



City of Seattle



Comprehensive Emergency Management Plan
Emergency Operations Plan

Updated May 2015

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Prepared by
Seattle Office of Emergency Management

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I. INTRODUCTION

The Emergency Operations Plan (EOP) describes how the City will respond to save lives, protect property, and stabilize the incident. It describes how coordination is managed among the many departments and organizations that may be involved in response so that unity of effort may be achieved.

The EOP is one of the plans that make up the City of Seattle's Comprehensive Emergency Management Plan (CEMP). The CEMP is a set of overarching documents that describe Seattle's overall plan in managing disasters.

II. SITUATION AND ASSUMPTIONS

In addition to those base statements, the following elements apply specifically to the EOP.

A. Situation

The City maintains a strong capability to respond to emergencies that typically occur on any given day. Supporting this response, the Office of Emergency Management provides an on-call, 24/7, Duty Officer who can assist responders in obtaining resources, gathering information, and facilitating the transition from normal response operations to activation of the City Emergency Operations Center.

On a less frequent basis, larger scale incidents can occur. These have expanded requirements and challenges that can exceed the response capability of one department, the entirety of the City or the region and can involve large numbers of dead or injured, extensive property damage, environmental damage and economic hardship.

B. Assumptions

The City of Seattle CEMP, Introduction contains a common set of assumptions that apply to the EOP. In addition to those, the following assumptions that are specific to the EOP apply:

- Weather related incidents that trigger coordination under this plan may occur several times a year.
- The time of year, day of the week, time of day, and weather conditions can affect the seriousness of an incident and the City's ability to respond.
- The City's five 24/7 operational departments (Seattle Fire Department, Seattle Police Department, Department of Transportation, Seattle City Light and Seattle Public Utilities) are prepared and have sufficient resources to adequately handle most commonly encountered incidents.
- Generally, departments do not maintain caches of food, water, equipment and supplies in sufficient quantity to support the anticipated scale of operations after major incident has struck.

- Some incidents would severely stress normal municipal systems and would likely require outside assistance from the state and federal governments.
- In a major incident, the City of Seattle government response may be overwhelmed, requiring the community to be without basic services for at least the first 72 hours after an event and possibly longer.

III. CONCEPT OF OPERATIONS

The National Response Framework doctrine of tiered response emphasizes that response to incidents should be “managed at the lowest jurisdictional level and supported by additional capabilities when needed.” The vast majority of incidents are, in fact, managed locally and do not require deviation from normal, daily operational procedures.

The National Incident Management System and the National Response Framework provide guidance on how federal, state and local resources will coordinate their efforts during major incidents. In addition, the Comprehensive Emergency Management Plans (CEMPs) for Washington State and King County describe how incident response operations will be conducted at their respective levels in coordination with local efforts.

The City of Seattle defines an “incident” as “any occurrence or event, natural or manmade that requires a response to protect life or property. Incidents can include major disasters, emergencies, terrorist attacks, terrorist incidents, civil unrest, wildland and urban fires, floods, hazardous materials spills, nuclear accidents, aircraft accidents, earthquakes, hurricanes, tornadoes, tropical storms, tsunamis, war related disasters, public health and medical emergencies, and other occurrences requiring an emergency response.” In the EOP and CEMP, the term “incident” is used broadly to avoid confusion between other terms such as disaster, emergencies or events.

There are four key actions that typically occur during the response to an incident:

1. Gain and Maintain Situational Awareness.
2. Activate and Deploy Resources.
3. Coordinate Response Actions.
4. Demobilize.

A. City Strategic Goals for Response

There are 7 strategic goals for City response. They are:

1. Saving and protecting the greatest number of people at risk.
2. Providing for the safety of emergency responders, other City employees, and the public.

3. Supporting a response that accommodates vulnerable populations, including access and functional needs.
4. Saving and protecting as much vital infrastructure as possible.
5. Saving and protecting as many residential, business and industrial properties as possible.
6. Restraining the spread of environmental damage.
7. Minimizing human hardship and economic interruptions.

B. City Response Coordination

Coordination of response occurs at many levels but always begins in the field at the incident scene. In City wide incidents, such as a snow storm, where there is no one incident scene, field operations, snow plowing, are coordinated through Dispatch Centers and Department Operations Centers.

Levels of coordination, starting with field response:

1. Incident Command

The City uses the Incident Command System (ICS) to manage and coordinate the response to emergencies.

The first responder to arrive on the scene of an emergency is in command. As other departments respond, overlapping responsibilities and authorities have the potential to interfere with the effectiveness of the response. To overcome this, departments and agencies with functional, jurisdictional or statutory responsibility for incident response have options for managing the emergency:

An agency or department may establish Incident Command with all other responders reporting to the Operations Section Chief and/or other sections within the General Staff.

Establish a Unified Command.

Each incident command is responsible for command and control over all tactical operations at the incident scene.

2. Unified Command

In Seattle, Unified Command is generally the preferred approach because it supports the establishment of common objectives, strategies and tactics without any organization abdicating authority, responsibility or accountability.

In Unified Command, the participating departments or agencies designate an Operations Section Chief who has authority over incident operations. The appointment of Deputy Operations Section Chiefs may be used to ensure adequate and effective representation.

3. Area Command

When multiple incident commands/unified commands are established, one or more Area Commands may be created to better coordinate operations and improve resource support.

Area Commands have been rarely used in Seattle. During a response to a major incident, all qualified personnel who could be assigned to operate an Area Command may already be assigned to an Incident Command, a DOC, the EOC or some other duty.

One (or more) All Hazards Incident Management Team (AHIMT) may be needed to augment staffing at incident commands, areas commands, department operating centers and the Emergency Operations Center.

a. Area Command – Healthcare

Public Health Seattle and King County provides services to the entire county. During an emergency, it coordinates and supports the healthcare community response. To accomplish this, Public Health may activate the Health and Medical Area Command (HMAC). The HMAC works closely with the Disaster Medical Control Center (DMCC) and the Multiagency Coordinating Group, which is led by the Local Health Officer.

The DMCC, operated by Harborview Medical Center, is responsible for coordinating the distribution of patients to local hospitals coming directly from incident scenes or the transfer of inpatients evacuated from healthcare facilities. The healthcare system has procedures in place for hospitals to rapidly report on their available bed space.

The Multiagency Coordinating Group provides policy direction in support of HMAC operations and is composed of:

- **King County Local Health Officer:** The Local Health Officer has unique authority and responsibilities which are in effect at all times and do not require an emergency proclamation or approval by local jurisdictions. Some examples are; activating the regional medical surge strategy, prioritizing and rationing of medical resources or implementing Isolation and Quarantine orders.
- **King County Medical Examiner:** The King County Medical Examiner also has county-wide duties and has unique authority and responsibilities which are in effect at all times and do not require an emergency proclamation or approval by local jurisdictions. The Medical Examiner represents a key element of the healthcare system and his/her participation brings specific medical expertise and helps coordinate and establish consistent response strategies for the countywide health, medical and mortuary response.
- **Emergency Medical Services Medical Directors for King County and City of Seattle:** The EMS Medical Directors represent all ALS, BLS, private ambulance, and air ambulance agencies in the county.

- **King County Healthcare Coalition Executive Council:** The Executive Council has members which represent healthcare provider organizations in the county such as long term care facilities, pharmacies, medical product suppliers, skilled care nursing homes, hospitals, kidney dialysis, Puget Sound Blood Center, behavioral health, and other medical professionals. The King County Healthcare Coalition Executive Council members represent organizations which fall within their healthcare function. Their participation leverages the expertise of medical and executive leaders from across the continuum of healthcare in King County.

4. Dispatch Centers

The majority of incidents do not require activation of the EOC or a DOC. On a daily basis, Dispatch Centers activate resources and coordinate the response to short duration, limited incidents. For example, a light accumulation of snowfall over the entire city, late at night, might be best addressed through the use of on-duty resources coordinated through department Dispatch Centers.

The following departments maintain a 24/7 dispatch center, control center or on-call duty officer:

- Seattle Police Department.
- Seattle Fire Department.
- Seattle Public Utilities.
- Seattle Department of Transportation.
- Seattle City Light.
- Department of Parks and Recreation
- Public Health Seattle and King County.

During a major incident, Dispatch Centers can become overloaded with calls for service, coordinating the initial response effort and making notifications. In these situations departments may choose to activate their Department Operations Center (DOC) and/or request activation of the EOC.

5. Department Operations Center (DOC)

A DOC enhances, above that of a dispatch center, the ability of a department to coordinate and support the response to an incident. A DOC can also assist in sustaining routine services in areas of the City unaffected by the incident.

DOCs can coordinate directly with each other as needed and with their department's representative in the EOC. Each department determines how their DOC will operate depending on operational need.

The following City departments have an established a DOC:

- Seattle Police Department – Seattle Police Operations Center (SPOC).

- Seattle Fire Department – Resource Management Center (RMC).
- Seattle Public Utilities – Operations Resource Center (ORC).
- Seattle Department of Transportation- Charles Street Operations Center (CSOC).
- Seattle Department of Planning and Development –Department Operations Center
- Seattle City Light – Department Operations Center.
- Seattle Department of Information Technology Information Technology Operations. Center (ITOC)
- Finance and Administrative Services – Department Operations Center.
- Department of Parks and Recreation –Department Operations Center.

6. City Emergency Operations Center

The mission of the City EOC is to minimize the impact of incidents on the community through coordinated planning, information sharing and resource management between all City departments, partnering agencies and the public. The EOC does not command tactical incidents in the field.

The Director of the Seattle OEM is also the Director of the EOC when it is activated and is responsible for:

- Authorizing the activation of the EOC.
- Coordinating the citywide strategic response.
- Providing advice to the Mayor on emergency management related matters.
- Facilitating the Mayor’s Emergency Executive Board meetings.
- Coordinating the identification and resolution of policy issues related to the incident.
- Resolving conflicts over jurisdiction and authority.
- Supervising the development or termination of Emergency Proclamations and any associated Executive Orders.
- Acting as the City representative and point of contract with other emergency management agencies in the region and the state.
- Designating alternate EOC Directors and appointing EOC General Staff Section Chiefs and Branch Directors.
- Approving Mutual Aid requests.
- Coordinating the review and signing of any Delegations of Authority.
- Acting as a representative of the City EOC at press conference and media interviews.

C. Relationship Between Field Operations and the EOC

The EOC doesn't direct field operations; rather it provides support to field operations in the form of resources, policy direction, and by providing situational awareness. The EOC also supports incident commanders and operations in the field through the development of interagency or inter-governmental plans of action. The EOC can also develop city-wide, or regional strategies that, in turn, support field operations.

In normal response operations, the EOC does not communicate directly with field response units. Instead, field units communicate directly with their department or agency through established procedures or standard operating guidelines. Field communication may be to a DOC or to an agency representative who in turn communicates with the appropriate ESF representative in the EOC.

IV. THE CITY EMERGENCY OPERATIONS CENTER

The City Emergency Operations Center (EOC) is built to exceed by 50% the maximum building code standard for critical facilities. It has redundant communication systems, emergency power generators, 60 workstations in the main operations area, and six breakout rooms with additional workstations. There is also a dedicated communications room, a Mayor's Policy Room, a Joint Information Center (JIC) and a Media Briefing Room. The Seattle OEM also maintains an electronic information sharing and management program, called WebEOC, which can be accessed via any internet connection.

A. Authority to Activate the EOC

Any department director or incident commander may *request* activation when they see a need to develop plans of action, coordinate resources, gather information, or seek assistance in resolving policy issues during events. The Director of the Office of Emergency Management, in consultation with the Mayor or his/her designee, *authorizes* the activation of the EOC.

Factors to consider when determining if EOC activation is needed, and to what level, are:

- The nature, scale, and severity of the hazard and immediate known or possible impacts (which may include secondary risks or impacts).
- The potential for the hazard and/or secondary impacts to increase.
- The degree and extent of support needed to achieve response and/or recovery objectives.
- The time of day and day of the week.
- The amount of media or public attention garnered by the incident.
- The benefit achieved by coordinating departmental operations from a centralized location.

- Other unrelated incidents underway or planned events scheduled.

B. EOC Activation Process

The Seattle OEM Staff Duty Officer serves as the single point of contact for any request to activate the City's Emergency Operation Center. The OEM Staff Duty Officer:

- Receives notification for any request to activate the EOC
- Consults with decision makers on activation and departments who should respond.
- Performs initial notifications to appropriate personnel to respond to the EOC.
- Tracks any issues, problems, or potential EOC requests until such time as the EOC is activated.

C. Modes of EOC Activation

EOC modes of activation provide a way to quickly summarize and communicate the level of response by the City. OEM staff use the modes of activation to help organize EOC staffing levels, operations and planning efforts.

EOC modes are presented in descending order and progressively greater severity:

1. Increased Readiness Mode (ICS Type 5 or 4 Incident)

Incident or events where there is a period of warning or the impacts are limited and mutual aid not needed. The OEM Staff Duty Officer closely monitors the situation and briefs the OEM Director, staff, and key City or other stakeholders that may be either impacted by the incident or event or play a role in response. The Duty Officer is also available to provide assistance to the responding departments as needed.

EOC activation is unlikely.

A proclamation of Civil Emergency is highly unlikely.

Some examples of possible triggers include:

- National Weather Service forecast and/or storm watch or warning.
- Intelligence indicating that violence is anticipated at a planned event.
- Large structural fire.
- An outbreak of disease on cruise ship affecting several passengers.
- Isolation/quarantine ordered for an individual or group which may have contracted or been exposed to a serious disease that poses a potential public health risk.

2. Major Incident Mode (ICS Type 3 Incident)

Incident or event has the potential for, or causes, major impacts that are expected to be of relatively short duration and can be managed using City resources. Mutual aid assistance, if needed, is limited.

- EOC activation is likely.
- A proclamation of Civil Emergency is possible but not probable.

Some examples of possible triggers include:

- Large structural fire with significant disruption to the surrounding area.
- Evacuation of a hospital.
- Passenger airplane crash.
- Snowstorm of limited duration and severity.
- Earthquake with limited damage.
- Terrorist attack, using conventional weapons and directed against one target with limited impacts.
- Loss of some utility services for a relatively limited period of time.

3. Disaster Activation Mode (ICS Type 2 Incident)

Incident or event has the potential for, or causes, significant and extensive impacts such as large numbers of injured, loss of life, wide spread damage to structures or loss of utility services.

In this mode, City resources and capabilities may not be sufficient to meet all of the challenges posed by the emergency. Restoration of basic services might take several weeks or months. Mutual aid, State and Federal assistance could be required.

- Activation of the EOC is certain.
- A proclamation of Civil Emergency is likely.

Possible triggers include:

- Strong earthquake with structural collapse, fires, injuries and fatalities.
- Infectious disease outbreak that is widespread but does not significantly impact the delivery of essential healthcare, the continuity of government or services in the public and private sector.
- Terrorist attack involving multiple targets using conventional weapons such as rifles and improvised explosive devices.
- Widespread outage of utility services for an extended period of time.

- Number of fatalities and/or injured, by whatever cause, exceeds the capacity of the Healthcare system.
- Collapse of a dam owned by the City of Seattle.
- Large wildfire in a city watershed.
- Evacuation of large numbers of casualties from elsewhere in the United States to the Seattle region under the National Disaster Medical System program.

4. Catastrophic Activation Mode (ICS Type 1 Incident)

Incident or event involves widespread and severe damage, significant contamination or large numbers of casualties or significant risk of same. In some scenarios, the actual disaster may occur elsewhere but the secondary impacts may cause extensive disruption locally.

The response and recovery operations would be extensive and long term assistance and support from all levels of government required. Restoration of basic services might take months or years. Due to the potential widespread nature of the impacts associated with this mode, assistance from the federal or state governments may be rationed or severely limited.

- Activation of the EOC is certain.
- A proclamation of Civil Emergency is certain.

Possible triggers include:

- A large magnitude Seattle Fault earthquake.
- A pandemic that impacts the delivery of healthcare, continuity of government or business continuity throughout the region.
- An attack involving a weapon of mass destruction; biological, chemical, radiological or nuclear weapon, or combinations thereof.
- Weapons of Mass Destruction (WMD) threat, which is deemed credible by the public and/or government.
- Extensive damage or contamination that will take months or years to repair/decontaminate.
- Cyber attack that severely impacts one or more critical service sectors locally.
- Long duration power outage.

D. Purpose of the EOC

1. Gain and Maintain Situational Awareness

At the start of any response there are three fundamental questions that all responders ask:

- What has happened? (assessment)

- What are the current and potential impacts to people, infrastructure, systems and services? (impacts)
- What response operations are underway or anticipated? (operations)

From this information a Common Operating Picture is developed. This is not a static picture; during an incident information is constantly changing or being added. For example: information provided by subject matter experts can fundamentally alter what is understood about an incident and its impacts. With this mind, the Common Operating Picture is refined and adjusted on a continual basis in order to provide the greatest level of accuracy.

Crucial to building and sustaining an effective Common Operating Picture is the sharing of information widely throughout the region. Sharing information about an incident provides another way to verify and correct what is known. It also supports unity of effort by helping to establish a common view of the incident; responders can't coordinate effectively if they each hold different opinions of what has happened and its impacts.

Individual departments may collect information that is then shared with the appropriate ESF Coordinator in the EOC. That information is then placed into WebEOC. In cases where information is not added to WebEOC, the information may also be provided directly to the EOC Situation Unit who is ultimately tasked with collection, analysis, and dissemination of information involving the City's Common Operating Picture during activations.

a. Common Operating Picture - Assessments

An assessment of what has happened can take many forms depending on the nature of the incident. On a daily basis, responders utilize their training and experience to rapidly assess incidents they respond to (so called "routine" emergencies). In contrast, during the response to a major incident this may be more difficult, the initial assessment will likely be incomplete due to initial conditions present; communication systems may be inoperable or overloaded, responders may not be able to access the most heavily impacted areas or pressing life safety issues may limit how much time responders can devote to conducting a detailed assessment.

To assist all responders, a standing Essential Element of Information (EEI) Strategy is available that defines what information, or categories of information, each department should collect and report during the response to a major incident.

Until the EOC is activated, departments share summaries of their assessments with each other by the most effective and expeditious means available. A communications plan is available to assist departments in the exchange of information.

Once the EOC is activated, department assessments, as well as assessments provided by other jurisdictions, are consolidated into various situation reports which are disseminated widely. Further, more specialized assessments, evaluations and inspections will be conducted as response transitions to recovery.

It is recognized that in a catastrophic incident, even conducting assessments may not be possible until sufficient resources can be mobilized and brought to the incident scene.

Businesses, following business continuity plans, conduct assessments of their staff, buildings, vehicles, inventory and suppliers. During EOC activations, ESF #14 Long Term Recovery and Mitigation Representatives may arrange for a business representative to be present in the EOC to assist with the collection of this information.

Concurrent with the initial government and private response, the general public will take action as well. Those members of the community who have received disaster training are expected to:

- Check on themselves, their family and neighborhood.
- Provide first aid.
- Extinguish fires.
- Control utilities.
- Conduct light search and rescue.

In addition, neighborhoods can coordinate and support each other through local community Hubs. Hubs are locations pre-identified by community members where people can go to seek or offer assistance to one another until ordinary city services are restored.

Individuals and groups also use social media sites to share information, contribute to common maps and organize local solutions to problems.

b. Common Operating Picture - Impacts

Each department is responsible for determining, within their area of responsibility, what the impacts are to the community and their ability to continue to provide services. Through an assessment, a department may determine that one of its buildings has been evacuated. By itself, this information does not paint a complete picture; what services were provided by units housed within the evacuated building or are there specialized resources that are now inaccessible? Some other examples are:

- Seattle City Light can quickly estimate the number of customers affected by a power outage.
- The Seattle Fire Department has a thorough understanding of the businesses located within a Battalion or Company area of operation.
- Seattle Public Utilities can determine what areas of the City will be affected by a major break in a water pipeline.

This information is shared with the Seattle EOC Situation Unit who is responsible for consolidating information into a single common operating picture.

c. Common Operating Picture - Operations

In a major incident, the sharing of what operations are currently underway or anticipated is vital:

- It promotes unity of effort and prevents conflicts between various operations.
- Contributes to a safer response.

Since no commander or supervisor can have a complete understanding of the impacts, sharing operational information is another way for everyone to gain a better picture of the situation.

At minimum, information should be shared with the department responsible for leading the tactical response in the field. For example:

- For natural disasters or accidents involving injuries, departments coordinate information with the Seattle Fire Department Deputy One or alternate - assisted by the Fire Alarm Center and the Resource Management Center (RMC).
- For incidents caused by deliberate criminal act, or threats of, departments coordinate information with the Seattle Police Department Duty Commander—assisted by the Seattle Police Dispatch Center and the Seattle Police Operations Center (SPOC).

Common sense prevails in this process. Given the large number of potential, and at times overlapping, incident scenarios and missions, it is impossible and unwise to develop a rigid doctrine. Instead, a best practices approach is called for with all departments acknowledging the benefit of sharing as much information between responders as appropriate or possible.

Once the EOC is activated, information sharing about operations will still continue between departments while also sharing with the EOC.

d. Methods of Information Sharing

During a complex incident or disaster, the amount of information available has the potential to overwhelm any information management process or system. To address this, face to face contact between representatives assigned to the EOC is promoted in training and during activations as the most effective means for maintaining situational awareness, common operating picture and problem solving.

- The EOC Director regularly briefs the entire EOC staff on the situation.
- The EOC Operation Section conducts “stand up” meetings with EOC Branch Directors to coordinate actions and information several times during the operational period.
- The EOC Planning Section Chief facilitates planning meetings, as part of the CAP planning cycle where information is shared.
- ESF representatives meet throughout the operational period as needed.

e. Information Sources

Departments and ESF Representatives collect, analyze and forward information, intelligence, assessments, impact reports, plans and operational information within their area of operation and responsibility to appropriate sections in the EOC. In addition, the EOC personnel rely on a wide variety of other information sources, some examples are:

- Department of Transportation Traffic Cameras.
- Internet Sites.
- National Weather Service.
- Washington State Fusion Center.
- United States Coast Guard.
- Emergency Management Organizations.
- WATrac Healthcare Information System.
- National Shelter System.
- Broadcast and Social Media.

f. Essential Elements of Information

The Essential Elements of Information (EEI) strategy defines what information is needed from each department when the EOC is activated. The EEI is a guide to help with the collection of information and departments are encouraged to adapt as needed to meet the intent of the EEI document and needs of the response and recovery.

- The EOC Planning Section Chief is responsible for coordinating the update of the EEI every operational period to match current conditions and operation need.
- A standing EEI is available for use during the initial phase of the response.
- Custom EEIs have been developed for Earthquakes and Snowstorms.

g. EOC Reports

The EOC Planning Section produces three reports when the EOC is activated:

- ISnap; initial report that is generated at the beginning of the response to assist in the regional situational awareness during major incidents.
- Snapshot Report; short, concise updates issued regularly throughout the operational period that describes what has changed since the previous report,- this report is sent to all email distribution groups maintained by the Seattle OEM.
- Situation Report; a more comprehensive report , generally issued every six to twelve hours, intended to convey the current common operating picture and resource needs - this report is sent to all email distribution groups maintained by the Seattle OEM and specifically with King County and the State of Washington.

The intent is to distribute these reports to as many individuals and organizations as practical or needed.

If email and other communication systems are inoperative, the ESF Representatives are responsible for distributing these reports.

h. City WebEOC

WebEOC is information management software used in the EOC to document information about the incident and actions taken during the response. WebEOC can be accessed over the internet by any representative or partner that has been granted permission.

Departments order resources by using a resource order form located within WebEOC. Policy decisions are also posted in WebEOC.

During the initial response, an Incident is created within WebEOC by the EOC Deputy Director. Under this Incident, information is divided into two areas:

i. Base and Sub Incidents

Base Incidents and Sub-Incidents are intended to provide an intuitive way to determine how to store and retrieve information within WebEOC.

Base Incident - All general information updates about the incident which apply to the entire incident are posted in the Base Incident.

Sub-Incident - There can be several Sub-Incidents covering areas of operation or function related to the Base Incident. For example; a Sub-Incident could be created for a Family Assistance Center that has been established by Public Health -all information related to Center is posted under that Sub-Incident

ii. Other Available WebEOC Systems

The State of Washington and Pierce County each operate their own version of WebEOC. OEM staff can access the State WebEOC account. Both jurisdictions can host a version of the Seattle WebEOC, accessible by internet, in the event the City WebEOC becomes inoperable.

i. Mapping

The City has a significant mapping capability based on the Graphic Information System (GIS) which, during an activation of the EOC, is used to support emergency operations. Mapping in the EOC is coordinated through the EOC Planning Section Mapping Unit.

- Seattle Public Utilities GIS team coordinates City wide mapping during all phases of emergency management.
- Departments provide copies of any map they create during the incident to the EOC Planning Section Mapping Unit.
- Social Media maps will be considered UNCONFIRMED and must be verified by the EOC Mapping Unit before they can be authorized for use by responders.

