



City of Seattle

Office of Emergency Management



INTERGRATED EMERGENCY MANAGEMENT COURSE

AUGUST 19-23, 2013

After Action Report

Published, December 2013

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City of Seattle, Washington

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INTEGRATED EMERGENCY MANAGEMENT COURSE (IEMC)

AUGUST 19 -22ND, 2013

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1.0 Executive Summary

On the week of August 19-22, 2013 a team of 69 City, County and Community partners attended FEMA's Integrated Emergency Management Course (IEMC) in Emmitsburg, Maryland. This course was customized for the City of Seattle and provided participants with intensive training and practice in response to a specific hazard. A broad cross section of stakeholders participated, including representatives from city departments, county agencies, and from key non-city entities, (including a community representative) that play a role in supporting disaster response operations in the City of Seattle.

The major goal of the course was to develop and enhance emergency management skills in part through enhancing teamwork. A simulated worst case winter storm event was utilized as the backdrop for the exercises. The course provided the opportunity for the team to strategically address the response strategies, messaging, and policies for a severe winter storm incident that included significant snowfall, winds, freezing rain (ice), and rain.

Over a period of three months, FEMA worked with the City to customize the course including the selection of presentations and development of a multi-day exercise. A FEMA representative visited Seattle and over a period of three days, met with key City personnel in order better understand the challenges and response capabilities Seattle had in dealing with winter storms. A City design team continued to work with officials from the Emergency Management Institute (EMI) following the onsite visit to help develop exercise components and lectures.

A series of trainings were held in the months leading up to the training to prepare participants for the August course. Preparations culminated in a 2 ½ hour training event, which was held in the last two weeks prior to departure for Emmitsburg.

During the 4 ½ day course, participants practiced team building skills and response activities related to power outages, traffic and infrastructure incidents, human impacts, and other concepts outlined in the Seattle Snowstorm Incident Annex and the updated Seattle Disaster Readiness and Response Plan.

Participants completed post training surveys which validated the success of the event in developing team building skills and develop multi-agency strategies for a number of specific issues that the City would deal with in such a large scale event.

1.1 Acknowledgements

The Seattle Office of Emergency Management would also like to acknowledge the following people who helped make the IEMC course such a success.

The following individuals who presented to Seattle participants during the four day course:

- Nicole Errett, Director of Policy and Special Projects, Mayor's Office of Emergency Management, Baltimore MD.
- Peter T. Gaynor, Director, Providence Emergency Management Agency and Office of Homeland Security, Providence, RI
- Dr. Jeffrey M. Lating, Professor, Loyola University, Baltimore, MD
- Robert Marsini. The District of Columbia Department of Public Works, Washington DC.
- Kevin Neary, Mayor at Village of Richmondville, NY

- Kerry Payne, The District of Columbia Homeland Security & Emergency Management Agency, Washington DC
- Ira Tannenbaum, Director of Public/Private Initiatives at New York City Office of Emergency Management

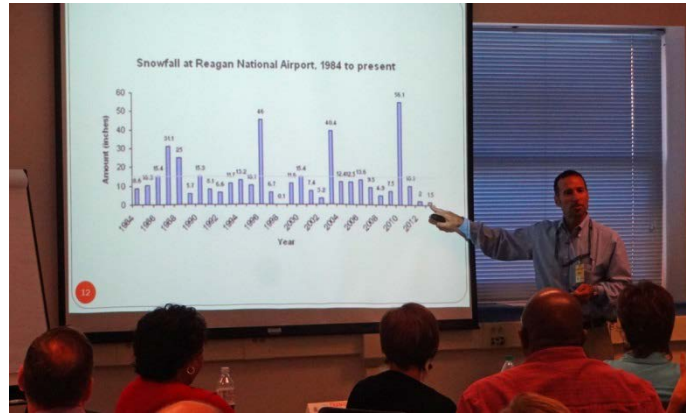
The following EMI staff provided direct assistance in the development and execution of the four day course and the associated exercises:

