Regional Recovery Framework

Stakeholder Engagement Session Summary

June 2018



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Regional Recovery Framework Stakeholder Engagement Sessions

Project Background

Natural disaster can happen at any time. The five counties of the Portland Metropolitan Region (PMR) are working together to guide rebuilding, redevelopment, and recovery following a disaster. The framework looks beyond the disaster to imagine life in the weeks, months, and years afterward; to seize the opportunity to creatively redesign our region to be even stronger and more resilient.

This project is a collaboration between public, private, and non-profit sector stakeholders, led by the five-county, multi-state Regional Disaster Preparedness Organization (RDPO).

As a part of this effort, the project team held a series of eight identical stakeholder kickoff engagement sessions throughout the PMR in May of 2018.

Purpose

The purpose of the stakeholder engagement sessions was to:

- Help stakeholders understand why a regional recovery framework is important and what it will do.
- Discuss stakeholder goals related to recovery and resilience before and after a disaster.
- Identify additional partners who will be involved in community recovery.
- Begin to identify stakeholder roles in the recovery process.
- Give a brief introduction of the Recovery Support Functions, pre- and post-disaster recovery organizational structure components.

Sessions were offered throughout the five-county region to allow stakeholders to choose the session, or sessions, that best met their schedule and location needs.

Sessions Schedule and Attendance

The Regional Recovery Framework Core Planning Team (CPT) members identified locations for the engagement sessions and identified stakeholders to involve in the project. The RDPO sent invitations and reminders to all identified stakeholders, and the CPT members followed up with their contacts to encourage attendance.

A total of 115 stakeholders attended the sessions. The following table includes the dates, locations, and attendance of each meeting.



#	Location	Address	Date	Attendance
1	Multnomah County: North Portland Library	512 N Killingsworth Street, Portland, Oregon	Wednesday, May 2	9
2	Clackamas County: Development Services Building – Room 401	150 Beavercreek Road, Oregon City, Oregon	Thursday, May 3	15
3	Multnomah County: Oregon Convention Center – Room D140	777 NE Martin Luther King Jr Blvd, Portland, Oregon	Thursday, May 3	8
4	Columbia County: Columbia County Emergency Operations Center	58611 McNulty Way, Saint Helens, Oregon	Monday, May 7	15
5	Clark County: Clark County Food Bank	6502 NE 47th Ave, Vancouver, Washington	Tuesday, May 8	15
6	Washington County: Hillsboro Brookwood Library – Community Room	2850 NE Brookwood Parkway, Hillsboro, Oregon	Wednesday, May 9	27
7	Multnomah County: Gresham Library	385 NW Miller Ave, Gresham, Oregon	Thursday, May 10	16
8	Washington County: Tigard Public Works Building	8777 SW Burnham St., Tigard, Oregon	Thursday, May 10	16

Session Overview

Each stakeholder kickoff was facilitated by Hope Winship, Hagerty Consulting, and attended by at least one member of the CPT. Upon arrival, stakeholders were asked to sign in and were given a series of handouts illustrating the purpose of the project and the kickoff session scenarios and activities, as well as the session agenda and comment card.

The agenda was as follows:

- 1. Welcome and Introductions
- Scenario Exercise: What does it look like after a disaster?
- 3. Project Overview Presentation
- 4. Recovery Priorities Exercise
- 5. Wrap-Up and Next Steps

Session Format

Welcome and Introductions

The facilitator and a CPT member would introduce themselves, as well as give a brief description of the project before asking attendees to state their name and who they represented.

Scenario Exercise: What does it look like after a disaster?

The facilitator directed attendees to the handout illustrating the Cascadia Subduction Zone scenario exercise and asked them to consider their top three personal priorities following a disaster.



After attendees had read through the scenario, the facilitator assured that for the purpose of the exercise, they could assume their personal priorities had been taken care of, and should instead consider and voice the broader needs and impacts to the region, specifically focusing on:

- How the damage from the earthquake and tsunami described in the scenario change residents' daily habits.
- Whether residents stay in the area after a significant portion has been destroyed and needs rebuilding.
- What services residents will need the most after the earthquake, tsunami, and other cascading impacts.

The scenario specifically looked at what recovery would look like if an 8.5 magnitude earthquake occurred at 11:23 A.M. on May 15, 2018 along the Cascadia Subduction Zone.

Project Overview

Using a PowerPoint, the facilitator walked attendees through the project and framework background, purpose, and stakeholder roles.

Recovery Priorities Exercise

Following the project overview, the facilitator explained that they would continue the scenario exercise, specifically considering what regional recovery would look like one month, one year, and five years following a disaster. Attendees were split into groups of four to six people, and asked to read through the scenarios for each time period. Each group was given green, yellow, and blue sheets of paper and asked to write down one goal per sheet with the corresponding entities responsible for accomplishing the goal. Green sheets represented one-month goals, yellow sheets represented one-year goals, and blue sheets represented five-year goals. The groups were asked to spend 10 minutes brainstorming goals for each time period.

Following the brainstorming session, attendees were given a break while the project team arranged the goals on the wall, grouping them by time period and commonality.

The project team gave a brief summary of how the goals aligned. Attendees were given five dots and asked to use the dots to identify their top priorities for recovery.

The facilitator then asked the group to voice any additional goals they felt were missing or did not receive adequate prioritization.

Wrap-Up and Next Steps

The facilitator and a CPT member thanked the attendees for their participation and explained how they could continue their engagement. They asked the attendees to fill out a comment form, specifically asking them to indicate which Recovery Support Function Workshops they would be interested in attending, and any additional stakeholders or groups they felt should be involved in the process.



Stakeholder Input

Scenario Exercise

Following is a summary of the goals and responsible parties identified during the scenario exercise for each time period (one month, one year, and five years after a disaster) listed from highest to lowest priority according to the stakeholder feedback.

ONE MONTH AFTER A DISASTER

- 1. Resources ensuring equitable and efficient provision of all resources after a disaster.
 - Establishing functional distribution sites.
 - Establishing temporary or permanent "cool storage" facilities.
 - Identifying where clean water can be sourced from digging and filtration of wells.
 - Determining agriculture and livestock farms that can supply the region with food.
 - Establishing ports and harbors as distribution centers.
 - Coordinating with local stores and businesses to identify potential resources, and ensuring stores are aware of emergency exemptions and Federal Emergency Management Agency (FEMA) reimbursement.
 - Coordinating with local law enforcement to provide security at distribution sites.
 - Managing and coordinating volunteers and donations.
 - Restoring potable water to the "spine."

- FEMA
- Food banks
- Out-of-state assistance
- Grocery stores
- Granges
- Community organizations (e.g., non-governmental organizations [NGOs], non-profits, churches)
- City/county emergency management agencies to provide filters
- Farms
- U.S. Department of Agriculture (USDA)
- Farm services agencies
- City/county transportation departments
- Military
- Ports
- Local law enforcement departments
- 2. Communication developing a communication system for all, regardless of location and status of power restoration, and ensuring the public is informed on recovery efforts.
 - Communicating to the public about recovery, including the locations of resources and facilities, their role in the recovery efforts, and overall status.
 - Managing public expectations.
 - Mobilizing amateur (HAM) radio, Garmin™ InReach, and satellite phone owners to spread public information across the region.



- Ensuring continued communication with potentially isolated or vulnerable populations about recovery efforts.
- Messaging to the public on need for damage assessments to prevent people inhabiting unsafe structures or rebuilding without permitting.
- Ensuring the public is informed on water safety and sanitation issues.
- Reestablishing cellular service.
- Coordinating with fuel providers and cellular companies to create functioning communication systems.

- City/county/state leaders
- Law enforcement
- County emergency management agencies
- FEMA
- Public and private communication infrastructure providers
- City/county housing authorities
- Joint offices
- City/county health and human services departments
- Public health
- Fuel providers
- Service providers
- Transportation prioritizing the restoration of major arterials and supply lines for movement of people and resources.
 - Identifying detours to avoid damaged roads and bridges.
 - Reopening critical connecting roads.
 - o Primary supply routes will need prioritization in road clearing efforts.
 - Columbia County will need Highway 30 cleared to ensure mobility of people and resources.
 - Developing alternative routes over the Columbia and Willamette rivers for movement of people and resources; also considering the use of boats.
 - Coordinating with transit organizations to mobilize public transportation for moving people to shelters, medical facilities, and volunteer hubs.
 - Considering and identifying alternative vehicles for transportation of people and resources such as school buses, moving trucks, and other commercial vehicles.
 - Assessing damage to identify safe alternatives to important routes with critical damage.
 - Exploring and identifying multimodal (e.g., air, marine, rail) transportation alternatives.
 - Coordinating with local transit authorities to reestablish public transportation.
 - Coordinating with neighborhoods and communities to begin clearing surface streets.

- City/county/state transportation departments
- Public works departments
- Private contractors
- FEMA
- State emergency management associations



- Local utility providers
- U.S. Army Corps of Engineers (USACE)
- Transit agencies
- Ports
- Coast Guard
- Community members
- Farms (for tractors)
- Sanitation and sewage mitigating sewage and sanitation issues before full system restoration.
 - Communicating to the public on how to dispose of human waste and prevent sanitation and health issues and providing specific education on how to avoid cholera – "two bucket system."
 - Issuing public "boil water" notices.
 - Coordinating to reestablish wastewater systems.
 - Determining the potential need for the public to compost or burn human waste to avoid contamination and disease.
 - Developing a plan for dealing with contaminated water.

- Regional service providers
- National Guard
- Local water districts and bureaus
- FEMA
- Oregon Department of Environmental Quality (DEQ)
- Public works departments
- Private sanitation and waste management providers
- City/county transportation departments
- **5. Medical services and facilities** ensuring access to medical treatment and prescriptions for those with new or pre-existing conditions.
 - Considering patients with pre-existing conditions and illnesses that rely on consistent medical treatment (e.g., dialysis, insulin).
 - Serving people who require medical treatment for injuries sustained during or following the disaster and prioritizing those with injuries deemed "life-threatening."
 - Prioritizing the development of a functioning system of healthcare facilities.
 - Ensuring sufficient access and supply of antibiotics.
 - Determining hospital capacity.
 - Establishing stations to train individuals on how to perform basic medical services.
 - Addressing potential mental health issues due to trauma.
 - Providing healthcare to vulnerable communities, specifically the disabled.

- Hospitals
- FEMA
- City/county healthcare authorities
- Red Cross
- Community Emergency Response Team (CERT)
- Clinics



- Volunteers
- Mutual Aid
- Local/federal government
- Local medical personnel
- Public works departments
- City/county emergency management agencies
- Utility providers
- Public and private healthcare providers
- Healthcare companies
- City/county transportation departments
- **6.** Fuel ensuring the continued availability of fuel supply that will support the provision of vital services.
 - Identifying fuel supply.
 - Developing prioritization of how fuel will be distributed.
 - Determining routes and supply lines that can safely and efficiently transport fuel to the region.
 - Providing fuel to critical transport vehicles.
 - Collaborating with regional gas stations to identify safe, existing fuel sources.
 - Developing an alternative transportation plan for bringing fuel into the region (e.g., trucks, boats, helicopters).
 - Hillsboro Airport may be able to serve as a distribution site for fuel brought in by plane.

- Fuel providers (e.g., Arco, Shell)
- City/county emergency management agencies
- FEMA
- Regional ports
- Port authorities
- City/county/state governments
- USACE
- Regional transit authorities
- 7. Structural integrity performing damage assessments to identify safe buildings and understand regional impact to infrastructure.
 - Recognizing that aftershocks will have impact on rebuilding efforts.
 - Identifying individuals to perform damage assessments of buildings and infrastructure to determine safety and access, with a priority on critical facilities and connecting arterials.
 - Assessing and planning how best to begin rebuilding efforts.
 - Establishing a timeline for remaining building assessments.
 - Establishing a system for inspecting and tagging homes for safety.

- City/county government
- Local certified professional volunteers
- USACE
- City/county emergency management agencies



- Joint districts
- 8. Transitional shelter and social services establishing transitional shelters and social and educational services that serve both the new and previously houseless community within the region.
 - Understanding the growing need for temporary shelters as people are increasingly displaced.
 - Identifying safe and centralized locations for shelters in-place.
 - Providing resources to shelters and points-of-distribution (PODs).
 - Providing law enforcement at shelters and PODs to ensure public safety and security of resources.
 - Ensuring shelters are suitable to seasonally-specific conditions cold vs. hot weather.
 - Providing child and family services to the region (e.g., daycare, education, school social programs).

- Community organizations (e.g., NGOs, churches)
- Schools
- FEMA
- City/county government
- Neighborhoods
- U.S. Department of Housing and Urban Development (HUD)
- Red Cross
- School districts
- Event centers
- Council for the Homeless
- Local law enforcement departments
- Individual households
- Access to money developing a system for allowing people to access bank accounts and cash.
 - Providing "banking trucks" for people to access their bank accounts and withdraw money.
 - Reestablishing the banking infrastructure and communication system.
 - Reestablishing the ability to use credit and debit cards, since many people no longer carry cash.
 - Coordinating with marijuana dispensaries to establish a microcredit system dispensaries typically have significant cash at their locations.

- Private banks and credit unions
- Economic development commissions and agencies
- Federal government
- Service providers
- Financial institutions
- Marijuana dispensaries



- **10. Debris management** removing basic waste and debris.
 - Communicating to the public on where to dispose of debris and waste.

- Metro
- Public works departments
- NGOs
- Local public and private waste management providers
- City/county governments

ONE YEAR AFTER A DISASTER

- 1. Utilities rebuilding functional utility infrastructure.
 - Developing a sustainable waste management system.
 - Widely distributing basic utilities (except wastewater sanitation).
 - Exploring and encouraging renewable energy sources.
 - Rebuilding water storage facilities.
 - Restoring a functional sewer system.
 - Restoring mail service.
 - Restoring phone service.

- Public health departments
- Local planners
- DEQ
- U.S. Environmental Protection Agency (EPA)
- Utility districts
- Local jurisdictions
- City/county/state governments
- Wastewater managers
- USACE
- Transportation departments
- FEMA
- Port authorities
- **2.** Land use developing land use regulations, policies, permitting, and zoning laws that promote rebuilding safe, affordable, and resilient structures and infrastructure.
 - Ensuring land use policies prohibit rebuilding in hazard areas.
 - Regulating the potential influx of rebuilding.
 - Developing comprehensive new or adapted land use laws.
 - Ensuring the building codes require all new buildings to withstand future seismic events.
 - Creating a comprehensive regional strategy for land use and growth.
 - Informing developers, builders, and the general public about new or adapted land use laws.
 - Establishing policies to avoid gentrification and displacement.
 - Identifying properties for acquisition and demolition.
 - Identifying locations where people will live and changing land use policies to promote resilient development.



- Ensuring housing policies best suit the needs of displaced populations.
- Reexamining permit procedures to make new development simpler and more efficient.
- Determining the market (e.g., own vs. rent, single family vs. multi-family).