- Maps for public information purposes must be reviewed by the Joint Information Center Supervisor and the EOC Planning Section Chief prior to public release to ensure the accuracy of the information.

The Seattle Fire Department, Police Department and Public Health Seattle King County are jointly responsible for verifying the accuracy of maps that define hazards (within their area of responsibility) areas such; as buildings at risk of collapse, current and future locations of plumes, security perimeters, patterns of disease and location of fires.

2. Develop Plans of Action

A key function of the EOC is to provide the means for departments and ESF leads to develop specific response strategies for the incident. Department decision makers who serve as EOC department representatives and ESF leads, assess, problem solve and develop strategic responses that integrate needs, considerations, capabilities from across all City departments, government and non-government stakeholders.

The EOC ensures an integrated and coordinated response among various departments and government agencies that are providing assistance during an emergency.

3. Activate and Deploy Resources

Even though the initial assessment will be incomplete following a major incident, response operations will commence as soon as possible. In those major incidents where the impacts are severe and widespread, and resources in short supply, the response to some individual incidents may be significantly delayed.

Regardless of the type of incident or its size, responders at all levels must balance available resources against the needs of the incident. Priorities for response provide guidance to responders when making a decision as to which resources to activate and where to deploy them. Strategic goals provide further guidance to assist responders at all levels, and especially in the EOC, in developing a comprehensive plan for response and recovery.

a. Mobilization

City resources that are on-duty and available are deployed first. The Seattle Fire Department, Seattle Police Department, Seattle Public Utilities, Seattle City Light, Seattle Department of Transportation and Public Health Seattle and King County play a significant role in the initial response to incidents involving injuries and/or property damage.

Concurrent with these initial efforts is the recall of off-duty personnel and activation of Department Operations Centers.

Departments have procedures in place to recall personnel during emergencies. Depending on the type and scale of the incident, recalled personnel could be significantly delayed in reporting for duty. During a major incident, the level of preparedness at home may affect how quickly a responder can report for duty.

b. Mutual Aid

During the earliest phases of the response, City departments, via their dispatch centers, may request assistance directly from agencies in neighboring jurisdictions or districts utilizing existing mutual aid agreements or other regional agreements. All mutual aid requests are coordinated through the EOC once it is activated.

4. Public Information

A Joint Information Center (JIC), located within the EOC, is responsible for providing timely and accurate information to the public about:

- The cause of the disaster and its impacts.
- Hazard and protective action information.
- Status of response operations.
- Instructions on how to obtain assistance.
- How to volunteer or assist in the response and recovery.

The JIC is staffed with public information officers from the various departments involved in the response. The JIC is managed by the Director of the DIT Office of Electronic Communication with the assistance of a JIC supervisor appointed from among the Public Information Officer cadre.

When the EOC is activated, all public messaging by City departments and by Incident Commands in the field is coordinated through the JIC creating one central point of citywide messaging.

To ensure close coordination between operations and public messaging a representative of the JIC participates in all EOC briefings and planning meetings. In addition, the EOC Planning Section Chief and the JIC Supervisor jointly review all EOC Situation and Snapshot reports and press releases before they are published to ensure consistency and accuracy between public messaging and operations.

All reports and press releases are reviewed and approved by the EOC Director prior to release.

a. Joint Information System (JIS)

Joint Information Centers throughout the region coordinate messaging to prevent conflicting messages from being released, share information and ensure messaging supports response and recovery operations. This coordination is referred to as a Joint Information System (JIS). JIS activity is coordinated through the King County Emergency Coordination Center.

Health and Medical Area Command (HMAC) operates a (JIC) for coordinating healthcare related public messaging. The Public Health JIC is part of the regional JIS.

E. Development of the EOC Consolidated Action Plan

The Consolidated Action Plan (CAP) is the document that guides the EOC in the course of its operations. Specifically the CAP defines the strategies as well as the objectives and missions that will need to be accomplished to meet that strategy. The EOC Advanced Planning Unit is responsible for capturing and documenting the CAP. However the development of the CAP is very much a collaborative process involving most, if not all, stakeholders in the EOC.

The planning P articulates the process for developing a Consolidated Action Plan.

1. Initial Event Phase

The initial event phase identifies the planning related actions that guide the EOC operations during the first 1-2 hours of an event. This includes actions related to notification of partners and responders that the EOC is activated .

Objectives during this initial phase will come from one of the following sources:

1. Use of event specific objectives. In cases where enough notice has been given that the EOC may be needed in support of an actual or anticipated event, the OEM, in conjunction with key department representatives, may draft an initial CAP that will be used during

the first activation period.

Examples include special events such as parades or special events when EOC coordination is needed.

2. Use of hazard specific objectives. For some hazards (such as winter storms or earthquake) initial activation objectives have been drafted and are included in hazard specific appendixes to the CEMP.
3. Use of EOC standing objectives. EOC standing objectives are used for no notice events where pre developed objectives have not be developed. The EOC standing objectives are [described below in Section IV, F.](#)

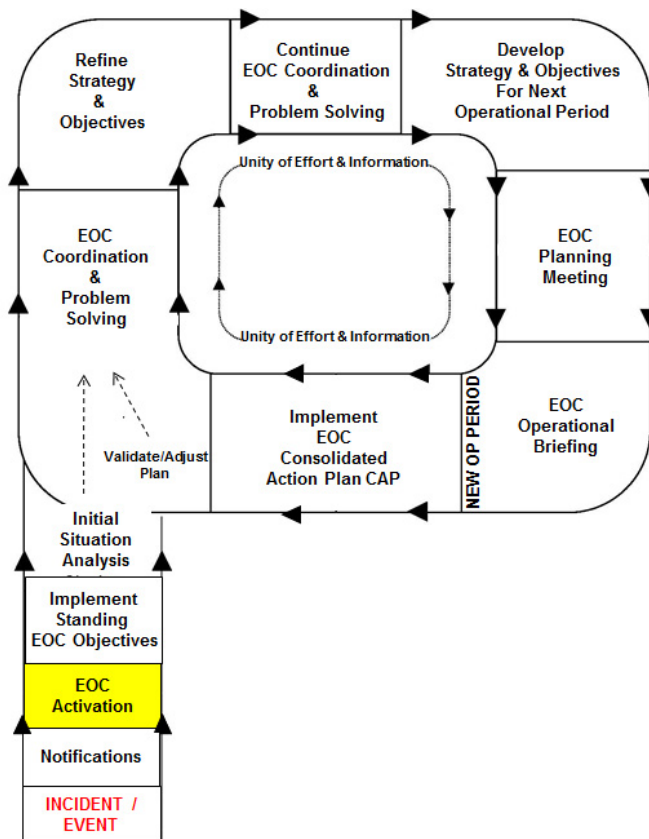


Figure 1 - EOC Planning “P”

Regardless of the event, one of the first activities that will take place will be to conduct an initial assessment and gather information about the situation. This initial assessment, along with the EOC objectives, is what will drive EOC operations during the initial hours of the activation.

2. Managed Phase of the Operational Period

During the first and subsequent operational periods:

- Resources, plans of action, and information are coordinated and EOC reps work to solve issues and problems.
- Objectives are set for the next operational period. The Section Chiefs, key ESF leads and the Planning Section collaborate to establish Operational Period Objectives. The objectives are then approved by the EOC Director.
- The planning section then coordinates the development of strategies, missions and tasks meeting the Strategic Objectives with ESF leads and EOC department representatives.
- The planning meeting reviews, deconflicts, and finalizes the CAP with key branch, ESF, and department leads as well as the JIC Supervisor.

F. Standing EOC Objectives

City objectives contribute to effective response coordination. Working as a team, the OEM Director, OEM staff, Emergency Support Function Representatives, and EOC volunteers, develop a common set of strategic City objectives that guide EOC personnel in their actions during activations. City objectives are updated each operational period (typically 12 to 24 hours) or as needed depending on the incident.

For those incidents that occur without notice, standing EOC objectives can be used until there is sufficient time to develop custom objectives. The following serve as the EOC initial objectives for a no notice activation:

1. Develop and maintain situation awareness.

- Collect, organize, analyze damage assessments from departments and other partners.
- Publish an Essential Elements of Information strategy each operational period or as directed.
- Issue Situation and Snapshot Reports on regular and frequent basis.
- Arrange for subject matter experts to conduct specialized analysis.
- Coordinate Mapping.
- Rapidly incorporate information from social media.

2. Develop and execute a City-wide strategy for response and recovery.

- Establish and maintain the Consolidated Action Plan planning cycle.
- Publish a City Consolidated Action Plan each operational period or as directed.
- Define impacts to vulnerable populations and address through City Consolidated Action Plan.
- Hold EOC Director and Operations Section Chief briefings frequently each operational period.
- Ensure areas of operation and responsibility are clearly defined at all levels.
- Provide logistical support to operations.
- Support restoration of critical services such as utilities and healthcare.
- Conduct advanced planning.
- Designate the department, or departments, responsible for staffing and operating local Points of Distribution, City Staging Areas, Camps, Bases, Heli-Bases, Donation Centers and other facilities and functions.

3. Coordinate communication between City departments, external agencies and the community.

- Establish and maintain communications with all partners.
- Support Auxiliary Communication Service.
- Participate in local and regional conference calls.
- Establish a Joint Information Center.
- Participate in the regional Joint Information System.

4. Promote unity of effort with City departments and external agencies.

- With participation from all ESF Representatives, develop one City strategy.
- Leverage all available City resources, as needed, based on City goals, priorities, strategy.
- Include vulnerable population impacts , and how to address them, in Director and Section Chief briefing agenda.
- Advocate for and support a regional approach to addressing the needs of vulnerable populations and for restoring essential services such as public transportation, mass care and healthcare.
- Assign a Zone (Seattle) Representatives to the King County ECC.
- Coordinate requests for assistance from the City to regional, state and federal partners.

- Wherever possible, provide support to neighboring jurisdictions.
- 5. Address impacts to the community in a comprehensive manner.**
- Utilize advanced planning to identify challenge and opportunities as early as possible.
 - Initiate recovery operations as soon as possible.
 - Closely coordinate impact analysis and planning with regional partners.

G. Special Coordination Issues

1. Support Facilities

In general, one or more departments with the least involvement in the response may be tasked with the responsibility for coordinating and managing the operation of City Staging Areas, Points of Distribution, Donation Centers, Camps, Bases, Shelters and other functions or services until assistance can arrive from outside the City.

2. Catastrophic Conditions

It is understood that for those incidents which cause a catastrophic level of impact responders will face extreme challenges. City resources are finite in number, as the extent and severity of impacts increase, the need for more outside assistance increases as well. In essence, a catastrophic incident is inherently regional, and in rare cases national or global in scope.

- The response to a catastrophic incident builds on the fundamentals outlined above and relies on the ability of responders to quickly adapt as needed to meet the conditions present.
- Regional Plans that address catastrophic level of impacts have been developed by jurisdictions in the Puget Sound region.
- City Priorities for Response and Goals for Response, along with plans, provide essential guidance to responders operating under catastrophic conditions where communication with commanders may not be possible for an extended period.
- Each department, and its responders, is prepared to operate independently when necessary.
- Critical roles are staffed at least three deep so there will be sufficient number of trained individuals available for duty.
- Critical facilities and functions have redundancies to ensure continuity.
- Alternate locations for the EOC have been identified and a contingency plan for relocating has been written.

- At minimum, the City, and its departments, endeavors to always maintain continuity of government and authority over the response, even under the most trying of conditions.

H. Demobilization

When resources are no longer needed they must be quickly demobilized. Just as it is difficult to effectively manage the surge of resources that arrive after a disaster, it is equally challenging to efficiently identify and out-process the many resources assigned to the incident. Some resources, such as Urban Search and Rescue teams are experienced at completing the many steps needed to disengage from the response and return to their home base, while other resources will require an extensive amount of time and energy to demobilize.

Depending on the resource involved, standard procedures for demobilizing field resources or existing department policies and procedures are followed. The EOC Planning Section Chief through the Demobilization Unit leader coordinates citywide demobilization issues through City departments.

Each department is responsible for all documentation related to their response activities.

V. DIRECTION AND CONTROL

A. Mayor

The primary responsibility for maintaining “the peace and order” in The City of Seattle is vested in the Mayor by The City Charter.

The Council President is authorized to act as Mayor in the Mayor’s absence from the City, or in the event of the Mayor’s incapacitation (See Article V, Section 9 of The City Charter).

Should the Council President, while serving as Acting Mayor, have an occasion to be absent from the City or suffer an incapacitating disability, the President Pro-Tem would be next in the line of succession to be Acting Mayor.

B. Emergency Executive Board

The EEB, composed of department Directors and Mayor’s Office senior staff, advises the Mayor on policy issues, takes steps to improve coordination between departments, modifies response priorities and supports resource allocation. Board meetings are chaired by the Mayor or his designee and are facilitated by the EOC Director.

- The EEB is only convened when needed.
- The EOC Operations Section Chief is responsible for ensuring all policy decisions are communicated to all ESF Representatives in the EOC and regional partners.

1. EEB Emergency Policy Review and Development.

An incident may pose unique challenges that require changes to existing City policies, the creation of entirely new policies, or otherwise require a problem to be decided by the Mayor.

To support an expeditious resolution, an ESF Representative who has identified a possible policy issue is responsible for:

- Coordinating resolution of the policy issue with other ESF Representatives and the Operations Section Chief in the EOC.
- If unable to resolve, completing the EOC proposed policy form which requires a detailed description of the issue, multiple options for resolution and a recommended option for approval.
- The EOC Director reviews each request to determine if it should be forwarded to the Mayor.
- The Mayor, assisted by the EOC Director, may resolve the issue immediately, return it to the Director for resolution or convene the Emergency Executive Board (EEB).

C. Emergency Proclamation and Orders

Should a situation be serious enough, the Mayor may proclaim a "Civil Emergency". Under the proclamation of emergency, the Mayor may proclaim one or more of the following orders which, in summary, can:

- Impose a curfew.
- Require any or all businesses to close.
- Require closure of businesses that sell alcoholic beverages or restrict sale of alcoholic beverages.
- Stop the sale, distribution or giving away of gasoline or other flammable liquid or combustible products.
- Close business establishments where firearms and/or ammunition are sold or dispensed.
- Close public places.
- Prohibit the carrying or possession of a firearm or any instrument capable of causing bodily harm.
- Request federal and/or state assistance to combat such civil emergency.
- Establish economic controls.
- Direct the use of public and private health, medical and convalescent facilities and equipment.

- Shut off, restore and operate utility services in accordance with priorities established for combating the civil emergency.
- Provide for the evacuation and reception of the population of the City or any part thereof.
- Other such orders as are imminently necessary for the protection of life and property.

The City Attorney’s Office is responsible for providing legal advice to the Mayor, the City Council and EOC Director in this area. It also assists with drafting the Emergency Proclamation and associated Orders to evoke Emergency Powers.

The emergency proclamation and any orders, once signed by the Mayor must be filed with the City Clerk within 48 hours of their issuance, or as soon as practical. The City Council will endeavor to act on the proclamation or order within 48 hours of its being presented. The Council may ratify and confirm, modify or reject the proclamation or order. Any such action by the Council is prospective.

A similar process is followed to terminate the proclamation once it is determined that it is no longer needed.

D. Emergency Operations Center

City of Seattle EOC Structure

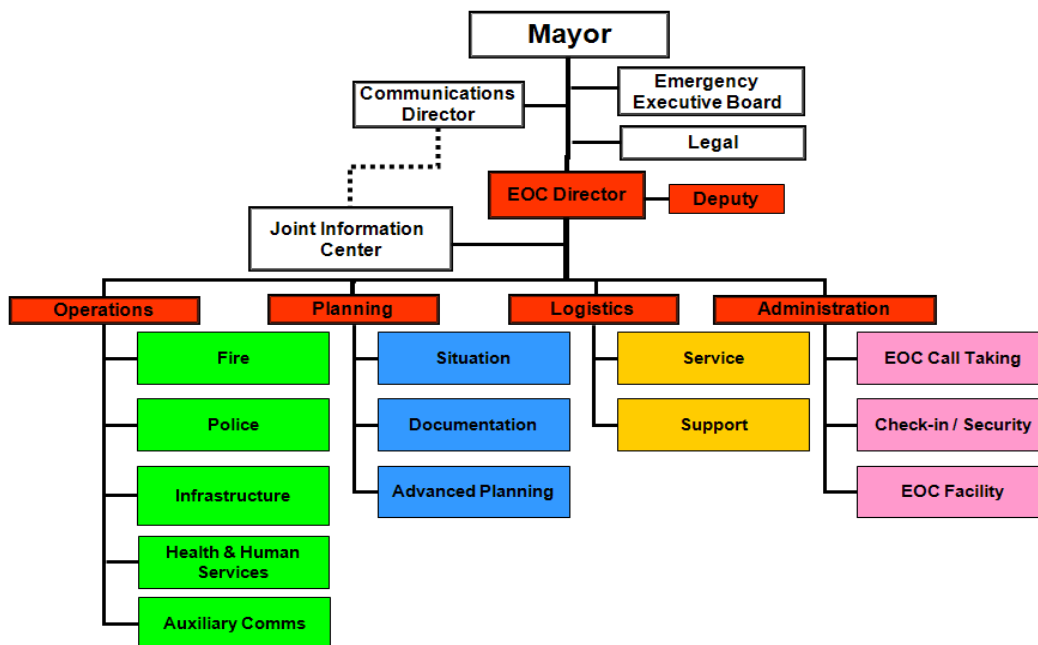


Figure 2 – Seattle EOC Organizational Structure

The EOC is organized as follows:

1. Operations Section.

Under the EOC Operations Section, staffed by OEM personnel, consists of four branches, within which several Emergency Support Functions and departments may be represented depending on the nature of the incident:

- Fire Branch (Seattle Fire Department Branch Director) ESF 4, 9, 10
- Health and Human Services Branch (Human Services Department Branch Director) ESF 6 and 8
- Infrastructure Branch (Seattle Department of Transportation Branch Director) ESF 1, 2, 3, and 12
- Police Branch (Seattle Police Branch Director) ESF 13

2. Planning Section.

The Planning Section is staffed primarily by OEM personnel, employees reassigned from other departments or units and volunteers.

- Documentation Unit – responsible for gathering, organizing and storing incident documents.
- Advanced Planning – responsible for developing the City Consolidated Action Plan and conducting long range planning to identify, as early as possible potential challenges and opportunities involved in the response and recovery.
- Situation Unit – utilizing information provided by ESF Representatives, issues Snapshot and Situation Reports, coordinates mapping and other reports as needed to maintain situational awareness and to contribute to developing a common operating picture.

3. Logistics.

Operated by personnel from the Finance and Administrative Services Department, provides logistical support to operations conducted at all levels within the City and as defined by the Logistics Section Chief. The Section also manages financial matters for operations in conjunction with the City's Emergency Executive Board. For details on the operations of the logistics section please see the ESF #7 Annex.

4. Administration.

Staffed by Seattle OEM personnel, the Administration Section maintains the EOC facility during activations and provides material support to the ESF – Representatives assigned.

5. Joint Information Center (JIC).

The Mayor's Office operates the JIC which coordinates public information and employee messaging among all departments and with regional partners – “many voices one message”

E. Departments

During incidents, department directors retain authority over their employees. Directors play a critical role in ensuring their department is fully supporting the response as guided by the roles and responsibilities listed in the ESF Annex and the EOC Consolidated Action Plan. In addition, each department is expected execute its Continuity of Operation plan as soon as practical after the incident has struck.

F. Field Operations

Operations in the field are conducted under an approved incident command organization and documented on the appropriate Incident Action Plan (written or verbal) and led by an Incident Commander or through a Unified Command.

For those situations where it is not practical or possible to establish an incident command, units will coordinate their operations through their department, dispatch center or DOC - these operations will be documented in the EOC Consolidated Action Plan.

Departments should avoid issuing conflicting orders to assigned units and instead coordinate through the Incident Commander.

The EOC Operations Section Chief will work with the EOC Branch Directors and ESF Representatives to define specific areas of operations and responsibility for each incident command in order to promote the safety of the responders, prevent conflict between various operations and support efficient resource allocation.

VI. COMMUNICATIONS

No communication system is 100% reliable. Every communication system is susceptible to being destroyed, damaged or overloaded. Redundancy of emergency communication systems increases resiliency of this system and confidence that critical messages can get through. However, under some scenarios all technology based systems could be out of services for an extended period of time.

A. 800 MHz Radio

The 800 MHz radio is used by emergency management, police, fire, public health, hospitals and utilities throughout King County. Each group is assigned a priority within the radio system which organizes how individual messages are transmitted.

Critical systems in this network have backup power available which is limited by effectiveness of local emergency management organizations to support the refueling of those generators.

During times of peak use, modifications to the 800 MHz radio system can be made to assign higher priority to specific groups of users having the most critical operational need. Also, different channels or communication systems can be patched within, or into, the 800 MHz system.

A regional Tactical Interoperable Communication Plan (TICP) guides the operation of this regional asset.

The EOC Operations Section Chief authorizes, with assistance from the ESF #2 Representative, any request from the EOC to modify the City radio priorities or establish a new patch – Since this is regional system, any such requests must also be approved by the radio system operators.

The Seattle Police Department Communication Center personnel are trained, equipped and authorized to do radio patching.

City OEM can contact City Departments on a dedicated EOC radio channel known as “Ops Call” or when the EOC is not activated, Departments may use this channel, among many others, to coordinate City operations.

City OEM radios have King County radio channels for EOC to EOC communication.

B. Additional Radio Systems

City OEM sponsors the Auxiliary Communications Service which, staffed by volunteers, operates amateur/HAM radios.

Community based volunteer Communication Hubs, equipped with amateur radios, have been established in several neighborhoods throughout the City and provide way for communities to coordinate and communicate with one another.

Warning messages between local government and State or Federal partners are communicated through the Comprehensive Emergency Management Network (CEMNET) and the National Alert and Warning System (NAWAS) - these radios are located in the City EOC.

C. Telephone

Satellite, cell and wired telephones are available in the EOC and in Department Operations Centers.

The City telephone system is more resilient than the public telephone system.

EOC staff and other key response personnel have Government Emergency Telecommunication System (GETS) and Wireless Priority System (WPS) user accounts which provide higher priority, but not guaranteed, access to the public telephone network.

An encrypted telephone is available in the EOC, and in other local EOCs, for confidential communications.

The EOC has one telephone number (non-public) for departments and regional partners to contact the EOC.

An Automated Call Distribution system in the EOC increases the number of phones dedicated to the main phone number

Direct telephone lines connect operations centers, dispatch centers and the EOC some of which operate within the City telephone network (hotlines) and others which operate through the public network (ring down lines).

City employees assigned to emergency response duties, including OEM staff, are issued cell phones which in addition to being able make phone calls, can support text messaging, email, and internet.

D. Mass Notification Systems

The City has two systems capable of supporting mass notification of designated pagers, phones and email.

The Washington State EOC (primary) and the King County Sheriff Dispatch Center (secondary) can launch Emergency Alert System (EAS) messages.

See Alert and Warning Annex for more information.

E. Conference Calls

Web, video and teleconference capability is available in the EOC.

F. Pagers

All OEM Duty Officers have assigned pagers which provide an additional capability for communication.

G. Email

Seattle OEM maintains a number of email distribution accounts to various groups involved directly in the response or in supporting it.

All email correspondence to and from the EOC during activations is done through one non-public, email account which is accessible by OEM Staff Duty Officers 24/7.

The City Department of Information Technology can create an alternate City email system using cloud based resources.

A City-ALL email account is available for use by the Mayor's Office staff, JIC staff or OEM Staff Duty Officers, to send emergency messages to all city employees.

VII. LOGISTICS

A. Department Responsibilities

All City Departments are required to do the following with regards to logistics:

- Provide all initial logistical support necessary to support anticipated field operations for up to 12 hours after the incident has struck or until the EOC Logistics Section assumes responsibility.
- At any Incident or Unified Command or Area Command must establish a Logistics Section or assign responsibility for logistics within the existing incident command organization.
- If operating a DOC, develop processes and procedures for providing and coordinating logistical support to commands and units in the field and with other DOCs.

- Coordinate with the EOC Logistics Section to ensure sufficient resources are available to support any mutual aid, contracted or non-profit resource requested by the department through existing agreements.
- When requested, provide a representative in the EOC Logistics Section to coordinate and support resource requests from their department, especially for specialized resources.
- As directed by the EOC Resource Unit Leader, provide regular reports on the status of assigned resources.
- Submit resource requests following the established procedures defined by the Office of Emergency Management.

In coordination with the Office of Emergency Management, ensure designated department personnel have attended required training in how to order resources.