- Richard Sexton, National Program Manager, National Emergency Training Center
- Al Fluman, National Emergency Training Center
- Ray Chevallier, National Emergency Training Center

The following City of Seattle staff members worked with EMI staff to develop the exercises that were successfully delivered at IEMC:

- Lawrence Eichhorn, Seattle Department of Transportation
- Elenka Jarolimeck, Finance and Administrative Services
- Jerry Koenig, Seattle City Light
- Jill Watson, Seattle Human Services Department
- Ned Worcester, Seattle Public Utilities

The City of Seattle would also like to acknowledge the work and assistance of Ted Buehner from the National Weather Service who assisted with the meteorological aspects of the development of the exercises.



Robert Marsini. The District of Columbia Department of Public Works, Washington DC.

2.0 Background

The IEMC is a FEMA sponsored course that provides students with an opportunity to practice and enhance skills for use in Emergency Operations Center (EOC) environments. IEMCs are a combination of classroom lectures, discussions, small-group planning sessions, and functional exercises which expose participants to new ideas, and increase their understanding of interagency coordination needed during disasters. For the exercises, each participant is assigned a role similar to their real-life position in an EOC. IEMCs also build awareness and skills needed to develop and implement policies, plans, and procedures in an EOC.

The course provided by EMI was a Community-Specific IEMC. Community-Specific IEMCs are tailored to the specific needs and situation of a jurisdiction. Simulations are customized to reflect the hazards or events facing the jurisdiction; the type of EOC used by the jurisdiction; and reflect the emergency plans that are used by the jurisdiction. Throughout the course participants are able to propose new ideas, practice skills and abilities, and rehearse their real-life roles during functional exercises.



Grant Tietje from Seattle OEM quickly convening planning meeting just outside the Emergency Operations Center

2.1 Scenario and Course Goal

The overarching goal of Seattle's IEMC was to

- Provide participants the opportunity solve problems through collaborative teamwork.
- Examine and work through issues the City might face during a winter storm involving multiple types of hazards (snow, wind, ice, etc.) and extend over a period of several days.

2.2 IEMC Objectives

In keeping with the overall course goals, five objectives were identified:

Objective 1 – The Seattle EOC will develop strategies for dealing with an extreme amount of snow removal from multiple parts of the City.

- A. Strategies will take into account the other hazards (i.e. ice storm, power outage) that will impact preexisting plans, and potential solutions.
- B. Strategies will address the impacts to other critical (City) operations that will be taking place.
- C. Create a strategy for ensuring access to critical facilities and/or essential services.
- D. Develop a strategy for emergency snow removal and disposal within the downtown core.

Objective 2 – The Seattle EOC will develop inter-agency strategies related to the continuation of City services during a multi-hazard winter storm.

- A. Create a strategy for responding to emergency/9-1-1 calls during extreme winter weather conditions.
- B. Resolve policy issues related to the changing or modification to City services (e.g. changes in responses to 9-1-1 calls).
- C. Develop strategies for providing support and/or services to isolated or cut off neighborhoods.
- D. Develop a multi-agency plan for the movement of patients from emergency scenes to hospitals – and- movement of patients between hospitals.
- E. Develop a multi-agency strategy supporting the relocation of critical operations of a department operations facility due to snow load issues at the location.
- F. Develop a strategy that ensures a minimum number of employees able to support critical operations for a City department.
- G. Develop of policy guidance covering when the City will protect private property.

Objective 3 – The Seattle EOC will develop inter-agency strategies related to supporting the human services needs of the community.

- A. Develop a plan for assisting vulnerable populations that are stranded, isolated or otherwise cutoff due to weather conditions.
- B. Develop a plan for providing aid to the business sector and commuters (stranded passengers at the train station, busses, etc.) that are stuck in town.
- C. Develop strategies for dealing with hospital overcrowding due to discharged patients not leaving (or unable to leave) the premises, etc.
- D. Incorporate strategies for leveraging community hubs and other citizens based resources into operational plans and objectives.
- E. Identify and manage issues related to extended school closures and prioritization of issues related to the reopening of schools.
- F. Identify policy level issues surrounding having to support a politically sensitive event taking place in the downtown core (either convention center or major event at Safeco Field).

