Services Department Contracted Agencies #
	King County 2-1-1
	Northwest Healthcare Response Network
	Other Non-governmental Organizations #
	PATH*
	Pharmacies #
	Poison Control Center
	Public and private emergency medical services providers
	Public Health Reserve Corps
	Puget Sound Blood Center
	Salvation Army*
	Seattle Council PTSA
	Seattle Food Committee
	Seattle Housing Authority
	Seattle Human Services Coalition
	Seattle Public Schools^*
	Therapeutic Health Services*
	United Way King County*
	University Student Groups#
	Urban League*
	WA Federation of Independent Schools*
	Washington Voluntary Organizations Active in Disaster (WAVOAD)
	YMCA of Greater Seattle
	YWCA

RSF 4 - Housing

	Categories	Entity
Task Force Chair Candidates		
	1) City of Seattle	Office of Housing
	2) Community Organization	To be determined
Support		
	Federal	Housing and Urban Development (NDRF Lead)
	State of Washington	Department of Commerce Military Department Housing Finance Commission
	Regional Public Sector Entity	Seattle Housing Authority
	King County	Department of Community and Human Services – Housing and Community Development Department of Permitting and Environmental Review
	City of Seattle	Department of Finance and Administrative Services Department of Human Services Department of Neighborhoods Seattle Department of Construction and Inspection ^* Office of Immigrant and Refugee Affairs Office Intergovernmental Relations Office of Planning and Community Development ^* Seattle City Light^* Seattle Public Utilities
	City of Seattle Boards and Commissions	Board of Park Commissioners Housing Levy Oversight Committee Human Rights Commission Lesbian Gay Bisexual Transgender Commission Seattle Housing Authority Board of Commissioners

RSF 4 - Housing

Categories	Entity
	Women's Commission
Community Partners	
	American Institute of Architects (AIA)
	American Planning Association (APA)
	American Red Cross*
	Architecture, engineering and development firms #
	Banks and Credit Unions#
	Bellwether Housing
	Capitol Hill Housing*
	Condo associations #
	Habitat for Humanity Seattle-King County
	Homeowner associations #
	Housing Development Consortium
	Impact Capital
	Insurance companies #
	Master Builders Association
	Neighborhood Associations
	Non-profit shelters and housing agencies #
	Plymouth Housing Group*
	Property management groups #
	Real Estate companies #
	Rental Housing Association
	Runstad Center for Real Estate at UW*
	Urban Land Institute (ULI)
	US Green Building Council
	Washington Community Reinvestment Association

RSF 5 - Infrastructure Systems

	Categories	Entity
Task Force Chair Candidates		
	1) City of Seattle	Seattle City Light Seattle Public Utilities Department of Transportation (SDOT) ^
	2) Community Organization	To be determined
Support	**Federal**	Department of Defense (DOD)/ US Army Corps of Engineers (USACE) (NDRF Lead)
	State of Washington	Department of Transportation Utilities and Transportation Commission Consolidated Technical Services Department of Archaeology and Historic Preservation Washington State Patrol Military Department Department of Agriculture Department of Ecology Department of Health
	Regional Public Sector Entity	Cascade Water Alliance King County Metro Transit Port of Seattle^ Puget Sound Regional Council* Sound Transit*
	King County	Department of Transportation Department of Natural Resources and Parks (Solid Waste, Wastewater Treatment, etc.)

RSF 5 - Infrastructure Systems

Categories	Entity
City of Seattle	
	Department of Finance and Administrative Services
	Department of Information Technology
	Seattle Department of Construction and Inspection ^*
	Office of Planning and Community Development ^*
	Office of Sustainability and Environment
City of Seattle Boards and Commissions	
	Bicycle Advisory Board
	Board of Park Commissioners
	Bridging the Gap Levy Oversight Committee
	Citizens Telecommunications and Technology Advisory Board
	Pedestrian Advisory Board
	Seattle City Light Review Panel
	Seattle Public Utilities Creeks, Drainage and Wastewater Advisory Committee
	Seattle Public Utilities Solid Waste Advisory Committee
	Seattle Public Utilities Water System Advisory Committee
Community Partners	
	Amtrak*
	Argosy Cruise line
	AT&T*
	Bike Share Programs #
	BNSF Railroad*
	BP Olympic Pipeline ±
	Cascade Bike Club ±
	Cascadia Center for Regional Planning*
	Cascadia Green Building Council
	Clipper Vacations*
	Community Transit Advocacy Organizations
	Commute Seattle
	Eastern WA freight shippers #
	Engineering and Planning firms #
	Enwave Seattle ±