B. Specialized Resource Ordering

Some departments have pre-existing mutual aid agreements for specialized resources. These specialized resources can and should be ordered by departments having such arrangements in place. For example, Seattle City Light can call upon assistance from power companies throughout the United States who can provide trained personnel and equipment to help repair and restore the electrical system.

The department ordering specialized resources will be responsible for closely coordinating with the EOC Logistics Section to ensure that:

- The resource has not already been ordered through another source.
- Costs and reimbursement or payment is defined and approved.
- Sufficient local resources are available to support the ordered resource when it arrives.
- The movement of such resources into the area can be supported by the State Movement Coordination Center (when applicable).
- If the source of specialized resource runs out or becomes unavailable, the requesting department will order the specialized resource through the EOC Logistics Section following standard EOC resource ordering process.

C. Non-Medical Logistical Support to Healthcare Providers

Health and Medical Area Command (HMAC) or the Public Health Duty Officer, is responsible for coordinating medical supplies and services to healthcare providers in the region.

The City of Seattle is responsible for providing emergency non-medical supplies and services to healthcare providers within its jurisdiction.

Healthcare providers that require assistance in obtaining non-medical resources will first contact HMAC or the Public Health Duty Officer who will evaluate the request and if deemed appropriate, will forward to the Seattle EOC for action.

D. EOC Logistics Section Responsibilities

When established, the EOC Logistics Section will define which resources the EOC Logistics Section will be responsible for managing and which will remain the responsibility of departments. The EOC Logistics Section is responsible for:

- Obtaining resources for responders and general public and providing logistical support to:
 - Local Points of Distribution.
 - Staging Areas.
 - Emergency Shelters.
 - Bases, Camps, Heli-bases and Heli-spots.
 - Healthcare facilities (non-medical).
 - Family Assistance Centers.
 - Other facilities and functions as directed.
- Managing local donation program for goods, services and cash.
- Coordinating lodging arrangements for, and among departments, whenever the EOC is activated. This includes hotel, motels, or alternate lodging arrangements (e.g. responder camps).
- Coordinating with County and State Logistics Sections.

E. Regional Assistance

All resource requests that cannot be filled by the City EOC Logistics Section are sent to the King County Emergency Coordination Center. The Center will attempt to fill the resource request from county government sources, private vendors, and other jurisdictions within the County or neighboring counties. If the Center cannot fill the resource request they will send it to the State EOC.

Regional catastrophic plans call for regional coordination and support between counties, and jurisdictions within. Resources from jurisdictions in the Puget Sound region can be quickly mobilized and transported into the affected area.

F. State Assistance

The State EOC follows a similar process to county; it attempts to fill the request using State resources or private vendors. If unsuccessful in filling the order, the State can call upon assistance from Emergency Management Assistance Compact (EMAC) or the Pacific Northwest Emergency Management Arrangement (PNEMA).

Both EMAC and PNEMA provide the legal framework and supporting procedures for quickly providing resources to Washington State from any state in the union or, with PNEMA, Canada as well.

- Under PNEMA and EMAC, Washington State, using online system requests resources which any State can agree to provide.
- The State is expected to fully reimburse the state that loans the resources.
- The State may establish a Movement Coordination Center with control points to coordinate and track the flow of disaster relief convoys through and to affected areas, providing security escorts where needed.
- State and regional staging areas may be established.
- Reception and integration centers can provide reception, integration, onward movement and accountability for out-of-state resources.

G. Federal Assistance

If the governor believes that the severity of the incident will overwhelm State and local government, he or she can request Federal disaster assistance. Federal assistance is governed by the Stafford Act. Any assistance provided is coordinated through the State.

It is important to note that there is no guarantee Federal assistance will be provided and that such assistance is strictly limited, cost matching may be required and it does not represent an unlimited source of funding for local government, businesses or individuals.

During smaller scale incidents, there may be a significant delay before the decision is made to provide Federal assistance or not.

According to the National Response Framework (NRF), “the Secretary of Homeland Security is the principal Federal official responsible for domestic incident management. This includes coordinating Federal operations and resource deployments within the United States to prepare for, respond to, and recover from terrorist attacks, major disasters, or other emergencies.”

The National Operations Center (NOC) is responsible for situational awareness and operations coordination across the Federal government. Several Federal Operations Centers provide coordination and support to the Federal effort within their area of responsibility.

- The Federal government uses 15 Emergency Support Functions (ESF) to coordinate functional capabilities and resources provided by Federal departments and agencies (same ESF structure is followed by the State and the City).
- FEMA can deploy assets and capabilities through ESFs into an area after an incident has occurred or in anticipation of an approaching incident or event that is expected to cause a significant impact and result.

- This coordination through ESFs allows FEMA to position Federal support for a quick response, though actual assistance cannot normally be provided until the Governor requests and receives a Presidential major disaster or emergency declaration.
- US Military resources may also provide assistance under certain conditions – see the Military Support Annex for additional details.

In a no-notice incident, FEMA activates the FEMA Region X Regional Response Coordination Center to coordinate Federal support until a Joint Field Office (JFO) can be established.

A JFO is the primary Federal field structure that integrates the Federal response and provides coordination and support to the response and recovery effort. A JFO is led by a Unified Coordination Group which includes a representative from the affected state. The JFO works in close coordination with the State EOC.

A Joint Operations Center (JOC) which is led by the Federal Bureau of Investigation, is an interagency command post for managing terrorist incidents or threats and investigative or intelligence activities may be activated as well.

As Federal resources arrive in the area, they are deployed based on specific requests or need. It is understood that in some scenarios, the deployment of Federal resources, and State resources, may occur with limited coordination with local authorities due to the severity of the incident and local conditions at the time. As the incident response develops, resources arriving in the region will be coordinated with the local EOC and local area or incident commands.

VIII. ADMINISTRATION AND FINANCE

A. State Mission Numbers

A mission number is obtained from the State EOC whenever the City EOC is activated. This tracking number will be used on all documentation related to the incident.

B. Records Preservation

The Seattle EOC has a process in place to maintain and protect essential records in accordance with the record retention program as defined in RCW 40.10.010. Essential records are those needed in an emergency and for the reestablishment of normal operations after an emergency. Some examples are:

- Situation and Snapshot Reports.
- Proclamations of Emergency and requests for Proclamations of Emergency.
- Requests for Assistance.
- Damage Assessment Reports.
- WebEOC log entries.
- Seattle-EOC email.

During the incident the EOC Planning Section Chief is responsible for ensuring essential records are retained.

When the activation has concluded, the Seattle OEM Deputy Director is responsible for the organization, collection, and storage of incident records.

C. Financial Management

Disaster-related obligations and expenditures in accordance with the provisions of RCW 38.52.070(2), 35.33.081 applicable state statutes and local codes, charters and ordinances.

Records will be kept in such a manner to separately identify incident related expenditures and obligations from general or routine department programs and activities. Complete and accurate records are necessary to document requests for assistance, for reimbursement under approved applications pertaining to declared emergencies or major disasters and for audit reports. Detailed records will be kept from the onset of an incident or event to include, but are not limited to:

- Appropriate extracts from payrolls, with any cross references needed to locate original documents.
- A schedule of equipment used on the job.
- Invoices, warrants, and checks issued and paid for materials and supplies used on the job.
- Work that is contracted out.
- Copies of requests for bids.
- Final contracts.
- Invoices submitted by the contractor.
- Warrants authorizing check issuance.
- Work done under inter-community agreements and mutual aid.

Disaster-related expenditures and obligations may be reimbursed under a number of Federal programs. The Federal government may authorize reimbursement of approved costs for work performed after a major disaster declaration by the President of the United States under the statutory authority of certain federal agencies.

- This is a complex process that requires significant documentation.
- The Seattle OEM is responsible for coordinating the City effort to properly apply for Federal reimbursement and in general document the incident response and recovery.
- It may take years to complete all the paperwork associated with Federal disaster assistance.

Audits will be conducted in the normal course of state and local government audits. Audits of projects approved for funding with federal disaster assistance funds are necessary to determine the eligibility of the costs claimed by the applicant.

APPENDIX 1 –RECORD OF REVIEW AND ADOPTION OF THE CEMP - EOP

Meeting / Event	Date	Action
Disaster Management Committee (DMC)	December 18, 2014	Plan voted on and formally approved.
Emergency Executive Board	February 18, 2015	Plan voted on and formally approved.

APPENDIX 2 – WINTER STORM INCIDENT ANNEX

Begins On Next Page

City of Seattle
Comprehensive Emergency Management Plan

Emergency Operations Plan
Winter Storm Incident Annex

Prepared by
Seattle Office of Emergency Management

Updated November 2014

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PRIMARY DEPARTMENT:

Seattle City Light
Seattle Department of Transportation
Seattle Public Utilities

SUPPORT DEPARTMENTS AND AGENCIES:

Seattle Department of Parks and Recreation

I. INTRODUCTION

A. Purpose

To enable a coordinated multi-department and multi-jurisdictional response to a winter storm.

B. Scope

This is an annex of the Seattle Comprehensive Emergency Management Plan and applies to all City departments. It addresses the potential challenges posed by the following hazards:

- Snow/Ice/Extreme Cold
- Windstorm
- Flooding
- Landslides

II. POLICIES

A. Authorities

See Seattle Comprehensive Emergency Management Plan.

B. Limitations

The City will endeavor to make every reasonable effort to respond to a winter storm. However, City resources and systems may become overwhelmed by the magnitude of a storm and its impacts. There is no guarantee implied by this annex that a perfect response to a winter storm will be practical or possible.

III. SITUATION

A. Hazards

In the Seattle Hazard Identification and Vulnerability Assessment (SHIVA) there are four hazards associated with winter weather:

1. Snow, Ice and Extreme Cold
2. Windstorms
3. Flooding
4. Landslides

Each of the four hazards may have one or more of the following impacts:

- Traffic congestion

- Increased response time for emergency services.
- Interruption or cancellation of government services such as solid waste pickup, municipal court cases.
- Reduction in public and/or private transportation services,
- Cancellation of healthcare services
- Damaged or collapsed structures
- Car accidents
- Impacts to vulnerable populations. See section [IV-C-3](#) for details.

1. Snow, Ice and Extreme Cold

Snowfall is not uncommon and can be heavy. The unofficial record for the most snow is 64 inches in 1880. The single-day record is 21.5 inches in 1916. Snow, ice, cold temperatures can linger for weeks (see SHIVA).

Possible impacts from snow, ice, and cold temperatures may include:

- Snow and ice covered sidewalks, roadways and bridges making travel hazardous
- Illness, injuries, and fatalities due to falls, sledding, car accidents, carbon monoxide poisoning, food poisoning (lack of refrigeration), hypothermia, heart attacks, and falling ice
- Collapsed roofs
- Power outages
- Stranded commuters
- Flooding caused by snow melt
- Frozen or ruptured water mains causing local flooding and/or loss of water services

2. Windstorms

The Puget Sound region can experience strong windstorms, including ones with hurricane force winds known as mid-latitude cyclones. These storms are wider than tropical storms. The largest of these was the 1962 Columbus Day Storm.

The highest recorded wind speed in Seattle was 82 mph during the Columbus Day windstorm, although winds vary throughout the area due to terrain.

The 2006 windstorm caused great damage to city property and infrastructure, with preliminary damage estimates at \$16 million. In the 2006 windstorm, sections of dozens of major arterials and hundreds of neighborhood streets were blocked, mostly by fallen trees and tree limbs. An estimated 700 trees fell on public property. Besides being an inconvenience to property owners and municipal governments who must clean up debris, falling trees and tree limbs are a hazard.

Possible impacts from high winds include:

- Severed power lines and communication lines
- Illness, injuries and fatalities due to falling tree limbs and other objects, electrocution (downed power lines), carbon monoxide poisoning, food poisoning (lack of refrigeration)

3. Flooding

Seattle is vulnerable to three types of floods

- Riverine flooding – Heavy precipitation causes a river or stream to overflow its banks into the adjoining floodplain. This is the classic flood. Seattle’s creeks, especially Thornton and Longfellow, have flooded more often than the managed Duwamish River. Release of large volumes of water from the Howard Hansen Dam could affect the Duwamish River. (See Infrastructure Failures for more on dam failures).
- Coastal flooding – Associated with storms. High tides and wind can push water into coastal areas. Coastal flooding can erode the toes of bluffs and are one factor in landslides. Some areas, like South Park, can experience drainage problems under the same conditions.
- Urban flooding – Happens suddenly when intense rain overwhelms the capacity of the drainage system. Low lying, bowl-shaped areas like Madison Valley and Midvale are the most likely to flood. (See SHIVA) This also can occur in many areas of the City where storm drains are overwhelmed by leaves and debris. This causes ponding on roadways, disrupting traffic and crosswalks.

Possible impacts from flooding include:

- Flooded structures
- People trapped inside flooded structures or vehicles
- Injuries and fatalities due to drowning
- Severed pipelines, drainage lines, power lines, and communication lines
- Ponding water blocking roadways and pedestrian crosswalks

4. Landslides

8.4% of Seattle is prone to landslides. Four kinds of slides may occur in Seattle:

- High Bluff Peel-off – blocks of soil fall from the high bluffs primarily along the cliffs of Puget Sound. Between 3-4% of all slides.
- Groundwater Blowout – groundwater pressure built up at the contact between pervious (sand) and impervious (clay) soil units causes a catastrophic groundwater and soil burst. Between 5-6% of all slides.
- Deep-seated Landslides – deep, rotational or translational slides and slumps caused by groundwater pressures within a hillside. Between 18-19% of all slides. These are the most dangerous type of slide.
- Shallow Colluvial (Skin Slide) – shallow and rapid slides on a slope, which may result in a debris flow. Over two-thirds (69%) of all slides are shallow colluvial.(See SHIVA)

Possible impacts from landslides may include:

- People trapped inside damaged or collapsed structures
- People buried under dirt and debris
- Injuries and fatalities related to blunt or penetrating trauma, suffocation
- Severed pipelines, drainage lines, power lines, and communication lines

B. Assumptions

- Winter storm forecasts provide sufficient time to conduct planning and to prepare in general.
- While winter storm weather forecasts are extremely helpful in planning and response, they are not 100% accurate.

- Despite extensive public messaging, many members of the community often fail to heed warnings to prepare for a storm.
- The hilly terrain in Seattle can make driving even more difficult on snow and ice covered roadways and may temporarily isolate neighborhoods.
- The drainage and wastewater system has a finite capacity and may be overwhelmed by storm runoff from short-duration events with high rainfall intensity or long-duration events with moderate rainfall intensity.
- The same type of rainfall event (e.g. 2 inches over 24 hours) may result in drastically different storm impacts due to the level of soil saturation during the storm.
- Because of the inherent uncertainties associated with any weather forecast, responders generally must assume the worst when it comes to preparing for a storm.
- Many businesses and residents do not clear the sidewalks in front of their property which limits access to goods and services, especially by the disabled or elderly.
- Street closed signs for ice covered streets, or flooded areas, are often ignored by drivers
- Storm related traffic congestion, parked vehicles, and abandoned vehicles can impede efforts to clear roadways, restore power, or address local flooding.

C. Weather Forecasts

Seattle Department of Transportation, Seattle Public Utilities, City Light, and the Seattle Office of Emergency Management closely monitor National Weather Service forecasts. In addition:

- Seattle Department of Transportation contracts with a private forecasting service called Weathernet and with the University of Washington for snow/ice forecasting; called Snowwatch
- Seattle Public Utilities has a meteorologist on staff and contracts with the University of Washington for rain forecasting; called Rainwatch
- Seattle City Light contracts with University of Washington for wind forecasting; called Windwatch

All departments routinely and regularly share weather forecasts. In addition, Snowwatch, Rainwatch, and Windwatch are available on the City's public website.

The National Weather Service (NWS) may issue a weather outlook, advisory, watch, or warning as a storm approaches.

- A weather outlook gives notification of a potential for a significant storm, two to five days in advance
- A weather advisory is for weather events with up to 24 hour notice that are more of an inconvenience and not necessarily life threatening
- A weather watch is issued one or two days prior to an anticipated significant weather event; the odds of the event occurring have increased yet some uncertainty remains for the specific forecast area
- A weather warning means confidence is high the significant weather event will occur in the next 24 hours or less, or is already underway

The NWS may host one or more interactive webinars with local jurisdictions, before and during the storm, to discuss the forecast in detail and provide an opportunity for responders to ask questions. The Seattle Office of Emergency Management, Seattle Department of Transportation, Seattle Public Utilities, and Seattle City Light each participate in these webinars. Since the webinar can only support a limited number of participants, representatives from other City Departments and partner organizations are invited to participate in the webinar at the City Emergency Operations Center.

IV. CONCEPT OF OPERATIONS

A. Incident Planning

When there is sufficient notice of an incident with the potential to cause significant impacts, the current OEM Staff Duty Officer (OEM SDO), OEM Operations Coordinator, OEM Deputy Director, and members of the DMC Strategic Workgroup representatives review available information and recommend a course of action to the Director;

- **Take no action:** Departments manage the incident without activation of the EOC. The OEM SDO is available 24/7 to provide assistance to departments.
- **Monitor the Incident:** The OEM SDO monitors the incident in coordination with affected departments. The OEM SDO keeps the OEM Director and Deputy Director fully briefed on the situation. If needed, the OEM SDO can share situation reports and forecasts with stakeholders using existing EOC email distribution groups.
- **Conduct a Planning Meeting:** The OEM Director may convene a planning meeting to develop a City Consolidated Action Plan (CAP) and determine when the EOC will be activated and what Emergency Support Functions (ESF) will be involved.

The decision on what action to take is based on the totality of the circumstances, such as the forecast, anticipated impacts, past experience with similar weather events, scheduled events taking place during the storm, and recommendations from those City departments likely to have a role in the response.

Triggers that could cause a planning meeting to be called, include but are not limited to the following:

- When requested by a City department
- “Weather Advisory” issued by National Weather Service
- Freezing rain and/or snow anticipated in the lowlands
- 32 degrees freezing temperatures sustained for 2-days straight (daytime temps don’t rise above freezing)
- Rainfall greater than 2-3 inches in 24 hour period
- Forecast of sustained winds 25 to 39 mph and/or gusts to 57 mph
- Increase in USGS landslide threshold and or rainfall intensity

B. Citywide Incident Planning

A citywide planning meeting is conducted as soon as possible in order to provide sufficient time to prepare. The goal of the meeting is to:

1. Determine the current state of preparedness of the City
2. Assess possible impacts to special events, City services and the community.
3. Consider whether or not to activate the EOC –or- identify event specific triggers for an activation.

If the decision is to activate the EOC, a citywide Consolidated Action Plan is developed that identifies the objectives and strategies that will govern the response to the storm.

The Seattle OEM convenes and facilitates the meeting. For winter storms, the following departments participate in the planning meeting:

- Seattle City Light
- Seattle Department of Finance and Administrative Services
- Seattle Department of Information Technology
- Seattle Department of Transportation
- Seattle Fire Department
- Public Health Seattle and King County
- Seattle Human Services Department
- Mayor’s Office (Director of Communications and/or Mayor Representative)
- Seattle Parks and Recreation
- Seattle Police Department
- Seattle Public Schools
- Seattle Public Utilities
- King County Metro Transit
- King County Adult Corrections Facility
- University of Washington Emergency Management

This list may be modified based on the type of hazard and other factors.

C. Response

1. EOC Activation

The City EOC is activated to provide citywide coordination and support to response operations during a significant winter storm. Typically, the EOC will activate shortly before the storm arrives and remain open through the height of the storm. City EOC hours of operation are tailored to meet operational need.

- A Consolidated Action Plan is used to coordinate operations throughout the City
- Information is regularly shared with all EOC stakeholders through hourly snapshot and situation reports that are issued once every operational period.
- An Essential Elements of Information list guides departments in what information to report to the EOC during the storm and when those reports should be provided
- WebEOC is used for sharing information and updates with all City departments

Public messaging is coordinated through the EOC Joint Information Center. Public messaging topics common to winter storms include:

- Check on your neighbor
- Shelter and warming center locations and hours of service

- Extent of damage
- Safety information; hypothermia, driving, carbon monoxide poisoning, obey road closed and other warning signs
- What the City is doing to respond to the incident
- Status of City services, changes in hours of operation for City programs
- Where to get information and assistance
- Protect pipes and water services from freezing
- Clear storm drains in the event of snow melt or flooding.

2. Lead Agency Transition

As storm hazards change with weather conditions or when life safety priorities necessitate, lead agency assignment will be transitioned to the appropriate responding agency as indicated in the CEMP and approved by the responding department's representatives in the EOC or conference call during periods of non-EOC activation.

3. Vulnerable Populations

Each storm and subsequent impacts may affect populations differently. For winter storms, populations that are potentially more vulnerable are people who are homeless; are elderly; are receiving medical treatments, such as dialysis; have a disability; rely on in-home case management services; need power for medical or assistive devices; become homebound and unable to go out during prolonged storm conditions; have limited English proficiency and others. As the ESF-6 lead, each event is assessed by HSD using the ESF-6 Winter Storm Checklist, which includes identifying potential impacts to vulnerable populations. Additionally, information, ongoing assessment and response activities are coordinated with ESF-8, ESF-5 and ESF-6 departments and partner agencies, including HSD, Libraries, Parks, Neighborhood Service Centers, Office of Housing, Commission for People with Disabilities, Seattle Animal Shelter, and 2-1-1.

a. Winter Response Plan for Homeless Persons

Many programs, government and non-profit, provide services to the homeless on a daily basis. During inclement weather, it is essential that the delivery of critical services for the homeless is maintained, and if needed, augmented. The Human Services Department Winter Response Plan for Homeless Persons describes what steps are taken during the winter to provide shelter and food for the homeless. For storms or extended periods of low temperatures that present a substantial threat to life or health, shelter capacity is augmented using facilities not normally used as shelters. During a disaster (weather-related or not) activities to support the homeless will be linked with the overall City response as described in the Seattle Disaster Readiness and Response Plan.

b. Utility Outages

To minimize impacts to vulnerable populations and critical services during the storm, electrical, water, gas outages will be promptly reported to the City Emergency Operations Center and Public Health Seattle and King County. The EOC will coordinate response activities, such as opening warming or overnight shelters (see Sheltering Appendix), and messaging. During severe winter storm conditions, scheduled power and water shutoffs due to non-payment may be placed on hold.

c. Mobility Impacts

Conditions that prevent people from obtaining critical services or supplies can create life-threatening situations, particularly over an extended period of time. The Seattle EOC will monitor for these conditions, which can include, but are not limited to: hazardous driving conditions for non-emergency vehicles; cancelation of public transportation including Access buses; case workers or other support assistance unable to reach homebound persons; people who use mobility devices, have visual impairments, are frail or are not able to safely navigate conditions becoming homebound due to dangerous or impassable walkways and sidewalks; and/or supplies of food or medicine inaccessible or unavailable because of travel conditions.

d. Notification and Warning

Public information, including notifications are coordinated through ESF-15. Any messaging will include multiple communication strategies to reach targeted (vulnerable) populations.

4. Snowstorm Response Strategies

SDOT responds to snow, ice, frost, freezing fog, mist, rain, and black ice. The Seattle Department of Transportation Winter Weather Readiness and Response Plan details the SDOT response.

a. Response Strategies

The response to snowstorms hinges on the ability of the SDOT and other transportation agencies in the region to keep the roadways passable. All City departments are expected to support SDOT in accomplishing its mission.

SDOT focuses on clearing snow from a limited number (approximately 1000 lane miles) of designated roadways to a defined service level. These roadways include the busiest streets that connect Seattle's neighborhoods with downtown and the greater Puget Sound region, streets used by transit agencies during harsh weather, streets used most frequently by public safety agencies, streets deemed important to public institutions (e.g., schools and hospitals), and streets leading to Seattle's major employers. Residential and secondary roadways are not cleared. Under the SDOT plan, there are two service levels:

- **Gold Level:** Bare pavement within twelve hours over all lanes on the most critical arterials as soon as there is a significant lull in the storm.
- **Emerald Level:** Bare pavement within twelve hours for one lane in each direction on selected major arterials and remaining Metro winter storm bus routes, as soon as there is a significant lull in the storm.

Before the storm arrives, SDOT applies anti-ice solution to the designated roadways to prevent frost from forming and snow and ice from bonding to the pavement. Under optimal conditions, it takes approximately 8 hours to apply the anti-icing solution to all designated roadways under optimal conditions. Rain may dilute or wash away the anti-ice solution, limiting its benefit. During storms, crews also apply deicing material, granular salt, to help melt snow and ice on the roadway.

Plowing generally begins when there is more than 1 inch of snow accumulation. Plows push snow to the right. If there is more than 12 inches, the snow is pushed to the center of the street. The plows try to avoid creating windrows, which is a buildup of plowed snow that can block cross traffic at intersections. If necessary, front end loaders may be used in the downtown area to remove windrows and excessive snow accumulation.

King County Metro plows a limited number of routes in the downtown area that are needed for bus operations.

