



City of Seattle, Washington



After Action Report & Improvement Plan

Evergreen EOC Functional Exercise

Exercise Date: June 5th – 6th 2012

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ACKNOWLEDGEMENTS

Planning for the Evergreen Exercise Series involved the work of hundreds of people from dozens of jurisdictions across the State of Washington. The exercise represents the culmination of over 12 months of planning and preparation. In the City of Seattle, A core planning team consisting of representatives from key City departments and other agencies worked diligently for months in order to put together an exercise that would afford responders the opportunity to test processes and skills that would be needed should a significant earthquake strike the Seattle metropolitan area.

The following individuals provided support as the Seattle Core Exercise Design Team:

Lawrence Eichhorn	Seattle Department of Transportation	Danica Little	King County Healthcare Coalition
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EXECUTIVE SUMMARY

On June 5th and 6th, the City of Seattle participated in a 2 day exercise that provided the opportunity to test EOC extended response phases concepts (days 2 and 3 after an earthquake). It also provided the opportunity to test the ability to coordinate with other regional, State, and Federal agencies. This After Action Report (AAR) examines and reviews only those activities that occurred in the Seattle Emergency Operations Center (EOC) and is compliant with the Homeland Security Exercise and Evaluation Program (HSEEP). The State of Washington will publish an after action report that holistically reviews the entire exercise. In addition, there are a number of city and counties agencies that will be producing their own reports.

Over 196 persons participated in the Seattle EOC and DOC's over the course of the two day exercise. Seattle's activities were evaluated by 26 persons who reviewed Seattle-specific objectives and provided their observations using HSEEP based critique forms. As a part of the exercise evaluation process, the City of Seattle collected feedback from players, controllers, and evaluators using the following activities:

- Exercise participants were asked to complete a 9 question survey as they left at the conclusion of their shift on the day of the exercise.
- A short debriefing (hot wash) was conducted with EOC players and exercise support staff at the end of each day.
- A more detailed online collected more detailed information on performance and the value of player preparation training and workshops.
- Finally a 2 hour After Action Conference was conducted in the week following the exercise.

During the course of the exercise, the players were able to successfully transition parts of the operation from response actions (including extended response) to recovery. This was significant since this the first full scale EOC exercise where there has been the opportunity to test these actions.

There were a number of successes that were documented. The City used this exercise as an opportunity to test new processes for electronically managing resource requests using the City's WebEOC system. Overall, the electronic management process made the requesting and tracking process more efficient for EOC representatives and for those in the Logistics Section. Policy issues were also successfully managed. The Mayor and his Emergency Executive Board (EEB) quickly made decisions on policy issues brought to them by the EOC.

Perhaps the most significant outcome of the exercise was the high level of player interaction and teamwork that took place in the EOC. Players were constantly out of their seats talking with one another. Key EOC leadership routinely met with their groups and coordinated cross-group meetings for enhanced response. Player interaction was critical in the EOC's ability to quickly resolve a number of issues that came up during the course of the 2 day exercise.

Although EOC play was an identified strength, additional practice and drills are needed to improve inter-jurisdictional coordination. Some additional areas for improvement include:

- Development of a regional shelter strategy

- Ensure that EOC personnel use common terminology when describing resources or capabilities
- Linking of key transportation incident response tools in order to provide a better picture of transportation impacts across the region.

Suggested steps to address the action items identified during this exercise are summarized and discussed in this report.

EXERCISE BACKGROUND

Evergreen Quake 2012 was a series of exercises and workshops held during the 2012 calendar year. The series was designed to educate and test the ability of local, state, federal, and tribal governments, and select private sector entities located within the Puget Sound region to collaboratively respond to and recover from large-magnitude earthquakes. The ultimate goal was to improve the collective operational readiness of emergency management and other public safety institutions that are participating in the exercise.

On June 5th and 6th, 2012, the City of Seattle participated in a two-day functional exercise which examined Emergency Operating Centers (EOC) response actions to a wide-area catastrophic earthquake. The exercise started 24 hours after the earthquake struck and provided 48 hours of simulated play over the 2 days. Exercise play focused on issues related to information management, transportation, medical, and human services. It also emphasized regional play between local, county, state, tribal and federal agencies. A number of local jurisdictions participated across a 6 county region along with significant participation by the State and Federal Agencies, other states and Canada. Both the State EOC and the Federal Emergency Management Agency (FEMA) Regional Operations Center participated in both days of the exercise.

Exercise Objectives

The City of Seattle tested regional capabilities to coordinate and work through response issues starting 24 hours after a 6.5 earthquake along the Seattle fault. Seattle tested objectives in five different areas:

1. **Information Sharing and Situational Awareness:** This area of emphasis aims to establish the ability of all participating EOC's/ECC's to develop detailed information on disaster impacts, ascertain resource needs, analyze and disseminate information and support requests in a timely manner.
 - a. Seattle EOC will develop situational awareness and provide awareness information/reports to King County and upwards
 - b. Seattle EOC will participate in and contribute to regional coordination through the King County teleconference (situational awareness, priorities, resource needs, public messaging)
2. **Logistics and Resource Management:** This area of emphasis is to test the interagency ability to identify, move, store, stage, and distribute both disaster response teams and disaster supply commodities from all sources: local, state, and Federal via internal sources and through mutual aid.
 - a. Seattle EOC will coordinate our respective response and recovery tactics and strategies through King County to assist in the county-wide level/approach
 - b. Seattle EOC will communicate and describe our resource needs up to King County and onto the WA State EOC
 - c. Seattle EOC Logistics will be prepared to accept resource requests from neighboring jurisdictions and King County
 - d. Seattle EOC will participate in regional discussions and prioritization of federal resources coming into the area.
3. **Medical Response Operations:** This area of emphasis focuses on evaluating the ability to treat injured disaster survivors through the establishment and resourcing of field medical facilities to include patient evacuation, transport, and tracking.
 - a. Seattle EOC will follow the regional priorities set for medical response