- Private and public engineers
- City planning organizations
- Policy-makers
- **Building departments**
- Construction companies
- Developers
- Public information officers
- Real estate companies
- City/county governments
- Community planners
- HUD
- Elected officials and politicians
- Housing authorities
- 3. Economic and workforce development planning for and developing a healthy and growing economy that is tailored to the region.
 - Providing job and skills training to reintroduce people into the workforce.
 - Identifying regional-specific jobs and industries that offer the opportunity for growth in the future.
 - Providing economic support for small businesses (e.g., incentives, loans).
 - Developing a plan for economic restoration.
 - Creating incentives for large employers that encourage them to stay in the region and invest in the region's recovery.
 - Providing support to businesses that need to relocate to keep them in the region.
 - Creating a financial support system for local small and medium sized businesses (e.g., gap loans, federal loans).
 - Ensuring that large-scale employers are up and running.
 - Slowing federal assistance to the public to promote commerce stores are open and consumers are able and encouraged to purchase goods.
 - Providing jobs that support the recovery efforts.
 - Identifying where job centers will be located.
 - Supporting major employers by creating a workforce tailored to their industries.
 - Developing plans to attract new businesses that will revitalize the regional economy.
 - Providing financial support to employees that have on-going payments and responsibilities.
 - Reigniting the tourism economy.
 - Restoring Portland's industrial district.

- Economic development agencies and commissions
- Large employers and corporate partners
- **Business associations**



- International employers
- State funding agencies
- Small business associations
- City/county/state governments
- Community colleges
- Trade schools
- Unions
- Policy-makers
- Chambers of commerce
- Local businesses
- Neighborhood associations
- **4. Schools** restoring a functional education system.
 - Ensuring students have access to education throughout the region.
 - Ensuring school districts are restored or consolidated to support students.
 - Prioritizing construction of new schools to replace collapsed or permanently damaged buildings.
 - Ensuring schooling is offered year-round.
 - Recruiting teachers and encouraging teachers to return to work.
 - Ensuring sufficient student-to-teacher ratio.
 - Ensuring schools are open in temporary or permanent buildings.
 - Connecting displaced students with schools and education opportunities.
 - Prioritizing vulnerable communities in the restoration of education facilities.

- School districts
- Higher education institutions
- State/federal education departments
- State legislators
- Private schools
- Emergency management agencies
- City government
- **5. Health and human services** ensuring functional services that support medical, mental, and general public health needs.
 - Restoration of a functioning healthcare system.
 - Providing mental health services for those suffering from mental or behavioral health issues as a result of the disaster (e.g., residual trauma, post-traumatic stress disorder [PTSD]).
 - Managing fatalities.
 - Offering mental health support programs in schools.
 - Ensuring people have access to life-sustaining medications.
 - Establishing community-led mental health support groups.

- Public health departments
- Hospitals
- Centers for Disease Control and Prevention
- Private medical agencies



- Community organizations (e.g., NGOs, non-profits, churches)
- Health authorities
- Schools
- Mental health professionals
- U.S. Department of Veterans Affairs
- Grassroots support networks
- Social and community support identifying and supporting vulnerable communities and individuals.
 - Communicating with at-risk communities to ensure equitable distribution and prevent displacement.
 - Providing social services to communities and individuals in need.
 - Ensuring low income communities and vulnerable populations have access to recovery opportunities (e.g., jobs, grants, financial assistance).
 - Holding a recovery ceremony.
 - Connecting smaller communities to the greater community.
 - Conducting public education on how to be more resilient.
 - Developing a plan for encouraging people to return.

- City/county health and human services departments
- Social services
- Community organizations (e.g., NGOs, non-profits, churches)
- Mercy Corps
- 7. Transportation rebuilding major transportation arterials.
 - Detouring critical routes during rebuilding.
 - Determining safe bridges for maximum transportation.
 - Normalizing air travel.
 - Restoring freight service truck, rail, air and marine ports.

Who is responsible?

- Military
- USACE
- Transportation departments
- Local jurisdictions
- FEMA (funding)
- 8. Recovery planning developing and enacting a long-term plan for recovery.
 - Establishing, stand-up, long-term recovery committees that focus on communities with the most need.
 - Encouraging sustainable redevelopment that addresses water quality, environmental protections, debris management, etc.

- State and local government
- Department of Fish and Wildlife
- EPA
- 9. Rebuilding –rebuilding and repairing damaged structures and infrastructure.
 - Rebuilding housing with a focus on affordability and structural resiliency.



- Promoting rebuilding efforts that focus on local commerce and walkable communities.
- Promoting the concept of "build back better."

- City/county planning organizations
- Private contractors and builders
- City/county housing associations
- Habitat for Humanity
- Community organizations (e.g., NGOs, non-profits, churches)
- 10. Housing transitioning people out of shelters and into temporary or permanent housing.
 - Investing in transitional, temporary, or permanent housing to support the houseless population.
 - Ensuring population centers shift east to avoid building on liquefiable soils.
 - Addressing issues with squatters and people living in unofficial housing.
 - Developing and coordinating temporary cooperative housing with shared facilities that still allow privacy.
 - Identifying homeless communities and creating targeted services.

Who is responsible?

- Community organizations (e.g., NGOs, non-profits, churches)
- Housing authorities
- Health and Human Services
- Policy-makers
- Law enforcement

FIVE YEARS AFTER A DISASTER

- 1. Land use and development ensuring sustainable, resilient land use policies and development.
 - Incorporating mitigation into building codes.
 - Ensuring land use laws have promoted safe and resilient infrastructure development.
 - Ensuring residential development is underway.
 - Ensuring strategic development in locations that promote the goals of the region.
 - Providing incentives for sustainable, resilient building practices (e.g., tax credits, financial support).
 - Prioritizing vulnerable communities in recovery efforts.
 - Decreasing the homeless and houseless population through continued service and strategic development of affordable housing.
 - Promoting the concept of "build back better."
 - Ensuring vulnerable populations have stable and affordable housing.
 - Strategically designing communities to support sustainable lifestyles (e.g., distance between home and work, access to transit, walkable/bikeable infrastructure).
 - Implementing policies that avoid gentrification.

- Planning departments
- Emergency management agencies
- City/county governments



- Insurance companies
- Private contractors, builders, and construction companies
- City/county housing authorities
- Economic health developing and restoring the economic engine and a thriving workforce.
 - Identifying and supporting new economic drivers and industry sectors to promote a thriving economy.
 - Developing regulatory measures for new businesses to ensure equitable distribution of wealth, and to avoid displacement of vulnerable populations.
 - People and businesses resuming economic activities beyond what is necessary for survival.
 - Streamlining the process for opening businesses.
 - Tailoring regional education opportunities to support local business and industry.
 - Restoring the existing economic drivers.
 - Attracting new businesses to rebuild tax-base.
 - Providing incentives to businesses to grow in accordance with the regional goals.
 - Reestablishing businesses to full employment and commercial capacity.
 - Supporting the local market.
 - Addressing issues related to the potential deficit of skilled workers.
 - Promoting the education and training of youth to reinforce the regional workforce.
 - Employing locals to help in rebuilding efforts.
 - Reestablishing the tourism sector.
 - Diversifying the tax base.

- Chambers of commerce
- Economic development agencies and commissions
- Local/state governments
- Committees
- Business associations
- Local businesses
- Local representatives
- Long-term care resources
- Recovery organizations
- Policy-makers
- Employment agencies
- **3. Community development** creating cohesive, sustainable, and locally-designed communities.
 - Investing in local communities to support human-centric development.
 - Identifying of community enhancing amenities that promote a local marketplace (e.g., fruit stands, plazas, farmer's markets).
 - Engaging smaller communities to better understand strategic growth.
 - Maintaining regional coordination for cohesive recovery of communities and the region.
 - Enhancing self-sufficiency promoting sustainable living practices (e.g., vegetable gardens, solar panels).



- Promoting empathy toward homeless populations.
- Re-imagining community design to better serve the region.
- Attracting residents who left the region.
- Investing in ways to reestablish a sense of community pride.

- Community leaders
- City/county planning departments
- Recovery organizations
- FEMA
- **4. Transportation** building strategic and comprehensive regional transportation infrastructure.
 - Improving transportation to address current bottlenecks, and lack of connectivity and sustainability.
 - Connecting Washington County to the coast.
 - Connecting Washington County to Clark County.
 - Bus service and rail service is fully functional and adapted to meet to needs of the region.
 - Building stronger active transportation with a focus on walkable/bikeable infrastructure, and strategic positioning of homes vs. work.
 - Ensuring local routes that sustained damage are repaired or rebuilt.
 - Developing a diverse transportation system to suit the needs of the region, focusing on vulnerable populations and sustainable alternatives.
 - Preparing and establishing a regional network of resilient supply lines and distribution centers for future resilience.
 - Building additional, resilient bridges across the Columbia River.
 - Prioritizing the construction of seismically retrofitted bridges throughout the region.

Who is responsible?

- City/county departments of transportation
- Transit authorities
- Metro
- City/county planning departments
- Neighborhoods
- Community organizations (e.g., NGOs, non-profits, churches)
- USACE
- 5. Schools ensuring schools and school districts are rebuilt and fully functional.
 - Ensuring schools and school districts are functioning and able to support all students.

- School districts
- Transportation departments
- Transit authorities
- Private contractors, builders, and construction companies
- Local government



- **6. Utilities** creating fully-functional, efficient, and sustainable utility systems.
 - Exploring and implementing sustainable, resilient utility infrastructure.
 - Implementing alternative and resilient fuel infrastructure.

- Water providers
- Local governments
- Policy-makers
- Regulatory agencies
- Fuel providers
- Departments of energy
- Natural and cultural amenities restoring and preserving natural and cultural resources.
 - Rebuilding cultural resources (e.g., sports teams, museums, theaters).
 - Providing entertainment and recreational services to the community.
 - Establishing a sense of regional pride.
 - Preserving and rehabilitating historic buildings and sites.
 - Promoting practices that protect and preserve natural resources and habitats.

Who is responsible?

- Historic societies
- Tourism associations
- Preservation groups
- Private companies
- Parks and recreation departments
- Community organizations (e.g., NGOs, non-profits, churches)

Comment Cards

Below is a summary of key themes gathered from the stakeholder comment cards, for the full comments and suggested stakeholders, see the excel spreadsheet attachment.

- There needs to be preparation and planning that addresses animal welfare issues (e.g., pets, farms, wildlife).
- It important to set realistic expectations for each time period, many stakeholders felt the feedback from the sessions was too optimistic.
- Understanding the unique needs of rural communities and incorporating them into the framework for recovery.
- Vulnerable communities need better representation throughout this process.
- Arts, culture, and natural resources will be critical in returning to normalcy.







North Portland Library — May 2, 2018

Attendees

Name	Organization	Title
Laura Hanson	RDPO	Planning Coordinator
Amy Haase	MCEM	Emergency Management Planner
Ryan Wist	Oregon Food Bank	Facilities and Compliance Manager
Denise Barrett	RDPO	Manager
Angie Gaia	Central City Concern	Risk Management
Beth Gilden	PSU	Project Manager
Robin Holm	Multnomah County Health Department	Emergency Preparedness and Response Associate
Carla Miller	Central City Concern	Safety
Tom Stenson	Disability Rights Oregon	Attorney

Scenario Exercise – What does it look like After a Disaster?

Meeting attendees were asked to participate in a disaster scenario exercise, specifically considering what regional recovery would look like one month, one year, and five years following a disaster. Attendees were split into groups of four to six people, and asked to read through the scenarios for each time period. Each group was given green, yellow, and blue sheets of paper and asked to write down one goal per sheet with the corresponding entities responsible for accomplishing the goal. Green sheets represented one-month goals, yellow sheets represented one-year goals, and blue sheets represented five-year goals. The groups were asked to spend 10 minutes brainstorming goals for each time period.

Following the brainstorming session, attendees were given a break while the project team arranged the goals on the wall, grouping them by time period and commonality.

The project team gave a brief summary of how the goals aligned. Attendees were given five dots and asked to use the dots to identify their top priorities for recovery.

Below are the results of that exercise:

Category	Goal 1 MOI	Who's responsible	Votes	Total
Public safety and security	Security in places with stranded people	Sheriff's office coordinates with state and federal resources	1	1
and Security	Public safety restored in all areas equitably		0	
Season- specific shelter	Temporary Housing (different needs for summer vs. winter)	FEMA	0	
Communication networks	Critical communications (lifesaving)	Federal government	1	
restored Supply distribution	Major arterials reopened – supply distribution		2	3
Reunification	Reunification of families	County government	1	1
Sewage Sanitation	Human waste – septic? Down for long term?	Water and waste water or solid waste coordinator	1	1
	Social services outreach – what do people need?		2	
Needs identification	Outreach to people who haven't had need for help before (and providing for them)	Government	0	2
Medical support for pre- existing conditions	Continuity of care – permanent or temporary disruption of services for disabled – group homes, home care		0	
	Hospital support	Public health	1	6
Mental health	Disaster behavioral health - PTSD specialists	Public health with providers	2	•
Medical services and	Emergency medications		3	
facilities	Temporary medical stations	DMAT team with public health and volunteers	0	
Employment	Have an employment strategy – enough employees for the new needs (construction, medical, etc.)	Many groups! Government and private	0	0



Category	Goal	Who's responsible	Votes	Total
Coordination with stores for supply	Community "marketplaces" - Can exchange/trade - Emergency exemptions for business license		0	0
Volunteer management Donation Management	Volunteer and donation coordination (volunteers and donations will pile up at this point)	Salvation Army and distribution specialists	0	0
Cultural resources Natural preservation	Protection of natural and cultural resources	 State, federal, local, community groups Non-profits, Community organizations 	1	1
Rebuilding Building codes, permitting, policy	Rebuilding codes - Can we change now? - What are the standards? - Communication to residents Rebuilding - Code and permitting	County/city planners	0	1
Children Schools	exemptions Temporary solutions for childcare and education services in place (temporary locations, etc.)	School Districts, non-profits, faith-based organizations	0	0
	1 YE	AR		
Schools	Schools fully back open - Where is population now? - New schools?	School Districts	2	2
SCHOOLS	Restore educational institutes - Education, health, social, behavioral	School districts, education service, NGOs	0	2
Getting people back	Public information to get people to move back who moved out temporarily	Government, non-profit and business alliances	1	1



Category	Goal	Who's responsible	Votes	Total
Homeless services	Restoration of homeless services - Landscape - Specific considerations and services	Homeless services	0	0
Historic preservation	Housing deconstruction to preserve historic housing and conservation of building stock (historical preservation) - Creates jobs	Rebuilding center, Federal government	0	0
Restoration of stores	Get smaller community stores back on line (small grocery stores, etc.)		0	0
Mental health	Long term mental health support plan	Public health with providers ad partners	1	1
Resilient rebuilding	Infrastructure repair/replace (more resilience) projects underway (roads, bridges, etc.)	Public works and private contractors	1	1
NGOs	Non-profit support needed (because funding based will no longer be making donations)	Mobilize cmty [sic] and other foundations and alternate funders	1	1
Regional coordination and communication	Regional coordination (with states) on provision of daily social services		0	0
Economic development	Need economy back up and running (especially construction, medical)	Everyone	3	
Large/small businesses Financial assistance	Support for mid-large businesses (because they provide good jobs with benefits for mass population) and encourage them not to relocate		0	3
Relocation of businesses	Cash assistance and market access programs needed	Federal, state, and local government	0	