As called for in the Winter Weather Readiness and Response Plan SDOT deploys pedestrian safety crews to perform deicing and snow removal on critical sidewalk landings and public stairways located in the right-of-way, as identified using criteria in the city's Pedestrian Master Plan.

Using signs placed near known trouble spots, SDOT crews or SPD officers close streets as needed. Closed streets are displayed on a map which available on the City website.

SDOT has a special emphasis team that can respond to emergency requests for plowing from SPD and SFD. In addition, Public Health Seattle King County and the Seattle Commission for People with Disabilities can request assistance in maintaining access to critical facilities and services, such as the Puget Sound Blood Center.

HSD and SPR department can open warming shelters or overnight shelters if needed. HSD conducts outreach to the homeless community during periods of low temperatures and may activate additional shelters for the homeless. SPD can activate outreach teams ("Cold Weather Van") which check on the homeless and provide transport to shelters. The 211 website provides a comprehensive list of winter shelters in operation throughout the region.

A regional transport plan for medically vulnerable individuals that require uninterrupted access to outpatient care, such as chemotherapy or dialysis, may be activated if regular transportation options not be available. This is a limited service intended to support the most urgent of medical needs not otherwise addressed by emergency medical service providers. In the City EOC, ESF-1 and ESF-6 monitor providers of transportation (public and private) to medically vulnerable populations to determine if services are being curtailed due to the storm while ESF-8 and the Northwest Healthcare Response Network request healthcare providers reschedule appointments and identify those individuals that must receive their routine healthcare without delay or interruption.

b. Public Messaging for Snow Events

Key public message topics specific to snowstorms include:

- Shovel sidewalks, curb cuts, and driveways
- Where to find information about the condition of roadways and weather reports
- Location of closed streets
- Warnings about ice falling from buildings
- Protection of water services against freezing (for any sustained cold period, not specifically snow related)

5. Windstorm Response Strategies

Seattle City Light (SCL) responds to power outages.

a. Response Strategies

As soon as possible, areas without power are defined, damaged portions of the electrical power system located, and a strategy for repair and electrical power restoration implemented. Where practical to do so, designated critical facilities are given priority for restoration with the understanding that the entire local distribution system in a given area must be functional in order for electrical power to flow.

Areas without electrical power are displayed on a map which is available on the City website.

SDOT leads the clearing of debris from roadways. Initially, debris is pushed out of the roadway to be picked up later. The SPU Debris Management plan describes how SPU will manage the removal and disposal of debris.

Traffic congestion, due to the traffic control signals being out, can slow crews responding to roadways blocked by debris and to damaged electrical power infrastructure. To address this, Debris Removal Task Forces (DRTF) can be mobilized. The DRTFs include SPD and one or more of the following departments as needed; SDOT, SCL, SPU, and the Parks Department. The DRTFs, escorted by police officers assigned to the task force, can rapidly respond to incidents. This multi-department approach is especially helpful for incidents that involve power lines (SCL response) entangled in debris (SPU and SDOT response) which is blocking a roadway (SPD).

The EOC Planning Section maps the location of critical facilities located in areas without power such as hospitals, dialysis centers, long term care facilities, and others.

Public Health works closely with the healthcare community to identify and address impacts related to the storm. Public Health has two plans that could be used should need arise to evacuate a healthcare facility: the Long Term Care Facility Evacuation plan and the Hospital Evacuation plan. If at all possible, evacuation of these facilities will be avoided.

During an EOC activation the Logistics Section may coordinate the refueling and maintenance of fixed generators through the FAS Facility Operations Maintenance Control Center (MCC). Generator repair and refueling are done through City vendors. If necessary, emergency contracts for rolling stock generators can be made available, however connections for rolling stock generators to buildings' electrical systems may not be in place.. As needed, additional suppliers for mobile fueling can be made available. In a declared emergency by the Governor and Mayor, , these resources, to extent practicable, can be commandeered for public use following Procedures for Commandeering of Private Equipment, Supplies, Facilities, Services and Impressment of Citizens.

The City's water system experiences impacts during a sustained (multiple day) cold weather event. Seattle Public Utilities (SPU) gathers necessary resources to respond to no-water calls due to frozen services, and leak shut-offs. Staff are put onto extended shifts, and may be held over.

Response to water systems leaks may be prioritized differently than normal, depending on the impact to transportation.

b. Public Messaging for Windstorms

Key public message topics specific to windstorms include:

- Warnings about the hazards posed by falling trees, tree limbs, objects, downed power lines, and carbon monoxide poisoning
- Safe operation of generators
- Requests that residents remove debris from sidewalks, curb cuts, and driveways
- Description of the location of areas without power
- Explanation of the cause of the power outage and when electrical power might be restored and where

6. Flooding Response Strategies

Seattle Public Utilities leads the response to local flooding. SPU clears drains, maintains the storm drain system, and addresses ponding and flooding.

a. Response Strategies

SPU monitors weather forecasts and analyzes the potential impacts. The impacts are influenced by precipitation amounts, intensity, duration, and other issues such as leaves along streets and in storm drains. SPU prepares for impending storms by performing pre-storm maintenance to critical facilities.

During a storm crews are dispatched to known flooding sites, and in response to public calls. Priority is given to sanitary back-ups, and to flooding which impedes transportation. System operations are undertaken to maximize storage and pumping, to accommodate increased flow.

SDOT assists with clearing roadways.

SPD assists with identifying flooded areas, closes roadways, and provides traffic and crowd control as needed.

SFD conducts rescues for individuals trapped by water and can pump out flooded critical facilities such as hospitals (limited capacity to do this).

SFD and SPD work together to conduct evacuations of flooded areas.

HSD and Parks Department establish shelters as needed.

Department of Planning and Development (DPD) structural engineers assess buildings for structural damage while SDOT structural engineers conduct assessments of roadways and bridges.

b. Public Messaging for Flooding

Key public message topics specific to flooding include:

- Do not drive/walk through pools of water
- Where to obtain sandbags

7. Landslide Response Strategies

SPU leads the response to landslides. An annual pre-season, landslide planning meeting, hosted by SPU, is attended by Parks Department, SPU, and OEM. These departments use a joint protocol for coordinating the response to a landslide.

a. Response Strategies

Landslides can cover a wide area and impact public and/or private property, block roadways, and sever pipelines, communication lines and electrical lines. Depending on the area impacted, one or more departments may have a lead role in the response; SDOT clears roadways, SPR clears areas involving parks property, while Puget Sound Energy (gas), SPU and SCL address impacts to their infrastructure.

SPU crews respond to evaluate whether water runoff can be directed away from the landslide area.

Geotechnical engineers from several departments, including SPU, SPR and the Department of Planning and Development (DPD) evaluate hillsides for stability and landslide potential.

DPD structural engineers evaluate buildings for structural damage. DPD uses a color coded tag system to identify the status of structures:

- Red = structure is not safe to occupy
- Yellow = limited use of the structure permitted
- Green = structure is safe to use without limitations

SPD assists with traffic and crowd control at landslide scenes.

SFD provides emergency medical response and conducts rescues as needed.

The origin of the landslide determines which department is responsible for follow up and resolution of the incident. Resolution may take weeks or months to determine.

b. Public Messaging for Landslides

Key public message topics specific to landslides include:

- Stay away from unstable hillsides and recent landslide areas
- Obey DPD placards
- Redirection of runoff or drainage water away from slopes

D. Direction and Control

1. All Departments

a. Initial Planning and Preparation.

- Ready department resources for the response to the snow storm, including four wheel drive vehicles, tire chains and windshield fluid
- Take steps to mitigate impact of the storm to service delivery, critical infrastructure and key resources

- When requested, participate with Seattle Office of Emergency Management and other City Departments in planning the storm response
- Notify Seattle Office of Emergency Management if Department Operations Center will be activated, when and at what level of activation and what support is needed from the EOC
- Following guidance provided by the City EOC and in coordination with the Mayor's office, provide employees with updates on storm preparations, as needed
- Coordinate pre-incident City public messaging as defined in initial planning meeting

b. Response (Emergency Operations Center Activated).

- Coordinate public messaging through the Joint Information Center
- OEM coordinates with the Mayor's office on any messaging that needs to go to City employees. For example, employee messaging, leave policy and modification of hours of department operation. It is then shared with City Department Directors for implementation and dissemination within their departments. City Department Directors have the discretion to adjust or modify messaging, hours of operations to personnel, or services based on their mission.
- Coordinate **policy** issues through the Seattle Emergency Operations Center Director.
- Coordinate all storm related mapping through the City Emergency Operations Center Planning Section
- Use WebEOC to share information
- Route requests for emergency plowing in support of critical operations to the Seattle Department of Transportation
- Notify the City Emergency Operations Center and Seattle Department of Transportation if road conditions deteriorate and significantly hinder response operations or delivery of services
- Notify Seattle Emergency Operations Center when Department Operations Center activates
- Notify City Emergency Operations Center of any emergency lodging arrangements for department personnel.
- Notify City Emergency Operations Center of any fatality or significant injury related to the storm
- Closely monitor supply levels and usage rate of wiper blades, windshield washer fluid and tire chains and notify Emergency Operations Center Logistics Section well before critical supplies run low or are expended

2. ESF-1 Transportation (Department of Transportation)

a. Initial Planning and Preparation.

- Provide to Seattle Office of Emergency Management an analysis, based on the weather forecast, of potential impacts to Transportation Department service delivery and impacts to public transit in Seattle and region
- Closely coordinate preparations with King County Metro Transit, Sound Transit and other transportation agencies in the region
- Determine Washington State Department of Transportation strategy for Express Lane operation

- Provide estimate, based on forecast and available resources, of potential impacts to driving conditions and anticipated Service Level on snow routes and update according to the Essential Elements of Information strategy
- Coordinate with Seattle Police Department to ensure sufficient street closure signs are available and distributed to designated locations throughout the City
- Notify Seattle Police Department and King County Metro Transit of anticipated need for assignment of Liaisons – update the Emergency Operations Center when liaisons are activated
- In coordination with City pre-incident public messaging strategy, develop and disseminate public messaging regarding transit services
- Determine need to assign a King County Metro Transit Liaison to the Seattle Department of Transportation Department Operations Center
- Ensure Seattle Public Schools notifies the Emergency Operations Center of any school closures or modification to hours of operation.

b. Response (Emergency Operations Center Activated).

- Closely coordinate operations with King County Roads Division, Washington State Department of Transportation, other transportation agencies in the region, King County Metro Transit, Sound Transit and other transit agencies to support transit operations
- Monitor and provide updates on the status of rail, intercity bus service, taxi, marine and air transportation providers
- Notify the Seattle Emergency Operations Center of any changes in King County Metro service levels
- Coordinate requests to King County Metro Transit for heavy duty tow service, on an emergency and as available basis, for fire trucks
- Closely coordinate operations with Seattle City Light to determine priority of handling downed power lines so key transportation routes can be reopened in a timely manner
- Provide regular and frequent updates to the City Emergency Operations Center on road conditions, the status of storm operations and problems encountered
 - Maintain and update online mapping system
 - Maintain and update the Master Street Closure List
- Ensure Seattle Public Schools notifies the Emergency Operations Center of any changes in school bus schedules, students sheltered at schools or students stranded on buses.
- Rapidly address requests for emergency street clearing from the Police Department, Fire Department, Public Health Seattle and King County or others
- Assign highest priority to, and at the expense of snow plan operations if necessary, supporting life safety requests for assistance such as mass casualty incidents, hostage situations and fires

3. ESF-2 – Communications (Department of Information Technology)

a. Initial Planning and Preparation

- Review and update list of vendors and communication contacts for use during winter weather EOC activations.

b. Response

- Monitor all communication modes (radio, telephone, networks/servers, etc) for impacts, especially power outages

4. ESF-3 Public Works and Engineering (Seattle Public Utilities)

a. Initial Planning and Preparation.

- Provide to Seattle Office of Emergency Management an analysis, based on the weather forecast, of potential impacts to water, waste water and solid waste service delivery
- In coordination with City pre-incident public messaging strategy, develop and disseminate public messaging regarding frozen or burst water pipes and solid waste pickup

b. Response (Emergency Operations Center Activated).

- As needed, activate Department Operations Center to coordinate internal operations and with other departments
- Notify the City Emergency Operations Center and Public Health Seattle and King County of significant water or sewer service outage, outages known to impact a health care facility or if solid waste pickup will be delayed
- Be prepared to provide equipment and crews to assist with snow and ice removal in support of Seattle Department of Transportation operations

5. ESF-4, 9, 10 Firefighting, Search and Rescue, Oil and Hazardous (Seattle Fire Department)

a. Initial Planning and Preparation.

- Provide to Seattle Office of Emergency Management an analysis, based on the weather forecast, of potential impacts to Fire Department service delivery
- Coordinate with Public Health Seattle and King County on public messaging regarding carbon monoxide poisoning

b. Response (Emergency Operations Center Activated).

- As needed, activate Department Operations Center to coordinate internal operations and with other departments
- Immediately notify the Emergency Operations Center of developing critical incidents with a potential for cascading impacts
- Maintain capability to respond to calls for service
 - Notify City Emergency Operations Center if trends develop which indicate emergency calls for service may be significantly delayed Contact Seattle Department of Transportation to request emergency plowing assistance
 - For fire trucks that become stuck in the snow consider requesting heavy duty tow trucks from King County Metro

6. ESF-5 (Emergency Management)

a. Initial Planning and Preparation.

- Monitor and notify, as needed, City department and regional partners about the potential for a winter storm
- Host the National Weather Service Webinar at the City Emergency Operations Center and notify City departments of the Webinar forecast
- Facilitate the City initial planning meeting
- In coordination with the Mayor's Office, define City public and employee messaging strategy
- Provide regular updates, as needed, to City departments on the storm forecast, potential impacts, storm preparation activities and anticipated response operations.
- Coordinate development and distribution of the City Consolidated Action Plan and Essential Elements of Information guide
- Configure WebEOC (Base and Sub-Incidents)

b. Response (Emergency Operations Center Activated).

- Assign Office of Emergency Management Staff Duty Officers to general staff positions in the Emergency Operations Center
- Update Essential Elements of Information guide as needed
- Develop and distribute Snapshot and Situation Reports
- Coordinate response mapping
- Develop and distribute Consolidated Action Plans
- Coordinate with King County Office of Emergency Management
- Coordinate public and employee messaging through the Joint Information Center
- Coordinate Auxiliary Communication Service operations

7. ESF-6 Mass Care, Housing and Human Services (Seattle Human Services Department)

a. Initial Planning and Preparation.

- Provide to Seattle Office of Emergency Management an analysis, based on the weather forecast, of potential impacts to vulnerable populations, human service agencies and ESF-6 departments' services (Parks, HSD, Libraries, Seattle Center, DON, Seattle Animal Shelter, Office of Housing)
- In coordination with City pre-incident public messaging strategy, develop and disseminate public messaging regarding warming shelters and other related topics
- Develop and maintain list of locations and capacity of current and potential warming shelters
- With support from Finance and Administrative Services, arrange for front or four wheel drive vehicles, chains etc for HSD Aging and Disability Services outreach workers

b. Response (Emergency Operations Center Activated).

- Monitor ESF-6 and human services agencies ability to deliver services
- Continue assessing and reporting to the EOC impacts to vulnerable populations
- Coordinate establishment of shelters or other mass care support as needed
- Monitor mobility issues and transportation systems that support vulnerable populations, and notify City Emergency Operations Center of developing issues

8. ESF-7 Resource Support (Finance and Administrative Services)

a. Initial Planning and Preparation.

- Review and update list of department fleet coordinators and review vehicle rental procedures and contracts
- Review emergency contracting and purchasing guidelines and policies, and update the website
- Assist departments with preparing vehicles and facilities
- Review and update inventory of winter storm supplies such as chains, wiper blades, fluid, snow shovels, and salt
- Ensure emergency generators are ready and City vendor contracts in place for repair and refueling
- Ensure Finance and Administrative Services supported facilities have sufficient winter storm supplies per plan
- Ensure City Contracts for generators, fuel delivery, snow removal supplies, equipment/vehicles rentals, towing, snow removal, snow plowing services and lodging are in place

b. Response (Emergency Operations Center Activated).

- Closely monitor reports from departments on burn rate of key supplies and arrange for resupply as needed
- Notify departments of extended hours of operation for vehicle maintenance shops.

9. ESF-8 Public Health and Medical Services (Public Health Seattle and King County)

a. Initial Planning and Preparations.

- Provide to Seattle Office of Emergency Management an analysis, based on the weather forecast, of potential impacts to healthcare community
- In coordination with City pre-incident public messaging strategy, lead the development and dissemination of carbon monoxide warning messages
- Develop and distribute other relevant health alerts according to public information strategy

b. Response (Emergency Operations Center Activated).

- As needed, activate Health and Medical Area Command to coordinate internal operations and with other jurisdictions and departments.
- In coordination with Northwest Healthcare Response Network, monitor emergency room services, blood bank, dialysis centers and other critical healthcare services for potential disruption and notify City Emergency Operations Center
- Rapidly evaluate impact of utility service interruptions on affected health care providers
 - Monitor Seattle City Light System Status website
 - Immediately notify the Emergency Operations Center of developing critical incidents with a potential for cascading impacts
- Closely monitor and report number of carbon monoxide cases
 - Notify Seattle Joint Information Center

- Address, and if needed, route to the City Emergency Operations Center for assistance, requests for non-medical logistical support from health care providers
- Coordinate messaging through the Seattle Joint Information Center with Health Department as lead for messaging related to Carbon Monoxide poisoning

10. ESF-12 (Seattle City Light)

a. Initial Planning and Preparation.

- Provide to Seattle Office of Emergency Management an analysis, based on the weather forecast, of potential impacts to electrical service delivery
- In coordination with City pre-incident public messaging strategy, develop and disseminate public messaging regarding power outages

b. Response (Emergency Operations Center Activated).

- As needed, activate Department Operations Center to coordinate internal operations and with other departments
- Notify the City Emergency Operations Center and Public Health Seattle and King County of significant interruptions to electrical service delivery
- Closely coordinate with Seattle Department of Transportation to determine priority for clearing downed power lines so key transportation routes can be reopened in a timely manner
- Be prepared to provide equipment and crews to assist with snow and ice removal in support of Seattle Department of Transportation operations

11. ESF-13 (Seattle Police Department)

a. Initial Planning and Preparation.

- Provide to Seattle Office of Emergency Management an analysis, based on the weather forecast, of potential impacts to Police Department service delivery
- Coordinate Seattle Department of Transportation Department and determine if or when a Police Department Liaison will be needed in the transportation operations center
- Coordinate with Department of Finance and Administrative Services regarding extended hours of operation at Charles Street and Haller Lake facilities. Arrange for emergency vehicle chain up at vehicle maintenance shops or utilize City towing vendor for support at precincts.
- Inventory cache of street closure signs stored at precincts and request replacements as needed from Seattle Department of Transportation

b. Response (Emergency Operations Center Activated).

- As needed, activate Department Operations Center to coordinate internal operations and with other departments
- Assign priority to requests from Seattle Department of Transportation or King County Metro for assistance with abandoned vehicles impacting snow and bus routes
- Immediately notify the Emergency Operations Center of developing critical incidents with a potential for cascading impacts

- Maintain capability to respond emergency calls for service
 - Notify City Emergency Operations Center if trends develop which indicate emergency calls for service may be significantly delayed Contact Seattle Department of Transportation to request assistance with vehicle access to police facilities and emergency plowing assistance
- Be prepared to assist if resources allow, with implementing the plan to restrict Express Lane access to emergency and transit vehicles
 - Requires assignment of officers to traffic control posts at on ramps
- If resources allow, and if deemed safe to do so, provide escort of Seattle Department of Transportation vehicles
- If resources allow assist with closure of critical transportation routes such as the Viaduct, West Seattle Bridge or others
- Provide regular and frequent updates to the Seattle Department of Transportation on locations of closed roads using SharePoint
- When requested, provide report on weather, road conditions and snow depth, to the Seattle Department of Transportation and the City Emergency Operations Center via the Seattle Police Department Dispatch Center or the Operations Center.
- When requested, assign a liaison from Traffic (or Patrol if not available) to the Seattle Department of Transportation
- When requested, assist with locating and reporting the location of abandoned buses

12. ESF-15: Public Information

a. Initial Planning and Preparation

- Prior to activation, assign a lead PIO to coordinate pre-event messaging and serve as a point of contact for media inquiries. This individual should come from the Department which has lead of the hazard.
- Brief department PIOs on the situation.
- Develop a staffing plan consisting of PIOs from City departments to staff the Joint Information Center when the EOC activates.
- Participate in planning meetings, facilitated by OEM, to develop the response plan.
- Coordinate with partners at King County and the State as necessary.
- Briefing the EOC Director on the plan for JIC operations
- Finalize and push any pre-event messaging to internal and external stakeholders including the media through the lead PIO.

b. Response

The JIC, staffed by PIOs from City departments, is the primary site and source of public information to the community using a variety of communications channels. Leveraging their combined expertise, the PIO team provides timely, accurate, and comprehensive information to the public. Public messaging activities include:

- Refine messaging with the Mayor's Office and EOC ESF Representatives as needed based upon impacts and actual conditions.
- Monitor media and social media.
- Coordinate with the Mayor's office and key Department representatives to ensure coverage for on camera or phone interviews with the media.

- Develop and disseminating the City’s public messages
- Integrate public messaging strategy with other response operations
- Coordinate messaging with regional counterparts
- Brief EOC staff on how the City’s messages are being received by the community
- Contribute to the development of EOC Snapshot and Situation Reports
- Maintain direct contact with mainstream (TV, radio, newspapers), alternate (social, including blogs and on-line) and ethnic (as maintained by the Mayor’s Office of Immigrant and Refugee Affairs (OIRA) media sources from local, regional and international organizations.
- Ensure that key messages, especially those pertaining to life safety issues are translated into Tier 1 and Tier 2 languages.
- Guided by the City’s Inclusive Outreach and Public Engagement (IOPE) policy, ensure emergency information gets out to as broad a base as possible using OIRA, the Community Communications Network (CCN), which is managed and maintained by Seattle-King County Public Health, and other available forums
- Ensure that public messaging is accessible to all parts of the community, such as providing American Sign Language (ASL) interpreters, for any emergency news conference.

PIOs can use several outgoing communications channels to reach external audiences, including, but not limited, to, news releases; Seattle Channel; the City’s public Web site; Emergency Alert System (EAS), the alerts.seattle.gov blog; social media, such as Twitter and Facebook; regional communications channels, such as King County Metro listservs and Govlink; and resident information lines.

V. ADMINISTRATION AND LOGISTICS

The Seattle Office of Emergency Management will have primary responsibility for this annex and will ensure it is reviewed on a regular basis and updates made as necessary to ensure guidance contained in this document remains current.

VI. REFERENCES

- Seattle Disaster Readiness and Response Plan Volume I and II
- Seattle Hazard Identification and Vulnerability Analysis
- 2014-2015 Seattle Department of Transportation Winter Weather Readiness and Response Plan
- King County Comprehensive Emergency Management Plan
- Winter Response Plan for Homeless Persons, City of Seattle
- 2008 Winter Storm Corrective Action Plan

VII. APPENDIX 1 - WINTER STORM EVENT CHECKLIST

TRIGGERS FOR INITIAL ACTION:

- “Winter Weather Advisory” issued by National Weather Service; freezing rain and/or snow anticipated in the lowlands
- 32 degrees freezing temperatures sustained for 2-days straight (daytime temps don’t rise above freezing)
- Rainfall of greater than 2-3 inches in 24 hour period causing urban flooding and impacts at known sites
- “Wind Advisory” issued by National Weather Service; sustained winds 25 to 39 mph and/or gusts to 57 mph
- USGS landslide threshold; increased landslide hazards and City landslide coordination occurring

PREPAREDNESS (HAZARD ASSESSMENT, SITUATIONAL AWARENESS, INITIAL PROTECTIVE ACTIONS)

- ❑ **Send Inclement Weather Guidelines to All OEM Distribution Groups**
- ❑ **Prepare for Initial Planning Meeting** OEM
Gather short and long-term weather forecast -identify the onset, type, severity and duration, and accumulation to occur (snow, ice, high winds, severe cold temperatures), gather SDOT, SCL and SPU’s specific weather analysis and their assessments on impacts to respective infrastructure and systems, identify planned events, conduct initial briefing with SDOs to prep for planning meeting, arrange for meeting room/conference bridge use, send out initial meeting notification to Dept Reps/ attendees
- ❑ **Conduct Initial Planning Meeting OEM (lead) & All Departments (Dept Reps/Agencies and ESFs)**
Recommended Attendees: SDOT, SCL, SPU, Police, KC Metro, Human Services, Public Health, Fire, Parks,
Agenda:
 - Review weather forecast
 - Review list of upcoming planned events
 - Update list of where people can go to get warm; confirm with sites they will be open; post and disseminate list
 - Identify potential impacts (power outages, health care facilities without heating, homeless, at risk populations)
 - Identify any “Customer Care” concerns and issues
 - Review EOC standard “Common Operational Objectives” and update, as needed along with identifying strategies:
 1. Develop and maintain situational awareness.
 2. Develop and implement city-wide strategy for response and recovery.
 3. Coordinate communications between city departments, external agencies and the community.
 4. Promote unity of effort with City Departments and external agencies.
 5. Address impacts to community in comprehensive manner.
 - Identify actions expected and/or underway
 - Determine if any initial assistance/resources needed
 - Determine plan for coordinating public information
 - Communicate key safety and department preparedness messages to public
 - Identify contacts and method(s) between jurisdictions for coordinating and/or sharing the release of statements
 - Develop strategy to outreach to all sectors of community
 - Provide key contact departmental numbers and weblinks
 - Develop standard list of key messages for the Mayor to deliver
 - Identify any policy concerns and/or issues – Assemble / Notify Emergency Executive Board as needed
 - Address procedures on reimbursement for response costs
- ❑ **Develop and Distribute initial Consolidated Action Plan**.....OEM
Partners such as community organizations, schools, hospitals, and chamber/business partners
- ❑ **Create WebEOC incident and send notice to DMC/Dept Directors, etc.** OEM
- ❑ **Report on Preparatory Steps Being Taken** All Departments

- ❑ **Activate necessary Department Operation Centers (DOCs)** OEM & All Departments
 - Notify OEM Staff Duty Officer (SDO) / EOC when activated
 - Establish communications
 - Identify initial actions
- ❑ **Notify Auxiliary Communications Service (ACS) Team** OEM
- ❑ **Communicate with City employees** OEM Director, Department Directors & Policy
Mayor communicates expectations of employees and directs Dept Directors to adjust necessary staffing levels
- ❑ **Track costs** OEM & All Departments
Items: Emergency protective measures and potential uninsured property damage; potentially ensure post-event reimbursement.