- b. Seattle EOC will coordinate with King County and the region on non-medical resourcing
 - c. Seattle EOC will coordinate with King County and the region on medical transportation priorities and needs.
4. **Sheltering/Mass Care and Housing:** This area will test our ability to identify immediate temporary sheltering requirements to include high-risk populations, track shelter residents and needs, as well as resource and staff shelters while concurrently planning for interim housing options.
 - a. Seattle EOC will participate in and coordinate with the regional priorities for sheltering needs (all EOCs contributing to regional sheltering plan)
 - b. Seattle EOC will address special/vulnerable population and pet sheltering needs.
 5. **Regional Transportation Resiliency:** This will focus on validating the ability to identify post-disaster transportation disruptions, and prioritize and establish short- and mid-term alternative multi-model transportation route options to include road, rail, air, and marine.

Participating Organizations

The following organizations participated or supported the Seattle EOC during the two day exercise:

- Seattle Office of Emergency Management
- Mayor’s Office
- City Attorney’s Office
- Seattle Fire (SFD)
- Seattle Police (SPD)
- Seattle Department of Transportation (SDOT)
- Seattle Public Utilities (SPU)
- Seattle City Light (SCL)
- Department of Information Technology (DoIT)
- Finance & Administrative Services
- Development and Planning Department
- Parks – Facilities
- Human Services Department (HSD)
- Seattle Public Library
- Seattle Center
- Office of Housing
- Public Health – Seattle & King County
- Amtrak
- King County Metro Transit
- Sound Transit
- Puget Sound Energy
- Mayor’s Emergency Executive Policy Board
- 2-1-1
- Seattle Commission for People with Disabilities
- Northwest Renal Network
- DSHS

Active Department Operations Centers

In addition to the EOC, several departments conducted operations out of own Department Operating Centers (DOC) during the exercise. Departments that had active DOC’s included:

- Seattle City Light
- Seattle Public Utilities
- Seattle Department of Transportation
- Department of Information Technology—Information Technology Operating Center (Citywide IT services)
- Public Health – Seattle/King County

- Seattle Parks and Recreation

Seattle EOC Exercise Activities

The following is an overview of the activities that occurred in the Seattle Emergency Operating Center during the two day Evergreen Earthquake exercise on June 5th & 6th, 2012. On both days the EOC was activated from 0800 – 1630 hours.

Policy Issues

The Mayor issued two proclamations on day one of the Exercise.

- Proclamation of Civil Emergency and;
- Civil Emergency Order Delegation of Authority

Additionally, the City was involved in a number of policy discussions early in day one. An Emergency Executive Board (EEB) meeting was held and three issues were discussed.

- **Camping on City Property:** The EEB agreed that the City would provide limited support to emerging “tent cities” at least until shelters could be established.
- **Providing guidance on distribution of a limited resource:** The EEB provided guidance for the distribution of a limited number of portapotties which would be needed in a number of areas around the City due to extensive damage to the sewer system.
- **Restricting Fuel purchases to 10 gallons:** The City Attorney’s Office was actively involved in discussions throughout the day to address these issues. Regional partners agreed that a county-wide fuel restriction policy was appropriate and worked with the King County Prosecutor’s Office to draft language for the order.
- **Demolition of four (4) Historic Buildings that were posing a risk and hampering rescue efforts:** After conferring with the EEB the Mayor decided to seek an order allowing for the demolition of buildings and the City Attorney’s Office obtained the order.

Conference Calls

Seattle EOC participated in two conference calls on Day One of the Exercise. The first occurred at 0930 hours and was hosted by King County Office of Emergency Management. It included participating jurisdictions within King County. Each area reported on their top two issues. Seattle reported that like many other areas, there were multiple impacts to roads and infrastructure. Top two issues were supporting rescue efforts, and hospitals that were operating above capacity.

The second call on day one occurred at 1230 hours and dealt with whether or not to establish a County-wide curfew and dealing with the limitation of fuel.

- Some jurisdictions felt that a County-wide curfew should be imposed because some businesses were worried that looting would occur. It was also discussed that with ongoing emergency operations, curfew could be helpful in keeping limited access routes available during hours of darkness. It was decided that

rather than imposing a curfew, a county-wide public message would be issued asking people to (voluntarily) remain inside between the hours of 2200 and 0500. If jurisdictions felt it necessary they could impose a curfew.

- Because of the limited fuel, Seattle requested a county-wide fuel policy be established, limiting individual fuel purchase to 10 gallons. Several jurisdictions concurred on need for consistent implementation within a geographic area. King County Prosecuting Attorney's Office worked with Seattle Law Department to finalize verbiage and implement throughout county.

On day two at 1445 hours the State ESF-6 Coordinator hosted a conference call to discuss priorities, needs and requests of local jurisdictions. The state was prepared to provide sheltering for 50,000 people for 30 days; food and water for 150,000 people, including those in shelters, and shelter for 25,000 pets. The state also reported that they had requested resources for volunteer coordination, children's services, feeding, sheltering, functional and access needs, and personal assistance services.