Objective 4 – The Seattle EOC will develop inter-agency strategies addressing logistical challenges related to a multi-hazard winter storm event.

- A. Identify impacts and develop solutions to issues involving the movement of critical resources (Vehicles, equipment, supplies, plus Facilities, Communications, Vendor Supported services and Personnel)
- B. Create strategies for when a specific commodity that is needed to perform a critical operation is no longer available.
- C. Identify resources needed to support specific plans developed by the various EOC working groups during the IEMC course.

Objective 5 – The Seattle EOC will develop strategies for the management of public information.

- A. Develop strategies including specific messages directed at a non-English speaking population.
- B. Create messaging strategies involving the push of messaging during a specific operational period.

2.3 Pre-Event Preparations

The City of Seattle conducted a number of activities to prepare participants for the course. These included review of key winter storm plans and hands-on activities designed to prepare participants for collaborative problem solving. These included the following:

- **February Disaster Management Committee (DMC) Meeting:** Provided briefing on Seattle’s IEMC program including the scenario that had been chosen. The briefing was followed by a hands-on activity that divided participants into teams and challenged them to address potential issues and impacts from various hazards faced during winter storm events.
- **March DMC Meeting:** Presentation on “Understanding Power & Utility Challenges” during major winter storm events. Following the presentation, conducted a hands-on activity where participants had to respond to a utility related problem that could occur during a winter storm. At the end of the activity the groups were asked to: 1. Identify which departments, organizations, or agencies should be part of an advance planning team to finalize a solution. 2. Begin development of a solution to the issue.
- **April DMC Meeting:** Presentation on “Impacts to Community & Vulnerable Populations”. Included presentations from Public Health Seattle King County, University of Washington.
- **May DMC Meeting:** Presentation on “Whole of Community Approach During Major Winter Storm Events”. Included an overview of how the City of Seattle utilizes the whole of community approach. This was followed by group discussion for further defining what we mean by whole of community and its scope during major winter storm events.
- **June DMC Meeting:** Briefing on Public Information Processes and Seattle’s Joint Information Center. The hands-on activity had teams practice developing policy recommendations for the Emergency Executive Board. Participants reviewed a policy issue that could come up during the IEMC, review the possible options (including adding any of their own), analyze, and then recommend an option to the group.
- **FINAL IEMC Training in July.** A final 90 minute training class was held approximately two (2) weeks prior to departure for Emmitsburg. The training reviewed the processes and procedures that would be used in the simulation EOC during exercise play at IEMC.



3.0 Assessment by Objectives

Following completion of the course, the participants provided feedback regarding activities related to accomplishment of the overall course objectives:

3.1 Assessment of Objective 1 – Snow Removal.

- Team members worked together to solve issues related to snow removal and melting snow. There were two notable solutions that were created over the course of the 3 days of exercises. The first involved working to secure snow melting machines. The City of Baltimore described how they acquired and applied these machines during a recent snow storm. Over succeeding days participants practiced acquiring these machines and incorporating their use into City of Seattle operations. This exercise helped to identify the benefits and drawbacks to their use.
- A second snow removal idea involved coordinating with Seattle Steam to assist with melting snow using their resources (i.e. steam). Planning efforts involved identifying locations where steam could be safely applied to melt snow in the downtown core taking into consideration runoff and the large amount of water flow that would result from the melt.
- There were good discussions on how to separate oil from the water before discharging melted snow into Puget Sound.
- Equipment and staff from other City departments to assist in clearing roadways worked well.
- Throughout the exercise, players discovered approximately 30 additional employees at Seattle Public Utilities (SPU) who could assist with snow removal.