RSF 5 - Infrastructure Systems

Categories	Entity
	Greyhound
	Unions #
	Insurance companies #
	Large vendors and contractors with national capacity#
	Manufacturing Industrial Council
	North Seattle Industrial Association
	Pacific Northwest Economic Region(PNWER)±*
	Ports and fuel providers on Harbor Island
	Puget Sound Energy*
	Puget Sound Pilots Association
	Regional Utility Districts
	Ride share companies #
	Suppliers for wire, pipes, building materials, water portable toilets #
	Taxi Companies#
	Transportation Choices*
	University of Washington^*
	UPS
	US Green Building Council
	UW School of Built Environment
	Washington Association of Sewer and Water Districts*
	Washington State Association of County Engineers (WSACE)
Tribal Government	
	Office of Intergovernmental Relations – Tribal Relations

RSF 6 - Natural and Cultural Resources

	Categories	Entity
Task Force Chair Candidates		
	1) City of Seattle	
		Department of Parks and Recreation
		Office of Arts and Culture*
	2) Community Organization	
		To be determined
Support		
	Federal	
		Department of Interior (NDRF Lead)
	State of Washington	
		Department of Natural Resources
		Department of Ecology
		Department of Agriculture
		Department of Archaeology and Historic Preservation
		Department of Fish and Wildlife
		Department of Health
	Regional Public Sector Entity	
		Visit Seattle
	King County	
		Department of Natural Resources and Parks - Water and Land Resources Division, Parks Division, Historic Preservation, etc.)
	City of Seattle	
		Business Improvement Areas
		Department of Neighborhoods – Historic Preservation
		Office of Film and Music
		Seattle Center
		Seattle City Light^*
		Seattle Public Library^
		Seattle Public Utilities

RSF 6 - Natural and Cultural Resources

Categories	Entity
City of Seattle Boards and Commissions	
	Arboretum and Botanical Garden Committee
	Arts Commission
	Ballard Avenue Landmark District Board
	Board of Park Commissioners
	International Special Review District Board
	Landmarks Preservation Board
	Music Commission
	Parks and Green Spaces Levy Oversight Committee
	Pedestrian Advisory Board
	Pike Place Market Historical Commission and Development Authority
	Pioneer Square Preservation Board
	Seattle Center Advisory Commission
	Seattle Public Library Board of Trustees
	Seattle Public Utilities Creeks, Drainage and Wastewater Advisory Committee
	Urban Forestry Commission
Community Partners	
	Allied Arts
	American Planning Association (APA)
	Art museums #
	Bicycle clubs
	Burke Museum
	Ethnic Organizations #
	Historic Seattle
	Libraries and Archives#
	Museum of Flight
	Museum of History and Industry*
	National Trust for Historic Preservation
	Neighborhood Associations #
	Neighborhood organizations #
	Preservation Green Lab
	Private owners of historic resources#
	Puget Sound Maritime Historical Society
	Seattle Art Museum

RSF 6 - Natural and Cultural Resources

Categories	Entity
	Seattle Aquarium
	Seattle Chinatown International District Preservation and Development Authority
	Seattle Foundation
	Seattle Heritage Emergency Response Network (SHERN) *
	Seattle Parks Foundation
	Seattle Sport Commission
	Seattle sports teams (e.g. Sounders, Seahawks, Mariners)
	Seattle Theater Group – Opera, Symphony
	Seattle/American Institute of Architects (AIA)
	Trust for Public Lands
	Washington Park Arboretum
	Washington Trust for Historic Preservation
	Wing Luke Museum
	Woodland Park Zoo
	Youth organizations and schools#
Tribal Government	Office of Intergovernmental Relations – Tribal Relations