Category	Goal	Who's responsible	Votes	Total
	High risk loans through community credit unions to get small businesses back up	Credit unions and government	0	
	Alternate small business sites (land and structure – e.g., Containers) Relocate small businesses	Government and possibly private sector	0	
Restoration of industrial	Get industrial sector back up and running (Swan Island and Columbia Corridor area)		0	1
district	Strategic investments/incentives for major industries and sectors	State and federal government	1	•
	Focused workforce/skills training and hire those trainees (targeted toward underserved populations)	Government	1	
Workforce development Skills and job training	Build community center and resources in underserved community areas – and used locals to build them		0	2
Vulnerable community rebuilding	Understand real impact on underserved - Who - What do they need? Community based decisions of priorities and what equity is – not prescribing	All	1	
Housing Building codes, permitting,	Housing decisions - Where - Single vs. multiple - Own vs. rent	Housing authorities, land owners	0	
Communication to public on recovery vision	Rebuilding codes - What are the standards? - How are we enforcing?	County/City planners, building code enforcers/inspectors	0	5



Category	Goal	Who's responsible	Votes	Total
Land use	How rebuilding? - Evaluate codes (function vs. aesthetic) - Commercial, industrial, residential, natural	County/city departments (planning, Bureau of Community Services)	2	
	Communication - Information about vision - Information about rebuilding decisions	County/city departments – transportation, planning NAs, Business Associations	1	
	Land use policy updates for future uses/rebuilding	Government and local elected	2	
	5 YE.	ARS		
Investment in local community rebuilding	Rebuild more local (Europe style) - Set priorities for more walkability - Small plazas, fruit stands, etc Less focus on driving culture	Civic leaders	2	
Sustainable rebuilding	Need a 5, 10, 15 year plan – hold accountable (focused on housing and economy)		0	4
Recovery plan Long-term vision	Long-term vision - Is there a better way? - Roads/bridges, where do they rebuild?	County/city planners set process	1	
Engaging the local community	Local community is engaged for revisioning its community (what's right for one county might be different from another)		1	
Regulatory measures for new businesses	Investors will be looking at disaster as opportunity for development. Make sure they are regulated and don't add to more disenfranchising of vulnerable populations	Government – put policies in place Non-profits and citizens	2	2



Category	Goal	Who's responsible	Votes	Total
Strategic planning	Strategic planning for federal/state/local legislation - Departments - Employment - Building code	Elected officials	1	1
Homeless services	Enough services for the new houseless populations		0	0
Self-sustaining economy	Self-sustaining economy - Incentives	COCs, Economic Development	0	0

Scenario Exercise Continued

Following the voting exercise, meeting attendees were asked to identify priorities and any additional goals they felt were missing. Below are the results of that discussion:

- Resources:
 - Residents with the means and ability will leave.
 - Prepare for influx of coastal evacuees.
 - Necessity of generators to provide fuel.
 - Access to water water may not be available for two weeks.
 - Identifying what establishments have preparedness supplies.
 - The Oregon Food Bank will not have adequate water/food for beyond 1-2 days.
 - Coordinating with grocery stores to help provide necessary supplies need to make aware of the FEMA reimbursement process in advance.
 - Managing spontaneous community clean-ups and response volunteer management.
- Health and safety:
 - Search and rescue for missing people.
- Medical services and facilities:
 - Prioritization of medical services to those with previous needs and those with secondary medical needs.
 - Access to hospitals, specifically OHSU.
 - Communicating where to get medical attention fire stations, emergency shelters, triage centers.
- Utilities:
 - Restoration of basic utilities electricity, water, etc.
- Transportation:
 - Functioning transportation networks to get medical supplies in.
 - Identifying regional airports with the capacity to handle FEMA shipments understanding runway length limitations.



- Health and human services:
 - Providing activities and childcare for kids at shelters.
 - Consider opportunities for children to accompany their parents to volunteer or work, and help when possible.
 - Providing critical infant care fuel for heating milk/formula, stores to provide formula, and connecting wet nurses with infants in need.
 - Providing services for homeless throughout the region, not just in Portland, to avoid an influx of the homeless population migrating to Portland.
- Recovery plan:
 - Developing a comprehensive 20-year plan.
 - Developing policies in advance to avoid displacement.







Clackamas County Development Services — May 3, 2018

Attendees

Name	Organization	Title
Lori Friedman	Preplo	Secritary BHNA
Terin Sinclair	Servpro of Tigard	Business Develooment Manager
Zach Swick	OR OEM	Emergency Preparation Manager and Analyst
Ryan Farner	City of Happy Valley	Utility Worker
Chris Randall	City of Happy Valley	Public Works
Laura Hanson	RDPO	Planner
Jay Wilson	Clackamas County DM	Resilience Coordinator
Mike Grimm	West Slope WD	General Manager
Rick Eilers	Prep Lo	Chair
Donn Bunyard	CRW	Emergency Manager
Martin Montalvo	Oregon City PW	Operations Manager
Erika Silver	Clackamas County Social Services	Human Services Manager
David Rudawitz	Lake Oswego United Methodist Church	Board of Trustees Secretary
Susan Romonski	Mercy Corps	US Director of Resilience
Eben Polk	Clackamas County	Sustainability Supervisor

Scenario Exercise – What does it look like After a Disaster?

Meeting attendees were asked to participate in a disaster scenario exercise, specifically considering what regional recovery would look like one month, one year, and five years following a disaster. Attendees were split into groups of four to six people, and asked to read through the scenarios for each time period. Each group was given green, yellow, and blue sheets of paper and asked to write down one goal per sheet with the corresponding entities responsible for accomplishing the goal. Green sheets represented one-month goals, yellow sheets represented one-year goals, and blue sheets represented five-year goals. The groups were asked to spend 10 minutes brainstorming goals for each time period.

Following the brainstorming session, attendees were given a break while the project team arranged the goals on the wall, grouping them by time period and commonality.

The project team gave a brief summary of how the goals aligned. Attendees were given five dots and asked to use the dots to identify their top priorities for recovery.

Below are the results of that exercise:

Category	Goal	Who's responsible	Votes	Total
	1 MONTH			
Access to money	Banking infrastructure restored – residents have to access funds	Banks EDCs/EDAs	3	3
Volunteer management Donation coordination	Structure to coordinate donations	NGOs	0	0
Schools	Educational facilities – provision of services	School districts	0	0
Mitigating displacement Vulnerable populations	Identify ways to prevent disproportional displacement of underserved communities	Elected officials	0	0
Prioritizing need	Finish a gap analysis: what's wrong and how do you plan to address it?	Local government Public officials	1	1
Casualties	Taking care of casualties (burials)	City/county Cemeteries Medical examiners	0	0
Distribution of resources	Distribution systems are set up (food, water, medical resources, etc.)	PPP Local government	3	3
Fires	Fire management	City/county	0	0
Managing public	Communication to community about what's being rebuilt, plans, local government incentives	Local government	3	
Public messaging	Garmand in-reach app GPS Messaging communication	NAs Cities	0	4
Communication networks	Public messaging	HAM radio Cities Counties Neighborhoods	1	



Category	Goal	Who's responsible	Votes	Total
	Establish more permanent communication methods		0	
	Cellular – needs fuel – towers resilient	Power company Generators with FEMA	0	
Establishing transportation routes	All bridges and transportation (arterials and collectors) inspected and people know which they can use	Cities/counties/state Road Authorities	5	
Road clearing Bridges	Highways and surface streets	DOTs City – connectivity – damage Neighbors Farms – tractors for smaller streets	0	5
	Fuel for general public	Individual providers	1	
Fuel	Fuel for all fire/police/etc. – generators	City – heli-drop State to begin emergency response Gas stations team with electricity to pump POD system	0	1
	Relocation plan in place to relocate the most vulnerable (or how to house them)	Local government	0	
Relocation Shelters Transitional	Needs of those still in shelters have been assessed and are getting resources (still too early to work on transitional housing) – the most vulnerable ones are left in housing		0	0
housing	Shelter in place – help in place	All	0	
	Begin moving from shelter to temporary/transitional/permanent housing – in area or out of area	Housing authorities – state/federal support	0	
Building assessments	Progress on doing home assessments to see what's habitable (tagging) – and local government figuring out who they will contract with	Local government	0	0
	Need to find adequate personnel and building materials to rebuild homes	Private sector	0	



Category	Goal	Who's responsible	Votes	Total	
Debris management	Lifeline routes are cleared of debris	ODOT Counties Cities (Contractors)	5		
Transportation routes	Temporary debris sites are online	Counties Metro	0	5	
	Debris management	City – still needs fuel Neighbors – need to know where drop points are	0		
Sewage Sanitation	Sanitation and water system	No water – no sewer and vice versa New pipes (LO) Get water to main lines Two bucket system	6		
Water Utility	Water repairs underway – need roads and assessment	Tillikum bridge Sellwood Bridge Arterial lines Utility providers	0	6	
restoration	Restoring water to the spine	Water departments (regional water consortium)	0		
	1 YEAR				
Vulnerable populations	Ensure low income and people of color have access to the opportunities of recovery effort – jobs, grants, assistance	Government CBOs Mercy Corps	2	2	
Equitable distribution	Donations have been distributed equitable to vulnerable groups		0		
Access to money	Access to banks	Utility providers	0	0	
Cultural restoration	Sports teams – Timbers, Thorns, Blazers – Providence Park, Coliseum	State City of Portland	0	0	
Mental health Community	Maintain to identify psycho-social needs – closure ceremony	Behavioral health Faith-based organizations NGOs	0	0	
Small/large business support	Vibrant small and medium business support system (federal loans, etc.) gap loans	Federal government	2	4	



Category	Goal	Who's responsible	Votes	Total	
	Large scale employers should be up and running	Utilities	2		
Cultural and community amenities	Libraries in process	Counties	0	0	
	Prioritize renewable energy sources - Electric grid rebuilt for distributive - Economic development - Energy resiliency	State and regional Utilities/private sector	1		
Sustainable rebuilding	Have a plan for restoring utilities (but won't have everything restored at one year)		0		
Renewable energy	Basic utilities: - Water - Gas - Electricity	To houses – etc. Utility departments	6	7	
Utility restoration Fuel	Gas stations? Would hope to have fuel supply to commuters - Stabilized fuel availability - First thirty to sixty days	Federal government and then private/state	0		
	Fuel in process	Utility providers	0		
	Restoration of utilities and services at large companies will have happened (Intel, Nike, etc.)	Utilities	0		
	Electrical grid restoration to critical infrastructure	Utility providers	0		
Bridges	Determining safe bridges for maximum transportation	Transportation Departments	0		
Transportation infrastructure restored	Critical commodity transportation is adequate – fuel and groceries		0	0	
Debris management	Create jobs for debris management (sorting for reusable) ramping up deconstruction sector	Metro Private sector	0	0	
Restoring commerce	Store open for purchasing	FEMA and Red Cross stopping resources	2	2	
Postal service restored	Postal and mail	Federal and state	0	0	



Category	Goal	Who's responsible	Votes	Total
Workforce development	Back to work	Transportation departments Building departments	0	0
Equitable policies to avoid gentrification and displacement	Plan to avoid gentrification in current low-income housing - Through policies and development restrictions - Incentivize affordable housing - Write this is regulations tied to state funding mechanism	ent low-income housing Through policies and development restrictions Incentivize affordable housing Write this is regulations tied to state funding		1
Land use Building codes,	Change to land use policies and building codes (to not build in high risk zones; seismic codes)	Local/state government	5	
permitting, policies	Identify properties for acquisition and demolition (insurance, funding)	Building officials Planning departments	0	5
Resilient rebuilding	Zoning and building codes (away from hazard zones)	Planning departments	0	
	Infrastructure is functioning (roads, water)		5	
Utilities restored	Rail – freight	Transportation departments Freight	0	
Transportation restored	Infrastructure material rebuilding	Transportation departments	0	_
restored	Transportation – bridges	State and county	0	5
Bridges Detours	Transportation across river	Ferries Existing bridges Transportation departments	0	
	Detouring for landslides, liquefaction, sink holes	Transportation departments	0	
Schools	Schools	Cities School districts – less so Reliant on infrastructure	4	4
	Schools fully functional – not building, but programs How are we retaining teachers?	School districts	0	



Category	Goal	Who's responsible	Votes	Total	
	Schools open and functioning		0		
5 YEARS					
	Low income people have stable and affordable housing	Local government	1		
Vulnerable populations Affordable housing	Addressing housing – making people move or grow in area	COCs Economic development Cities State	1	2	
Policies to avoid gentrification	Implementing the plan to avoid gentrification in current low-income neighborhoods		0		
	Identify marginalized communities and determine ways to serve	All			
Sustainable rebuilding Walkable	A more sustainable community is emerging - More walkable, transit use, jobs/housing balance - Effective system		2	2	
Major	Major rebuild - Colleges - Fuel - Schools - Employers	Multi-agency Housing EDCs/EDAs School districts Cities Counties	1		
infrastructure restored	Reintegrate rebuilt infrastructure	Planning committees NAs COCs USACE	0	1	
	Major bridges and transportation infrastructure	Transportation departments	0		
	Expanded infrastructure repair		0		
People coming back	People who left are coming back (active plan/campaign to get the diaspora back)		1	1	
	Moving people back in		0		
Land use	Changes to land use policies	Policy makers	1	1	



Category	Goal	Who's responsible	Votes	Total
Strategic investments	Strategic investments to relocate away from high risk areas (like Japan did) Policy makers		0	
Sustainable rebuilding	Don't build homes in liquefaction areas/housing areas – adjust zoning codes to disallow this		0	
Resilient rebuilding		Local and special		
Zoning	Natural hazard mitigation plans being implemented districts State increased		0	
Building codes, permitting, policies		Federal funding		
Debris management Debris recycle	Recycle and remove debris	Sanitation agencies Private contractors	0	0
Farming, rural, agricultural community restored	Rural economy is functioning (enough workers; able to bring goods to market, etc.)		0	0
Economic development	Re-balanced jobs and economy	Oregon and Washington Counties Cities	0	0

Scenario Exercise Continued

Following the voting exercise, meeting attendees were asked to identify priorities and any additional goals they felt were missing. Below are the results of that discussion:

- Getting the economy back up is critical. It seems like there is a basic timing/structure
 that needs to take place: Get banking back up in 1 month, have stores open and
 operating in 1 year, and have a strong economy in 5 years.
- Keeping agricultural economy strong and rebuilding it is important.
- We should add **law enforcement** as a priority (was missing from the sticky wall). Law enforcement will have a place at 1 month, 1 year and 5 years.
- Retail stores (especially grocery stores and daily goods needs) should know their options and plan for what they're going to do before a disaster. For example: will they keep their doors open and allow people to take goods? Will they board up their doors and stay closed? They should have a plan.
- Policies to avoid gentrification are important to get into place. (within 6 months to 1 year after the disaster).