City staff engaging in a collaborative problem solving exercise with regional partners and community members in the EOC.

3.2 Assessment of Objective 2 – Continuation of City services during a multi-hazard winter storm.

- Individuals from the Seattle Parks Department had a wealth of real working knowledge about Seattle Park's buildings, such as when they were built, roof load capacity, etc. Their accessibility and participation helped in developing some out of the box solutions to the issue of snow loading and removal of snow from critical buildings following a significant snowfall.

- Seattle Police worked together with EOC Logistics to successfully establish a housing and feeding plan for SPD employees during the worst of the “storm”. Although SPD has an internal process for a feeding plan, the ability to off load that responsibility to the EOC resulted in removing a large workload that would have been a distraction from the actual mission of assisting citizens and other department/agencies during the storm.

3.3 Assessment of Objective 3 – Supporting the human services needs of the community.

- A regional mass care shelter plan was developed during the course of the exercise. Through information sharing, regional players were able to develop a collaborative solution to sheltering challenges facing South Seattle. Significant coordination occurred between regional and City of Seattle players, including interactions between Red Cross, the King County Zone 3 Representative, the Commission for Disabilities representative, food providers, transportation providers, and the Joint Information Center (JIC). This happened smoothly and thoroughly.
- Public Health Seattle King County, Seattle Fire, hospitals, and King County Metro successfully worked together to implement a Nursing Home Evacuation Plan.
- Members of the ESF-6/Human Services group successfully coordinated with the Red Cross and EOC Logistics on a feeding plan for overnight sheltering at Seattle Center.
- King County Metro worked with other agencies to provide transportation requirements to get people out of the weather and into a shelter.
- Public Health Seattle King County, Hospitals, ESF-6, and EMS (Seattle Fire) all collaborated on the sheltering of victims from a simulated building collapse. Options discussed included, operability for shelter and hospitals, feasibility of direct placement to a skilled nursing facility, and the role of Public Health’s EOC for other injured victims. Participants indicated that the planning effort solidified roles and processes that would be invaluable in a real event.
- Seattle Police worked with the Human Services Department to ensure that there was adequate bed space for individuals identified through the Homeless "cold patrol" as well as those seeking shelter on their own.
- ESF-6, HSD and Parks, successfully developed plans to take care of a homeless encampment that had formed in the Laurelhurst neighborhood.
- At one point during the exercise, the Fire department began receiving an increased number of calls related to carbon monoxide poisoning. Public Health worked with the EOC representative from the City’s Neighborhood Hubs which involved using hub volunteers. The plan called for Hub volunteers to distribute translated health & safety messages around neighborhoods with higher proportions of recent immigrants and non-English speakers.
- Exercise participants developed a plan that used non-essential employees to help with staffing of recreation centers that were being used to house responders. The plan took into consideration the home locations of staff workers relative to opened shelters.

- During the final exercise, ESF-6, King County Metro and others, developed a plan to support the movement of vulnerable populations in South King County.

3.4 Assessment of Objective 4 – Logistics.

- There were excellent conversations regarding the planning and managing of limited fuel supplies and how the available fuel could be shared across the region. In one specific case, the EOC team successfully worked through the process of accessing fuel stores from partner agency. The work and planning done during the exercise will help speed up access to this fuel resource in the event of an actual emergency.
- EOC players from the City, region, and State developed specific plans to ensure that existing supply chains remained operational and ways the region could continue to bring deliveries of critical supplies into the region (using Federal Express and other methods). Specifically, they discussed and identified a number of options to maintain the essential supply chain to Alaska, rather than asking another port outside Washington to act as a relief port. The discussion expanded to include airlift of items when both runways at SeaTac were closed later in the exercise.
- There was good collaboration between the State of Washington and the City regarding the availability of state resources. Players remarked that it was nice that State was clear about how resources should be requested.
- The Mayor’s Emergency Executive Board (EEB) coordinated with the King County representative and the State of Washington representative to address concerns over the fuel supply shortage and how to resolve, as well as clarify the process for requesting resources. It was a good opportunity for the people playing on the EEB to obtain a better understanding of this coordination. This specific problem resulted in a 'tweak' to the EEB's effort to address the fuel shortage.