Health and Human Services

Throughout the two days, the Human Services Branch worked on several issues, including:

- Sheltering: By the end of day two, four (4) Priority 1 shelters were established (Garfield, Southwest, Rainier and Meadowbrook Community Centers) and three (3) additional sites were close to being opened.
- Health Care: Relocation of the Medical Examiner's Office due to facility issues, loss of power to area hospitals, and overwhelmed healthcare systems impacting ability to provide services.
- Food and Water distribution: working with Safeway Stores to set up food distribution centers.
- Pet sheltering: Including the relocation of the Seattle Animal Shelter due to the damage done to the building.

Logistics

Logistics Section activated the support branch, and rotated four teams throughout the two days comprised of personnel from Finance and Administrative Services, Department of Information Technology and Personnel Department.

- Resource Requests for additional supplies, equipment, teams and services were initiated by the requesting City Department utilizing the online Resource Request Board in WEBEOC. Approximately 125 requests were generated over the course of the two days of exercise play.
- Requests for State or Federal Resources were submitted to King County Emergency Coordination Center via email or phone call. The status of these requests was tracked via King County Share Point Site or State WEBEOC.
- Where appropriate, Logistics coordinated with City vendors or partner agencies to acquire necessary resources. This included coordinating on fuel supply, identifying facilities and locating other necessary supplies and services.

Infrastructure

The initial focus of the Infrastructure Branch was to develop situational awareness and provide a basic common operating picture to the EOC for deliberate and collaborative decision making. Once situational awareness was obtained of the current infrastructure earthquake damage, the team then worked with the other EOC functions to provide basic city services such as traffic routing, shelters, community points of distribution, power, water, sewage, transit, and information technology services including data networks and phone services. Below are some of the milestone activities that occurred within the EOC Infrastructure Branch and within the EOC in general as a result of Infrastructure Branch coordination with other EOC functions to move the City's earthquake response activities into stabilization so that recovery operations can begin:

- SDOT gained situational awareness and ability to indicate issues on the transportation layer of ArcGIS, which could be viewed in real time on the SDOT Emergency Management Map website at roughly 0900, one hour into the exercise. The situation map was then captured on a pdf file and posted in Seattle's Web EOC at 0923. An additional Acrobat (pdf) file of the real time map was posted in Web EOC at roughly 12:10 indicating significant North/south detour routing as a result of 15th Ave W. and W. Marginal Way SW. being closed due to landslide.
- SPU provides initial snapshot report indicating impacts to water infrastructure, drinking (city wide boil water order) and waste (pump station failures) at 09:10, 06/05/2012.
- SCL provides initial damage assessment/situational awareness of city power outages at 09:29.
- DoIT provides initial damage assessment/situational awareness of fiber outages by 09:45 based on internal monitoring tools and city power outage information.
- At roughly 10:00, 6/5/2012, deliberate and collaborative decision making begins within the EOC to identify basic sheltering, distribution, and infrastructure priorities.
- SDOT identified North/south & East/west mobility corridors at roughly 1200 hrs 6/5/12 on the SDOT Emergency Management Map clearly identifying alternate routes to exercise damage scenarios. Map visible to Seattle EOC real-time as updates made. Pdf file posted into Web EOC at 12:00.
- DPD provides approved building list for shelter purposes at roughly 13:11, 6/5/2012, SDOT confirmed access to shelters by 14:41.
- City earthquake exercise response activities now in beginning stages of stabilization.
- By 09:23 on 6/6/2012, Seattle EOC has a public facing URL indicating a Common Operating Picture of damage impacts, transportation detour routes, shelter and Community Points of Distribution (CPOD) locations.
- SCL posts Power Outage map in Web EOC at 09:45, 6/6/2012. The power outages map allowed DOIT to access data network outages within existing buildings.
- At 11:40, 6/6/2012 KC Metro posts in Seattle Web EOC, text document describing KC Metro transit service offerings.

Advanced Planning

For the Exercise an Advanced Planning Team was established in the EOC under the Planning Section and was very active over the two days. Included in the issues they addressed were:

- Long term sheltering planning was initiated on a regional basis, with Health and Human Services Branch serving as the lead. Planning assumptions included that most stranded commuters and passengers would eventually return home and long-term sheltering would be needed for people whose residences were no longer habitable.
- Recovery issues were addressed early by contacting Washington State Emergency Management Division and FEMA to arrange individual assistance to facilitate funding to make earthquake repairs to homes and set up Disaster Recovery Centers.
- On day two there was talk of a possible Presidential visit. Advanced Planning began looking at coordination and resource needs if the President did make a visit.
- Worked with Operations Section and Logistic Section regarding ongoing issues involved with housing, fuel supply and transportation.

Transition from Response to Recovery

There was a transition that took place during the exercise that indicated the City of Seattle’s emergency management team’s capability to stabilize response activities and transition to recovery activities. Exercise players obtained situational awareness around 9:00 AM on day one of the exercise. From there, players developed a common operating picture to begin deliberate and collaborative decision making as team to have a coordinated City of Seattle response (roughly 10:00, 6/5/2012) moving incident toward stabilization. The incident reached a point of stabilization early on day 2 of the exercise (June 6th) by performing the deliberate and collaborative placement of shelters, Community Points of Distribution (CPODs), City mobility, detour routing, and utility status, thus stabilization.