- Agencies should put contracts into place pre-disaster for rebuilding medical buildings and other facilities.
- To make it easier to rebuild, agencies should streamline burdensome design review standards. We don't want builders to be prevented from building because they don't meet strict standards.
- It will be critical to rebuild lifeline infrastructure (major connecting roads, bridges, etc.)
- After disaster, should get cash to people to buys essentials (this is more effective than distributing donated goods, because people all have different needs).
- Getting economy back up is most critical—and should strive to do this at month one. In other post-disaster areas, people set up a local barter economy. These kinds of community-based ideas are great.
- Pre-disaster, need to instill a culture of preparedness and how people can be self-sufficient after a disaster (instead of waiting for help to come to them—community should be inspired to help one another and recover themselves).







Oregon Convention Center — May 3, 2018

Attendees

Name	Organization	Title
Gary Calvert	Washington County	Asset Manager
Brian Eberhardt	Multnomah County Drainage District	Emergency Program Manager
Allison Pyrch	Salus Resilience	Geotechnical Engineer
Jeremy O'Leary	East Portland Action Plan and City Repair	Preparedness Representative
Jay Wilson	Clackamas County DM	Resilience Coordinator
Curtis Peetz	American Red Cross	Planning and Readiness
Laura Hanson	RDPO	
Malachi Hindle	Red Cross	Disaster Program manager

Scenario Exercise – What does it look like After a Disaster?

Meeting attendees were asked to participate in a disaster scenario exercise, specifically considering what regional recovery would look like one month, one year, and five years following a disaster. Attendees were split into groups of four to six people, and asked to read through the scenarios for each time period. Each group was given green, yellow, and blue sheets of paper and asked to write down one goal per sheet with the corresponding entities responsible for accomplishing the goal. Green sheets represented one-month goals, yellow sheets represented one-year goals, and blue sheets represented five-year goals. The groups were asked to spend 10 minutes brainstorming goals for each time period.

Following the brainstorming session, attendees were given a break while the project team arranged the goals on the wall, grouping them by time period and commonality.

The project team gave a brief summary of how the goals aligned. Attendees were given five dots and asked to use the dots to identify their top priorities for recovery.

Category	Goal	Who's responsible	Votes	Total
	1 MON	NTH		
Sanitation Sewage	Sanitation (two bucket system)	All DEQ Public works Public health Private sanitation Transportation	1	1
Water	Water (temporary water) not water system	PWB – accessing systems Water distributors Transportation	2	2
Building inspections	Safety assessment	Building officials Volunteers	3	3
Coastal evacuees	Absorption of coastal evacuees/conduit to get people (Washington County) east	Government NGOs (All mass care folks)	0	0
Relocation	Relocation – ongoing	State OEM FEMA Military	0	
Communication networks	Some cell coverage	Cell companies Utilities Fuel Transportation	1	1
Equitable distribution	Organizing aid – ongoing	OEM NGOs VOAD	0	
Organizing distribution Distribution of supplies	Getting people off of relief and back into economy/supply chain for food	Government and private sector Everyone	0	0
Shelter	Everyone has some form of shelter (temporary at least)	Households Individuals Faith-based organizations Red Cross Counties	1	1



Category	Goal	Who's responsible	Votes	Total
	Shelter – ongoing	Need 7,000 employees County/local EM Red Cross Faith-based organizations State/Federal	0	
Debris management	Debris removal	Military FEMA Public works Regional debris management taskforce	1	
Road clearing	Transportation	Military DOT – all levels	2	3
Transportation routes	Roads being opened so supplies and goods can flow in – debris	Spontaneous volunteers – we organize Contractors remove debris onward	0	
Fuel	Fuel	Federal government OEM Helicopters Transportation	1	1
Food	Food	FEMA OEM Oregon Food bank – sort of	1	1
Utilities	Restoration of basic utilities is underway – electric, water – and/or temporary solutions	Utilities Government Non-profits	0	0
	1 YE	AR		
Access to money Financial	Working on access to banking	FEMA Elected officials Loan program for small businesses EDC COCs Community	0	0
assistance	Financial stress of homeowners	Elected officials Policy makers Multi-agency CDCs HUD	0	



Category	Goal	Who's responsible	Votes	Total
Long-term recovery plan	Stand up long-term recovery committees in first year (focus on communities in most need)	Government	5	5
Safety assessments Building inspections	Safety Assessment – continuing	Building codes Owners Engineers	1	1
Business incentives	Incentivize big companies to stay	Policy government – who is paying?	0	
Small business support Economic development	Reinvest in small businesses – economic revitalization, reinventing businesses while infrastructure is rebuilt (new small businesses will emerge)	Unclear – businesses helping each other?	2	2
Land use Building codes,	Land use and zoning - Policies - Location - Relocation of temporary housing	Metro – UGB decisions Local government/jurisdictions State planning goals	0	0
policies, permitting	Land use policy and redevelopment: who makes decisions needs to be established	Elected officials	0	
Regulations	Building codes/regulations (make better)	State/local engineers	0	0
Major transportation restored	Major transportation arterials- working on rebuild Detouring	Military DOT Local jurisdictions FEMA funding	3	3
Schools	Schools – open in temporary facilities	School districts – need support Federal agencies – possible philanthropic	0	0
Transitioning out of shelters	Move all to transitional/temporary housing solutions	NGOs Housing authority Human Services	1	1



Category	Goal	Who's responsible	Votes	Total
Transitional housing Addressing	Population center shifts east away from the liquefiable soils in the west – help re-establish	Requires policy attention	0	
unofficial housing	Unofficial shelters and squatters	Law enforcement	0	
Sanitation	Sustainable sanitation management	Wastewater managers Public health Planners DEQ EPA	2	2
Utilities restored	Basic utility distribution (except wastewater sanitation)	Utility districts and local jurisdictions State PUD Public utility commission	0	0
Communication networks	Decent cell coverage	Utilities	0	0
	5 YEA	ARS		
Community pride	Celebrate the successes in recovery	ALL	0	0
Equitable distribution of resources	Equitable distribution of services – needs of those without insurance/underserved	Human services NGOs Long-term recovery	4	
Vulnerable populations Equitable wealth distribution	Identify the pockets of underserved	NGOs Government	0	4
Tourism	Re-establish lodging sector	COCs Government	0	0
Tourism	Re-establish tourism base	Government COCs Private sector	0	
Tourism Cultural restoration	Culture – get our city activities back	Elected officials Planners NGOs CBOs Parks and Recreation Metro	0	0



Category	Goal	Who's responsible	Votes	Total
Economic development	Businesses that will help rebuild	COCs EDCs/EDAs	1	
Diversify tax	Diversify tax base	Elected officials Policy makers	0	1
Support for large and small businesses	Encourage large employers to return	Elected officials Policy makers	0	•
Regulations to avoid	People returning	Elected officials Community groups NAs	0	
gentrification People returning	Land rush – seismically soils – disaster gentrification - Renters - Low income	Elected officials Policy - Multi-agency - CDCs	1	1
Building codes, permitting, policies, regulations	Building codes/regulations Better with engineering structures	State/local/engineers	0	0
Transportation – major arterials	Transportation (major arterials done) - Hwy 99 - Not I-5 - Maybe I-205/I-97 Smaller district stations	FHWA ODOT Local jurisdictions FEMA funding	0	0
Water	Water - Isolated distribution - could still be out	Water districts EPA/DEQ Local jurisdictions	0	0
Sanitation	Sanitation – getting distribution back up/neighborhoods and outer areas	Wastewater districts EPA DEQ	1	1

Scenario Exercise Continued

Following the voting exercise, meeting attendees were asked to identify priorities and any additional goals they felt were missing. Below are the results of that discussion:

- Health and human services:
 - How to address inability to perform daily habits.
 - Reunification of families.
 - Communicating and providing public, situational awareness.



- Determining and communicating unsafe areas.
- Managing public expectations.
- Educating the public on needs.
- Ensuring animal welfare pets, livestock.
- Developing policies and regulations that address abandoned land and avoid "disaster gentrification" to ensure equity.

Utilities:

- Sanitation issues with wastewater systems down.
- Emergency communication networks up and running where needed radios.
- Developing long-term, sustainable sanitation mitigation that addresses night soils, gray water, and black water.
- Sanitation of wastewater for public safety is necessary.

Land use:

- Safety assessments and building inspections.
- Displacement issues.
- Creating building codes, policies, and permitting that promotes resilience for the future.
- Building and building codes

Housing:

Mitigation and management of camping in open areas.

Safety:

- Managing the public's potential, primordial response lack of resources and trauma.
- Providing damage assessments and building inspections.

Resources:

- Will first responders and emergency management staff be available and able to reach where they are needed?
- Neighbors and communities will band together to provide basic amenities and resources.
- Identifying and preparing people, businesses, etc. to be two-weeks self-sufficient.
- Identifying the new population centers.
- Managing spontaneous volunteers and effectively integrating them into the recovery efforts.
- Ensuring public employees are aware of their roles, and can be shared across jurisdictional borders.
- Identifying how to utilize local agriculture for local food production.

Transportation:

- Developing alternative river crossings.
- I-5 will be shut down; transportation will take place on Hwy 99 and other local/county roads.
- Medical services and facilities:
 - Hospitals are not seismically stable and need a multi-decade, multi-dimensional approach to prepare and withstand a seismic event.
 - Relocating dialysis patients and determining when they can be brought back and supported by the health care system in the region.







Columbia County Emergency Operations Center — May 7, 2018

Attendees

Name	Organization	Title
Jonathan Bauer	Columbia County EM	EMC
Jeff Vannatta	Columbia County Planning	Chair
Florence Miller	Columbia County EM	Intern
Rachael Brake	Skyline Ridge Neighborhood	Board member
Grant Rolette	Skyline Ridge Neighborhood	Board member
Terin Sinclair	Servpro of Tigard	Large Loss Manager
Steve Pegram	CCEM	Director
Michael Greisen	Scappoose Fire District and Columbia River Fire and Rescue	Fire Chief
Mike McGlothlin	Columbia City	Police Chief
Casey Wheeler	CPFB	Ex-Director
Anne Parrott	Public Health Foundation of Columbia County	PHEP Coordinator
Dan Brown	Community Action Team	Executive Director
Terry Moss	St. Helens Police	Chief
Chris Walsh	Washington County	EM Coordinator

Scenario Exercise – What does it look like After a Disaster?

Meeting attendees were asked to participate in a disaster scenario exercise, specifically considering what regional recovery would look like one month, one year, and five years following a disaster. Attendees were split into groups of four to six people, and asked to read through the scenarios for each time period. Each group was given green, yellow, and blue sheets of paper and asked to write down one goal per sheet with the corresponding entities responsible for accomplishing the goal. Green sheets represented one-month goals, yellow sheets represented one-year goals, and blue sheets represented five-year goals. The groups were asked to spend 10 minutes brainstorming goals for each time period.

Following the brainstorming session, attendees were given a break while the project team arranged the goals on the wall, grouping them by time period and commonality.

The project team gave a brief summary of how the goals aligned. Attendees were given five dots and asked to use the dots to identify their top priorities for recovery.

Category	Goal	Who's responsible	Votes	Total
	1 MOI	NTH		
Prioritization	Needs prioritized		0	0
	Fuel	Government Fuel providers (Shell, Arco, etc.)	0	
	Establish fuel supply	EM	1	
Fuel	Fuel distribution and attainment – barges	Port Westward staging – Tivan Brothers FEMA Helicopters	6	8
	Fuel available	City/county governments	1	
Pecovery	Recovery organization		1	1
Recovery	Recovery services		0	•
Children and daycare	Daycare	"My" daycare (?) Community	1	1
Shelter	Shelter	Neighborhoods Community organizations - Church - Schools	1	3
	Shelter	City/County government	2	
	Security for basic commodities	Police departments	1	
Protection of resources	Security		1	2
resources	Back up for basic and other necessities	Police departments	0	
Communication	Communications	State agencies Utility providers	2	2
	Communications	HAM radio and satellite phones	0	_
Transportation access	Clearing of access roads – hwy 30	Depends on fuel	0	5



Category	Goal	Who's responsible	Votes	Total
Road clearing	Access	Community - Debris off road - Surface roads ODOT/counties/city	0	
	Supply routes cleared	State and county agencies and community resources	1	
	Transportation vehicles for food and water distribution and people (school buses)	County Individual vehicles Moving companies	0	
	Roads reopened	City/county governments	4	
Volunteer management Community coordination	Community coordination (NGOs, churches, volunteers) – focus on vulnerable populations	NGOs Churches/faith-based organizations VOAD Citizen Corps Council	0	0
Casualties	Casualties – mass graves/mass internment	Community	0	0
Equity of resources	Equitable provision in rural areas	EM	0	0
Reunification	Reunification – due to employment out of Columbia County and commuters	Schools (active shooter ready) Multi-County – getting people from Multnomah back to Columbia	1	1
Preserving population	Keeping people here – work here, stay here	Economic development CAT Food bank distribution	0	0
Access to money	Banking trucks operational	Banks	0	0
	Fully functional commodity distribution sites (cool storage) – people know where these are	Community organizations/granges EMA Health	2	
Resource distribution	Natural spring wells (identification, digging, filtration)	EMA to provide purifiers Communities will just find and dig	0	10
	Food and water	Government Supermarkets Neighbors	4	



Category	Goal	Who's responsible	Votes	Total
	Livestock/cut meat (eating as food supply)	Communities Individuals cut meat Providers	1	
	Food	Food banks Community FEMA	3	
	Medical services	Local/federal government Local medical personnel	2	
	Medical services		1	
Medical resources	Medical services - Prescriptions - Longer term medical issues - Facilities (schools?)	Health departments and agencies	1	4
	Medical support	FEMA	0	
Mental health	Mental health – in process Specific to vulnerable communities	CCMH – leads Public health Faith-based and family- based organizations	0	0
	Providing activities and crisis counseling for adults and children	ССМН	0	
	1 YE	AR		
Fuel	Regular fuel	Private industry	0	0
Transitioning out of shelters	Building reoccupation	Private or public engineers	0	0
Rebuilding	First priority – rebuild first responders organizations	Volunteers Government	0	0
Schools	Schools inhabiting new/alternative buildings	CAT School districts Insurance companies EM	1	1
Schools	Schools reopening – where would school take place? Consolidate attendance to 1-2 areas.	County School superintendent Corps of engineers – building integrity	0	,
	Streamlined permitting for roads, bridges, buildings	City/county agencies	0	8