3.5 Assessment of Objective 5 – Public Information.

- The Joint Information Center (JIC) worked well as a team, even though most had not worked together in previous activations or exercises. The exercise helped JIC players become more familiar with those they may have to work with in the JIC and how they managed to come together as an effective team, by taking on roles and get a lot of work done.



Rick Sheridan (SDoT), Dick Reed (Seattle Police) and Paul Atwater (Seattle Fire) holding a simulated press conference.

4.0 Corrective Action/Improvement Plan Items

The following items were identified as corrective actions requiring work or follow-up post exercise.

4.1 Improvement Plan Item #1: Fuel Prioritization and Fueling Plan

This exercise highlighted the importance of being able to fuel critical response functions during an extended winter storm. This includes not only public safety response vehicles, but also snow plows, removal assets, and other vehicles necessary for movement of critical personnel or citizens during emergencies. Although a lot of ideas were developed during the exercise, there is a need for development of a city-wide fuel plan for winter storms that could also be leveraged for other hazards.

Recommendation: Incorporate development of city-wide fuel plan into the city-wide Emergency Management Strategic Plan with Finance and Administrative Services (FAS) as the lead agency for plan development. Incorporation of this item into the strategic planning process ensures that this priority:

- Is appropriately balanced with other strategic objectives.
- City departments can incorporate the work needed to create the plan into their department level works plan.
- Realistic milestones and due dates can be set.

Lead Agency: FAS (Seattle OEM lead on incorporating into the City's Emergency Management Strategic Plan)

Due Date: TBD

4.2 Improvement Plan Item #2: Continue work on snow disposal and removal policies

The IEMC exercise allowed for City Departments to plan for operations outside of Seattle's typical snow storm. One of the key operational areas during any winter storm event involves snow plow and removal. A number of ideas were discussed during the IEMC that should be incorporated into the City's snow plow and removal planning.

Recommendation: Incorporate lessons learned into SDoT snow plow and removal plans.

Lead Agency: Seattle Department of Transportation

Due Date: TBD

4.3 Improvement Plan Item #3: Expand awareness of available snow resources and contracts that can be leveraged during events

A number of City participants expressed confusion over what snow related resources could be leveraged from private vendors or existing City contracts. The exercise highlighted that resources are out there, but key EOC Department Representatives are not familiar with where to find them.

Recommendation: Review existing contracts for potential snow resources, identify vendors and compile a comprehensive list for use in the EOC during snow emergencies. This vendor list should be reviewed and updated prior to winter storm season each year. Training on accessing these resources should also be incorporated as an annual training requirement in the City's Emergency Management Training and Exercise Plan.

Lead Agency: FAS

Due Date: Fall 2014

4.4 Improvement Plan Item #4: Develop a feeding and lodging plan for city workers who can't get home during disasters

The winter storm scenario made it impossible for essential City workers to safely commute between home and work. There were inconsistencies among departments in regards to their planning for housing essential employees during the storm. Not all departments had plans. Those that did were not coordinated with each other.

Recommendation: Incorporate the development of an all-hazards feeding, lodging, and transportation plan for city-supported response workers into the City-wide Emergency Management Strategic Plan. Incorporation of this item into the strategic planning process ensures that this priority:

- Is appropriately balanced with other strategic objectives
- City departments can incorporate the work needed to create the plan into their department level works plans.
- Realistic milestones and due dates can be set.

Lead Agency: Seattle OEM

Due Date: TBD

4.5 Improvement Plan Item #5: Develop procedures for advanced planning and alternate EOC.

The City of Seattle Emergency Operations Center has good plans in place for management of operations in their primary EOC. However, a gap exists in operational procedures for EOC operations at alternate locations. The exercise provided the opportunity to test processes that could be used in alternate EOC's.