New Positions

There were two new positions that were practiced for the first time in the exercise:

- The Office of Economic Development (OED) staffed the EOC to provide coordination between the EOC and the Seattle business community.
- A City of Seattle representative was embedded in the King County Emergency Coordination Center (ECC). This position, called a Zone coordinator, is designed to aid in the two-way communication on information and resources. In addition to a representative from Seattle, there are two other Zone coordinators: One serving areas of north King County and one for south King County.

EOC Produced Deliverables

The following materials were produced by the Seattle EOC during the two day exercise:

Activity	6/5/12	6/6/12	Total
Snapshot Reports	7	7	14
Situation Reports	1	1	2
Consolidated Action Plan (CAP)	1	1	2

EOC Coordination Meetings

The following coordination activities were held by EOC players during the two day exercise:

Activity	6/5/12	6/6/12	Total
Conference Calls	2	1	3
Emergency Executive Board (EEB)	1	1	2
Planning Meetings	2	1	3

LESSONS LEARNED

Information Sharing and Situational Awareness

What Worked

- The level of interaction between players in the Seattle EOC was outstanding. Section leaders routinely met with their groups and coordinated cross-group meetings for enhanced response (e.g., Parks Personnel met with Logistics for sheltering sites). This proved very effective for communicating event status and current needs/priorities.
- Policy issues were forwarded to Seattle’s Emergency Executive Board and handled quickly. The pre-briefing from Branch Directors to the Seattle EOC Director to lay out policy issues, options and recommendations seemed very effective both to prepare for the meeting but also as a situation report for everyone.
- The EOC Operations Section facilitated “standup briefings” with all branch directors and section chiefs every two hours. This proved to be an effective method for keeping everyone up to date, promoting unity of effort and ensuring all departments focused on achieving the operational objectives.
- The pre-exercise training on WebEOC, Seattle EOC operations, and various local and regional plans (at a series of Disaster Management Committee meetings starting in November 2011) significantly contributed to the overall player understanding of the EOC and the importance of their role to the community.
- Outage maps provided by SCL and SPU were very useful to participants in identifying infrastructure affected and impacts to overall response efforts. In one instance, the maps helped DoIT think about and assess fiber cuts and needs for generators to keep computers working in buildings with no power.
- Two information sharing maps were created by SDOT and the EOC for situation assessment: The SDOT emergency map, and one created on the City’s internal ArcGIS online portal by the EOC GIS unit. Both received high praise for the usefulness to EOC players.
- Roles within the GIS unit were clearly defined which helped speed up the processing of map requests received.
- The ESF-6 (Health and Human Services) branch conducted training sessions prior to the exercise which was reflected in the branch play. Players clearly demonstrated teamwork and collaboration skills as they worked through problems during both days of the exercise. The branch was very proactive in getting information to JIC.
- The Seattle Joint Information Center (JIC) successfully vetted information assembled from several sources. The decision to double validate information to avoid miscommunication was a good call, especially as it related to opening up shelters. News releases were issued and coordinated with King County’s JIC.
- A City of Seattle representative was embedded in the King County Emergency Coordination Center (ECC) for the first time. This new position enhanced coordination on critical issues that affect both jurisdictions. The representative assisted in coordinating the issuance of the fuel restriction order.

Challenges

Issue: A City of Seattle representative was embedded in the King County Emergency Coordination Center (ECC) for the first time. There needs to be a better definition of the role and mission of this representative. The lack of role definition resulted in some confusion over what issues they should communicate back to the Seattle EOC.

Recommendation: Work with King County Emergency Management along with Zone 1 and 3 representatives to develop procedure and checklists for all Zone representatives.

Lead Agency for Follow-up: OEM

Issue: Various coordination calls between like operational groups between Seattle and King County were scheduled on top of one another.

Recommendation: Work with King County Emergency Management along with Zone 1 and 3 representatives to define a process for managing and scheduling conference calls, perhaps leveraging the zone representatives.

Lead Agency for Follow-up: OEM

Logistics and Resource Management

What Worked

- Resource requests were successfully managed using WebEOC. This helped the Logistics Section to more efficiently manage requests submitted by City departments. Most resource requests were successfully tracked in WebEOC, with numerous updates providing status of the request, throughout the exercise. The updates were displayed with date/time information and included current status and/or reassignment to another person.
- Seattle Logistics and Seattle Public Utilities representatives successfully worked together to resolve water supply issues to the hospitals.
- Shift change between morning and afternoon shifts in Seattle Logistics Section went smoothly.
- Coordinating with the City's fuel supply vendor proved to be beneficial in successfully exercising the contract, and helped to identify areas of improvement.

Challenges

Issue: A number of Seattle EOC participants were unfamiliar with Federal resources and their capabilities.

Recommendation: Provide opportunities to learn more about Federal assets such as DMORT, DMAT, USAR, etc. as well as resource typing and make it an annual training requirement to review this information. A suggestion could include inviting these teams to set up and demonstrate their capabilities.

Lead Agency for Follow-up: OEM

Issue: There was some disconnect between Seattle and King County in posting, managing and updating elevated resource requests. Many of the issues had to do with tracking and following up on submitted requests in the King County system. Updates from King County on outstanding requests did not consistently reflect the resource expected times of arrival and often lacked the detail information needed in order to plan for the resource arrival.

Recommendation: Provide additional training and exercises to Seattle EOC Logistics personnel on using the King County Share Point Site to obtaining State and Federal resources. Establish joint training opportunities between Seattle and King County logistics personnel in order to improve coordination of resource requests between the two agencies.