RESPONSE (ACTIVATION, NOTIFICATIONS, OPERATIONAL & PLANNING ACTIONS)

- ❑ **Activate EOC** OEM, Departments & Policy
 - Department Representatives (recommended): SDOT, SCL, SPU, Police, Fire, HSD, Public Health, Parks, Transit
 - Coordinate city-wide response and recovery efforts
 - Notify Mayor, Council and policy levels
 - Request ESF and Department representatives
 - Request activation of joint information system and center
 - Notify departments, King County, WA State, partners
 - Establish communications and check-in with activated DOCs
 - Confirm activation timeframe, operational periods and staffing needs
- ❑ **Establish contact with partner agencies as well as Departments** OEM & All Departments
- ❑ **Establish situational awareness and analysis** OEM & All Departments
 1. What is the situation?
 2. What are the impacts?
 3. What are we doing about it?
 4. What are your unmet needs and the urgency of those needs?
 5. Are you mobilizing beyond current on-duty personnel? If yes, specify.
 6. Are you able to maintain normal service delivery? If not, what has changed?
 7. What information needs to be shared with public?
 - Develop/Update Essential Elements of Information and disseminate; monitor weather
 - Identify current and anticipated impacts to department operations
 - Identify department operations affecting/affected by other department operations
 - Identify current and anticipated impacts to homes, business, critical infrastructure, etc.
- ❑ **Establish Consolidated Action Planning process** OEM & All Departments
 - *Mission:* The mission of the Seattle EOC is to minimize the impact of emergencies and disasters on the community through coordinated planning, information-sharing and resource management between all City departments, partnering agencies and the public.
 - Identify and/or modify objectives

Emergency Operations Center – Section Responsibilities

PLANNING ISSUES (ANTICIPATE THE NEAR AND LONG TERM NEEDS)

- ❑ Continued weather forecast
 - ❑ Anticipated service level disruption – (including Libraries, Neighborhood District Centers, School District)
 - ❑ Contingency plans (power outage, transit disruption, special event impacts, loss of heating/water flow at health care facilities/critical infrastructure, cold temps for homeless population and at risk population outreach and impacts)
 - ❑ Anticipated “Customer Care” issues and concerns
 - ❑ Policy decisions list
 - ❑ Transitions within the EOC (staffing, rehab, IT, etc.)
- Public Information Issues (strategize, anticipate needs, and confirm how information is getting to the right people)

- Carbon monoxide poisoning prevention & power outage safety
- Waste management issues / garbage services
- Sites to get warm / If opened, shelter locations and hours of service
- Services open (or closed). Phone number/web site/contact for more information or to report information.
- Encourage citizens to check on one another and vulnerable neighbors
- Maintain and update list of key messages for the Mayor to deliver
ESF/Operational/Logistical Issues (creative, collaborative problem-solving)
- Confirm SDOT and King County Metro Transit Memorandum of Understanding is implemented; exchange of liaisons
- If City employees released, notify King County Metro as influx impacts their service delivery
- FAS/Maintenance staff support SPU, SPD, SFD; Adequate fueling capacity and diesel impacts and chain and salt supplies
- Determine overall city-wide lodging/hotel management and food service for operational city workers Address employee transportation options (city vehicles, staff with 4x4s, cross-department coordination)
- Maintain employee worker safety messages – reporting to work, preparedness, medications, etc.
- Need for claims adjustors
- Vulnerable populations concerns (elderly, SHA facilities, homeless, English not a primary language, etc.)
- Shelter locations – media, King County hot line, City web page, 2-1-1
- Shelter types – overnight, warming, recharging sites, pet, alternate care facilities, severe weather shelters for homeless
- Deployment of generators and ongoing fueling (Use of District Service Centers to post information regularly)

RECOVERY (SERVICE LEVELS, INDIVIDUAL/COMMUNITY ASSISTANCE, CITY/PUBLIC AGENCY ASSISTANCE, ECONOMIC/BUSINESS RESUMPTION)

- Conduct Hotwash**.....**OEM & All Departments**
- Disseminate After Action Report/Improvement Plan instructions**.....**OEM & All Departments**
- Demobilize and notify DMC, Dept Directors, appropriate agencies** **OEM & All Departments**
Department Operations Centers and Emergency Operations Center
- Prepare costs and documentation** **OEM & All Departments**
Anticipate of federal/state cost recovery
- Notify the public and agencies of return to normal service**.....**OEM & All Departments**

APPENDIX 3 – EARTHQUAKE INCIDENT ANNEX

Begins On Next Page

City of Seattle Comprehensive Emergency Management Plan

Emergency Operations Plan Earthquake Incident Annex

Prepared by
Seattle Office of Emergency Management

Updated November 2012

EARTHQUAKE INCIDENT ANNEX

PRIMARY DEPARTMENT:

*Seattle Fire Department
Seattle Office of Emergency Management*

SUPPORT DEPARTMENTS AND AGENCIES:

All City Departments

I. INTRODUCTION

A. Purpose

1. To enable coordinated, multi-department, multi-jurisdictional response to an earthquake. It applies to all City Departments and provides information to all partners that support or depend on the City response.

B. Scope

1. This Annex is part of the Seattle Disaster Readiness and Response Plan (SDRRP). It addresses the challenges posed by the following hazards:
 - a. Earthquake and associated aftershocks, tsunamis, seiche, landslides, liquefaction, subsidence
 - b. The primary focus of this plan is a severe earthquake that causes large numbers of casualties, widespread damage, and catastrophic impacts
2. This plan is a guide which should be adapted as needed to meet conditions at the time of the response.

II. POLICIES

A. Authorities

1. See Seattle Disaster Readiness and Response Plan Volume I.

B. Limitations

1. The City will endeavor to make every reasonable effort to respond to an earthquake and related hazards. However, City resources and systems may become overwhelmed by the magnitude of the disaster and its impacts. This planning represents guidelines and is not intended to guarantee that a perfect response to this type of disaster will be practical or possible.

III. EARTHQUAKE HAZARDS

A. Seattle Region

1. Possible immediate impacts
 - a. Large numbers of dead, injured and missing
 - b. Multiple structures collapsed or severely damaged
 - c. Many people trapped in collapsed structures, including elevated structures such as roadways, requiring rescue
 - d. Multiple fires

- e. Damage to fire detection and suppression systems
 - f. Damage to the waterfront area
 - g. Flooding of waterfront area and around lakes
 - h. Localized flooding from ruptured water pipes, damaged reservoirs or tanks
 - i. Interruption of utility services for days, or even weeks to include electrical, water, natural gas, solid waste, sewer
 - j. Shortage of water, food and other commodities
 - k. Shortage of gasoline and diesel fuel
 - l. Hazardous materials release
 - m. Overloaded telephone systems (wired and wireless)
 - n. Interruption of commercial television and radio service
 - o. Disruption of information technology services
 - p. Separated family members
 - q. Large numbers of missing persons
 - r. Widespread damage to roads and bridges
 - s. Isolated neighborhoods
 - t. Diminished healthcare capacity caused by damage to medical facilities and loss of medical supplies and medications
 - u. Reduction in emergency service capacity due to injured responders or damage to stations and equipment
 - v. Lost animals
2. Possible long term impacts:
- a. Businesses failing due to economic impacts
 - b. Increased unemployment
 - c. Elevated risk of disease
 - d. Increased rates of general illness and mortality
 - e. Mental health issues due to the disaster and aftermath
 - f. Increased homelessness
 - g. Increased traffic congestion
 - h. Decreased tax revenue
 - i. Decreased residential population
 - j. Loss of some seaport customers to other ports
 - k. Large number of structures, public and private in need of extensive repair

IV. SITUATION AND ASSUMPTIONS

A. Earthquake

1. A catastrophic earthquake could occur in the Seattle area without warning and at any time.

B. Planning Assumptions

1. A detailed and credible common operating picture may not be achievable for 24 to 48 hours, or longer, after the earthquake – response operations may have to begin without a complete or detailed situation and critical needs assessment.
2. Staffing varies in many City departments depending on the time of day, should an earthquake strike at the time of lowest levels of staffing the response will be significantly impaired until off duty personnel can respond.

3. There are not enough City public safety resources to immediately address all, or even a majority, of the life safety needs expected after a severe earthquake.
4. Fires are the leading danger immediately following an earthquake due to the expected number of fires, damage to fire suppression systems, damage to water pipelines, difficulty in accessing fire incidents and limited resources.
5. The number of expected deaths will likely exceed the capacity of the Medical Examiner's Office, as well as any local mutual aid that office might call upon, which will require the mobilization of federal resources, establishment of temporary morgues, and instructions to the public on fatality management.
6. The 911 phone system, if operating, will be overloaded.
7. During the initial response, the amount of radio use by responders will likely overload the 800 MHz radio system.
8. The limited capacity in the region for charging portable radio batteries and the expected high tempo of operations will make it difficult to keep City 800 MHz portable radios charged.
9. Departments should expect to receive no logistical support from the City Emergency Operations Center for 72 hours.
10. Damage to City owned buildings may impact the ability of City employees to effectively respond.
11. Traffic congestion will be significant due to roadway damage which can impact operations such as the establishment of shelters.
12. The University of Washington, a State institution, located within the jurisdiction of the City with its own Emergency Operations Center, relies on the City to provide water, electricity, sewage, fire response and some law enforcement specialized services – careful coordination will be needed between the City and the University to ensure effective operations.
13. Helicopters may be needed to support operational and logistical needs due to extensive road and bridge damage.
14. The City does not stockpile food or water for the general public.
15. Generally, City departments either do not stockpile supplies of emergency food and water for responders or if they do, only have a limited amount.
16. The level of personal preparedness by the public is insufficient to significantly decrease the need for public services.
17. Hospitals may not have sufficient capacity to meet the surge in patient demand.

18. Many organizations, public and private, routinely use “just in time” ordering and do not generally stockpile significant amounts of supplies; after an earthquake shortages of critical items, such as medical supplies are likely.
19. The City’s information technology systems do not have an alternate site location capability for the City’s data center located within Seattle Municipal Tower which will delay recovery of the computer infrastructure should the data center sustain damage during the earthquake.
20. Many City employees live outside of the City and will experience significant delays getting to/from home and work.
21. Damage to water utility infrastructure may impair firefighting.
22. Numerous initial, separate fires may combine to create extremely large fires.
23. The generally cold and wet climate and interruption of water, sewer, electrical and natural gas service may increase the number of individuals in need of immediate shelter following an earthquake.
24. Spontaneous shelters will likely be established by private entities not in coordination with government.
25. The number of individuals seeking shelter will exceed the City’s emergency shelter capacity.
26. It will take several days to establish shelters.
27. There is a large population of individuals in Seattle with access and functional needs that must be addressed during disaster response and recovery.
28. Seattle has approximately 800 unreinforced masonry buildings which are at risk of significant damage or collapse during an earthquake.
29. Social media will be an important source of information for the general public, however the accuracy of social media reports may cause confusion.
30. Missing person reports could number in the hundreds to thousands.
31. The private sector will volunteer assistance to the response effort and provide contract services; which will require coordination with the public response.
32. Many individuals will volunteer to assist with the response; while this represents a potential resource it will also present significant operational and logistical challenges.
33. Donated goods, solicited and unsolicited, may present a significant challenge to manage.

34. Communications and collaboration methods which depend on the Internet or Information Technology infrastructure may be impacted and compromised by virtue of physical damage, over use and heavy traffic, and possibly malicious use by those hoping to take advantage of the disaster. They may require an extended period of time and extensive resources to return to even a minimal level of availability, function and security.
35. Neighboring jurisdictions will also be impacted, limiting the availability of mutual aid, and making it important to coordinate regional response operations through the King County Emergency Communication Center.

V. CONCEPT OF OPERATIONS

A. Elements of an Effective Response

1. Factors necessary for an effective response to a major earthquake:
 - a. City employees who know their role during a disaster and have been provided training and are personally prepared
 - b. A large percentage of the public who are prepared to survive without outside assistance for a minimum of three days and possibly several weeks
 - c. A unified response, at all levels government
 - d. Responders who are prepared to act without delay
 - e. Timely, accurate and comprehensive public information to assist the public in meeting their own needs
 - f. Redundant systems and procedures in place to ensure continuity of command, control, coordination and communications

B. Earthquake Response Goals

1. Saving and protecting the greatest number of people at risk
2. Provide for the safety of responders and other City employees
3. Saving and protecting as much critical infrastructure as possible
4. Saving and protecting as many residential, business and industrial properties as possible
5. Stop the spread of environmental damage
6. Minimizing human hardship and economic disruption

C. City Response Priorities

1. Life Safety
2. Incident Stabilization
3. Property Conservation
4. Environmental Protection

D. Initial City Objectives For Earthquake Response

1. Initial City objectives provide a starting point for the response and will be modified as needed.
 - a. Support a City strategy for firefighting, emergency medical service, rescue and hazardous material response
 - b. Assess damage and impacts to community

- c. Provide sheltering in coordination with regional efforts
- d. Sustain public confidence and trust in response and recovery efforts
- e. Ensure life sustaining essentials are available to the public such as food, water, sanitation, medical care and fuel
- f. Sustain situational awareness for City response and recovery

E. City Strategy

Even in an earthquake with catastrophic impacts, the City will retain jurisdiction and authority over the response and recovery efforts. This will be accomplished by maintaining a line of succession throughout City government, clearly defining areas of operation and responsibility, establishing alternate command centers, augmenting command and general staff using Mutual Aid resources, Incident Management Teams or Emergency Management Assistance Compact teams and delegating authority where needed.

On duty personnel will be responsible for the first hours of the response. The initial common operating picture will be imperfect due to the many challenges that will follow an earthquake. It will be based primarily on windshield surveys conducted by the Police and Fire Departments and possibly some early media reports.

The initial City response to an earthquake consists of supporting and coordinating life safety efforts; controlling fires, addressing hazardous materials releases, providing emergency medical care, ensuring access to hospitals, conducting rescues and evacuations and maintaining public order. Damage to dams, water storage facilities or large pipelines may require immediate response operations to address hazards from local flooding and landslides.

Responders may have to make difficult choices regarding where to assign the limited resources available. Close coordination and unity of effort between all responders will be especially critical.

Repair of roads and bridges and water service to support life safety response operations will have priority over other repair missions.

To support the response, the first public message will be broadcast within the first hour following the earthquake. The first message will include instructions to limit travel on roadways and use of the phone system.

Concurrent with these early response operations, command centers will be activated, damage or impacts to infrastructure, facilities and systems determined, a more comprehensive common operating picture developed, City objectives and priorities established, resources obtained, an emergency proclamation issued and emergency powers implemented as needed.

Given the generally cold and wet climate and the time needed to establish shelters, efforts will be begin as soon as possible to access and assess the cache of shelter supplies, inspect for damage those buildings designated as shelter sites and begin the mobilization of shelter staff. The strategy for sheltering will be determined during the first operational period in the Emergency Operations Center.

Communication and coordination with neighboring jurisdictions and the State will be established as early as possible. The plans and logistics necessary to address the best use of private sector, State and Federal resources will be coordinated from a strategic level through the City Emergency Operations Center.

As resources arrive from outside the City, they will be integrated into response operations as directed in the City Consolidated Action Plan and, where appropriate, individual Incident Action Plans in order to ensure a coordinated and unified response. City and mutual aid responders will work within established areas of operation and under designated command organizations as defined by the City. Self deployment of resources will not be tolerated.

As immediate life safety issues are addressed and stabilized, the number of shelters established and their capacity will be increased as rapidly as available resources permit. To the degree practical, shelters will be established nearest to the community in need. Residents will be encouraged to remain in their homes if at all possible. Points of Distribution for food and water may be established for this purpose.

Fatality management and missing person investigations will be established as early as possible. An effective process for determining the status of missing persons contributes to stabilization and ultimately decreases the demand on law enforcement, medical and rescue resources. The City will advocate for a regional approach to fatality management and missing person investigations in order maximize limited resources, provide for a consistent approach and high quality of service. Public Health will lead this mission with close support from ESF-13 and ESF-15.

Planning for recovery will begin as soon as possible and in parallel to response operations.

Given the potential for the disaster to overwhelm responders, every effort should be made to enlist the support of the community, where practical and safe to do so. Some examples are; encouraging individuals to clear their streets and sidewalks of debris, marking hazards, checking on neighbors, assisting the elderly or disabled, helping to move rubble at rescue locations, providing shelter to friends who are homeless.

F. Trigger for Response

City departments will err on the side of caution and be proactive when determining what initial actions to take following an earthquake.

1. Departments will initiate response operations when an earthquake occurs that may have caused damage or impacts to City facilities, systems or services
2. Department Emergency Support Function Representatives and Office of Emergency Management Staff Duty Officers will automatically respond to activate the Emergency Operations Center immediately following an earthquake that may have caused damage or impacts to City facilities, systems or services

G. Common Operating Picture

Departments will exchange information on damage and impacts to systems through the most effective communication method available at the time. Once Department Operations Centers and the Emergency Operations Center are activated, these reports will be consolidated into Snapshot and Situation Reports. The goal is to develop a Common Operating Picture that includes an understanding of the extent of damage and impacts to people, systems and services.

1. Emergency Operations Center Planning Section is responsible for gathering, analyzing and disseminating information about damage and response efforts citywide
2. Damage reporting and system assessments begin immediately after the earthquake and may take days to complete. Some cannot be done at night. Following an aftershock, some of these may have to be repeated. Building habitability must be considered in addition to structural integrity. There are several types of reports:
 - a. Windshield Assessments
A rapid survey for fires, damage and the injured along designated routes conducted by Seattle Police and Fire Department personnel immediately following the earthquake which provides an overview of damage to the City and guides the initial assignment of police and fire resources
 - b. News Media
All media report on damage and impacts soon after the earthquake strikes
 - c. Building Surveys
Performed on City owned buildings by department employees on site that provides a brief overview of damage and habitability
 - Parks Department, Seattle Center, Library, Department of Transportation, Seattle Public Utilities and Seattle City Light, Seattle Fire Department and Seattle Police Department
 - d. Aerial Survey
King County Sheriff Office Guardian One can provide a helicopter survey of the City with video downlink, other options for aerial survey include other jurisdiction helicopter, WSP fixed wing, private contractor aircraft or Unmanned Aerial Vehicles (UAV)
 - e. Rapid Evaluation – Advisory (voluntary tags)
Finance and Administrative Services personnel trained in ATC 20 post earthquake safety evaluation methodology assess the structural safety of facilities managed and operated under its jurisdiction - at the end of this evaluation an advisory tag will be posted with listed recommendations for acceptable use.
 - Compliance with these tags is voluntary.
 - f. Rapid Evaluation – Placard (mandatory tags)
Damage evaluation of City or other critical buildings, conducted by Department of Planning and Development teams trained in the ATC 20 process who post Placards describing what is considered lawful use of the building
 - Failure to comply with Placard instruction is unlawful
 - g. Infrastructure Inspections
Inspection of critical infrastructure such as roads, bridges, pipelines by specially trained individuals
 - Seattle City Light, Seattle Public Utilities, Seattle Department of Transportation, Puget Sound Energy, Seattle Steam, Hospitals
 - h. Jurisdiction Evaluations and Inspections
Damage evaluations and inspections conducted by neighboring jurisdictions which is reported to King County Emergency Coordination Center
 - Some information is exchanged between specific sectors such as between City Light and Bonneville Power Administration
 - University of Washington
 - Port of Seattle
 - i. 911

- The public will report damage through the 911 system
- j. Social Media Reporting
Social media sites, within minutes, begin to voluntarily collect, organize and post damage information which can include text descriptions, maps of damaged locations and photographs or video
 - k. Private Evaluation
Damage evaluation of private property conducted by private engineers hired by building owners.
 - Similar to the Rapid Evaluations-Advisory process described above, or more comprehensive assessments to develop a plan to repair a building and to resolve restrictions listed on Placards posted by Department of Planning and Development
3. Rapid Evaluation Priorities
Evaluations will be prioritized to support City objectives as defined in the Consolidated Action Plan.
 - a. Department Building Surveys inform the decision to assign priority
 - For example: a Building Survey report that a building has collapsed will cause it to be removed from the evaluation list
 4. Infrastructure Inspection Priorities – In Order
 - a. Emergency requests to support life safety operations
 - b. Individual department strategy for restoration of critical infrastructure

H. Response Operations

1. Dispatch Centers
 - a. Immediately following the earthquake Dispatch Centers will request all units limit radio traffic to prevent system overload
 - b. Calls for service will be prioritized as directed by internal department plans, procedures or as directed
2. Field Responders
 - a. Field Response Units that become geographically isolated and are unable to communicate with their Dispatch Center, Department Operations Center or their chain of command shall meet at the local Fire Department Battalion Station to coordinate operations
 - b. Administrative staff and other support personnel should to their regular assigned work location – not the Battalion Station
3. Fire, Rescue, Emergency Medical and Hazardous Materials
 - a. Fire Alarm Center may discontinue dispatching and direct all units to account for their personnel, assess their stations for damage and drive their Life Safety Damage Assessment Routes
 - b. While conducting their assessment, fire department personnel may have to bypass emergencies
 - c. Based on the damage information obtained from the assessments, Fire Department personnel will determine the initial strategy for response
 - d. Deputy One is in command of Fire Department resources until relieved by the Assistant Chief of Operations
 - If communication systems are inoperable Fire Department units will coordinate at the Battalion level
4. Law Enforcement

- a. The 911 Center may discontinue dispatching and direct all units to account for their personnel, assess their precinct for damage and drive their Life Safety Damage Assessment Routes
 - b. Police Department damage assessment will be provided to the Fire Department as soon as possible
 - c. Using the damage assessments, and in coordination with the Fire Department and Seattle Public Utilities, Police Department personnel will determine their initial strategy for response
 - d. Life Safety law enforcement calls for service have first priority followed by life safety requests for support from the Fire Department or Seattle Public Utilities
 - e. If communication systems are inoperable, Police Department units will coordinate at the Precinct level
5. Public Works
- a. Upon request, Public Works departments will provide equipment and personnel to support Life Safety operations
 - This may require delaying other Public Works missions
 - b. Based on their critical infrastructure damage and capability assessments, which may take several hours, Public Works departments will prioritize and assign resources to restore services and repair infrastructure
6. Medical.
- a. Disaster Medical Control Center at Harborview Medical Center determines status of hospitals in the region, how many patients they can support and, in coordination with the Fire Department, allocates patients to the appropriate facility
 - Overlake Hospital is the alternate Disaster Medical Control Center
 - b. Health and Medical Area Command (HMAC) coordinates the healthcare system response operations for Region Six (King County) and supports public health, hospitals, other healthcare organizations, emergency medical services and the Medical Examiner
 - Point of contact with health departments in other counties and the State Department of Health
 - Point of contact between local emergency operations centers and the healthcare system
 - HMAC collects damage reports from hospitals and other health care providers and forwards to Seattle Emergency Operations Center
 - i. Public Health Seattle King County provides the staff for the HMAC
 - Establish Specialized Support Functions
 - i. Alternate Care Facilities (ACF) which provide additional non-critical care medical bed space for the region
 - ii. Family Assistance Centers (FAC) which, in partnership with the Police Department, leads the effort to find missing persons and is the point of contact for families to file missing person reports
 - iii. Temporary morgues
 - Supports hospitals, long term care facilities, and other inpatient facilities with medical evacuations as needed
 - Responsible for estimating the number of fatalities and injured in coordination with the Joint Information Center

7. Sheltering

Sheltering for people, service animals and pets after any significant earthquake is a high priority. Before a shelter can be opened, the Department of Planning and Development Rapid Evaluation team must first assess the building for structural damage.