Recommendation: Create procedures that will be used by EOC personnel in an alternate EOC.

Lead Agency: Seattle OEM

Due Date: May 2014

Appendix 1 – List of Participating Agencies

Emergency Executive Board

City Light
Department of Neighborhoods
Department of Transportation
Finance & Administrative Services
Fire Department
Human Service Department

King County Metro Transit
Mayor's Office
Parks & Recreation
Seattle Police
Seattle Public Utilities
Office of Emergency Management

City of Seattle EOC Participants

Animal Shelter
City Light
Human Services Department
Department of Transportation
DoIT
Finance & Admin Services
Fire Department (fire and EMS)
Office of Emergency Management

Parks & Recreation
Personnel
Police Department
Police Communications Center/911 Dispatch
Public Health - Seattle & King County
Public Utilities
Seattle Center

Regional Participants

American Red Cross
Amtrak
Auxiliary Communications Services
City of Renton (WA) representing King County Zone 3
City of Shoreline (WA) representing King County Zone 1
City of Seattle Community Emergency Hubs
Northwest Health Care Coalition
King County Metro Transit
King County OEM
King County Roads

Office of Emergency Management - Hub Member
Port of Seattle - Airport
Port of Seattle - Ports
PSE
Seattle Commission for People with disAbilities
Seattle Community Colleges
Seattle Steam
Seattle University
University of Washington Emergency Management
WA State Emergency Management



Exercise Design and Simulation Cell

City Light

Department of Transportation

Finance & Administrative Services

Human Service Department

Office of Emergency Management

Seattle Public Utilities

Appendix 2 – IEMC Evaluations

The following are selected questions from the participant survey.

Rate on a scale from 1-5. The IEMC helped me to:

Answer Options	1 - Strong No	2	3 - Neutral/Not sure	4	5 - Strong Yes	Rating Average
A. Better understand my own agencies response plans	0	3	7	22	11	3.95
B. Better understand the City of Seattle's Winter Weather Annex	0	3	7	15	17	4.10
C. Better understand other agency response plans	0	1	9	19	14	4.07
D. Better understand regional catastrophic response plans.	0	5	8	16	13	3.88
E. Meet and interact with agency representatives that had not known before the training	2	0	0	4	37	4.72
F. Learn and apply concepts that will help me and/or my organization better respond to winter storm events.	1	1	2	13	25	4.43
G. Become more familiar with my agency's equipment, personnel, and/or resources	0	3	11	20	8	3.79
H. Become more familiar with other agency's equipment, personnel, and/or resources	1	1	4	19	17	4.19

Only looking at the objectives that you were able to participate in, do you feel that the following objectives were accomplished:

Answer Options	Yes	No	N/A
A. Developing strategies for dealing with an extreme amount of snow removal from multiple parts of the City.	28	1	11
B. Developing inter-agency strategies related to the continuation of City services during a multi-hazard winter storm.	34	0	8
C. Developing inter-agency strategies related to supporting the human services needs of the community.	33	2	5
D. Developing inter-agency strategies addressing logistical challenges related to a multi-hazard winter storm event.	38	0	3



E. Developing strategies for the management of public information.	29	2	8
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Participant feedback on the pre-event trainings delivered for IEMC on a scale from 1-10.

Answer Options	Rating Average
A. DMC, February 2013, Assessing the Impacts	7.94
B. DMC, March 2013, Utility Presentations, Advanced Planning Activity	8.41
C. DMC, April 2013, Presentations: health/hospitals, Public Health Reserve Corps, Univ. of Washington	8.05
D. DMC, May 2013, Whole of Community Discussion	8.24
E. DMC, June 2013, Policy Practice	8.33
F. DMC, July 2013, PIO and JIC Operations	8.48
G. Final Training Delivered Aug 7, 9, & 14th	8.75