RSF 7 - Building and Land Use Planning		
	Categories	**Entity**
Task Force Chair Candidates		
	1) City of Seattle	Office of Planning and Community Development ^*
	2) Community Organization	To be determined
Support		
	Federal	**[No NDFR counterpart]**
		Environmental Protection Agency
		Housing and Urban Development
		US Geological Survey
	State of Washington	**Department of Commerce – Growth Management**
		Department of Ecology
		Department of Natural Resources
		Department of Agriculture
		Department of Transportation
		Department of Archaeology and Historic Preservation
	Regional Public Sector Entity	Puget Sound Regional Council
	King County	Department of Permitting and Environmental Review
	City of Seattle	Community Councils
		Seattle Department of Construction and Inspection (Seattle DCI)
		Department of Transportation (SDOT) ^
		Department of Neighborhoods - Historic Preservation Program
		Office of Sustainability and Environment
		Office of the Mayor
		Neighborhood District Councils
		Seattle City Light^*
		Seattle Public Utilities

Seattle Office
of Emergency
Management

RSF 7 - Building and Land Use Planning

Categories	Entity
City of Seattle Boards and Commissions	
	Construction Codes Advisory Board
	Design Commission
	Design Review Board
	Fire Code Advisory Board
	Pedestrian Advisory Board
	Planning Commission
Community Partners	
	Alliance for Pioneer Square ^*
	American Planning Association (APA)
	Architectural Trade Associations
	Building inspection trade associations #
	Capitol Hill - Ecodistrict
	Capitol Hill Housing*
	Cascadia Green Building Assoc.
	Chamber(s) of Commerce#
	Colleges and Universities
	Commute Seattle
	Congress for New Urbanism – Cascadia
	Construction firms #
	Cultural groups #
	Downtown Seattle Association*
	Employment agencies #
	Engineering and Planning firms #
	Green building organizations #
	Habitat for Humanity
	Insurance companies #
	International Living Future Institute
	Pike Place Market Preservation and Development Authority
	Preservation Green Lab
	Regional transportation partners #
	Seattle Chinatown International District Preservation and Development Authority
	Seattle/American Institute of Architects (AIA)

RSF 7 - Building and Land Use Planning

Categories	Entity
	Structural Engineers Association of Washington (SEAW)
	Urban Land Institute (ULI)
	US Green Building Council

Appendix 5 Pre-Disaster Recovery Preparations

The table below summarizes input from the Executive Advisory Group and Planning Committee, indicating which Pre-Disaster Preparations are most critical to address prior to a disaster. This input was gathered using an informal dot exercise during a joint Executive Advisory Group and Planning Committee meeting October 8, 2014.

Through ongoing development of the Framework since this meeting, a number of Pre-Disaster Preparations have been added, modified, or deleted. Given the informal nature of the input gathering and the imperfect correlation between the final Pre-Disaster Preparations listed on the pages above and in the list below, these indications should be used carefully. As the City updates its Emergency Management Strategic Plan, it will consider how best to prioritize and phase implementation of these recovery preparations.