Individuals will be encouraged to stay in their homes if at all possible. The number of individuals in need of sheltering may be reduced if warming locations or Points of Distribution for essentials such as food, water and tarps are established. Individuals with functional needs may have the greatest and earliest need for sheltering. In general, pet shelters will be established close to general shelters if possible.

King County, the American Red Cross and the City will coordinate shelter operations. In addition, churches and other non-governmental organizations may also establish shelters.

- a. Human Services Branch in the Emergency Operations Center is responsible for coordinating shelter operations with Parks Department having the lead role in the operation of shelters located in Parks facilities
 - For City operated shelters Parks Department will provide staff
 - An Emergency Operations Center Shelter Task Force, led by the Human Services Department, may be activated to coordinate sheltering
- b. Teams responsible for moving City shelter supplies will assess the cache for damage and accessibility as soon as possible
- c. Shelter activation strategy will be established during the first operational period in Emergency Operations Center planning cycle
- d. There are eight Community Centers identified as Tier 1 Shelters
 - Tier 1 Shelters have emergency generators
 - Total capacity of Tier 1 Shelters is approximately 1000 individuals – this is an estimate than can be impacted by other factors such as building damage and accessibility
 - Tier 1 shelters can expand capacity by developing additional shelters in nearby school gymnasiums – this is known as a Shelter Campus
- f. Examples of other potential shelter options
 - Seattle Center
 - University of Washington
 - Provided by State of Washington, FEMA or other partners
- g. Considerations when establishing a shelter
Conditions immediately following an earthquake may require opening shelters with very limited services and support.
 - Shelters should be established as close as possible to the areas in most need
 - Inspected by a Rapid Evaluation Team –Placard
 - Fire Department inspection
 - Minimal staff to operate the shelters
 - Arrangements in place to provide for water and food and disposal of solid waste
 - Heat/air conditioning, electricity, gas, water, sewage
 - Ability of Emergency Operations Center Logistics Section to sustain shelters
 - Adequate road ingress and egress routes
 - Sufficient parking for occupants, staff and supporting personnel
 - Transit service routes nearby

- h. Shelter facility inventory, status, occupancy and reporting will be done using the FEMA National Shelter System.

I. Community Response

In order to focus City response on the high priorities of fire suppression, survivor rescue, utility damage assessment and repair, etc. an effective response requires active engagement of community members seeing to each other's needs. "Hubs" have been organized in some neighborhood districts intended to be pre-designated sites where people who live close by will come together to help one another out with immediate needs. Each Hub site has radio communication with the City Emergency Operations Center provided by local amateur radio operators. This relatively new program sets the stage to organize similar sites in neighborhood districts throughout the City.

The Office of Emergency Management has trained thousands of individuals and neighborhood groups how to respond to their own needs and those of their families and neighbors through the Seattle Neighborhoods Actively Prepare (SNAP) program and other venues. A SNAP trained neighborhood is more likely to have supplies of food, water and other essentials on hand and trained and practiced controlling utilities, providing first aid, and seeing to the needs of their neighbors in an organized fashion.

The organized effort afforded by both Hub sites and SNAP neighborhoods can be helpful to the community wide response: by providing information about local conditions and needs and organizing teams to assist with response and relief operations.

Many community based organizations have developed emergency plans with the assistance of the Office of Emergency Management and Public Health – Seattle & King County and now stand a better chance of continuing to deliver high priority services.

Many people will likely spontaneously volunteer to assist in response and relief efforts. The key to effectiveness here is channeling that energy into volunteer agencies that can accommodate, train and deploy them such as the American Red Cross.

VI. Logistics

Departments will be responsible for their own logistical support until the Emergency Operations Center Logistics Section is activated; departments will rely on a combination of stored supplies, retail and wholesale outlets, contractors, service providers, designated Staging Areas, mutual aid and emergency commandeering. After an earthquake it is expected that these sources may not be accessible, be in very short supply or not available at all. This will limit the operations that can be conducted until more resources can be acquired.

It may take up to 72 hours before the Emergency Operations Center Logistics Section can operate at maximum capacity. Even after the Logistics Section is fully operational, departments will be expected to maintain responsibility for obtaining specialized resources. The City Consolidated Action Plan will specify what resources the Logistics Section is responsible for providing. In general, the goal is to consolidate the ordering of common resources under the Emergency Operations Center Logistics Section while leaving departments responsible for ordering specialized resources.

- 1. Resources – Common, Specialized and Regional
 - a. Common Resource Examples

- Food
 - Water
 - Temporary Sanitation Facilities
 - Fuel
 - Responder housing
 - Sheltering supplies
 - General supplies such as gloves, hard hats, flashlight etc
- b. Specialized Resource Examples
 - Electrical substation transformers
 - Specialized rescue tools
 - Medical supplies
 - c. Regional Resource Examples
 - Water Blivets
 - Radio Cache
2. Emergency Operations Center Logistics Section Staffing
To manage the anticipated workload the Logistics Section staffing will be augmented by the following:
- a. Reassigned City employees
 - b. Volunteers
 - c. Mutual Aid
 - Other jurisdictions
 - EMAC Teams
 - National Guard Homeland Response Force
 - Contractors
 - Coast Guard
 - d. Emergency Operations Center Branch Representatives (per 12 hour shift)
 - Law enforcement (1 officer)
 - Fire Department (1 firefighter)
 - Infrastructure (2 individuals)
 - Human Services (1 individual from Human Services and 1 individual from Public Health)
3. Ordering Common Resources
- a. Emergency Operations Center Logistics Section defines what common resources will be ordered through departments
 - b. Departments in need of common resources will complete a City Resource Request in WebEOC
4. Ordering Specialized Resources
- a. Departments will obtain specialized resources using established department procedures and vendors
 - When specialized resources will require logistical support such as fuel or food, the resource order must be first approved by the Emergency Operations Center Logistics Section Deputy Section Chief
 - Branch representatives assigned to the Emergency Operations Center Logistics Section will facilitate this process where applicable
 - b. When a special resource can't be obtained the department in need will complete a City Resource Order Form in WebEOC

- Branch representative assigned to the Emergency Operations Center Logistics Section will assist with the ordering of specialized resources
5. Ordering Regional Shared Resources
Using Federal grants, a number of resources have been purchased which are shared by all jurisdictions within the grant area. During the initial response, departments in the region will attempt to coordinate the use of these resources as fairly as possible and as conditions permit. After activation, local Emergency Operations Centers will coordinate the use of these shared resources.
 6. Facilities
 - a. Replacement of damaged department facilities to support Continuity of Operations
 - Departments provide a needs assessment to Finance and Administrative Services
 - Finance and Administrative Services is responsible for acquiring replacement facilities:
 - As part of Continuity of Operations planning some departments may have already designated specific facilities
 - b. Identification of facilities to support a surge in operations (example: mutual aid strike teams, task forces, contracted service providers, staging areas, and command posts)
 - Emergency Operations Center Logistics Section coordinates the identification and assignment of additional facilities
 - Departments submit a City Resource Request that describes the type of facility needed, intended use of the facility, number of occupants etc
 7. Staging Areas Camps and Bases
 - a. Before the Emergency Operations Center Logistics Section is activated, departments establish Staging Areas, Camps and Bases as needed
 - b. When the Emergency Operations Center Logistics Section is activated it will determine which of those Staging Areas, Camps and Bases it will assume responsibility for and which will be maintained by departments
 - c. The State of Washington has designated specific locations as State Staging Areas. Emergency Operations Center Logistics Section will be responsible for coordinating with the State on the establishment of these sites.
 - d. Emergency Operations Center Logistics Section is responsible for establishing, supplying and operating all Points of Distribution for food, bottled water and other commodities with the exception of those locations established for distribution of medical equipment and medications -in those cases the Emergency Operations Center Logistics Section will provide non-medical support to Medical Points of Dispensing.
 8. Shelters, Warming or Cooling Center
 - a. Emergency Operations Center Logistics Section is responsible for supporting all shelters (human and animal) warming or cooling centers as requested by the Human Services Branch
 9. Donations.
 - a. Donations will be coordinated by the Logistics Section
 - b. In general, unsolicited donations will be discouraged in favor of donations of money
 10. Healthcare Logistics.
 - a. Hospitals and other health care providers are responsible for ordering their own medical supplies, with HMAC providing assistance as needed

- b. On behalf of the medical community, HMAC serves as the single point of ordering for County, State and Federal government resources
- c. Logistical support for mutual aid medical teams will be the responsibility of HMAC
- d. Local Emergency Operations Centers, including Seattle, are responsible for non-medical resource requests from healthcare providers

11. Communications

The City Earthquake Communications Plan describes the various communications systems available to responders and how they will be coordinated during an earthquake. The goal is to provide redundant communication systems that ensure all departments with a critical role can effectively coordinate

- a. Requests for radio patching, 800 MHz radio reprioritizing, Cell on Wheels or Switch on Wheels or other communication resources which are limited in number or capacity will be screened by the Emergency Operations Center Operations Section Chief and the Department of Information Technology
 - The Department of Information Technology and the Emergency Operations Center Logistics Section will coordinate the ordering and support related to communication infrastructure resources
- b. Medical Communication
 - HMAC and all hospitals in Seattle have 800 MHz radios, satellite phones and amateur radio capability

VII. ORGANIZATION AND ASSIGNMENT OF RESPONSIBILITIES

A. Emergency Support Function 1 Transportation (Department of Transportation)

1. Determine if Seattle Department of Transportation resources are needed to support life safety priority operations.
2. Support clearing ingress and egress roadways to local hospitals, blood bank, other high priority healthcare locations and major incident scenes as needed.
3. Clear ingress and egress routes to shelter locations based on a priority determined by the Emergency Operations Center Operations Chief.
4. Assess the transportation system for damage.
5. Provide Emergency Operations Center Operations Section Chief with a recommendation for repairing and restoring the transportation system.
6. Request Seattle Police Department take responsibility for closing bridges determined to be unsafe, so that inspectors may continue with their inspections of other bridges.
7. Coordinate with other transportation agencies in the region to determine status of roads and bridges outside of Seattle.
8. Use Department Mapping Systems and the City of Seattle Street Closure Tracking List Mapping System and the Master Street Closure List to document status of roads.
9. Consider forming an Emergency Bridge Repair Task Force to coordinate rapid repair efforts.

B. Emergency Support Function 2 Communications (Department of Information Technology)

1. Assess information technology systems for damage and determine capability to provide critical services.
2. Provide Emergency Operations Center Operations Section Chief with a recommendation for service restoration and estimate time to complete such restoration.

3. Support the Emergency Operations Center Operations Section Chief in determining the strategy for radio patching, radio reprioritization, Cell on Wheels\Switch on Wheels requests and allocation.
4. Monitor 800 MHz system use and notify Emergency Operations Center Operations Section Chief of any decrease in functionality.
5. Conduct damage inspection of 800 MHz facilities and equipment.
6. Report fuel consumption\refueling need of 800 MHz generators to Emergency Operations Center Logistics Section.
7. Coordinate transport of radio system repair parts and teams with Emergency Operations Center Logistics Section.
8. Office of Information Security to consult on the security and reliability of data being received and methods of communications and collaboration that might be taking place during and after an event.
9. Coordinate with local telecommunication providers to support emergency requests for repair or augmentation of phone or internet service to critical functions and locations such as the Emergency Operations Center, dispatch centers, other critical infrastructure or incident scenes.

C. Emergency Support Function 3 Public Works and Engineering (Seattle Public Utilities)

1. Determine if Seattle Public Utilities construction equipment and personnel are needed to support life safety priority operations.
2. Assess water, waste water and solid waste infrastructure for damage and determine capability to provide services.
3. Provide Emergency Operations Center Operations Section Chief with a recommendation for service restoration and estimate time to complete such restoration.
4. Advise Emergency Operations Center Operations Section Chief immediately if unable to supply water to fire department firefighting operations.
5. Prepare Blivets for immediate deployment (24 hour process).
6. With assistance from Public Health Seattle King County and Emergency Operations Center Logistics, develop plan for providing sanitation in areas without sewer service.
7. Department of Planning and Development
 - a. In coordination with Emergency Operations Center Operations and Planning Sections, revise and set Rapid Evaluation Priority List.
 - b. Contact Public Health Representative to determine initial survey status of following hospitals and incorporate the following locations, as needed, into updated Rapid Evaluation Priority Plan
 - Harborview
 - Swedish
 - Childrens
 - University of Washington
 - Providence
 - c. Notify Emergency Operations Center Logistics Section of any mutual aid Building Inspectors already on scene.
 - d. Conduct building damage assessments and brief Emergency Executive Board on potential issues surrounding red and yellow placarded buildings.
 - e. Assist Joint Information Center supervisor in developing public messaging about building evaluations.
 - f. Revise priority list for Rapid Evaluation of Buildings.

D. Emergency Support Function 4, 9, 10 Firefighting, Search and Rescue, Oil and Hazardous Materials (Fire Department)

1. Provide situation report\summary of windshield assessment to City departments and Emergency Operations Center as described in the Essential Elements of Information plan.
2. Fight fires, provide emergency medical services, rescue trapped persons and address hazardous materials incidents.
3. As needed, enlist support from other department resources to support Life Safety operations.
 - a. Request Police Department Liaison Officer assist in locating missing fire units or to act as runners should communications fail
 - b. Request Police Department assign officers to complete damage assessments in those areas that could not be completed by Fire Department personnel

E. Emergency Support Function 5 Emergency Management (Seattle Office of Emergency Management)

1. Activate Emergency Operations Center to at least Major Incident Level.
2. Develop and disseminate City Objectives, Emergency Operations Center Operational Schedule, Priority list for Rapid Evaluation, Consolidated Action Plan and Essential Elements of Information Strategy.
3. Assign Office of Emergency Management personnel to Emergency Operations Center Director, Deputy Director and all Section Chief positions.
4. Be the point of contact with County regional, State, Federal emergency management partners and designated non-governmental organizations.
5. Coordinate the citywide response and promote unity of effort in response and recovery operations.
6. Law Department is responsible for proclamation writing, development of emergency orders and general legal advice.

F. Emergency Support Function 6 Mass Care, Housing and Human Services (Human Services Department)

1. Determine strategy for sheltering and feeding in coordination with Parks Department.
2. Assess human services infrastructure and need for mass care.
3. Identify vulnerable populations and any communication or support strategies needed.

G. Emergency Support Function 7 Resource Support (Finance and Administrative Services)

1. Single order point for County, State and Federal resources.
2. Establish policy for resource ordering –single point or department for specific resources.
3. Determine mutual aid already requested by departments.
4. Advise Emergency Operations Center Operations Section Chief immediately if City owned gas stations are inoperative or damaged.
5. Establish contact with King County Emergency Coordination Center Logistics Section.
 - a. Assign Liaison to King County Emergency Coordination Center Logistics to assist with processing resource orders from Seattle
6. Develop local Staging Areas, Bases, Camps and update as needed

7. Coordinate directly with Logistics counterparts at King County Emergency Coordination Center and State Emergency Management.
8. Review, update and implement feeding plan for responders.
9. Within the Logistics Section, Personnel will coordinate signing up of volunteers and reassignment of City employees.

H. Emergency Support Function 8 Public Health and Medical Services (Public Health Seattle and King County)

1. Assess healthcare system for damage to infrastructure and determine the ability to provide critical services.
2. Provide Emergency Operations Center Operations Section Chief with an estimate of when critical healthcare services will be restored.
3. Provide official totals or estimates of fatalities and missing persons.
4. Coordinate public messaging with the Seattle Emergency Operations Center Joint Information Center and Operations
 - a. Sanitation and food handling instructions to general public
 - b. Instructions for reporting and managing fatalities
 - c. Release of official totals or estimates of fatalities and missing persons
 - d. How to obtain medical care
5. Coordinate and provide mortuary services, including investigation of sudden, unexpected, non-natural deaths, body identification and disposition.
 - a. Provide guidelines to responders on the disposition of fatalities.
6. Direct and manage medical surge operations, provision of immunizations, prophylaxis and other preventative treatments.
7. With the police department, joint responsibility for investigating deaths and locating missing persons.
8. Coordinate with the Emergency Operations Center to establish transportation routes for delivery of critical healthcare supplies and services.
9. Coordinate and provide environmental public health services to include;
 - a. health inspection, on a priority basis, of responder food and sanitation arrangements
 - b. Inspections for Temporary Debris Staging and Reduction Sites
 - c. Disposal of disaster related solid waste
 - d. Assessment of the health impacts of wastewater spills and overflows
 - e. Services to emergency pet shelters, including inspections, sanitation, and guidance on disposal of deceased animals
 - f. Support to Seattle Public Utilities in providing emergency sanitation services to areas expected to be without potable water and/or sewer service for an extended period
10. Plan, coordinate, resource, and provide shelters for medically fragile populations when needed.
11. Coordinate movement of fragile populations from general population shelters to medical needs shelters, alternate care facilities and/or appropriate healthcare facilities.
12. Coordinate medical resource management for healthcare partners.
13. Advise Emergency Operations Center on need to provide emergency drinking water at hospitals using Blivets.
14. Contact Seattle Steam and determine ability to provide steam to area hospitals.

I. Emergency Support Function 12 Energy (Seattle City Light)

1. Determine if Seattle City Light construction equipment and personnel are needed to support life safety priority operations.
2. Assess Seattle City Light critical infrastructure for damage and determine ability to provide service.
3. Provide Emergency Operations Center Operations Section Chief with a recommendation for service restoration and estimate time to complete such restoration.
4. Repair and restore electrical service to City Light customers.

J. Emergency Support Function 13 Public Safety and Security (Seattle Police Department)

1. Provide situation report\summary of windshield assessment to City departments and Emergency Operations Center as described in the earthquake communications plan.
2. Assess Seattle Police Department facilities for damage and determine ability to provide critical law enforcement services.
3. Assign one officer to Harborview Medical Center to establish contact with Disaster Medical Control Center and to provide traffic control to support ingress\egress to the Center.
4. Assign Liaison to Deputy One until Department Operations Centers or the Emergency Operations Center activates.
 - a. When requested, assign officers to locate missing fire units or to act as runners should Fire Department communications fail
5. Assign officers to close bridges deemed unsafe by Seattle Department Bridge Inspectors.
6. With Public Health, joint responsibility for investigating deaths and locating missing persons.
 - a. Staff the Missing Person function in Family Assistance Center
 - b. Provide estimates of the number of missing
7. Assist Fire Department with emergency evacuations.
8. On a priority basis, and as resources permit:
 - a. Maintain law enforcement service throughout the City
 - b. Conduct high visibility emphasis patrols
 - c. Provide security at shelters, Family Assistance Centers, Alternate Care Facilities, Temporary Morgues and other locations as needed
 - d. Assist with commandeering of critical resources such as fuel
 - e. Provide crowd control or ingress and egress traffic control at major incidents scenes and\or hospitals
 - f. Conduct additional windshield assessments in the event of a major aftershock
 - Fire department resources may not be available to conduct a citywide survey once they are committed to response operations

K. Emergency Support Function 14 Community Recovery (City Budget Office)

1. Activate immediately concurrent with response to support short and long term recovery operations and planning.
2. Stand up and coordinate staffing of the Interdepartmental Recovery Team to respond to immediate and anticipated recovery needs in the areas of infrastructure/built environment, local economic impacts and human/community needs.
3. In coordination with the Mayor's Office, support stand up of a Community Recovery Team, an advisory team to harness resources from the wider community and engage stakeholders in recovery planning.

4. In coordination with the Office of Emergency Management, consolidate city damage reports for Federal Emergency Management Agency damage assessment processes required to justify request for a Presidential Disaster Declaration; coordinate with State and Federal partners on requests for disaster recovery assistance programs to offset public and private response and repair costs.
5. In coordination with the Office of Emergency Management, begin process for formal Mayoral designation of an Applicant Agent for Federal Emergency Management Agency Public Assistance.

L. Emergency Support Function 15 External Affairs (Mayor's Office)

1. When the Emergency Operations Center is activated, all department Public Information Officers become direct reports to the Mayor's Office through the Joint Information Center supervisor.
2. In coordination with Emergency Operations Center Operations Section, ensure public messaging related to life safety issues is initiated as soon as possible.
3. Activate City emergency web page.
4. With Emergency Operations Center Planning Section, review Snapshots and Situation Reports, Press Releases and Consolidated Action Plans for accuracy prior to publication.
5. Provide responders with a written daily summary of disaster related services, where those services can be obtained, hours of operation and contact information. Every City employee and responder is seen by the public as a source of official information about the disaster and what the City is doing about it.
6. Coordinate with Emergency Operations Center Logistics Section on public messaging related to donations.
7. Prepare for a large, national and international media presence following the disaster. Designate an alternate location for press conferences in anticipation the Media Briefing Room in the Emergency Operation Center may not have sufficient capacity and coordinate with the Emergency Operations Center Logistics Section
8. Work with the Emergency Operations Center Operations Section to integrate public messaging events into the Emergency Operations Center planning cycle.

VIII. DIRECTION CONTROL AND COORDINATION

A. Incident Command

Where there are multiple organizations on scene, Unified Command is preferred. To be included in Unified Command an organization should have:

1. Jurisdictional or functional responsibilities
2. Responsibility for geographic area affected by the incident or response operations
3. Responsibility for commanding, coordinating or managing a major aspect of the response
4. Have the resources available to participate in the response

Within Unified Command, the department or agency responsible for addressing the most immediate, life safety issues will most likely staff the Operations Section Chief role. The use of Branch Operations or Deputy Operations Section Chiefs should also be considered to ensure effective coordination between the various disciplines on the scene.

B. Area Commands

Area Commands may be established to improve coordination and support to multiple incident commands.

C. City Emergency Operations Center

Responsible for citywide strategy, support and coordination.

1. Coordinate with King County Emergency Coordination Center, State Emergency Operations Center and other jurisdictions in the region.
2. Coordinate Mutual Aid requests from departments.
3. The Emergency Operations Center Consolidated Action Plan is the citywide plan for disaster response operations.
 - a. Updated each operational period
4. Incident Action Plans cover operations for individual Incident Commands or for Area Commands
5. Type I, II or III Incident Management Teams may be used to augment command and control staff as needed.
 - a. All City and non-city responders will conduct operations either under the City Consolidated Action Plan, a specific Incident Action Plan or both
 - b. The Emergency Operations Center will work with departments to define Areas of Operation or Responsibility
6. The Emergency Operations Center Joint Information Center will coordinate all City public information activity
 - a. The Joint Information Center will participate in the Regional Joint Information System

D. Emergency Executive Board

The Emergency Executive Board is composed of department directors who provide policy advice to the Mayor.