Category	Goal	Who's responsible	Votes	Total
	Infrastructure - Utilities - Transportation - Mental/physical health - Community buildings	CAT Multi-agency – city/county/state LRTCR EM	2	
	Infrastructure fix/replace	City/county and state agencies	0	
Rebuilding policy and permitting	Water/sewer – 50%	EM Water districts Transportation Prioritization of assets	0	
Utility restoration	Water	Federal and local government	0	
	Utility restoration	Public and private utilities	6	
Transportation infrastructure	Electricity 6-8 months	Transportation access Resource transportation Utility providers	0	
	Restoring transportation	Government Private companies	0	
	Transportation	Federal, state, county	0	
	Wastewater systems	City/federal government	0	
	Electricity	Federal/local utility providers	0	
	Rebuilding	City/county	0	
Communication restoration	Full cell service	Cell providers Utility providers Transportation	0	0
restoration	Communication	Federal Private	0	
	Re-entry – family reunification – people who left	Government Red Cross	0	
Economic	AV loss of jobs	County/state	0	
development	Banking fully restored	Utility providers Transportation	0	3
	Economic recovery	Private sector Community organizations	3	



Category	Goal	Who's responsible	Votes	Total
	Lost business	Community Government	0	
	Lack of businesses	City/county government	0	
	Commerce restored	FEMA	0	
Recovery	Implement long-term recovery planning	Local	0	
planning	Rural community service provision (recovery services)	Local EM	0	0
Mental health	Elderly service provision	Senior services State and local DHS Community Action Teams	0	
Vulnerable populations	Mental health - Retiring community - Vulnerable communities	In-process from 1 month	4	4
	Priority for vulnerable populations – counseling	CCMH Faith-based organizations	0	
Medical services	Lack of medical services	Federal government City/county/state government Regional healthcare systems	0	0
	Debris management – reuse	City/county roads departments Private sector	1	
Debris management	Debris management	EM DEQ County roads City streets Public works Community	0	1
	5 YE <i>A</i>	ARS		
Economic	Economic recovery	Build: hospitals, schools, public structures	1	
recovery	Struggling economy	County/city Economic development COCs	3	5



Category	Goal	Who's responsible	Votes	Total
	Economic development	Governing bodies Committees County Legislators COCs Business community	1	
	Economic development	Represenatives LTCR – strategic document Schools Basic infrastructure Hospital	0	
	New sector/transportation (airport/river port)	Business development Economic development	0	
Sustainable recovery	Change to more local food production	Communities Granges Individuals	0	0
	Better public transportation	State/regional/local governments	0	
Sustainable redevelopment "Build back better"	Major arterials restored – bridges in process	FEMA WSDOT ODOT DEQ Coast Guard Army Corps of Engineers	0	0
Cultural restoration	Cultural amenities	COCs NAs Arts and cultural commissions City/state/county tourism	0	0
Schools	Fully functional, consolidated school districts	School districts Transportation Transit State Department of Education ESD	0	1
	Rebuilding schools	School districts Private construction	1	
Community	Re-envisioning our communities	Diversified planning teams that include vulnerable populations and engineers/architects	0	0



Category	Goal	Who's responsible	Votes	Total
Resilient	Flood control (floodplain and adjacent open space decisions; building codes; flood control structure)	Planning development services	0	
redevelopment	Incorporate mitigation into rebuilding decisions/codes	Planning and EM – City/County	1	2
Land use	Landuse (where do we rebuild?)	City/county planning development services	1	
Building codes	Reconstruction of residential	Insurance and private contractors Fire	0	
Sustainable	Diversify energy supply – renewable	Government and private sector	3	
Fuel	Diversify fuel storage	Government permitting agencies Private industry	0	3

Scenario Exercise Continued

Following the voting exercise, meeting attendees were asked to identify priorities and any additional goals they felt were missing. Below are the results of that discussion:

- Transportation:
 - People will be unable to leave.
 - Approximately 80% of the population commutes out of Columbia County for work.
 - Transportation infrastructure will suffer major damage.
 - Small towns and neighborhoods will become isolated "islands."
 - Highway 30 will liquefy and other transportation infrastructure and arterials will fail.
 - People will not be able to get to work which will impact the economy.
 - Bridges and culverts in the region will collapse.
 - Roads will be unusable due to slides.
- Children and schools:
 - Schools will collapse.
 - Children will be stranded at daycares and schools.
- Medical services and facilities:
 - Many medical facilities will suffer moderate to severe damage.
 - There will be a need for durable medical equipment for dependent populations.
 - First responders may be preoccupied or unable to access the region. People will not be able to refill their prescriptions.
- Resources and utilities:
 - Water utility facilities will be impacted.
 - The population will not have access to daily resources.
 - Communication access and networks will be limited.
 - It could take six to eight months to restore feeder lines.



- There will be serious sanitation issues.
- There will be no fuel.
- There will be little to no access to food or water.
- Rural areas will not have the infrastructure to support them, creating evacuees and refugees. It will be necessary to set up agreements and communication between jurisdictions to address this.
- Grain and cattle in the region can serve as a source of food.
- The area has a substantial timber industry.
- Shelter:
 - Address the potential for no access to shelter.
- Structures:
 - There will be a need for structural engineers to perform inspections.
 - The petroleum in Linnton will release.
 - Dikes in the region will fail.
- Casualties:
 - Addressing mass casualties, both immediately following the disaster, and later on.
- Health and safety:
 - How to address the subsequent fires and air quality issues gas, ammonia, etc.
 - Identifying and alerting the public to surface contaminations.
 - Preparing for crime and illegal behavior surrounding water, food, and other commodities.
- Pets and animals:
 - Addressing stray animal and vector issues.





Stakeholder Engagement Session Summary

The Clark County Food Bank — May 8, 2018

Attendees

Name	Organization	Title
Dairn Woodman	Vancouver Housing Authority	CIAEP Assistant 2
Scott Deutsch	Evergreen Public Schools	Safety Manager
Jim Quintana	C-Tran	Chief Safety and Security
Ruth Taylor	AADSW	Supervisor
Courtney Catt	CCFB (Food Bank)	Project Manager
Judi Bailey	COV/Office	Neighborhoods
Shane Gardner	Evergreen Public Schools	Manager of Safety and Security
Bill Bauman	Human Services Council	Mobility Coordinator
Michael See	Clark College	Director of Security, Safety, and Emergency Management
Laura Ellsworth	Council for the Homeless	Strategic Partnerships Manager
Nicole Daltoso	Vancouver Public Schools	Environmental Safety Coordinator
Kelli Keyes	Vancouver Housing Authority	Community Health Worker
Tom Donnelly	FEMA – R-X	Recovery Coordinator
Marcia Hale	Vol-Connections – HSC	Program Manager Vol- Connect
Chris Griffith	Ridgefield SD	Assistant Superintendent

Scenario Exercise – What does it look like After a Disaster?

Meeting attendees were asked to participate in a disaster scenario exercise, specifically considering what regional recovery would look like one month, one year, and five years following a disaster. Attendees were split into groups of four to six people, and asked to read through the scenarios for each time period. Each group was given green, yellow, and blue sheets of paper and asked to write down one goal per sheet with the corresponding entities responsible for accomplishing the goal. Green sheets represented one-month goals, yellow sheets represented

one-year goals, and blue sheets represented five-year goals. The groups were asked to spend 10 minutes brainstorming goals for each time period.

Following the brainstorming session, attendees were given a break while the project team arranged the goals on the wall, grouping them by time period and commonality.

The project team gave a brief summary of how the goals aligned. Attendees were given five dots and asked to use the dots to identify their top priorities for recovery.

Category	Goal	Who's responsible	Votes	Total
	1 MON	ITH		
Access	Isolated neighborhoods	Local governments	0	0
Resource Access	Opportunity for staging and access points much larger in Clark County – lots of open space – good locations adjacent to hwys	Clark College and Fort Vancouver	0	0
Reunification	Reunification with everyone across the river		1	1
Transportation	Public transportation fully operational	Public Works C-Tran	2	2
Fuel	Gas stations open		0	0
Finance	Provide unemployment and distribution of other forms of assistance (so people have money)	Government	0	0
access	Banks – identify how to modify programs for people that can't make payments		0	0
Public safety	Public safety restored		1	1
Large businesses	Know major business who can restore and when		0	0
Volunteer management	Managing and dispatching emergent volunteers (understanding where help is needed)	Human Services Council	1	1
Transportation Resource	Open channels to get goods in (whether by road, river, etc.)		0	
Access Resource distribution	Supply chain routes open	City/county/state DOT Transportation companies Airports Rail	1	1



Category	Goal	Who's responsible	Votes	Total
	Need to identify how to distribute resources predisaster (food, water, money, etc.)	Local community – internal resilience	0	
	Animal welfare is a thing	Humane Society Fish and Wildlife First responders	1	
Animal welfare	Set up places for pets (homeowners won't leave their pets)	Humane Society Local community	0	1
	Pet reunification	Neighbors Humane Society Volunteer Groups	0	
	Medical facilities (hospitals, urgent care, dialysis)	Facilities Mutual aid/volunteers	7	
Medical resources Medical needs of high-risk populations	Establishment of services for dialysis and other medical technical dependent populations - Clark County is more than Vancouver Metro - Focus on getting a facility up and running	DSHS Healthcare Authority Clinics i.e. DaVita	0	7
Managing public expectations	Status and recovery communications to the public (what services are available and where)	City/county/state leaders Law Enforcement Washington CRESA/FEMA	3	3
Communication with the public	Expectation setting (new normal)	Washington CRESA/FEMA City/county/state leaders	0	
	Detour routes for bridges	City/county/state DOT	0	
	Major roads open	City/county/state DOT	5	
Transportation	Primary routes clear	Public works Contracting resources GEM	0	
Road clearing Major arterials	Re-establish interstate (OR and WA) crossing transportation for people, goods, and services – including boats, etc. – fuel?	OR and WA DOT	0	5



Category	Goal	Who's responsible	Votes	Total
Communication networks	Alternative communications if telecoms are down – HAM radios	EM agencies First responders, etc.	0	0
networks	Communications – power restored on generators with fuel	Providers - Cell - Cable	0	
	Set up safe haven/resource hubs to provide emotional support/mental health	Community members	0	
Mental health	Mental health services – PTSD with responders and victims – stress of separation and poor communities Secondary medical – blood pressure meds, etc.	All medical providers Public health departments	0	0
	Coordination becomes challenging beyond the first few weeks, fatigue sets in – also: who is coordinating the big picture	CRESA (limited staff)	0	
	Temporary schools/childcare facilities (in tents, portables)	National Guard	0	
Childcare	Schools partially re- opened (normalcy for kids' lives) – even if more like daycare, not education (to help parents get back to work)	School districts and personnel FEMA Neighbors	2	2
Schools	Have at least half of school district properties operational	School districts ESD 112 Public agencies	0	
	Begin contracting with local contractors to rebuild schools (identify these firms pre-disaster)		0	
Food distribution	Enough food plus ability to distribute it	Grocery stores Government	5	e
distribution	Food bank operational for food distribution	Food banks	0	6



Category	Goal	Who's responsible	Votes	Total
Water	Food and water supply		1	
distribution	Distribution of safe drinking water/identify water sources	Other states	0	
	Housing becomes more urgent because people can't stay on friends' couches and hotels indefinitely	HUD	1	
Shelter and temporary housing	Emergency housing/shelter in place	Red Cross City/county School districts Religious Orgs. Event centers	0	1
	Set up shelters/safe place for people to have housing	Council for the Homeless	0	
	1 YE	AR		
Public safety	Civil order being maintained	Public Services (law enforcement, fire, etc.)	0	0
Displacement preparedness	Planning for the influx of people into east Vancouver (which will be less impacted)	CRESA	0	0
Sustainable recovery	Environmental responsibility in recovery - Ensuring water quality - Managing dumping, etc. - Debris management and water		1	1
Funding	Private funding sources (insurance) obtained	Businesses Homeowners	0	0
Damage assessments	Identify/know cost of recovery – damage assessment complete	City/county leaders Recovery Organizations	ons 0 0	
Land use policy and permitting	Identifying where people will live – change land use	City/county planning Developers Individuals Insurance	0	4



Category	Goal	Who's responsible	Votes	Total
Housing solutions	Permitting and land use – increased demand/surge	Local governments	1	
Building codes Sustainable/safe rebuilding	Housing – prioritizing affordable housing solutions. Plan to remedy pre-disaster housing challenges	Master planning Local/regional government HUD and habitat, etc. VHA Vancouver Housing	3	
	Rebuild homes (more resilient)	Developers, local contractors, government funding	0	
	Improvements to building code (more resilient structures)		0	
	Prohibit building in floodplains/high risk areas		0	
	Education - Usable buildings - Sustainable classes - Re-districting - Transportation - Mergers	EPS VPS Higher Educations Private Schools	1	
Schools	Placement of displaced students who lost their school building	School District	0	1
ounous	Schools at full operational capacity (new normal "full") – even if facilities aren't fully operational	School Districts Partners	0	•
	Schools are operational (level of rebuilding depends on how far we get with getting schools seismically sound pre- disaster)	School District	0	
Serving vulnerable populations	Ensuring vulnerable populations are served	Social service agencies Community Resource Centers CDBG Funding	1	1



Category	Goal	Who's responsible	Votes	Total
Workforce	Jobs - Recovery as major employer? Rebuilding - Job training - Workforce development - Support services: coffee shops, etc.	Clark County Economic Development Commission (CEDC) Work Source	0	
recovery	Identifying where people will work	Economic Development COCs Insurance/SBA Corporation	1	1
	Support to major employers: - Schools - Hospitals - Railroad (BNSF)	Corporate partners Existing Coop	0	
Mental health	Continuing mental health services – already underserved – increased need for services – remaining trauma	AANA – Anon groups DHS Public Health Faith-based community groups	0	1
	Local mental health resources are providing primary support	Public health Local medical networks School Districts	1	
Critical facility rebuilding	Prioritize rebuilding critical facilities (hospitals, schools, bridges)	City/county leaders Recovery organizations	0	0
Utilities Infrastructure	Utilities and infrastructure back up (incentives to contractors to build faster – San Francisco Hwy rebuild example)	Need community and political will	2	2
	Begin rebuilding roads and bridges		0	
	5 YEA	RS		
Tax system	More equitable housing tax structure		0	_
restructuring	Restructure tax system and funding stream – more progressive		0	0



Category	Goal	Who's responsible	Votes	Total
	Clearly defined roles for community providers		0	
Homeless	More empathy for the homeless and houseless		1	
populations NGOs	No profit organizations operating at a greater capacity and more efficiently	Non-profits FEMA Community members	0	1
Mental health	Mental health services operating better that predisaster	Public health Local health networks School districts Faith-based organizations	0	
Political impacts	Civic engagement increased within local population (influence to political leaders)	Everyone	1	
and civic engagement	Political effects on incumbents who were in office during disaster – unfulfilled promises - will shift our political landscape/priorities	Everyone	0	1
	Job centers on-the-job training sites/skill re- training Ex: Work Progress Administration during the Great Depression	Business/Economic Development groups	3	
Workforce	Economic development	Business COCs	0	
Job/skill training	Employ young people and locals in rebuilding efforts (apprenticeship programs)	Local businesses Counties DSHS	0	4
Economic development	Long term economic plan in place that adapts to the changes in economy post disaster – ie. Better timber and fisheries management – increase environmental considerations	Economic development council Private industry Local government	1	
	Farmers' markets/local agencies are flourishing	Local farms Community groups	0	