Lead Agency for Follow-up: ESF 7

Issue: Seattle Logistics had difficulty determining how resource orders were being prioritized on submitted resource request to King County Share Point site.

Recommendation: Create a position within the Seattle EOC Logistics Section who will be responsible for submitting, tracking, and follow-up on all resource requests that are pushed to King County and the State.

Lead Agency for Follow-up: ESF 7

Medical Response Operations

What Worked

- Seattle EOC benefited from situation awareness from the nursing homes and dialysis centers provided the health representative.
- There was excellent dialogue between Health and Human Services and Infrastructure branches on the failure of the seawall along with the impact that had on getting steam to the hospitals.

Challenges

Issue: Situational awareness came from the hospitals, however there was some confusion as to what type of information was needed by the EOC .

Recommendation: Review Seattle EOC's Essential Elements of Information (EEI) strategy relative to elements needed from hospitals at a future Seattle Strategic Work Group (SWG) meeting and include larger health and medical partners in the discussion.

Lead Agency for Follow-up: OEM

Issue: There was some confusion about the use and deployment of Federal medical teams such as Disaster Medical Assistance Teams (DMAT) and Disaster Mortuary Operational Response Teams (DMORT).

Recommendation: Work with Public Health Seattle King County to educate program stakeholders and EOC responders on role and logistical needs of DMAT/DMORT teams at a future Disaster Management Committee meeting.

Lead Agency for Follow-up: OEM

Shelter, Mass Care, and Housing

What Worked

- The pet sheltering plan moved in conjunction with the general shelter plan, and was included as a priority by supporting departments.
- The spontaneous tent sheltering policy options and recommendation were efficiently developed from a template, presented to the Seattle Emergency Executive Board, and adopted within four hours of the start of play.
- As an example of regional coordination, Seattle identified the need for a local shelter in the south Rainier area. Given that it was located close to Skyway (unincorporated King County) and Renton, three EOC's (Seattle, Renton and King County ECC) coordinated actions and related shelter activities.
- Showing initiative, the ESF-6 team coordinated beyond their initial sheltering plans and worked with several agencies to develop an interim and long-term housing plan for displaced residents.
- ESF-6 had a person that players could feed information to, who would then post it in WebEOC. Many ESF-6 players commented that helped them ensure that information was getting added to WebEOC in a timely manner.
- The ESF-6 group came up with the plan for sheltering commuters at the train station which turned out to be an excellent idea.
- The ESF-6 team displayed a great deal of camaraderie and cohesion which was due to the regular meetings and past practices conducted as a team.
- The Branch had an input session each morning for agencies not staffing the EOC. This was a good connection to the community and provided a level of expertise and perspective not at the branch.
- Libraries provided transportation for portapotties instead of waiting for Logistics. This allowed the first shelters to open earlier.

Challenges

Issue: There is a lack of awareness of existing plans created by King County Emergency Management; for example, agreements with operators of grocery stores.

Recommendation: Work with King County OEM to deliver a presentation on existing agreements on facilities and services at a future DMC meeting.

Lead Agency for Follow-up: ESF 6

Issue: Multiple types of sheltering operations were established without a clear way to visualize what was being set up in which region, the capacity and need in a given area, and how the pieces fit together.

Recommendation: Develop a methodology to diagram and synthesize sheltering site strategy and capacity through the ESF-6 workgroup.

Lead Agency for Follow-up: ESF 6

Issue: A regional shelter strategy had not been outlined by the end of the exercise. Opportunities to leverage shelter resources in individual jurisdictions were not effectively exploited. In an incident of this magnitude, it is likely that without such coordination time and resources will be wasted if sheltering and other mass care needs are not coordinated from the start. Fundamentally, jurisdictions in the region have not defined sheltering and other mass care will be coordinated.

Recommendation: In conjunction with regional stakeholders, develop a process that describes how mass care efforts throughout the region will be coordinated.

Lead Agency for Follow-up: ESF 6

Regional Transportation Resiliency

What Worked

- SDOT Emergency Management Map provided real-time transportation damage, street closures, and mobility through the City of Seattle and Seattle EOC map using ArcGIS Explorer Online.
- SDOT traffic detour routing and prioritization of north/south, east/west corridors to maintain mobility throughout Seattle and the region and ability of those regional agencies who have access and utilize Seattle's Web EOC to capitalize on information to develop and provide medical, shelter, and transit access and services.
- Seattle Web EOC was successfully used to assign tasks to responding agencies enabling tasks to be tracked through to completion.

Challenges

Issue: King County ECC and many other local jurisdictions do not have their key transportation incident response tools linked (able to share information with one another). This significantly diminishes the regions ability to coordinate transportation resource requirements, damage assessment impacts, and regional traffic routing throughout the Puget Sound region. For the Seattle EOC, significant delays and loss of information

occurs when non-represented jurisdiction information is received and has to be cut and pasted into Seattle's WebEOC system.

Recommendation: Dedicate transportation personnel at the local, county, and State to coordinate information, & monitor each other's systems.

Lead Agency for Follow-up: ESF 1

Issue: The lack of visibility of regional transportation incident response resources and ability to prioritize regional mobility across jurisdictions is not well understood.