- a. The Emergency Executive Board will convene as needed to resolve policy issues that arise during the response.
- b. Emergency Support Function Representatives in the City Emergency Operations Center are expected to identify and report policy issues that require the assistance of the Mayor and the Emergency Executive Board.
- c. Representatives have been trained in how to document these issues

IX. INFORMATION AND COMMUNICATION

A. Reports

The City Consolidated Action Plan and the Essential Elements of Information strategy for earthquakes define how the City Emergency Operations Center shares information. A number of methods are used:

1. Snapshot
 - a. Common Operating Picture
 - b. Issued every one to two hours
 - c. Update on known damage and impacts to services
 - d. Can be viewed using handheld devices
 - e. Is sent to a wide audience of government and partners in the region
2. Situation
 - a. Common Operating Picture
 - b. Generally issued twice during each 12 hour operational period

- c. Comprehensive overview of the situation and response operations
- d. Is sent to wide audience of government and partners in the region
3. Press Release
 - a. Issued frequently during the disaster by the Joint Information Center
 - b. Individual departments may also issue press releases in coordination with the Joint Information Center

B. Mapping

1. Mapping in support of disaster operations will be coordinated through the Emergency Operations Center Planning Section. Requests for Emergency Operations Center maps will be directed to the Planning Section.
2. The initial Emergency Operations Center situation map post earthquake – subject to modification as conditions require:
 - a. Areas, or exact location, of major fires, building collapse, major slides, urban flooding or other immediate and significant hazards
 - b. Status of major bridges
 - c. Status of freeway
 - d. Closed or evacuated hospitals
 - e. Name and location of Incident Command Posts
 - f. Status of ferry terminals
3. Maps generated by other jurisdictions will be reviewed before adoption by the City
4. Maps for public information purposes must be reviewed by the Joint Information Center prior to release
5. Departments will provide a copy of any map they create to the Emergency Operations Center Planning Section
6. A shake map which describes the intensity and location of the earthquake, provided by the United States Geological Service, will be distributed as a separate map
7. Social Media maps
 - a. Social Media maps will be considered UNCONFIRMED and must be verified before use
 - b. Emergency Operations Center Planning Section will monitor social media maps for operational information
 - c. The Joint Information Section will monitor social media maps for public information

C. Internet

1. WebEOC
 - a. Primary tool for documenting information about the disaster
 - b. Base Incident: Major Earthquake Seattle
 - This is a standing base incident available to responders before the Emergency Operations Center is activated
 - c. Sub Incidents - modified as needed during the event
Sub Incidents divide information into categories in order information easier to locate and organize
 - Area Commands or Incident Commands established
 - Damage reports
 - Shelter Operations
 - Family Assistance Center
 - Mortuary Operations
 - List of Mutual Aid responders

- d. WebEOC Significant Events:
 - Official estimate of the number of fatalities and injured
 - Estimate of disaster costs
 - Areas that have been evacuated
2. Emergency Operations Center Email.
 - a. Seattle Emergency Operations Center maintains an email account for disaster response which is monitored by the Emergency Operations Center Planning Section
3. City Disaster Website
 - a. The City Homepage can be rapidly switched to a disaster format by the Mayor's office
4. Seattle Department of Transportation SharePoint Street Closure Tracking list and Road Conditions map.
 - a. Documents impacts to City streets
 - b. Seattle Police Department can input information into the Street Closure System
5. National Shelter System.
 - a. Human Services Branch, and other shelter providers in the region, use the National Shelter System database to share shelter information
6. WATrac Incident Management System.
 - a. Incident management software used by HMAC members to share information which Seattle Emergency Operations Center staff can view
7. Regional SharePoint Information Sharing
 - a. King County Emergency Management maintains the regional SharePoint site
 - b. Available to support collaboration between departments and jurisdictions as needed

D. Radio and Phone

1. Radio Systems (City and Auxiliary Communication Service)
 - a. A radio communications plan for an earthquake scenario has been provided to all departments
 - b. Auxiliary Communications Service staffs the Emergency Operations Center communication room and monitors Ops Call channel, amateur radio, King County ECC radio and others
 - c. City Hubs can communicate with the City Emergency Operations Center using amateur radios
2. Phone
 - a. Government Emergency Telecommunication Service
 - When the phone system is overloaded with calls, increases the chance a caller using this service will be able to complete a phone call using a wired or cell phone
 - City responders have been provided accounts including all Emergency Operations Center Duty Officers
 - b. The City phone network may be more resilient than the public network
 - c. A common phone number for reaching the City Emergency Operations Center has been designated and, if needed, up to six answering stations can be established in the Emergency Operations Center to support this phone line
 - d. The Auxiliary Communications Service monitors the Emergency Operations Center satellite phone

APPENDIX 4 – MILITARY SUPPORT ANNEX

Begins On Next Page

City of Seattle
Comprehensive Emergency Management Plan

Emergency Operations Plan
Military Support Annex

Prepared by
Seattle Office of Emergency Management

Updated November 2012

MILITARY SUPPORT ANNEX

COORDINATING ORGANIZATION:

*Mayor's Office
Seattle Office of Emergency Management*

COOPERATING ORGANIZATIONS:

*All City Departments
Washington State Emergency Management Division
Washington State Military Department*

I. INTRODUCTION

A. Purpose

1. To describe the circumstances under which units of the Department of Defense (DOD) and the Washington National Guard (WNG) can provide Defense Support of Civil Authorities (DSCA) during disasters and catastrophes.
2. To describe the procedures the City of Seattle government must use to obtain DSCA

B. Scope

1. This document applies to all City Departments and supporting agencies.

II. SITUATION

A. Situation

The City of Seattle, its citizens, are exposed to a variety of natural and human caused disasters such as severe weather, earthquakes, and acts of terrorism. The Seattle Hazard Identification and Vulnerability Analysis identifies and discusses in detail a wide range of events that could impact the citizens and governments of our region.

In some incidents, the City and neighboring jurisdictions may not have sufficient resources to support the response. The military is one of many resources the City can request assistance from.

B. Planning Assumptions

1. Military assistance is a supplemental resource.
2. Military support like any other form of outside assistance requires the Mayor's declaration of "Civil Emergency" and an executive order.
3. When deployed to provide DSCA, military personnel work under the City's command and control structure, but always retain their unit integrity and chain of command.
4. Only under circumstances where the provisions of "Immediate Response" can be applied, or where a National Guard or Reserve unit coincidentally happens to be in a training status, can military support be expected to be a ready source of help. In all

other situations, it would probably take at least 48 hours to muster and deploy a response.

III. CONCEPT OF OPERATIONS

A. General Response

The Governor maintains control of the state National Guard in peacetime. He or she appoints an Adjutant General to command the state Guard, which is a combination of Army and Air Force units. In Washington, the Adjutant General (TAG) is also the head of the state Military Department.

1. After the Mayor has declared a “Civil Emergency” and based on the Mayor’s request for supplemental assistance made by executive order, the Governor may, if support can best be provided through special resources possessed by the Washington National Guard, task available units and/or activate units not on duty.
2. In general, the type of support provided by the National Guard may include:
 - Weapons of Mass Destruction Civil Support Team
 - Limited mass feeding
 - Civil disturbance operations/area security patrols
 - Roadblocks/traffic control
 - Perimeter security/quarantine
 - Limited military engineering
 - Mobile/fixed communications
 - Emergency evacuation (land/air/water)
 - Delivery of supplies
 - Emergency shelter
 - Limited emergency electrical power
 - Light urban search and rescue
 - Limited emergency medical aid
 - Limited potable water
 - Aerial reconnaissance

B. Federal Support

Despite normal placement of the Guard under the Governor, the President retains the authority to federalize guard forces in a major national crisis. Whenever this happens, units affected by the President’s mobilization order are transferred from their State Area Command (STARC) to active duty commands in the Army or Air Force. Examples of such mobilizations occurred during wars fought in Korea and Viet Nam and more recently in military actions in the Persian Gulf, Afghanistan and Iraq. It can also happen in natural, technological and human-caused disasters, including episodes of serious civil unrest.

The military is capable of providing a wide range of support to local government in a disaster or catastrophe, but the use of military personnel and military assets for DSCA must comply with guidelines set down in DOD Directives and federal law. Within these formal parameters military assistance can be obtained:

1. For an “Immediate Response” situation. In such an event a unit commander can provide immediate assistance to local authority if:

- There is an imminent threat to life or property, and/or human suffering is at stake, **and**
- An exhaustive effort by local government to seek help from public and private resources in the local area has been tried first *without success*, and the local military unit is the only viable source available, **or**
- The local military unit is the only source of help that can respond in time to support the City in countering or alleviating the danger(s) present or imminently expected, **and**
- The local military unit is capable of providing the type of support requested without degrading its primary national defense commitments, **and**
- The Mayor has declared a “Civil Emergency” and invoked his/her “emergency power” to request outside assistance, **and**
- The City agrees to assume costs incurred by the military unit to provide the requested support, **and**
- The City, through the Washington State Emergency Management Division (EMD), conveys the following details to the Commander, USARMYNORTHCOM through the Defense Coordinating Officer attached to the Federal Emergency Management Agency (FEMA) Region X Defense Coordinating Element in Bothell, WA:
 - The reason(s) and circumstances necessitating the request for “Immediate Response”.
 - The name of the Commander and unit aiding the City.
 - The type(s) of asset(s) requested.
 - An affirmative acknowledgement of the City’s compliance with the above process, as prescribed in DOD Directives.

In certain circumstances where response time is critical, a unit commander can act in anticipation of official receipt of authorization from the Commander, USARMYNORTHCOM. The unit commander can also decide to forego reimbursement from the City, but the City should always be prepared to assume the costs, which in the past have been paid by the state when the above steps have been followed.

2. After emergency declarations have been made by both the Mayor and Governor, the Mayor may request assistance from the Commander of the Seattle District of the US Army Corps of Engineers (USACE) to provide flood fighting and rescue support authorized under Public Law 84-99. The Governor, based on a request from the Mayor, can also ask the USACE to provide emergency supplies of clean water when contamination of normal sources endangers public health.

3. After the Governor has proclaimed a “State of Emergency” and formally requested federal assistance, the President after declaring an “Emergency” or “Major Disaster” may – through FEMA or the through the Joint Field Office (JFO) if established and the Defense Coordinating Officer (DCO) if in-place – task the DOD to provide specific support identified in the NRP. DOD participation could be used for:
 - Disaster Medical Assistance Teams (DMATs)
 - Disaster Mortuary Teams (DMORTs)
 - Patient evacuation to National Disaster Medical System (NDMS) hospitals
 - Urban fire suppression
 - Communications equipment
 - Debris clearance
 - Structural evaluation
 - Damage Assessment
 - Stabilization or demolition of damaged structures
 - Water supply
 - Restoration of critical public facilities
 - Contracting and construction management
 - Electric generation
 - To defend against a “credible threat” of a terrorist attack, or to respond to a terrorist attack.

C. Direction and Control

The EOC Director is responsible for coordinating all requests for military assistance.

Military units remain under control of their chain of command when deployed to assist civilian authorities. Military support is coordinated through the EOC and the incident commands that are provided such support.

EMD and/or military Liaisons may be assigned to the City EOC and/or incident commands as needed.

Once DSCA is dispatched to the City, it will be the responsibility of the requesting department to receive, direct, integrate, and sustain this capability for as long as they continue to support the City. Help in supplying the logistics for doing this will be available through the EOC, and should be directed to the EOC Logistics Section.

D. Procedures

A department that determines it will run out of resources before operations can be completed or has exhausted all resources will follow procedures outlined in the Logistics Section of the SDRRP to obtain outside resources.

IV. RESPONSIBILITIES

A. Preparedness

1. Seattle OEM is responsible for ensuring the Military Support Annex is current.
2. All departments that conduct training or develop plans with military organizations will notify the Seattle OEM of such activities before they occur to ensure City training and planning efforts are coordinated.

B. Response and Recovery

1. The Mayor, as the City's Chief Executive, will:
 - Determine when circumstances warrant asking the state for outside assistance, which may be provided through DSCA.
 - After deciding to do so and after declaring a "Civil Emergency", sign an executive order requesting outside assistance.
 - Direct public-notice, and ensure briefings of the City Council President and Public Safety Chair occur as called for in the Direction and Control Support Annex.
2. The City Council will review and act on all proclamations and executive orders as called for in the Direction and Control Support Annex.
3. The EOC Director will:
 - Decide when it would be necessary to request a state mission number.
 - Decide when and if it would be necessary to request the state EOC to send their Emergency Management Division (EMD) and/or Military Department Liaison to the Seattle EOC.
 - Determine if, and when a recommendation will be made to the Mayor to request outside assistance.
 - As soon as the Mayor signs the executive order requesting outside assistance, direct the Plans Section Chief to transmit it to the state EOC.
 - Based on information received from the state EOC (either through Logistics Section Chief or the EMD Liaison), brief the Mayor and as necessary direct the Operations Section Chief to make sure that:
 - Word has been passed to the requesting department.
 - The EOC JIC has been notified.
 - Adequate instructions have been given to the responding military commander, to at a minimum include the name of the official he or she is to report to and their cell phone number, and a map and directions to the staging area.
 - Arrangements are in place to receive and care for the arriving DSCA unit(s).
 - DSCA units are used for approved missions only, and that they are able to withdraw once those missions are completed.
4. The Operations Sections Chief will:

- Ensure all Operations Section ESFs that are activated are coordinating resource requests with the EOC Logistics Section.
- Work with the Logistics Section Chief, EMD Liaison and the Plans Section Chief to monitor critical resource requests that exceed the City's capability. As soon as it can be reasonably determined that outside assistance is the only suitable recourse, inform the EOC Director.
- Follow the EOC Director's instructions in making certain that departments are given an early "heads up" of the arrival of DSCA, and that departments take necessary actions to effectively receive, integrate, direct, and support DSCA units.
- Brief the department requesting the military assistance on what are the approved missions.
- Ensure that DSCA units are able to disengage and return to their normal duty station as soon as their assigned missions are completed.

5. The Plans Section Chief will:

- At the direction of the EOC Director, request the EMD Duty Officer to issue a state mission number for the major incident, disaster or catastrophe.
- At the direction of the EOC Director, request the state EOC to send their EMD and or Military Department Liaisons to the Seattle EOC.
- As necessary, make assistance available to the Law Department Representative in preparing the declaration of "Civil Emergency" and the executive order for outside assistance.
- Work with the Operations Section Chief, EMD and state Military Liaisons, and the Logistics Section Chief in making recommendations to the EOC Director on the need to seek state assistance in obtaining critical resources.
- At the direction of the EOC Director, oversee transmission of the City's request for outside assistance, including the Mayor's executive order and the Request for Outside Assistance form, to the state EOC.
- Once word is received from the state EOC that DSCA resources are on the way, advise the EOC Director and the Operations Section Chief.

6. The Law Department Representative will at the direction of the EOC Director:

- Prepare the declaration of "Civil Emergency" and executive order requesting outside assistance.
- Be available to answer legal questions arising from or about the declaration of "Civil Emergency" or executive order.
- Be available to answer legal questions regarding the approved missions for military units and other issues related to the use of military units.
- Assist in briefing the Council President and Chair of the Public Safety Committee on the declaration of "Civil Emergency" and executive order.

7. Emergency Support Function (ESF) Coordinators for ESFs-1, 2, 3, 4, 6, 8, 9, 10, 12 and 13, under the direction of the Operations Section Chief, will:

- Make sure DOCs are working with the EOC Logistics Section to resolve resource needs that exceed department capabilities.

- Make sure that once a department's DOC determines that vital resource requirements cannot be met locally they communicate the shortfall to their EOC department representative.
- As soon as a request for outside assistance is received, advise the Operations Sections Chief of the details.
- As applicable and as soon as the Operations Section Chief advises the ESF representative that DSCA is being provided to a City department ensure:
 - The department is informed.
 - The department communicates with the military commander and provides all necessary support.
 - The department coordinates with the EOC Logistics for any support for the military unit it cannot manage on its own.
 - The department uses DSCA for approved missions only.
 - The department releases the military unit as soon as approved missions are completed.

8. EOC Logistics Section Chief will:

- Ensure that within means available to the City, the EOC Logistics Section is providing all necessary logistical support to DOCs.
- Ensure the request is beyond the City's means to obtain with local resources.
- Assist City departments with any logistical requirements that may be necessary to support a military unit that is part of an authorized DSCA mission.

9. Department Operating Centers will:

- As soon as they have exhausted or anticipate exhausting, all local resource and assistance, inform their ESF representative in the EOC of the details and urgency of any resource shortcomings.
- When advised that DSCA is being sent to support the department, notify the Incident Commander, provide detailed description of what military missions are authorized and ensure the arriving military commander is given:
 - All necessary information for safely integrating his/her unit into the department's field operations.
 - All necessary support to sustain the military unit while they are supporting the department.
- For any support requirements needed to sustain the military unit for its assigned mission that cannot be managed with means available to the department, coordinate with the EOC Logistics Section.
- Ensure the military unit is being used for its assigned mission only and is allowed to demobilize as soon as the mission is completed.

10. Commanders of local military installations will:

- As requested and feasible, provide the City of Seattle with DSCA in accordance with guidelines established in DOD Directives.
- In a Presidentially declared “Emergency” or “Major Disaster” provide “direct federal assistance” or “technical assistance” as tasked by the Defense Coordinating Officer (DCO) under the National Response Plan.
- For a “credible threat” or act of terrorism, provide “direct federal assistance” or “technical assistance” as tasked by the DCO or the FBI Joint Operations Center that may be operating from the Seattle Field Office or attached to the Joint Field Office (JFO).

11. Washington State Emergency Management Division will:

- Upon receipt of proper notification from the City, issue a state mission number to cover the City’s involvement in managing a major incident, disaster or catastrophe.
- Provide 24/7 Duty Officer support to assist the City in coordinating with the USARMYNORTHCOM in an “Immediate Response” situation.
- As requested by the Seattle EOC Director and as authorized by the state EOC, send a liaison officer to the Seattle EOC.
- As provided for in the Washington State Comprehensive Emergency Management Plan, assist the City with any Mayoral request for supplemental assistance.

12. Washington State Military Department will:

- As requested and as authorized by the state EOC, send a liaison officer to the Seattle EOC.
- Provide National Guard support to the City as coordinated by the state EOC.

E. Liability

So long as personnel of the Washington National Guard are acting under the authority of the Governor (RCW 38.08.040) they are indemnified under the “Emergency Worker” provisions of WAC 114-04-070 and RCW 38.52.

Federal employees, including members of the Washington National Guard who may be activated for federal service by the President, are protected under Section 305 of the Stafford Act.

V. RESOURCE REQUIREMENTS

A. Logistical Support

- Requests for military support will be coordinated with the EOC Logistics Section to ensure adequate support is available.
- The EOC Logistics Section is responsible for providing logistical support to all approved military units that have been requested by the City.

B. Communications and Data

- ESF-2 is responsible for coordination of City radio communications support to military units, including patching.
- ESF-2 is responsible for screening any requests for military communications support to ensure compatibility with communications systems deployed.

VI. ADMINISTRATION

A. Cost Accounting and Cost Recovery

Units and departments will use the National Incident Management System and Incident Command System to organize and submit cost recovery documents to City, state and federal agencies as required to recover incident response and recovery cost.

B. Annex Maintenance

The Seattle OEM is responsible in maintaining this annex. The annex will be reviewed and updated annually as prescribed in the DRRP or when deemed necessary by either the Agency Administrator or the Seattle Office of Emergency Management.

APPENDIX 5 – EVACUATION ANNEX

Begins On Next Page

CITY OF SEATTLE

COMPREHENSIVE EMERGENCY MANAGEMENT PLAN

EMERGENCY OPERATIONS PLAN

EVACUATION ANNEX

REVISED AUGUST 2015

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1. INTRODUCTION

1.1 Purpose

This plan describes the strategies for managing evacuations which exceed the day-to-day capabilities of departments in the City of Seattle. The strategies are built using an all-hazards approach to preparing for and managing evacuations. They are designed to be applied in any event regardless of the threat or hazard that precipitates the need to evacuate. In most cases, evacuation carries the highest “life safety” priority in incident management.

The City of Seattle fully utilizes the National Incident Management System (NIMS) and its concepts in all emergency and disaster related efforts.

1.2 Scope

This annex supports, and is a part of, the City of Seattle Comprehensive Emergency Management Plan (CEMP) and applies to all City departments, offices, staff, and elected officials.

1.3 Plan Limitations

During day-to-day emergency operations, city response agencies may advise persons to take protective actions in a discrete, specified area. Typically, the situation involves homes, businesses or apartment buildings immediately adjacent to an incident site. This may be caused by situations such as gas line breaks, apartment or residential fires, barricaded subjects, flooding affecting a few homes in a single area, etc. The procedures for accomplishing and implementing these actions are included in individual departmental procedures and are not part of this document. This annex addresses situations where protective actions are needed, and the resources to carry out these measures exceed the day-to-day capabilities described above.

1.4 Situation

A situation statement that applies to all hazards can be found in the CEMP-Base Plan, Section II A. In addition to the all-hazard situation statements, the following specifically apply to the concepts of public warning:

- Use of this plan will occur for all hazards which could necessitate evacuation and sheltering operations involving all or parts of the City of Seattle.
- It may be necessary for the public to evacuate or to shelter-in-place due to a variety of situations. These cases are considered to be “protective actions.” The boundary of the protective actions area may be extremely limited or may be widespread in scope. In most cases, evacuation carries the highest “life safety” priority in incident management.
- Evacuations will require strategies that specifically address the challenges associated with moving high risk populations.
- Each jurisdiction retains its own authority for conducting emergency actions within its boundaries. Jurisdictional authority ends at the jurisdictional boundaries.

1.5 Assumptions

A list of assumptions that apply to all hazards can be found in the CEMP-Base Plan, Section II C. In addition to the all-hazard assumptions, the following specifically to the concepts of evacuation:

- Most people at risk will evacuate when local officials recommend that they do so. A general estimate is that 80 percent of those at risk will comply when local officials recommend evacuation. The proportion of the population that will evacuate typically increases as a threat becomes more obvious and serious to the public.
- Some evacuations may involve multiple jurisdictions due to the direct impacts; transportation routes; the location of safe zones, evacuation centers, or human and pet shelters; or the need for outside resources.
- Evacuations will likely involve a variety of buildings (residential, commercial, schools, daycares, retail, public, medical, etc.), geographic area (parks, transportation routes, etc.) population (residents, visitors, people in transit, workers) and people in a variety of situations (sleeping, driving, walking, biking, working, caring for children, etc) .
- The regional transportation system will become disrupted during large scale evacuation events involving the City of Seattle. Transportation mobility will improve through a regionally coordinated plan to ensure the movement of traffic away from the evacuation zone.
- During a large evacuation, there may not be enough transport capacity available for the number of people and pets needing to evacuate.
- Almost every evacuation will require issuance of a public warning statement. The City of Seattle outlines public warning strategies in a separate annex to the CEMP. A high level of coordination will be necessary to effectively communicate protective action, evacuation corridors, and shelter information to evacuees.
- An evacuation will require expedited coordination between all City departments to maintain an efficient and safe movement of traffic during an evacuation.
- Evacuations will require substantial personnel and equipment, which could stress and/or exceed the capabilities of the City of Seattle. Specific procedures may need to be developed regarding the pre-deployment of mutual aid personnel and equipment resources as required.
- The process for evacuation routes, evacuation centers, shelters or termination of evacuations will vary based on the specific hazard, degree of vulnerability, number of people impacted, and projected area of impact.
- Most evacuations involving several square blocks or more will stress the limited capabilities of roadways leading into and out of the area, particularly during peak travel hours. Traffic factors will impact the time it will take to complete an evacuation.

- Pre-designation of evacuation routes is impractical without verification of safe routes and surviving or safe congregation points and shelter locations.
- Some people will not receive the order to evacuate, or understand the order if it is received.
- Some people will not have the ability and/or resources to evacuate without assistance.
- Some people will choose not to evacuate.
- Pets may be in the evacuation zone, particularly if it includes a residential area.
- Evacuations may be spontaneous without government direction.
- Evacuating and displaced populations will include individuals subject to judicial and/or administrative orders restricting their freedom of movement, such as sex offenders and parolees

1 5.1 Assumptions for High Risk Populations

The following concepts apply specifically to high risk populations and evacuations:

- In an incident involving environmental quality issues, such as a hazardous materials incident or a flood event, people with compromised immune systems or serious health issues (e.g., emphysema or asthma) may need additional assistance.
- Special resources may be needed to decontaminate high risk individuals that have durable medical equipment and/or a variety of medical conditions.
- Evacuated populations will include people with access and functional needs, such as limited mobility, visual impairments, reliance on service animals, prescription medication requirements, durable medical equipment, limited English proficiency, etc.
- During evacuations, the physical and mental health of some people in the high risk population will deteriorate faster than those in the general population.

High risk individuals may also:

- Have difficulty communicating with rescuers during an evacuation event (e.g., hearing or speech impairment, behavioral or cognitive impairment).
- Choose not to evacuate during a disaster, and then become trapped and require rescue.
- Be resistant to search and rescue personnel during an evacuation or rescue operation.
- Become separated from their caregiver or the community with which they live.
- Have durable medical equipment and/or a service animal that need to be rescued with them.

1.6 Key Terms

Protective Action Notice: A statement which instructs people to take immediate action to protect their life due to a danger or impending danger.

Evacuation: National Incident Management System defines evacuation as an organized, phased, and supervised withdrawal, dispersal, or removal of civilians from dangerous or potentially dangerous areas, and their reception and care to safe areas.

Incident Command System (ICS): The Incident Command System organizational element responsible for overall management of the incident and consisting of the Incident Commander (either single or unified command structure) and any assigned supporting staff.

Incident Commander (IC): The individual responsible for all incident activities, including the development of strategies and tactics and the ordering and release of resources. The IC has overall authority and responsibility for conducting incident operations and is responsible for the management of all incident operations at the incident site.

Incident Command Post: The field location where the primary functions are performed. The ICP may be co-located with the Incident Base or other incident facilities.

Shelter-in-Place: The act of taking immediate shelter in a readily accessible location that puts as much indoor air and mass between the individual and the hazardous outside air, such as a basement or centrally located medium to small room.