RSF	Pre-Disaster Preparations	Dots
1	1.1.a. Map existing neighborhood structures that are/were institutional and/or organically developed.	4
1	1.1.b. Gather information regarding capability within neighborhoods by reviewing existing plans.	3
1	1.3.a. Identify language and information access needs.	6
1	1.3.b. Continue to pre-identify possible neighborhood meeting and resource center locations.	0
1	1.3.c. Identify mentors within the community who can help validate the pre-disaster process.	3
1	2.3.a. Inventory, evaluate, and prepare potential Recovery Center locations.	10
1	3.1.a. Identify and cultivate partner organizations that can support community-based planning.	9
1	4.4.a. Inventory community assets and resources, as well as government and community programs.	2
1	4.4.b. Identify obvious gaps based on expected disaster impacts.	4
1	4.4.c. Work with volunteer coordination groups to prepare for a large event. Identify resources they would need to coordinate this large influx of volunteers	12
2	1.3.a. Inventory and identify gaps in resources within the region to support economic recovery operations.	6
2	1.3.b. Communicate with key partners, including business networks, banks, and the City's large businesses, describing the role they can play in recovery.	11
2	2.2.a. Establish pre-determined business and economic priorities based on their ability to support and spur recovery in other sectors.	3
2	2.2.b. Develop a list of best practices to support business access to needed resources to keep them running post-disaster.	2
2	3.1.a. Lay the groundwork for a communications strategy to encourage business to remain in Seattle.	5
2	3.1.b. Cultivate relationships with a few CEOs willing to announce their company's commitment to remaining in Seattle following a disaster.	3
2	4.1.a. Lay the groundwork for modifying procedures and authorities following a disaster.	20
2	4.1.b. Examine the need for price gouging regulations after a declared disaster.	8
2	5.2.a. Engage public, private, and non-profit workforce development and retraining organizations in exploring their role in recovery.	1
2	5.3.a. Engage banks and insurance companies to understand their post-disaster processes and discuss how the Community Recovery Task Force can help them help our local businesses.	4
2	6.2.a. Establish a list of businesses and clusters most critical to retain in Seattle for their economic contributions and symbolic importance.	5
2	7.1.a. Pre-identify sites and potential Business Center resources in areas across the City.	2
2	7.1.b. Prepare businesses before a disaster by facilitating the development of business continuity and disaster recovery plans and encouraging appropriate insurance levels.	18
2	7.2.a. Identify and prepare sites that may be used as shared workspaces in areas across the City.	0

RSF	Pre-Disaster Preparations	Dots
3	1.2.a. Establish forums for public and private school systems to brainstorm how they might cooperate together to reestablish the Seattle education system without regard for the traditional operating methods that exist today. Work to eliminate the institutional barriers that limit the ability for cooperative efforts when disasters strike.	0
3	1.2.b. Coordinate preparedness efforts among public and private schools within the same neighborhood to develop a comprehensive recovery plan to help pool resources.	0
3	2.1.a. Provide pre-k providers with information about what to do in recovery – how to get permitted to open, how to communicate needs, etc.	0
3	2.3.a. Encourage Seattle Community Colleges and public and private colleges and universities to work together to become more disaster resilient and seek ways to be supportive of one another and their neighborhoods when disasters strike.	0
3	3.1.a. Conduct pre-event survey of school properties to identify potential sites where portable buildings might be a possible solution to space needs for the delivery of services.	0
3	4.2.a. Lay the groundwork for regional collaboration during disaster recovery.	20
3	4.3.a. Conduct surveys of providers to identify those that are already collocated by neighborhood, but not currently working together.	9
3	4.4.a. Establish protocols and tools for sharing information among providers and with residents.	14
3	5.2. Address immediate and long-term disaster impacts on mental health.	4
4	1.1.a. Evaluate current housing stock and associated risk exposure. Use this to inform planning activities carried out through RSF 7.	11
4	1.1.b. Prepare housing survey tools in advance of a disaster.	0
4	1.1.c. Model post-disaster housing and rent costs.	5
4	1.3.a. Engage the network of housing partners in recovery planning on these topics (1.3.3.) before a disaster.	4
4	2.1.a. Explore creative options for interim housing (warehouse, cruise lines, live aboards, student housing, employer housing)	1
4	2.2.a. Explore options developed by the FEMA joint Housing Solution Group (e.g., Alternative Housing Pilot Program)	7
4	3.1.a. Following Strategy 1.2, coordinate with government agencies and community partners to identify resources to carry out inspections and small repairs.	3
4	3.1.b. Promote actions renters and homeowners can take related to building safety and seismic retrofitting to minimize damages.	10
4	3.3.a. Coordinate with state/local government agencies and HousingSearchNW administrators to identify the support required to manage significant increase in site users post-disaster.	2
4	3.4.a. Develop guides/toolkits for homeowners and housing associations detailing available programs, eligibility requirements, and steps to take to receive assistance.	2
4	3.4.b. Engage local and national finance organizations (banks, credit unions, CDFIs, etc.) toward developing flexible financing instruments for homeowners post-disaster.	16
4	3.4.c. Engage with insurance companies to understand how post-disaster homeowner claims can be expedited.	1
4	3.5.a. Maintain a publicly available list of certified contractors.	3
4	3.5.b. Promote up-to-date understanding of seismic building standards.	1
4	3.5.c. Coordinate with the City's existing rental inspection program.	1
4	4.3.a. Stay up-to-date with FEMA and HUD financing programs.	5
4	4.3.b. Pre-identify programs and priorities for post-disaster development proposals.	6
5	1.1.a. Establish information sharing agreements with public and private utility holders that extend into the recovery phase.	2
5	1.2.a. Inventory and evaluate existing infrastructure-specific plans and priorities.	11