Recommendation:

Plan for and adopt a common language for defining City Departments' resources that could be deployed for response and recovery operations in a disaster. A next step involves the development of procedures to integrate resource information (i.e. share in a common platform) between City departments leveraging the work produced in the City's Resource Management Integration Project. The City should also work with regional partners to rehabilitate the building of a resource management system in order to provide jurisdictions review and share resources and to assist with resource prioritization.

Lead Agency for Follow-up: ESF 7

Other Issues

What Worked

- Having representation from the Port of Seattle proved invaluable as the face-to-face communication enabled logistics and the Port to coordinate on the delivery of a fuel shipment. In a second case, the Port along with King County and Seattle Parks provided sites for two DMAT teams.
- Seattle and King County successfully coordinated the use of additional structural engineers working with business liaison group to accept task to inspect private partner business (Safeway).
- Coordination between DPD and multiple departments led to the successful identification and prioritization of facilities for inspection.
- Regular breaks in the action for important updates including celebrating wins were very helpful for both morale and operational awareness.
- Having the policy issues framed to include recommendations and options considered was a vast improvement from the last major exercise (Sound Shake 2010). The agency heads contributed thoughtfully to informative discussions that added greatly to the dialogue and policy.

Challenges

Issue: There was some confusion among EOC players regarding the difference between tasking a department to perform a function as opposed to sending it in as a resource request.

Recommendation: A short, 5 minute, training module was conducted on Day 2 of the exercise. Additional training to differentiate between a task and a resource will be delivered at future Disaster Management Committee meetings.

Lead Agency for Follow-up: OEM

Issue: Common terminology was not being used when describing resources, facilities, teams. Advance planning and the Snap Shots did not utilize the same facility terms as Logistics. For example, Planning used Community Food Distribution Centers instead of Community Points of Distribution. There are other commodities other than food being distributed at these sites. Other term confusion included: Staging Areas vs. Distribution Centers, Base Camps vs. Staging Areas, and Base Camps vs. CPODs.

Recommendation: Identify terms needing definitions and train EOC representatives on the terms. Those terms not defined within NIMS documentation should be developed through the Resource Integration Project being managed by Finance and Administrative Services.

Lead Agency for Follow-up: ESF-7 with OEM

SEATTLE EVERGREEN CORRECTIVE ACTION/IMPROVEMENT PLAN

The following items have been identified as improvement items for the following:

TASK #	ISSUE	KEY ACTION STEPS THAT WILL LEAD TO RESOLUTION OF PROBLEM	RESPONSIBLE DEPARTMENT (S)	EXPECTED DATE OF COMPLETION	COMPLETION DATE
1	Defining role and mission of the Zone representatives who report to the King County ECC	Develop a checklist for Zone Representatives that respond to the EOC	OEM	Q1, 2013	
2	Lack of familiarity with Federal resources and their capabilities.	Develop an appropriate program to deliver information about key Federal Resources and deliver it a future DMC meeting or other appropriate venue.	OEM	Q1, 2013	
3	Disconnect between Seattle and King County in posting, managing, and updating elevated resource requests.	<ol style="list-style-type: none"> 1. Deliver training program to EOC logistics team members on procedures for submitting and tracking resource requests up to King County Emergency Coordination Center and State Emergency Operation Center. 2. Develop a joint training activity between King County and Seattle to improve resource management and documentation tracking between the two agencies. 	ESF-7	QTR 2, 2013	
4	Seattle Logistics had difficulty determining how resource orders were being prioritized on submitted resource request to King County Share Point site.	Create a position and/or an assigned responsibility for pushing and tracking requests up to King County and State.	ESF-7	QTR 3, 2012	
5	Situational awareness came from the hospitals, however there was some confusion as to what type of information was needed by the EOC	Review Seattle EOC's Essential Elements of Information (EEI) strategy relative to elements needed from hospitals at a future Seattle Strategic Work Group (SWG) meeting and include larger health and medical partners in the discussion.	OEM	Q1, 2013	

TASK #	ISSUE	KEY ACTION STEPS THAT WILL LEAD TO RESOLUTION OF PROBLEM	RESPONSIBLE DEPARTMENT (S)	EXPECTED DATE OF COMPLETION	COMPLETION DATE
6	There was some confusion about the use and deployment of Federal medical teams such as Disaster Medical Assistance Teams (DMAT) and Disaster Mortuary Operational Response Teams (DMORT)	OEM to work with Public Health Seattle King County to educate program stakeholders and EOC responders on role and logistical needs of DMAT/DMORT teams at a future Disaster Management Committee meeting	PHSKC, OEM	Q1, 2013	
7	There is a lack of awareness of existing contracts and/or agreements created by King County Emergency Management that could benefit the City of Seattle.	OEM to invite King County OEM to deliver a presentation outlining the existing agreements with facilities and services at a future DMC meeting.	OEM	Q2, 2013	
8	Multiple sheltering operations were set up without a clear way to visualize what was being set up in which region, the capacity and need in a given area, and how the pieces fit together.	Develop a methodology to diagram and synthesize sheltering site strategy and capacity.	ESF-6	11/30/12	
9	There was confusion surrounding the coordination of shelters in the region	Work with King County OEM and key regional partners to develop a regional shelter strategy that describes how mass care efforts throughout the region will be coordinated	ESF-6	12/31/12	
10	King County ECC and many other local jurisdictions do not have their key transportation incident response tools linked (able to share information with one another).	Dedicate transportation personnel at the local, county, and State to coordinate information, & monitor each other's systems.	ESF-1	Q2, 2013	