Category	Goal	Who's responsible	Votes	Total
	Resilient building practices implemented Ex: new buildings built to current or better EQ code	City/county Private partnerships	2	
	More earthquake proof public service buildings		0	
Resiliency Resilient	Better disaster preparedness policies and lessons learned		0	
building practices Resiliency planning	Annual event of remembrance of the disaster and how far we've come and are strong (shows resilience)	Local organizations Businesses Community	0	2
, pramming	Continue to build our resiliency and plan for the next one – so we are more prepared for future disasters Ex: HAM radio, building cod, etc.	All agencies Everyone	0	
	Diverse transportation options over waterways	C-Tran Public works City/County	5	
Resiliency planning	Establish regional network of hubs to distribute resources in case of future disaster/emergency	Cities/counties	0	
Transportation infrastructure	Build more bridges across Columbia – doesn't need to be fancy	Wa and OR DOT Public/private partnerships	0	5
Bridges	New bridges	Federal/state/local government	0	
	Improve our local communication networks, comprehensive upgrades	Private companies	0	
Schools	Schools back up and running 100%	School districts and State	0	0
	New schools		0	



Category	Goal	Who's responsible	Votes	Total
Sustainable redevelopment	Rethinking community design – more master planning for redevelopment – increased walkability and affordability	Government	0	0
"Build back better"	Either rebuild or restore – don't leave half-dismantled houses and neighborhoods	Local government	0	

Scenario Exercise Continued

Following the voting exercise, meeting attendees were asked to identify priorities and any additional goals they felt were missing. Below are the results of that discussion:

TOP PRIORITIES

- Leadership, coordination, and communication
- Faith community (need to add)
- Bridges! Transportation
- Crime response (looting)
- Community engagement increase then decrease
- Housing
- Community design
 - Streamlined permitting
 - Affordable building
 - o But resilient!
- Shelter and housing:
 - Ensuring shelters are functioning adequately.
 - Locating and serving the previously homeless population.
 - Finding temporary shelter for the new houseless.
 - Addressing the housing shortage in the years following a disaster.
- Resources, utilities, and services:
 - What is the legal requirement for emergency food?
 - Stores will play a critical role in providing resources post-disaster.
 - Creating a plan for getting basic utilities up and running electricity, sewer, water, etc.
 - Identifying forms of communication post-disaster. In the first month, relying on ham radio and satellite communication. Determining how to get phones, cellular networks, and wifi back up and running.
 - Develop neighborhood asset maps that identify resources as well as the neighborhoods that will need the most help.
 - Volunteer management post-disaster.
 - Funding will be limited how to prioritize competing needs.
- Medical resources and service:
 - How to address specific and immediate medical needs for those with pre-existing issues, such as dialysis, insulin, etc.
 - How will lack of access to resources impact mental stability?



- Prioritizing medical services and resources for high risk populations.
- Children and schools:
 - Identifying schools and community buildings that can temporarily serve as shelter and daycare for children.
 - How and when will students be able to go back to school?
 - Prioritizing reunification of children with their parents.
- Transportation:
 - Setting up temporary and responsive transportation in the first 12 hours postdisaster.
 - Developing transportation to hospitals and triage centers for those with medical needs.
 - Addressing issues with people unable to get to work will first responders be available or able to get where they are needed?
 - Vulnerable populations will have an increased need for transportation access.
 - People with the ability and means will leave following a disaster.







Hillsboro Brookwood Library — May 9, 2018

Attendees

Name	Organization	Title
Denise Burton	Virginia Garcia MHC	Safety and Health Manager
Lonny Welter	Columbia County Road Department	Transportation Planner
Bill Relyca	Tuality Hospital	
Tom Stow	Clean Water Services	Operations Division Manager
Scott Winegar	PCC	EM
Kori Nobel	Port of Portland	EM
Alex Ubiadas	TriMet	EM
Scott Porter	Washington County Emergency Management	Director
Susan Andrews	NET Forest Park Neighborhood	Program Manager
Garth Eimers	North Plains Council	City Council
Mike Sargent	Metrowest Ambulary	Manager
Tom Kramer	Ambacht	Brewer
John Core	ARES	Oregon Section Manager
Tripp Robinson	Intel/RDPO	EM
Annette Evans	Washington County Housing	Homeless Program manager
Victoria Nolan	Clean Water Services	Risk and Benefits Manager
Todd Felix	NW Natural	EM
Henry Oberhelman	CPO 8	
Gail Stinnett	USDA/FSA	County Executive Director
Rob Hale	City of Hillsboro	Inspector
Nora Curtis	Clean Water Services	Conveyance Director
Tammy Bryan	Hillsboro Fire EM	EM
Catherine Amerson	Hillsboro Fire EM	Volunteer Coordinator
Sue Mohrkern	WCPH	PHEP Supervisor
Tom Arnold	Hillsboro Public Works	Director
Candy Cates	OHA	Planner

Name	Organization	Title
Laura Hanson	RDPO	

Scenario Exercise – What does it look like After a Disaster?

Meeting attendees were asked to participate in a disaster scenario exercise, specifically considering what regional recovery would look like one month, one year, and five years following a disaster. Attendees were split into groups of four to six people, and asked to read through the scenarios for each time period. Each group was given green, yellow, and blue sheets of paper and asked to write down one goal per sheet with the corresponding entities responsible for accomplishing the goal. Green sheets represented one-month goals, yellow sheets represented one-year goals, and blue sheets represented five-year goals. The groups were asked to spend 10 minutes brainstorming goals for each time period.

Following the brainstorming session, attendees were given a break while the project team arranged the goals on the wall, grouping them by time period and commonality.

The project team gave a brief summary of how the goals aligned. Attendees were given five dots and asked to use the dots to identify their top priorities for recovery.

Category	Goal	Who's responsible	Votes	Total
	1 MON	ГН		
Animal welfare	Veterinary/animal services are critical in response	Local veterinary medical association	0	
Farms	Farming community emergency board meeting – damages to livestock, barns, etc.		1	1
Medical services and facilities	Seriously injured treated (in or out of area)	Local EMS Healthcare Federal Medical support	0	
	Hospital capacity	Transportation	3	
Hospital capacity	Distribute pharmaceuticals (to vulnerable populations)	Washington County Emergency Management	0	3
Pharmaceuticals Mental health	Training stations for individual	EM CERT Red Cross MRL	0	
	Behavioral health		0	



Category	Goal	Who's responsible	Votes	Total
	Wastewater sanitation	Field sanitation Community individuals Infrastructure owners Shelters USDA EM	0	
Sewage treatment	Coordinated water/wastewater re- establishment plan	Local utilizes	0	4
Sanitation	Sewer – people may need to compost/burn feces – or gravity sewers		0	
	Sewer treatment – need power to do treatment – displaced sewer treatment plant?	cws	4	
	Resource distribution	FEMA Hillsboro Airport Local Agencies	6	
	Establish harbor as distribution	USCG Navy	0	
Resource distribution	Pre-disaster need for CERT/NET so neighborhoods can get to work on recovery in first month before communities and resources flow in	Government	0	
Coordinating with grocery stores	Designated and known distribution centers	EM FEMA – less so Military	0	6
Resource supply	Conversations with businesses about need and resources	USDA Farm services agencies Law enforcement for safety	0	
	Sourcing materials – food/water	Transportation FEMA Airports FSA/USDA Military Local businesses Well water treatment plants	0	



Category	Goal	Who's responsible	Votes	Total
	Aftershocks will shake confidence in rebuilding and requires frequent damage assessments, etc.		0	
	Critical facilities damage assessments		0	
Aftershocks Structural integrity	Assessment of dollar value or loss – livestock, dwellings, etc. - Emergency board meeting - Storm report	USDA Farm service agencies	0	3
Damage assessments	Damage assessments done and clear plan for recovery is established (on utilities, infrastructure, etc.) Identify most able places to rebuild – locations for restoration	Government coordination	3	
	Timeline for remaining building assessments		0	
	Overall stabilization and having processes and plans in place	All JD EM	0	
Private sector support	Private Sector: Access to inputs electric, communication, water and human resources Outputs need to be able to ship out	Telecommunications Government Utilities DOTs Internet	0	0
Managing public expectations	Communication to public about how to get help/resources	EOC phone banks	2	
Communication to the public	Messaging about permitting, assessments, and rebuilding		0	
Public health messaging	Communications systems for coordination	Telecommunication Companies Utilities Government	0	9
Communication networks for coordination	Messaging to communities - sanitation	Public health Utilities PIO	0	



Category	Goal	Who's responsible	Votes	Total
	Communication system established		6	
	Cell phone service established		1	
Recovery organization	Recovery organization stood up		0	0
	Fuel - Delivery - Prioritized users - Distribution - Storage	Utilities Federal/state/local Regional group	4	
	Get fuel to provide for buses and cars	TriMet Fuel providers	7	
Fuel	Alternate fuel plan: bring fuel in by truck from the coast to the valley (brought in by barge)		0	11
	All fuel will need to be imported – Hillsboro Airport as distribution point (but is limited)	Coordination at EOC level Regional and state fuel plans	0	
Access to money	No one carries cash – we need communications up to use credit cards and debit cards	Banks Credit unions Financial institutions	0	0
Access to clean	Potable water	Water bureau EM	3	
water	Clean water access – central access and distribution points	Local water utilities	10	13
Access to water	Food stuff	Local farmers Transportation Airport	1	
	Food, fuel, facility report - Water - Food - Capacity for water	USDA Farm service agencies Law enforcement for safety	1	2
Public safety	Public safety established		1	1
	Security and safety	Law enforcement	0	•
Access to transportation	Get bus fleet back in service	TriMet Contractors ODOT	0	0



Category	Goal	Who's responsible	Votes	Total
	Electricity	Fuel	0	
	Utilities – clean water, electricity	Hospital have two weeks' worth of natural gas and propane – Tuality	1	
Access to basic utilities	We need power, water, sewer restored to at least some neighborhoods – fuel close second	Utilities (leverage mutual aid) Local government State Department of Energy Fuel providers	0	1
	Transportation to shelters		0	
Shelter	Identify temporary housing (and provide resources to those pods)	Multi-family NW Housing Authority of County Non-profit housing developers	0	
Transportation to shelters	Shelter	FEMA NGOs Local government Red Cross Faith-based organizations County locations – schools	1	1
Transportation	Critical transportation routes cleared – or alternatives identified		1	
access Road clearing	Transportation corridors	Public work road agencies Private companies USACE	6	7
	Roads need to be cleared and reopened	DOTs	0	
	1 YEA	R		
Transition to housing	Transition from temporary to permanent housing	Housing authority Reuters Associations Realtor Associations	0	
Homelessness Transitional housing	Will have pockets of homeless – how to create hubs for these populations (lack of space in urban areas)		0	1



Category	Goal	Who's responsible	Votes	Total
Shelters Displaced populations	Deal with impacts of the increased homeless population – more theft, crime, and black market activities	Police	0	
	House the new homeless		0	
	Transitional housing		1	
	Shelters and housing for displaced population (we assume people who could leave likely will) Semi-habitable and uninhabitable Tent cities Temporary and transitional	Red Cross HUD Churches and faith-based organizations	0	
Transportation	Public mobility - Roads/fuel - Stores - Services	Local/state government	0	
Bridges	Bridges – critical All transportation at 80% functionality Temporary bridges	Military Transportation departments	0	0
Transportation infrastructure	Secondary transportation routes and reopened and process in place to continue restoration	Land use Counties/cities States DOTS	0	
Restoration of	Rebuild water storage or find new water source (hag Lake and Barney reservoir will be gone)	Cities	0	
water access Replacement of	Water	Public works Electricity utility providers	0	0
water sources	Replace water source for water that came from wells and aquafers (will be destroyed)	Cities	0	
Sewage	Sewage	Local public works Utility providers	0	
	Sanitation/waste removal	Utilities	6	6
Sanitation	80% sewer system	Public works utility providers	0	



Category	Goal	Who's responsible	Votes	Total
	Restored mail service	Post office	0	
Restored mail service	Communication to public - Priorities - Rebuilding	Recovery organizations	1	
Communication networks	Internet and cell service 100% back up	Utilities	1	4
restored	Banking system operational	Wireless providers Utility providers NGO Banks	0	
	Communications – phones	Utility NGOs	2	
Public safety Illegal activity prevention	There will be an increase in gang activity – need police focused on gangs, homeowners protect own property	Police and residents	0	0
Healthcare	Functioning healthcare system – hospitals – normal operations	Transportation departments Utility providers Partnerships with prisons	1	
Mental health	Access to life sustaining medications has been established	Public health Pharmacies Hospitals	0	
Pharmaceuticals Hospitals functioning	PTSD/mental health support groups	Private and public mental/behavioral health providers Red Cross	0	1
properly	Highly functioning behavioral health systems	Health and Human Services Government NGOs	0	
Resilient public	Public more self-sufficient		1	1
Utility restoration	Electricity	Private utility providers NGOs BPA	3	3
Schools	Continue to reopen and rebuild schools	Local government School districts Transportation departments	0	0



Category	Goal	Who's responsible	Votes	Total
	Rebuild schools or have plan to rebuild/relocate students	Department of education Local school districts	0	
	Funding mechanism in place		1	
	Re-establish what the economy will look like - port still shallow depth		0	
Economic development	Plans to attract investment for small business to reopen (the 40% who serve and supply) reduce hurdles	COC EDCs	0	
Workforce development Small business support	Payment to employees who still have on-going financial responsibilities – what's the system for when we're knocked offline and pay stops coming in?	Employers Federal forgiveness	0	
Financial support	What kind of damage to credit occurs Identify unpaid (IA or		_	6
Incentivize	insurance)		0	
businesses External funding	Reignite economic engine	Microbreweries COCs NAs Local government	5	
Attract business Funding mechanisms	Revitalize the skilled labor workforce to rebuild (impact construction workers)	COCs Private industry Government services	0	
mechanishis	Infuse information private sector to revitalize economy (rebuild business physical structures)	Government	0	
	Stop exodus of businesses		0	
	Seeking external funding	USDA	0	
Tourism	Getting our tourism sectors back up a priority within the 1yr + timeline	OR tourism Travel Oregon COCs	0	0
Recovery plan	Have a recovery plan (based on identified needs) and existing plans/vision	Recovery organization	0	0



Category	Goal	Who's responsible	Votes	Total
Regional coordination	Coordinating regionally on priorities and decision – HC, utilities	Recovery organization	0	
Recovery organizations Land use	Recovery organizations – determining vision – has NGOs, business, public/community organizations	Recovery organization	0	
Policies, permitting	National/international planning partners	Recovery organization	0	
	Long-term recovery and comprehensive plans in place – land use policies updated and adapted – sync with state resiliency and recovery plans	Metro Cities Counties Policy makers	0	
	Envision service distribution regionally	Utilities Recovery organization Existing regional organizations (MPACT, JPACT, RDPO, Regional health, Metro, etc.)	0	
	Construction/trades workforce - Train here - Infrastructure to bring them in		0	0
Debris	Identify debris areas – decisions on agricultural means no farming		0	0
management	No debris dumping in communities		0	
Building inspections	Building inspection/revitalization of dilapidated structures	Agency	2	
Infrastructure restoration	Extensive end-user infrastructure restoration (to individual homes and schools, etc.)	Utilities	0	2
"Build back better" Resilient	Strengthen building codes, advocacy underway and plans being made to build back more resilient	State policy makers	0	
rebuilding	Where can't we build	Development services	0	