RSF	Pre-Disaster Preparations	Dots
5	1.3.a. Advance infrastructure-specific pre-disaster recovery planning.	6
5	1.3.b. Develop cross-sector and cross-jurisdiction coordination opportunities to better understand regional recovery interdependencies from each sector and how hazards impact specific structures	17
5	1.3.c. Inventory potential infrastructure funding mechanisms and identify funding gaps.	1
5	2.1.a. Engage the transportation community in recovery discussions well before the disaster to gain input and buy-in.	15
5	3.1.a. Implement mitigation, hardening, and increased resilience strategies in everyday infrastructure restoration planning and projects.	24
6	1.1.a. Prepare parks and open spaces for potential recovery uses.	13
6	2.1.a. Convene cultural organizations and philanthropy around recovery issues.	6
6	2.1.b Implement mitigation to support historic structures.	11
6	3.2.a. Inventory and understand existing local arts and cultural programs that could be leveraged for community healing during normalization period.	19
6	4.2.a. Maintain a current vision and priorities for improving the City's existing parks and open space network.	18
7	1.1.a. Identify potential sites for Community Recovery Centers.	0
7	1.1.b. Advance the technical and contractual foundation needed for a rapid and sufficiently rigorous post-disaster land use assessment.	1
7	1.1.c. Continue to study post-disaster assessment and planning experiences from other municipalities to generate lessons learned.	1
7	1.2.a. Maintain up to date information on the distribution of land uses, particularly within hazardous areas.	2
7	1.2.b. Pre-identify potential suitable locations for land uses currently in hazardous areas.	2
7	2.1.a. Maintain and collect recovery plan documents and guidance from other organizations. Develop accessible guides summarizing that information for multiple communities.	0
7	2.2.a. Maintain up to date information on the requirements and processes to deploy federal rapid repair programs.	1
7	2.2.b. Prepare draft ordinances permitting temporary or incomplete structures.	0
7	2.2.c. Establish draft guidelines and inspection regulations to allow minimally damaged housing and businesses to continue to operate.	15
7	2.3.a. Develop a surge plan and establish backups to mutual aid mechanisms for additional permitting capacity.	15
7	2.3.b. Prepare draft standards for temporary or alternative building types. Establish guidelines for acceptable use of variance in low-risk areas.	2
7	2.3.c. Identify potential weaknesses in building codes and encourage updating to more stringent seismic standards. Don't wait for a disaster to update building codes.	3
7	3.1.a. See RSF 6 – Natural and Cultural Resources	1
7	3.1.b. Develop disaster recovery-focused community development toolkits that give community members practical ideas about how to support the recovery of their neighborhood.	19
7	3.2.a. Understand HUD CDBG project requirements and pre-identify potential communities and/or projects for assistance.	3
7	3.2.b. Pre-identify potential debris staging areas within neighborhoods.	0
7	4.1.a. Propose that PDP do long range planning through the lens of SHIVA.	4
7	4.1.b. Identify and mitigate existing critical facilities located in potentially hazardous areas.	6
7	4.2.a. Inventory resources and incentives to encourage green and accessible building.	5

Appendix 6 Record of Revision

Record of Revision			
DATE	**SECTION**	**PAGE (S)**	**DESCRIPTION**