TASK #	ISSUE	KEY ACTION STEPS THAT WILL LEAD TO RESOLUTION OF PROBLEM	RESPONSIBLE DEPARTMENT (S)	EXPECTED DATE OF COMPLETION	COMPLETION DATE
11	The lack of visibility of regional transportation incident response resources and ability to prioritize regional mobility across jurisdictions	Plan for and adopt a common language for defining City Departments' resources that could be deployed for response and recovery operations in a disaster. A next step involves the development of procedures to integrate resource information (ie. share in a common platform) between City departments leveraging the work produced in the City's Resource Management Integration Project. The City should also work with regional partners to rehabilitate the building of a resource management system in order to provide jurisdictions review and share resources and to assist with resource prioritization.	ESF-7	QTR 4, 2012	
12	There wasn't common terminology being used when describing resources, facilities, teams.	Identify terms needing definitions and train EOC representatives on the terms. Those terms not defined within NIMS documentation should be developed by the appropriate lead agency and reviewed by SWG	ESF-7 with OEM	Q1, 2013	

APPENDIX 1: EXERCISE EVALUATION SURVEY RESULTS

The City of Seattle conducted a series of activities designed to evaluate the effectiveness of the exercise. There were 3 parts to this evaluation process:

1. **Participant Feedback Form:** A 2 page survey to be filled out by exercise participants on the day of the exercise
2. **On-line survey:** A more in-depth assessment designed to collect information on the exercise that will help guide strategic planning, training, and exercise for the City's emergency management program.
3. **After Action Conference:** This conference was a 2 hour meeting designed to bring together exercise participants and evaluators to review what worked and what didn't work so well during the exercise. The conference format was a two step process: First, participants were asked to record their impressions on post-it notes and place them in categories at the front of the room. The comments were then reviewed by a moderator and the most significant observations with selected issues openly discussed by the group.

Information from all three activities was used to produce the After Action Report for this exercise. What follows represents selected information collected from the Feedback Forms and the On-line survey

Participant Feedback Form

Below represent the results from the Participant Feedback Form. This form consisted of a short questionnaire that players were asked to fill out at the end of their shift. Players working both days were asked to fill a form out for each day.

	Question	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	N/A
Understanding Roles							
1	The exercise helped me understand my role and that of my agency .	44%	49%	5%	0%	0%	1%
2	The exercise helped me understand role of other agencies who are a part of the Seattle EOC	40%	42%	12%	4%	0%	2%
3	The exercise helped me understand role of other jurisdictions (e.g. King County, State, or Federal)	21%	30%	37%	9%	0%	2%
Understanding Plans							
4	The exercise helped me identify strengths & weaknesses in my agency's plans or operations.	47%	40%	11%	0%	0%	2%
5	The exercise helped me identify strengths & weaknesses of citywide plans (e.g. earthquake annex)	18%	40%	36%	4%	0%	2%
6	The exercise helped me identify strengths & weaknesses of regional plans (e.g. RCPG)	11%	25%	44%	16%	0%	4%

	Question	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	N/A
Exercise Design and Conduct							
7	I was adequately briefed on rules of exercise play.	66%	21%	9%	4%	0%	0%
8	The exercise was realistic	46%	39%	11%	4%	0%	0%
9	The exercise was well prepared and conducted.	64%	30%	6%	0%	0%	0%

On-Line Survey

The following contains selected questions from the online survey.

Including this exercise, how many Seattle EOC activations have you worked? (note working multiple days at the EOC for the same event counts as 1 activation).

1-3.....	60.7%
3-5.....	23.0%
5-10.....	9.8%
More than 10.....	6.5%

What ESF or functional group did you work in at the EOC?

ESF-1, 3, or 12: Roads, power, Water & Wastewater, Transit, Rail, or Airports	7.7%
ESF-3: Facilities, Building Inspections.....	3.1%
ESF-2: Telecommunications & Information Technology	1.5%
ESF -4, 8, 9, or 10: EMS, Fire Fighting, & Rescuing	3.1%
ESF-6: Mass Care, Sheltering, or Animal Services	20.0%
ESF-7: Logistics.....	23.1%
ESF-9: Health & Medical	1.5%
ESF 13: Law Enforcement	1.5%
ESF-15: Joint Information Center	3.1%
Plans Section.....	15.4%
Admin Section	3.1%
Exercise Design and Control (controller, evaluator, or SimCell)	4.6%
Other	9.2%
Don't Know	3.1%

In your opinion, was unity of effort achieved in the Seattle EOC during the exercise?

Yes	94.7%
No	5.3%

The EOC briefing process led by the EOC Director was helpful:

Yes 100.0%
 No 0.0%

The (time) length briefing was:

Too long 2.9%
 Too Short 5.7%
 Just right 91.4%

Please rate the environment and support services provided at the EOC on a scale of 1-to 5 with 1 being the highest rating:

	Outstanding	Very Good	Good	Fair	Poor	Rating Average
EOC Check-in	21	8	5	0	0	4.47
Restrooms Cleanliness	24	5	4	1	0	4.53
EOC Cleanliness	23	8	3	0	0	4.59
Availability of Supplies	14	13	6	1	0	4.18
Lighting	20	12	2	0	0	4.53
Noise Levels	9	10	12	3	0	3.74
Breakfast	9	10	10	0	0	3.97
Lunch	18	7	7	2	0	4.21
Call Taking	7	14	6	1	1	3.86

Were you able to log onto your assigned EOC Computer without difficulty? (NOTE: This question DOESNT deal with access/logon to WebEOC -- That question comes later!)