Category	Goal	Who's responsible	Votes	Total
Building	Assessments of unpermitted rebuilding – communicating		0	
assessments	Execute eminent domain on dilapidated properties (to avoid ghost towns)	Elected officials	0	
	5 YEAR	RS		
Regional communication and coordination	Maintain/re-establish/build new Cross-jurisdictional/regional coordination	Regional organizations	1	1
Communication to public on vision	Messaging to public - Vision - Priorities	Recovery organization	0	
Engaging the public in recovery efforts Prioritizing resiliency	Re-engage public in recovery - Change methods to avoid weariness - Look at resiliency	Recovery organization	0	0
Micro-grids	Establish micro-grids	Local/state Utilities	0	0
Sewage Water systems	Separate potable and black/gray water systems	Water providers Local governments with regulations and policy	1	1
	Long-term infrastructure and economic recovery plans established	Regional/local/state government	1	
Economic	Maintain focus on why recovery should still be a top priority (among elected and community members)	Emergency managers Governor's office	0	1
development	Recovery organization managing and tracking projects to the recovery plan	Recovery organization	0	•
	Indicator of success: people have resumed activities beyond just survival (going to movies, tourism, etc.)		0	
Reestablished farming communities and agriculture	Re-establishing farming communities	USDA Local water conservations districts Economic development	0	0



Category	Goal	Who's responsible	Votes	Total
	Revitalizing agricultural community that was here in Washington County before development? (How practical given level of development?)	Communities Government	0	
	Improve the fuel distribution system rather than trucking everywhere in state – multiple depots?	Petroleum Industry DOE	1	
Resilient fuel infrastructure	Redesigned system of how fuel is stored and delivered (not just in one location like Swan Island today)	Metro Regional government ODOT	0	1
	Reevaluate fuel infrastructure system, more resilient – natural gas	Private sector Departments of energy	0	
	Incentives for more resilient building practices	Local/state/federal	7	
Resilient	New construction is done right – utilities rebuilt to be more resilient (and homes, power lines)	Planning agencies	0	
Building codes, permitting, policies	Insurance availability – require EQ offerings in the state and also require on infrastructure Could we offer tax credits?	State policy makers	0	
Insurance Business incentives Equitable wealth distribution "Build back	Better building codes – sustainability – adapt CA codes - Bridges, roads, infrastructure – federal money - Solar standard install - Install electric vehicle charging in all new homes	State policy makers	1	8
better"	Pre-manufactured buildings (rebuilding faster and more simple)		0	
	Keep attention of challenged/low-income neighborhoods (equity)	Local government	0	



Category	Goal	Who's responsible	Votes	Total
	Should have a building boom to replace what's torn down	Insurance Property tax revenue	0	
	New building codes (more resilient)	Development services	0	
Sustainable transportation Improved transportation	Improve transportation connecting within region on bottlenecks Washington County to coast Washington County to Washington state	DOTs	3	3
infrastructure	Bus service back to normal – just starting to put rail service back in	TriMet	0	
	Simplified process for establishing businesses	Policy makers EDCs/EDAs	0	
Economic development Business	Education connected to areas of economic development	State higher education providers EDCs/EDAs USDA	0	
Workforce development and education	Re-establish and identify economic engine – possibly new	City/county EDC/EDA Community resources COCs USDA – emergency loans	0	
Attracting business	Reinvigoration of existing economic drivers	Federal/state Policy makers EDC/EDA	1	1
Economic incentives	Attracting new businesses – build back tax base	COCs Local/State	0	
Reestablish large and small businesses	Grants and economic incentives to keep businesses here – or bring them back	County State Metro	0	
Keep big employers here	Re-establish large business to full capacity - Employment - Feeder business	Private sector Local/state/federal	0	
Local market	Keeping big employers here – incentivized development	State economic development COCs	0	



Category	Goal	Who's responsible	Votes	Total
	Creating/supporting local market		0	
	Addressing deficit of skilled workers – assessment of skills needed		0	
Homelessness				
Job training Affordable rebuilding and housing	Address homeless issues with job training and rebuilding plans (affordable)		0	0
Vulnerable communities	Opportunities for underserved (language barriers/low income) communities	Higher education Survey of populations USDA loans	0	0
Schools	Schools	Local government School district	2	2
Medical health services fully	Consolidated health clinics if needed (expensive to operate many clinics – depends on money and staffing)	Health clinics Executive board members	0	0
restored	Established clinical sites and inventory healthcare system – mental health systems, support	Local/regional healthcare providers	0	

Scenario Exercise Continued

Following the voting exercise, meeting attendees were asked to identify priorities and any additional goals they felt were missing. Below are the results of that discussion:

- Utilities:
 - Addressing plumbing and water management issues.
 - Lack of access to money.
 - Restoring communication networks.
- Resources:
 - Addressing lack of just-in-time delivery.
 - Coordination and distribution of resources.
 - Access to water.
 - Managing and equitably/efficiently distributing volunteer support.
- Transportation/access:
 - Addressing lack of access on roads and bridges.



- Isolation of communities 2-3- weeks.
- Finding and helping stranded individuals.
- Creating transportation networks and movement of people and goods.
- How will slides impact isolation?
- Addressing liquefaction in Hillsboro.
- Public safety:
 - Public safety and security.
 - How to respond and prepare for aftershocks with temporary seismic mitigation.
 - Preparing for the possibility of additional regional impacts floods, landslides, etc.
- Health and human services:
 - How to respectfully address mass casualties.
 - Search and rescue of collapsed building for missing people.
 - Transitioning to shelters.
 - Understanding where people will congregate schools, community centers, churches, etc.
 - Addressing the prison population.
 - Mitigating subsequent fires.
 - Addressing air quality issues.
 - Preparing for the influx of coastal evacuees.
 - Providing childcare and activities for children.
 - Ongoing pollution remediation.
- Economy/funding:
 - Halt on economic activities.
 - Reliance on federal/state government support.
 - How to address budget concerns.
- Medical support/facilities:
 - Prioritizing medical needs of vulnerable populations.
 - Establishing triage/trauma centers.
 - Providing trauma and mental health support.







Gresham Library — May 10, 2018

Attendees

Name	Organization	Title
Amy Haase	MCEM	EM Planner
Tina Lefubure	Multco Transportation	Administrative Analyst
Kevin Sutherland	Multco DCS	
Ryan Krueger	Troutdale	Planner/flood plain manager
Kevin Cook	Multco	Senior Planner
Jasmine Avgerakis	Multco	EM Planner
David Lentzner	DLCD	Risk Management Coordinator
Alice Busch	MCEM	Operations Chief
Marianne Kersten	NWFS	Program Manager
Kelli Lardenczo	City of Gresham	EM Coordinator
Lisa Corbly	MCEM	Planning Director and Chief
John Niiyama	Wood Village	Public Works Director
Kari Schallock	Legacy Health	Registered Nurse
Annette Pronk	Living Cully	Community member/ally
Mark Dorin	Multco	Facilities Specialist
Robert Quinn	MCEM	Training/exercise

Scenario Exercise – What does it look like After a Disaster?

Meeting attendees were asked to participate in a disaster scenario exercise, specifically considering what regional recovery would look like one month, one year, and five years following a disaster. Attendees were split into groups of four to six people, and asked to read through the scenarios for each time period. Each group was given green, yellow, and blue sheets of paper and asked to write down one goal per sheet with the corresponding entities responsible for accomplishing the goal. Green sheets represented one-month goals, yellow sheets represented one-year goals, and blue sheets represented five-year goals. The groups were asked to spend 10 minutes brainstorming goals for each time period.

Following the brainstorming session, attendees were given a break while the project team arranged the goals on the wall, grouping them by time period and commonality.

The project team gave a brief summary of how the goals aligned. Attendees were given five dots and asked to use the dots to identify their top priorities for recovery.

Below are the results of that exercise:

Category	Goal	Who's responsible	Votes	Total
	1 MONTH			
	Transportation corridors	Cities Counties State Federal Utility providers	6	
Transportation access Road clearing	Transportation - Critical infrastructure - Damage assessments - Resource movement - Multi-modal – air, water, rail, road	Local and state transportation Air, ports, rail, public transit Coast guard, USACE	0	6
Transportation of supplies	Critical roadways being cleared/re-opened for flow of people, goods, supplies, etc.	ODOT DOTs	0	
	Access – transportation for delivery of supplies	Transportation departments USACE FEMA	0	
Fuel	Fuel	Transportation departments USACE Private sector pipelines	0	0
	Prescriptions	County Health departments	0	
Medical facilities and services	Access to medical supplies: antibiotics, folks with need for insulin, pharmaceuticals, etc.	ESF Health companies Pharmaceutical shelters	4	E
Medical support for vulnerable	Care facilities – health/medical/mental	Public and private providers	0	5
populations	Public health	Federal partners Health departments Utility providers Public works	0	



Category	Goal	Who's responsible	Votes	Total
	Medical services – clinics	Health department FEMA OHA EM	1	
	Lifestyle specific medical support	Health department FEMA OHA EM	0	
Access to money	Access to money	Bank trucks	0	0
Communications	Communications	Public and private infrastructure providers	1	1
Public safety	Security	Sheriff's departments	0	0
	Basic waste and debris removal services established	Metro Public works NGOs	0	
Debris management	Debris management - Where do you put the pile of stuff? - Solid waste management	Local public and private partners Metro Counties Cities	3	3
	Utilities back on – potable water	Service providers – ie PGE National guard	0	
Access to basic	Water and sanitary sewer	City of Wood Village Cities Water districts	0	
Access to water Sewage	Consistent/steady source of potable water – people know when and where to get it – prompts public education needs – cholera	Water bureaus Water providers consortium	0	9
	Water	Boil water notices Water bureau FEMA Local storage at businesses	9	



Category	Goal	Who's responsible	Votes	Total
Health and safety	Health safety education: - Pee - Poo - Cholera - Debris - Info on water containment	JIC PIOs NGOs Public health departments	0	0
	Life safety - Food - Water - Shelter	Federal State Local governments	0	
Food	Food	Local businesses FEMA Food banks	6	6
Marijuana microcredit	Marijuana shops turn into microcredit: they have cash!	We need to get coops with them	1	1
Manage public	Manage public expectations – communication with communities	Elected officials Public information officers	8	
expectations Community coordination	Continued and coordinated communication with community pockets	Community leaders identified Elected officials Public information officers – for specific communities	0	8
Shelters	Activate pre-identified shelters/services in underserved communities	Federal and local governments	0	
Housing	House-insecure populations will go to shelters but how will they access housing solutions longer-term? Start planning (renters are vulnerable)	Human services Housing Joint office	0	0
	1 YEAR			
Mental health Medical support	Mental health - PTSD - Refugee specific	Health and Human Services Private health providers FEMA	0	0
Healthcare	Hospitals Medical health	Private health providers	0	



Category	Goal	Who's responsible	Votes	Total
Hospitals	Healthcare - Access to services - What are the barriers for health	Local public health providers Private health providers	0	
Animal welfare	Livestock and animal care	Owners USDA/state/local	1	1
Transportation	Normalized air travel – PDX or substitute is operating	Port of Portland Military	1	1
Supply lines	Stabilize supply lines and channels, rails, etc. Port of Portland	Port Authority Military State FEMA	0	0
Utilities	Utility infrastructure up and running - to the spine	Utility providers Transportation departments USACE FEMA	4	4
Communication	Communication - Cell towers	Cellular providers Utility providers Transportation departments	0	0
Connecting communities	Connecting smaller communities to the greater community – so isolation	Counties Outreach organizations Community leaders Faith-based organizations NAs Connecting with each other	0	0
Sustainable transportation Renewable energy	Energy and transportation efficiency	Planning and building departments State	0	0
Land use Sustainable	Redevelopment and planning – ghost towns	FEMA Local governments Private land owners	1	
redevelopment Resilient rebuilding	Land use and transportation policies and procedures - Remove barriers - Equity	Local land use and transportation planning Elected officials	0	7



Category	Goal	Who's responsible	Votes	Total
Housing	Re-examine permitting procedures for rebuilding - More resilient building codes - Fewer permitting barriers	Community/developme nt services Elected officials	0	
	Land use - Move infrastructure and homes out of hazard areas	Local government Political buy-in Community organizations Neighborhood groups	0	
	Building and planning for future resilience – mitigation and adaptation	Multi-agency Community leaders Policy makers	6	
	The temporary has become permanent – land use planning needs updates	Counties Cities Community groups	0	
Housing	How to deal with people who have moved back to unsafe homes? (note: some vulnerable populations never go to shelters)		0	
Building codes, policy, and	Homes have been evaluated and tagged if safe so people can return	Local government Insurance Private companies	0	
permitting Cooperative	Flexibility in rebuild requirements in underserved communities	Local government State	0	0
housing Transitional housing	Cooperative housing – shared use of basic facilities and utilities, but with privacy	Housing authorities Volunteer groups Faith-based and community organizations	0	
	Transition into temporary/permanent housing	Housing authorities FEMA	0	
Vulnerable populations	Consider the needs of people with disabilities and under-represented communities in rebuilding	Planning and building departments Community organizations State – funding? Plan needs to prioritize	1	1



Category	Goal	Who's responsible	Votes	Total
Recovery planning	Comprehensive recovery plans in place – flowing from this framework	RDPO Counties Cities	1	1
Community Community resilience	Support for communities - Identification of community leaders to provide specialized support - Direct partnership for specific needs of individual communities	Community elders/leaders City/county leaders and representative NAs Faith-based organizations	0	0
Community awareness	Community preparedness, awareness, resilience	Community leaders Neighbors All Grassroots organizations	0	
Resource access Restored retail operations	Access to fresh foods, groceries, normal retail operations – all things needed for regular activity	Private business	1	1
	Ensuring education and services prioritized for minority and vulnerable groups – culturally appropriate	Community organizations Local government Faith-based organizations	0	
Schools and children	Schools operational – specific areas within each district	School districts Building inspectors State	6	6
	Schools and daycares back in operation so people can go to work	Public works Education departments Local government Private sector	0	
Workforce needs for rebuilding	Shortage of licensed electricians, plumbers, and engineers available – explore waivers, reciprocity	State/local/federal	0	0
Economic recovery	Small business incentives	Small business associations Local governments	0	4