Yes 79.5%
 No 2.9%
 N/A 17.6%

Did you use WebEOC during the exercise?

Yes 83.1%
 No 16.9%

Rate your experience using WebEOC:

Answer Options	Easy to do	A Little Challenging	Challenging	Difficult	Very Difficult to do	N/A	Rating Average
I was able to log into WebEOC.	36	9	7	2	2	3	1.66

Answer Options	Easy to do	A Little Challenging	Challenging	Difficult	Very Difficult to do	N/A	Rating Average
I was able to find information in WebEOC.	15	23	17	3	1	0	2.19
I was able to use WebEOC to provide me situation awareness during the exercise.	21	16	13	3	2	4	2.07
I was able to place a resource request in WebEOC.	9	9	9	1	1	29	2.17
I was able to track a resource request in WebEOC.	5	15	13	2	2	21	2.49
I was able to use WebEOC to locate people or phone numbers.	9	8	7	6	1	26	2.42

I want more training on how to use WebEOC:

Yes 48.1%
 No 51.9%

The Situation Reports provided useful information:

Yes 92.3%
 No 7.7%

The (hourly) Snapshot Reports provided useful information:

Yes 81.0%
 No 19.0%

Please indicate which of the following training opportunities you have taken prior to the exercise:

Answer Options	Response Percent
Introduction to WebEOC	82.0%
Basic EOC Operations	78.7%
Intermediate EOC Operations	60.7%
Advance EOC Operations	52.5%
All hands on Deck Training held the week of May 7th - 10th 2012	59.0%
Disaster Management Committee Meeting (DMC)Evergreen Player Prep Series - May 2012 - Transportation	23.0%
DMC Evergreen Player Prep Series - April 2012 - Mass Care and Sheltering Capabilities	41.0%
DMC Meeting Evergreen Player Prep Series - March 2012 - Understanding Our Plans	16.4%
DMC Meeting Evergreen Player Prep Series - Feb 2012 - Situational Awareness	37.7%
DMC Meeting Evergreen Player Prep Series - Jan 2012 - Exercise Player Orientation and Expectations	36.1%

Answer Options	Response Percent
DMC Meeting Evergreen Player Prep Series - December 2011 - Health and Medical Operations	16.4%
DMC Meeting Evergreen Player Prep Series - November 2011 - Logistics and Resource Management	31.1%

Out of the training that you took in the months leading up to the exercise, which one was the most useful in preparing you for Evergreen:

Answer Options	Response Percent
Introduction to WebEOC	8.3%
Basic EOC Operations	10.4%
Intermediate EOC Operations	4.2%
Advance EOC Operations	12.5%
All hands on Deck Training held the week of May 7th - 10th 2012	27.1%
Disaster Management Committee Meeting (DMC)Evergreen Player Prep Series - May 2012 - Transportation	0.0%
DMC Evergreen Player Prep Series - April 2012 - Mass Care and Sheltering Capabilities	4.2%
DMC Meeting Evergreen Player Prep Series - March 2012 - Understanding Our Plans	2.1%
DMC Meeting Evergreen Player Prep Series - Feb 2012 - Situational Awareness	2.1%
DMC Meeting Evergreen Player Prep Series - Jan 2012 - Exercise Player Orientation and Expectations	6.3%
DMC Meeting Evergreen Player Prep Series - December 2011 - Health and Medical Operations	0.0%
DMC Meeting Evergreen Player Prep Series - November 2011 - Logistics and Resource Management	12.5%
Other	10.3%

The following questions apply to those participants who also played in the Sound Shake Exercise in Oct 2010.

Did you feel more “at ease” in your role or responsibility as compared to Sound Shake 2010?

Yes 87.5%
 No 12.5%

Do you feel that over the last 2 years (between exercises) that your EOC skills and abilities:

Improved 96.9%
 Stayed the same 3.1%
 Decreased 0.0%

APPENDIX 2: LIST OF ACRONYMS

The following list contains acronyms that are used in this document

Acronym.....	Name
CAP	Consolidated Action Plan (for the Seattle EOC)
CSB.....	Customer Service Bureau
CPODs	Community Points of Distribution
DMAT.....	Disaster Medical Assistance Teams
DMC.....	Seattle Disaster Management Committee
DMORT	Disaster Mortuary Operational Response Teams
DOC.....	Department Operations Center
DOT.....	Department of Transportation
DoIT	Department of Information Technology
DPD.....	Department of Planning and Development
ECC.....	Emergency Coordination Center (same as an EOC)
EEB.....	Seattle Mayor’s Emergency Executive Board
EEl	Essential Elements of Information
EOC	Emergency Operations Center
ESF	Emergency Support Function
ETA.....	Estimated Time of Arrival
FAS.....	Finance and Administrative Services
FEMA	Federal Emergency Management Agency
HMAC.....	Health and Medical Area Command
HSD	Human Services Department
KC.....	King County
OIR.....	Office of Intergovernmental Relations
PHSKC	Public Health Seattle King-County
PSE	Puget Sound Energy
SCL	Seattle City Light
SDOT	Seattle Department of Transportation
SFD.....	Seattle Fire Department
SPD.....	Seattle Police Department
SPL	Seattle Public Libraries
SPU.....	Seattle Public Utilities
SWG	Seattle Strategic Work Group of the Disaster Management Committee
UCIDS.....	Unified Command Incident Command Decision Support System
UW.....	University of Washington