Category	Goal	Who's responsible	Votes	Total
Small business incentives "Build back	Employment and workforce development – keeping employees here	COCs Economic development agencies State employment	0	
Walkable Sustainable redevelopment	Economic revival	COCs Economic development agencies FEMA Work for Recovery	4	
Local economy	Re-localization vision: - promoting small businesses - mom and pop - food, not lawns - walkable communities	Planning departments Local community groups	0	
	Coop for small businesses and getting it in place beforehand	SBA loans	0	
	Local marketplace – small businesses	COCs Economic development agencies Small business owners	0	
	5 YEARS			
Sustainability	Enhanced self- sufficiency/sustainability and HH levels – ie. Food not lawns	Community groups Parks	4	4
	Consider LEED style rebuild	Building and planning departments	0	
Recovery policies	Long-term political commitment to long-term recovery	Good plan now = holding political system accountable Good practice	0	0
Permanent	Permanent housing	Housing Land use Employment Agencies	0	
housing Previously	Previously homeless populations – continued services	Joint office Health and human services	0	0
homeless populations	Decreased houseless populations through increased access – will have inventory of abandoned homes, etc.	Joint office Housing bureaus Land use	0	



Category	Goal	Who's responsible	Votes	Total
	Operable major arterials	Transportation departments USACE	0	
Sustainable transportation infrastructure	Stronger transit systems - bikes - BRT - Pedestrian connections - Homes near services	TriMet Metro Planning departments Community organizations Neighborhood groups	0	0
Operable transportation arterials	Transportation infrastructure - Ensuring local routes are rebuilt - Re-examine transportation infrastructure - Barriers to rapid rebuilding	FHWA ODOT USDOT Local transportation agencies	0	
	Natural and cultural resources – restored some history and culture	Historic society Tourism groups Preservation groups	1	
Cultural resources Natural resources Community	Recreation and entertainment	Netflix Starbucks Comcast Parks and Recreation NBA MLS	0	1
rebuild	Faith-based communities – sense of pride and connection	Houses of worship services to the community from these groups	0	
	Education	K-12-20 higher educations Community colleges are integral to the community	0	
Schools	Schools and institutions open and back to capacity – daycares	School districts University system – state Building and planning departments Private providers	0	0



Category	Goal	Who's responsible	Votes	Total
Utilities	Utilities functioning beyond the spine	Utility providers Transportation providers	0	0
Othlics	Basic public works back in operation – rebuilt with resilience	Public works Policy makers	0	•
"Build back better"	Land use permitting policies to build back better	Policy makers Elected officials Community leaders	1	
Land use Building policy,	Land use planning and policies updated to not rebuild in most unsafe	Land use policy and planning Elected officials	0	1
permitting Recovery	Long-term commitment/policies/partnershi ps for disaster recovery	All	0	
	Sustained economic health	COCs Economic development agencies	3	
Economic	Incentivize return of large anchor employers in region	Government	0	
development Large business Financial	Large business infrastructure	Intel Nike Amazon Adidas FedEx	0	
assistance for businesses Equitable wealth distribution	Assistance for bankrupt agencies	Urban renewal Housing and Urban development State/local/communitie s determine priorities	0	4
Large sector community investments	More even distribution of wealth across region – resiliency	Policy makers Community organizations	1	
Workforce development	Large sector employers investing in communities and recovery	NBA Nike Intel Etc.	0	
	Long-term opportunities - Jobs - Education	Policy leaders	0	



Category	Goal	Who's responsible	Votes	Total
	Permanent employment	Large and small business COCs Planning departments - Rezones identified? Employment offices	0	
	Improve communities and market them nationally and internationally	Tourism COCs Elected officials		

Scenario Exercise Continued

Following the voting exercise, meeting attendees were asked to identify priorities and any additional goals they felt were missing. Below are the results of that discussion:

Resources:

- Establishing fuel source.
- Establishing food source.
- Providing pet supplies.
- Prioritizing reunification of families.
- Providing clean water.
- Addressing staffing obligations and concerns.
- Finances and access to money which will impact mobility.
- Medical services and facilities:
 - Securing medications for those with pre-existing medical needs.
 - Addressing injuries and first aid needs.
 - Addressing mental health and emotional trauma.
- Utilities:
 - Establishing communication networks.
 - Establishing a source of power/electricity.
 - Small business will be inhibited without access to electricity and basic utilities.
- Shelter:
 - Providing shelter.
 - Determining the structural integrity of important facilities.
- Health and safety:
 - Addressing sanitation issues.
 - Ensuring public safety.
 - · Address subsequent fires and gas leaks.
 - Addressing illegal looting and securing commodities.
- Public communication:
 - Managing public expectations.
 - Communicating recovery plans to the public.
 - Providing safety information to the public.
 - Communication between the regions and communities.



- Transportation:
 - Establishing transportation and access routes.





Stakeholder Engagement Session Summary

Tigard Public Works — May 10, 2018

Attendees

Name	Organization	Title
Bob Rogers	Tigard Police Department	Commander
John Wheeler	WCEM	EM Supervisor
Dan Gerbely	Clean Water Services	Principal Engineer
Robert Whitham	Tigard Police Department	Police Officer
Vicki Adams	Tigard Senior Center	Center Director
Clint J Fella	ОЕМ	Mitigation and Recovery Section Manager
Clayton Reynolds	City of Tualatin	EMS Manager
Liz Safran	Lewis and Clark College	Professor
Rob Murckison	City of Tigard	Engineer
Mark Woolsey	LDS Church	
Mike Luech	City of Tigard	Emergency Manager
Shawna Mantey	Ecology and Environment	Emergency Planner
Travis McArthur	West Slope Water District	Water Tech
Tammy Scheenstra	Pacific University	Risk Manager
Aaron Boyce	LDS Church	Emergency Prep Specialist
Barbara Bracken	Tual Ready MYN	CERT Director MYN

Scenario Exercise – What does it look like After a Disaster?

Meeting attendees were asked to participate in a disaster scenario exercise, specifically considering what regional recovery would look like one month, one year, and five years following a disaster. Attendees were split into groups of four to six people, and asked to read through the scenarios for each time period. Each group was given green, yellow, and blue sheets of paper and asked to write down one goal per sheet with the corresponding entities responsible for accomplishing the goal. Green sheets represented one-month goals, yellow sheets represented one-year goals, and blue sheets represented five-year goals. The groups were asked to spend 10 minutes brainstorming goals for each time period.

Following the brainstorming session, attendees were given a break while the project team arranged the goals on the wall, grouping them by time period and commonality.

The project team gave a brief summary of how the goals aligned. Attendees were given five dots and asked to use the dots to identify their top priorities for recovery.

Below are the results of that exercise:

Category	Goal	Who's responsible	Votes	Total
	1 MO	NTH		
	Damage Assessment (what's safe? After shocks too)	Building department Inspectors Contractors Fire Department	4	
Damage	Identify and open main transportation routes	Local, county, state joint operation	0	5
assessments	Transportation plan for opening roads	Local, county, state	1	3
	Bridges, roads, culverts assessed and safe?	ODOT City/county engineers US DOT Private?	0	
	Deal with contaminated water and have source for water	State and local agencies	2	
Clean water Public	Public health information for safety – getting word out	Public health Utilities Medical facilities/hospitals	2	4
messaging	Prioritized hospitals and trauma facilities/patient redirection	Hospitals Federal Local government	0	
	Waste management – sanitation waste water	Private waste providers – Pride, Honey Bucket, Clean Water Services	3	
Waste management	Interim sanitation plan/arrangement	Waste management companies (haulers) Public health organizations Wastewater management organizations	0	3
Faith-based	Faith-based communities	Churches, synagogues, mosques, etc.	0	0
Employees	Organized employees for infrastructure	All agencies Outside experts who are local	0	0



Category	Goal	Who's responsible	Votes	Total
Evacuation	Evacuations Displaced persons surge	NGO Church Universities Volunteers Local EM Transportation providers (Greyhound) Mass care	0	0
	management	Public health		
Senior services	Senior services	Volunteers	0	0
	Communication to individuals and communities (status)	Local, state government	3	
Public messaging	Communication to the community about ongoing efforts	ARES Local elected Local radio Responders	4	7
Communication	Regional communication	Private service providers Local government emergency services	0	
	Cell towers restored	Cell phone providers Power companies	0	
Fuel	Dependable fuel supplies	State DOE Carriers/vendors Operators Local agencies	1	1
Storage	Defined temporary storage and reduction sites	Army Corps of Engineers Local governments Private contractors	1	1
Volunteers	Volunteer coordination	Volunteer agencies (VOAD)	0	0
Temporary housing	Short term housing	Local communities Faith-based organizations Red Cross Mercy Corps and other NGOs Schools	0	0
Resources	Dependable service and supply routes – roads	State DOT County Local governments	0	7



Category	Goal	Who's responsible	Votes	Total
	Food	CPODs (local EM) Volunteers	3	
	Supply lines – prioritized distribution	Trucking Suppliers Transportation agencies – state/county/city	4	
	Community security	Neighborhoods Law enforcement	0	
Public safety	Public safety	Police departments HOAs National Guard Private Security Companies	3	3
rublic Salety	Public safety – coordination for community security	Law enforcement Communities	0	
	Public safety/law enforcement (support for them to stay and work)	Local law enforcement Federal law enforcement	0	
	1 YE	AR		
Cost of resources	Control of cost of resources	Local governments	1	1
Тах	Federal funding incentive programs (tax)	Legislative (fed) Business development City/State grant writers Military	0	0
Vulnerable populations	Vulnerable population – identify needs	Social services	5	5
Landslides	Secondary hazards – landslides		0	0
Cultural resources	Investment in cultural and commercial institutions	Private business Artists	0	0
Reunification	Family reunification	Local government Red Cross Media Faith-based organizations	1	1



Category	Goal	Who's responsible	Votes	Total
Housing Rebuilding	Housing (materials for rebuilding)	Land use/planning Contractors/builders Affordable housing City planning Housing associations Habitat for Humanity Faith-based organizations	2	2
	Land use planning that avoids the big hazard zones	Engineers City planners	5	
Land use Zoning,	Incentivize and regulate boon in rebuilding	Building codes – educate and advertise Construction companies Developers Real estate companies City, county governments	0	7
permitting, policies	New or adapted planning and zoning	Counties Cities Regional governments	0	
	Buildings built to withstand future earthquakes	Building codes	0	
	Regional strategy – building fast vs building right	State, federal, local community planners	2	
	Local hubs providing advice: - Insurance claim - Funding - Rebuilding	Local, state, federal recovery agencies	0	
Insurance	Insurance	Insurance agencies Government support	0	0
	Funding strategies for the business and resilience development plan	FEMA Finance Banks Local, county, state	0	



Category	Goal	Who's responsible	Votes	Total
Workforce redevelopment Skills training	Job training	Schools Department of Economic Development New sector development Big employers Business associations International employers Programs out of the region	0	0
	Expedited re-education programs – recovery focused trade programs (supports mental health)	Community colleges Trade schools Unions Teachers	0	
	Economic opportunity to provide new employment	Start new business incentives State funding agencies	0	
Economic development	Small business support – local business incentives	BA SBA	4	4
	Economic development and restoration plan	City County State	0	
	Educational institutions functioning	School districts Higher education institutions Department of education (state/fed)	4	
Schools	Schools/education – need: - Recruit teachers - Student teacher ratio - Build new school	School districts State legislature Private schools EM Department of State and Homeland Security	1	5
	Year-round schooling increased services/resources	School districts	0	
Mental health	Fatality management initial and residual deaths	Public health	0	
Medical resources and facilities	Public health – needs: - Medical care - Establish care programs	Hospitals Public Health Departments CDC	0	3



Category	Goal	Who's responsible	Votes	Total
	Surged and long-term health impacts – PTSD, mental health	Public health Private medical agencies	0	
	Mental health	Faith-based organizations Health Department Schools Mental health pros VA Grassroots support networks	3	
	5 YE	ARS		
Economic recovery	Thriving and rebounding economy (70%)	Local governments All governments State economic department Ports	0	0
Daniliana	Maintain long-term recovery commitment	Local, state, federal Big employers	0	•
Resiliency	More resilient and better prepared citizens	Citizens Community groups	0	0
	Major bridges – Columbia, Willamette	ODOT County	0	
	Stronger infrastructure codes	Professional associations (APWIA ACE) State	0	
Infrastructure	Rebuild better infrastructure	DOTs Utilities Builders and developers - Regulated by codes	1	7
	Resilience	Building codes Stronger designs Partnerships with whole Pacific NW	6	
Recovery	Well coordinated, communicated, tracked effort	All stakeholders	1	1
Consumer protection	Consistent available access to commodities – food, fuel, utilities	Cities, counties, state Private businesses	0	
	Strong consumer protections	Community planners Consumer protection Law enforcement Banking organizations	1	1



Category	Goal	Who's responsible	Votes	Total
	Robust post-disaster curriculums and research	Universities Community colleges	0	
	Learning lessons from history		0	
Resiliency messaging	Partnering with high risk areas to share lessons learned	EM/FEMA Responders Legislators City planners Community groups Medical industry	0	0
Mental health	Mental health (PTSD) (ongoing stress)		2	2
Rebuilding community	Removing the scars - Beautify neglected properties - Coordinate volunteer service projects	Enable identity of property owners to authorize projects County tax office	0	1
	New community vision	Local officials Community members Land use department Parks and Recreation Federal funding	1	
	Tourism development	Tourism marketing agencies	0	
Tourism	Promote post-disaster NW "New Northwest"	Tourism agencies Private companies Local governments	0	0
Economic equity	Economic development for marginalized communities	State/local economic development	1	
	Equity – vulnerable populations, more social integration		3	4
- quity	Rebuild culture/community in marginalized communities – create community vision	State/local stakeholders	0	

Scenario Exercise Continued

Following the voting exercise, meeting attendees were asked to identify priorities and any additional goals they felt were missing. Below are the results of that discussion:

Resources:



- Access to food.
- Access to water.
- Equitable distribution of services and supplies.
- Health and human services:
 - Sufficient shelter and ability to access it.
 - Sanitation services and temporary sewage mitigation.
 - Providing children and parents with daycare and activities.
 - Providing childcare and services for children with deceased parents.
 - Reunification of families that may have endured prolonged separation due to collapse or distance.
 - Social assistance for vulnerable populations.
 - Prioritizing vulnerable populations in recovery. Develop a plan prior to the disaster in order to better mitigate potential issues of equity, displacement, and lack of resources and services.
- Utilities:
 - Temporary communication networks for coordination recovery.
 - Access to money and banking.
 - Temporary plan for accessing electricity.
 - Access to fuel.
- Medical services and facilities:
 - Access to medical services and facilities.
 - Ability to fill prescriptions in cases of pre-existing, life-risking conditions.
 - Mental health and grief counseling.
- Transportation access and infrastructure:
 - Address the subsequent transportation disruptions.
 - Identifying routes and detours for service and supplies.
- Public safety:
 - Security and public safety for residents.
 - Search and rescue of collapsed building for missing people.
 - Assessment of existing infrastructure to identify safe building for temporary shelter and triage centers.
 - Evacuating residents in hazard areas or areas where they are isolated from services and resources.
 - Mitigation of subsequent fires.
 - Ensuring first responders and their families are supported so that they are best able to serve in recovery.
- Land use:
 - Developing local-specific building codes, permitting and policies for rebuilding.
- Recovery plan:
 - Developing a collaborative regional approach for recovery with comprehensive strategies and plans for implementation.
 - Ensure the building back of communities receives equal or higher priority that building back infrastructure in recovery.