1.7 Legal Authorities Specific to Evacuation

- City Municipal Code, Chapter 10.02.020 - Authority of Mayor to issue certain orders
- City Municipal Code, Chapter 10.02.070 -Comprehensive Emergency Management Plan.
- RCW 38.10 – Emergency Management Assistance Compact (revised 2001). In accordance with RCW 38.52, cities, townships, and counties are responsible for the evacuation of their own residents.
- Public Law 99-499, Superfund Amendments and Reauthorization Act (SARA) of 1986, Title III, Emergency Planning Community Right-to-Know Act (EPCRA).
- Pets Evacuation and Transportation Standards Act of 2006.
- PL 110-325 - Title 42 Chapter 126 Americans with Disabilities Act -ADA (1990)
- National Incident Management System (updated 2013): <http://www.fema.gov/national-incident-management-system>
- Presidential (Policy) Decision Directive 5 (2003) as amended: <http://www.fas.org/irp/offdocs/nspd/hspd-5.html>
- Presidential (Policy) Decision Directive 8 (2011) as amended: <http://www.dhs.gov/presidential-policy-directive-8-national-preparedness>

- Executive Order 13166, Improving Access to Services for Persons With Limited English Proficiency
- Executive Order 13347, Individuals With Disabilities in Emergency Preparedness

2. CONCEPT OF OPERATIONS

2.1 Actions by Phases of Emergency Management

Describe how evacuation actions will be coordinated between the EOC (City and County), DOC (SPOC, RMC, TMC), and the Field.

2.1.1 Normal Operations

Normal operations involve any mitigation and preparedness activities associated with managing evacuations. This phase consists of the following major tasks:

- Where possible, undertake mitigation for known hazards that have in the past led to evacuation.
- Seek improvement to preplanned evacuation routes if needed.
- Coordinate City of Seattle planning and policies with County, regional, State, and Federal agencies to ensure management of evacuations.
- Review and test department level evacuation plans and procedures.
- Conduct public education awareness campaigns to increase citizen awareness on the issues and actions required during evacuations

2.1.2 Response

Response begins when there is awareness that an incident or event may occur or is already in progress. This includes any pre-event activities that may be undertaken prior to the onset of conditions or the event and consists of the following major tasks:

- Identify areas where previous major evacuations have occurred and additional areas that may require large-scale evacuation in the future due to known hazards.
- Review the population of the risk areas and identify facilities that may require special assistance during evacuation (hospitals, nursing homes, schools, etc.) to determine potential transportation requirements.
- Review the transportation options and corridors for public transit in the risk areas and identify possible public transit options for evacuation, including accessible options.
- Identify transportation providers and leverage or develop MOUs.
- To the extent possible, identify individuals with special medical needs who would require assistance in evacuating and maintain contact information for those individuals.

- Ensure that there are transportation options for pets during evacuations.
- Include evacuations when conducting emergency drills and exercises.
- Conduct public information programs to increase citizen awareness of possible reasons for evacuation, preplanned evacuation routes, availability of transportation, the need to take appropriate food, clothing, medicines and other disaster supplies during an evacuation, and to include pets in the planning. Also remind people of the importance of helping neighbors who may need assistance during an evacuation. The education campaign could also emphasize the importance of car-pooling, and inform citizens of where to obtain timely information in event of a mass evacuation.

2.1.3 Recovery

Recovery includes short-term and long-term efforts to rebuild and revitalize areas affected by disaster. For the purposes of this plan, recovery will include the following tasks:

- Support communication systems and reunification of families.
- Initiate return of evacuees, when it is safe to do so.
- Carry out appropriate public information activities.
- Coordinate temporary housing for those who cannot return to their homes.
- Coordinate assistance for those with access and functional needs in returning to a safe housing situation.
- Initiative recovery activities for evacuees who have suffered loss of or damage to their homes or businesses as outlined in the Seattle CEMP –Recovery Plan.
- Consolidate paperwork for the post-incident after action review and possible State and Federal reimbursement.

2.2 Agency and Positional Responsibilities

All departments and agencies with responsibilities in this annex are responsible for the development and maintenance of their own Standard Operation Procedures.

2.2.1 All City Departments

- Develop, maintain, and test Continuity of Operations Plans (COOP) including the evacuation of City occupied facilities.
- Support evacuation operations by providing personnel and/or resources as requested by the Seattle EOC.
- Maintain expenditure records to facilitate reimbursement

2.2.2 *Mayor of the City of Seattle*

The Mayor, as the ultimate authority, approves any evacuation or shelter-in-place order for the City of Seattle. The Mayor may:

- Issue a declaration of Emergency or Civil Emergency Order when appropriate
- Authorize activation of the City’s Emergency Operations Center
- Provide necessary guidance and leadership
- Through ESF-15, and in conjunction with appropriate department PIO’s, coordinate the dissemination of information through the Joint Information Center located at the Seattle EOC.

2.2.3 *Lead Agency or Incident Commander*

During the initial phase of the evacuation, evacuation activities will be managed and directed from the field incident command post. Once the EOC is sufficiently staffed, certain activities may be delegated to the EOC as appropriate. Responsibilities for the lead agency at the incident command (or unified command) are:

- When practical, provide recommendations to the Mayor regarding need for evacuation.
- Defining the evacuation/shelter- in-place footprint. This effort will usually be led by the lead agency as defined in the City of Seattle CEMP – Base Plan, Section IV, C, 1.
- Through the agency Public Information Officer (PIO), coordinate the development and delivery of emergency public information and warning to ensure effective communications of evacuation procedures.
- Determine any other recommended protective actions.
- Identify any recommended transportation routes/corridors for evacuees and emergency response personnel.
- Determine mass transit resources or other modes of transportation (air, rail, water/boat) as appropriate to the incident.
- Field warning operations (door-to-door, public address systems, etc).
- Identify collection points.
- Identify of staging areas for evacuation related resources.
- Track assigned and unassigned resources supporting evacuation operations.
- Initially identify populations’ specific needs and special considerations.

2.2.4 *Seattle Transportation/ESF-1*

- Identify evacuation routes and adjust routes to changing conditions.

- Develop transportation plans for evacuees, which include the feasibility of using transportation modes such as air, water, rail, road, and public transportation.
- Develop, implement, and continually adjust traffic plans to ensure that evacuation routes are kept clear.
- Monitor traffic congestion.

2 2.5 *Seattle Public Utilities/ESF-3*

- Monitor water quality and flow.
- Provide subject matter experts for events involving water quality or dam safety.
- Assist with traffic plans by providing barricades and/or personnel to assist at traffic control points.

2 2.6 *Seattle Fire/ESF-4*

- Manage evacuation operations including defining the course of action, recommended protective actions, parameters of evacuation zones, transportation routes, field warning operations (door-to-door, public address systems, etc.) and all hazards for which they are lead agency.
- Serve as lead agency for coordinating with outside agencies as appropriate any evacuation and re-entry plans involving waterways in or adjacent to the City of Seattle.
- Provide subject matter expertise for all hazards on which Fire is the lead agency.
- Coordinate the management of pre-hospital patient care and movement of Emergency Medical Service (EMS) resources with ESF-8.
- Provide Command Staff level participation in the Mayor’s Emergency Executive Board.
- Through the Fire Alarm (911 communications) Center, facilitate notification of, and communication between, the incident command post and neighboring jurisdictions who may be within an evacuation zone defined as determined by the incident commander.

2 2.7 *City of Seattle OEM/ESF-5*

- Coordinate the development and update of this annex. This responsibility is assigned to the Planning Coordinator of OEM unless otherwise specified by the Director of the OEM.
- Coordinate the activation of the EOC in support of any evacuation.
- Ensure continued coordination through the incident particularly with outside agencies including County, State, Military, and/or Federal resources.
- Coordinate the development of any re-entry plan developed at the EOC.

2.2.8 Human Services Department/ESF-6

- Identify population's specific needs and special considerations prior to, during and after an evacuation.
- Ensure human and pet evacuation resources, and shelter resources if needed, have been identified and activated.
- Coordination of human services functions in the field.
- Serve as ESF-6 coordinator when EOC is staffed and activated.
- Define potential animal population requiring attention.
- Ensure that pets are included in all plans and transportation options that evacuate people.
- Recognize that evacuation and transport of pets will require significant logistical support (e.g. specialized, climate control transport) if pets are not integrated into their owners' evacuation options.
- Work with public information to include messaging reminding evacuees not to leave leave pets behind.
- Assess reunification support and coordinate efforts with ESF-8 and 13.

2.2.9 Parks

- Ensure shelter resources have been identified and activated.

2.2.10 Finance and Administrative Services/ESF-7

- Provide resource support.
- Provide reports on the condition and status of all City facilities within any established evacuation zone.
- Staff ESF-7 in the EOC.

2.2.11 Seattle Police/ESF-13

- Manage evacuation operations including defining the course of action, recommended protective actions, parameters of evacuation zones, transportation routes, and field warning operations (door-to-door, public address systems, etc.) and on all hazards for which they are lead agency.
- Provide crowd and traffic control, site, and perimeter security.
- Investigate crime scenes and collect evidence.
- Assist in the development of traffic plans and management of evacuation routes.

- Provide Command Staff level participation in the Mayor’s Emergency Executive Board.
- Through Seattle Police Communications, facilitate notification of, and communication between, the incident command post and neighboring jurisdictions that may be within an evacuation zone defined as determined by the incident commander.

2 2.12 Public Health Seattle-King County/ESF-8

- Provide subject matter expertise for events where a health emergency may necessitate quarantine or an evacuation of an area.
- Provide guidance and technical assistance regarding medical facilities, long term care facilities, adult day facilities and health care agencies for planning and carrying out emergency evacuation and relocation of medically dependent persons.
- Coordinate transportation arrangements for individuals under client care who require Access Van support or have special transportation needs evacuating.

2 2.13 Department of Planning and Development (DPD)

- Coordinate the inspection of structures within the evacuation zone in conjunction with ESF-4, ESF-13, and FAS (for City owned facilities).

2 2.14 King County Metro

- Provide mass transportation for movement of evacuees to designated public shelters, evacuation staging areas, or other safe areas as requested.
- Coordinate and notify the Seattle EOC of the resources used, destination and number of people transported.
- Assist in the development of traffic plans to ensure continuation of mass transit outside the evacuation zone.

2 2.15 US Coast Guard

- Manage port and water traffic when impacts extend to area waterways.
- Assist with maritime-based evacuation assets when appropriate.
- Provide a liaison to the Seattle EOC when requested.

2 2.16 Port of Seattle

- Coordinate with the Seattle EOC when evacuations impact port property.
- Serve as liaison with air/freight carriers for possible evacuation transportation modes.

2.3 Authority to Issue Evacuations

As the Chief Elected Official, the Mayor has the ultimate authority on whether or not to issue an evacuation or shelter in place order. However there will be instances where, due to factors such as time or accessibility, it may not be possible to obtain Mayoral approval. In cases where a delay could result in unacceptable risk to the public, the authority to evacuate rests with the following individuals (in order of authority):

1. The Director or Chief whose department is the designated lead for the hazard listed in the CEMP-Base Plan Section IV, C, 1.
2. If applicable, the on-scene Incident Commander whose department is the designated lead for the hazard listed in the CEMP-Base Plan Section IV, C, 1.

In cases where the event involves a community-wide emergency or other unique incident, evacuation decisions will be made at the EOC. In these situations, the determination to take protective actions will be made by a group of ESF leads at the EOC and led by the EOC Director. At a minimum, this group will consist of the senior EOC representatives present from Seattle Police, Seattle Fire, Seattle OEM (as the EOC Director), and Seattle Transportation.

2.4 Transportation Considerations

2.4.1 Transport of Evacuees

Every effort should be made to encourage evacuees to leave in their own vehicles, if it is safe to do so. Given the significant number of residents without a vehicle, King County Metro buses will be used to transport evacuees and their pets. All transportation requests should be routed through the EOC, if it is activated or the Seattle OEM Staff Duty Officer if not activated.

The Seattle Police Department has a limited number of police officers who are certified to drive full-sized commercial buses. This pool of drivers could be used to fill a gap in volatile situations or if King County Metro drivers are not available.

2.4.2 Schools

Additional coordination concepts to consider include the coordination of students. Any required school evacuations should be coordinated with the affected school system. Normally, school buses will be used for this transportation whenever practical and may be a resource if not in use at that time.

2.4.3 Selection of Evacuation Routes

In most cases, the selection of evacuation routes will be done in the field at the incident command post. In some cases this responsibility may be delegated to a subject matter expert within Seattle Transportation, The Traffic Management Center (if open), or the Seattle EOC (if activated). Considerations that should be considered when selecting an evacuation route are:

- Shortest paths to established shelters or safe area(s).
- Maximum number of lanes that provide continuous flow through the evacuation area.
- Roadways that are not expected to become impassable while the evacuation is in progress.

- Existing signal control and signal coordinated corridors.
- Routes that minimize traffic crossing conflicts at intersections.
- Availability of infrastructure to disseminate real-time conditions and messages to the traveling public (e.g., media, AlertSeattle, variable message signs).
- Minimal number of potentially hazardous points and bottlenecks on evacuation routes such as bridges, tunnels, roadways at risk for landslides.
- Maximum existing capacity.
- Ability to add capacity on a temporary basis.
- Availability of real-time traffic flow and route condition information to decision makers and the public (e.g., from closed-circuit television cameras, traffic detectors, or spotters).

2.4.4 Traffic Control

When possible, Seattle Police, in conjunction with Seattle Transportation (or ESF-1 if the EOC is activated), will establish traffic control at all incident exit/entry points around the evacuation zone. Priority status will be given for barricade requests and from all City sources. A traffic plan supporting an evacuation will identify specific actions that will ensure a smooth flow from evacuation zones to the host shelter or zones of safety including:

- Traffic control points and the responsible agency for providing staffing and operational control
- Barricade plans including location and staffing
- Potential one way / reverse lane operations

Special consideration will be given to personal protective equipment that may be needed by personnel at barricades or traffic control points. In appropriate situations, plans should look at the use of non-traditional personnel such as non-essential City employees to staff barricades.

2.5 Perimeter Security Plan

A security plan will be developed as a part of any evacuation plan to prevent re-entry before conditions are safe and possible looting. The foremost consideration in any security plan will be personnel safety. Plans should establish access control points to limit entry into evacuated areas and, where possible, conduct periodic patrols within such areas to deter theft by those on foot. To the extent possible, the security plan should include measures to insure continued fire protection.

2.6 Management of High Risk Populations

Public information statements will include information targeted towards high risk groups. For example, who to call when transportation or evacuation assistance is needed (9-1-1, 3-1-1 or a specially established hotline).

Public warning notification tools have been identified that will reach high risk populations at the same time as the general population. Field incident action plans also will target high risk groups or facilities

with door-to-door notifications wherever practical. Additional information on public warning notifications for high risk and non-English speaking populations can found in Public Warning Annex the CEMP – Emergency Operations Plan.

The housing, mass care, and management of high risk populations is addressed in ESF-6 Appendix to the CEMP –Base Plan.

2.6.1 Considerations for ADA populations

- Coordinate the use of school buses, transit buses, or specialty vehicles to pick up people with access and functional needs at prearranged locations (e.g., group homes, nursing homes, pick-up points).
- Coordinate with ESF-1, ESF-6, ESF-8 and ESF-9 to transport high risk people with functional and access or medical needs.
- Coordinate with ESF-8 and ESF-9 to transport high risk people with medical needs.
- Prioritize the needs of people with disabilities when loading general, public transportation to ensure that those with disabilities are properly situated for transport.

Additionally, transportation resources that can be used for the transportation of high risk populations include, but are not limited to the following:

- Paratransit vehicles.
- Ambulances.
- Portable steps and/or ramps for bus/train entry.
- Appropriate transport vehicles provided by nonprofit community partners.

2.6.2 Evacuation Involving Schools

Seattle Public Schools have detailed plans on evacuation of school campuses. These plans provide for the use of school buses to transport students to other campuses. Evacuation of schools should be done in coordination with school district security and conform with these plans to the extent that time and circumstances permit. School Districts should be prepared for the arrival of parents at schools that have been either evacuated or used as a shelter for displaced students.

2.7 Coordination with Other Jurisdictions

In some cases, an evacuation in the City of Seattle could require coordination with other jurisdictions based on the size and geographic location of the incident. In cases where the zone of evacuation includes other jurisdictions, communication of essential information will occur through one or both of the following methods:

- City of Seattle public safety dispatch (Police and/or Fire) to the other jurisdictions' public safety dispatch center.

- Communication from the Seattle OEM Staff Duty Officer to the designated Emergency Management Staff Duty Officer of the affected jurisdiction.

2.7.1 *King County OEM/King County ECC*

The Seattle EOC will coordinate with the King County OEM Duty Officer or the King County ECC on:

- Staff and resource needs in support of evacuation operations
- The establishment and use of shelter facilities outside the City of Seattle
- Establishment of (when feasible) a regional traffic plan specific to the evacuation needs. Considerations may include route identification, signage, and traffic control.
- Monitoring of traffic flows and patterns on routes leading into and out of the City.

2.7.2 *University of Washington*

The City of Seattle will coordinate with the University of Washington (main campus) through the following means:

- Through the University of Washington Police Dispatch Center
- University of Washington OEM Duty Officer.

2.8 *Re-Entry*

Following an evacuation it will eventually be necessary to repopulate evacuated areas. In most events, the reentry plan will be developed at the EOC. Evacuees will typically remain in shelters or safe areas until they receive communications that it is safe to reenter. However, evacuees will often try to return to the evacuation area as soon as possible to assess the state of their property. Since they may be unable to enter the impact area, they will require sheltering closer to the impact area.

2.8.1 *Reentry Task Force*

The Seattle EOC will develop a re-entry task force that will be responsible for development and implementation of procedures for managing the re-entry of business owners and residents who have a legitimate need to re-enter the evacuated area. This task force will:

- Coordinate with City leaders and those who are at the incident command post to develop criteria to determine who can re-enter the evacuation zone, under what circumstances and when.
- Established a centralized point for fielding requests from businesses and residents who need to re-enter the evacuation zone prior to the order being lifted.

The task force will be responsible for the development of the overall reentry plan.

2.8.2 *Authorization for Reentry*

In most cases, the authorization for reentry will be made by the Mayor supported by the Mayor's Emergency Executive Board. Subject matter experts from City departments including the lead agency

and Seattle Police may be called up to provide advice to the Mayor and/or the Emergency Executive Board.

2.8.3 Considerations for Allowing Re-Entry

The following considerations should be assessed before repopulation can take place including:

- Is the danger still present? (Lead agency, ESF-13, ESF-4)
- Have the necessary inspections have taken place? (Department of Planning and Development)
- Have safety and security concerns been addressed? (ESF-13, ESF-4, ESF-8)
- Is there a security plan for re-entry? (ESF-13)
- Have essential services been reestablished? (ESF-1, ESF-2, ESF-12)
- Are there resources available for managing repopulation? (ESF-7, All appropriate departments and ESF's)
- Have re-entry routes been identified? (ESF-1)
- Has appropriate messaging been developed for release? (ESF-15)
- Is there transportation for those who were evacuated, including pets? (ESF-1)
- Have arrangements been made for high risk populations including companion animals? (ESF-6)
- Has the Mayor authorized re-entry?

Once it been determined that it is safe for reentry and a plan has been implemented, evacuees may return. Some evacuees will be able to return to their homes; others may attempt to return to the impact area but their homes may have been significantly damaged or destroyed. Sheltering may still be required for those who are unable to occupy their homes.

Please see [Appendix 3](#) for guidance on development of an event specific re-entry plan.

2.9 Guidance for Large Scale or Spontaneous Evacuations

Certain hazards or situations may require the evacuation of large or densely populated areas of the City. These evacuations may be planned or spontaneous. The following concepts should be considered in large scale or spontaneous evacuations:

- Coordinate evacuation plan development and its implementation through the EOC.
- If possible, attempt to develop an incident specific plan. Planning concepts can include a sector based approach to the evacuation by geography and/or time of evacuation. Provide maps or diagrams to the media.
- Provide a clear message to the public. Utilize the Mayor and/or senior uniformed personnel to deliver the message.

- Consider ongoing use of “live” media broadcasts, particularly radio, from the EOC to provide the latest traffic and evacuation information
- Utilize ASL interpreters when delivering on-camera emergency and safety information.
- Clear outbound traffic routes of construction and other impediments
- Utilize live traffic control at critical intersections that can improve traffic flow.
- Notify the King County OEM (or the ECC if activated) to assist with coordination traffic management with outside communities.
- Post Tow Trucks or “push” vehicles at appropriate locations to immediately clear stalled or wrecked vehicles
- Have ESF-1 and ESF-13 collaborate on the possibility of establishing one-way traffic lanes if this will improve traffic flow

2.10 Guidance for Shelter In Place

Depending on the nature of the threat, it may be appropriate to direct citizens to “shelter-in-place” as opposed to evacuating. The act of sheltering-in-place consists of sealing off a room or building to protect occupants from external threats. Normally, sheltering-in-place is a short term action needed to mitigate an immediate threat. The threat could include chemical, radiological, industrial or weather related threats. Key factors for directing citizens to sheltering-in-place include:

- Is the outside environment more hazardous, or likely to be more hazardous, than the interior environment?
- Is the duration of the threat event limited to the extent that a sealed building can sustain life until the threat has abated?
- Can people be safely evacuated before onset of hazardous conditions?

Upon directing people to shelter-in-place, the “worst case scenario” should be considered when determining the size and scope of the affected area. When evaluating the options of sheltering-in-place vs. evacuation, decision makers should consider the inherent dangers of evacuation. Specific protective measures that may need to be communicated to the community include:

- Immediately move people and pets indoors
- Close and lock all exterior doors and windows
- Turn off all heat and air conditioning systems
- Close chimney flumes and all other openings into the structure
- Access disaster preparedness materials (72-hour kit, cell phone, radio etc.)
- Move to an interior room or basement (if appropriate)

- Monitor broadcasts for additional instructions

3. ADMINISTRATION AND MAINTENANCE

The Office of Emergency Management is responsible for revisions and updates to this annex. Revisions and updates are incorporated in to the City’s Emergency Management Strategic Plan.

3.1 Record Keeping

Responding departments should maintain records of Protective Actions Notifications, press releases, warning logs, and other relevant materials related to the incident. If time and resources permit, consider keeping a record of individual and neighborhood notifications.

3.2 Post Incident Review

The Seattle CEMP Base Plan, Section IV. D, outlines the process to be used to ensure a proper after action review is conducted for all EOC activations and significant events. A standard template of questions is asked for all incidents. In addition to that consideration should be given to evaluating the concepts in this plan. Specific elements to consider in any post incident evaluation include:

- The use and effectiveness of transportation and route selection between the evacuation zone(s) and shelter(s).
- Assessment of public compliance with issued protective action notices.
- The coordination between transportation (ESF-1) and Incident Operations to safely evacuate residents.
- Appropriate assignment of responsibilities
- The effectiveness of collaborating with neighboring jurisdictions, schools , and businesses
- The ability to ensure that populations with access and functional needs were safely evacuated.

4. APPENDIX 1 – GENERAL EVACUATION/SHELTER-IN-PLACE CHECKLIST

GENERAL EVACUATION CHECKLIST

✓	Action Item	Assigned
Initial & Ongoing Actions:		
	Determine area(s) at risk: <ul style="list-style-type: none"> • Determine population of risk area(s) • Identify institutional facilities and populations with access and functional needs in risk area(s) • Approximate number of people in the evacuation zone 	
	Notify Mayor of situation and attain authorization of evacuation (time permitting)	
	Notify OEM Duty Officer to activate the EOC.	
	Determine evacuation center and/or human and pet shelter requirements & preferred locations.	
	Determine traffic control requirements for evacuation routes.	
	Estimate public transportation requirements & determine pickup/staging points.	
	Determine temporary shelter requirements & select preferred shelter locations.	
	Develop and disseminate any Protective Action Notice.	
	Coordinate with institutional facilities and ESF-8 regarding precautionary evacuation.	
	Ready evacuation center(s) and/or human and pet shelter(s) selected for use.	
	Ensure that appropriate communication tools have been used to alert those with access and functional needs.	
	Coordinate with transportation providers to ensure vehicles & drivers will be available when and where needed.	
	Coordinate with school districts regarding closure of schools in the evacuation zone.	
	Advise neighboring jurisdictions that may be affected of evacuation plans.	
	Advise King County ECC and State Duty Officer that evacuation recommendation or order will be issued.	
	Through the Joint Information Center (JIC) provide additional information to the public through the media. Emergency public information should address: <ul style="list-style-type: none"> • What should be done to secure buildings being evacuated • What evacuees should take with them • Where evacuees should go & how should they get there • Provisions for populations with access and functional needs and those without transportation 	
	Provide traffic control along evacuation routes & establish procedures for dealing with vehicle breakdowns on such routes.	

	Provide transportation assistance to those who require it.	
	Provide security in or control access to evacuated areas.	
RETURN OF EVACUEES		
	If evacuated areas have been damaged, reopen roads, eliminate significant health and safety hazards, & conduct damage assessments.	
	Determine requirements for traffic control for return of evacuees and their pets.	
	Determine requirements for & coordinate provision of transportation for return of evacuees.	
	Advise King County ECC and State Duty Officer that return of evacuees will begin.	
	Advise evacuees through the media that they can return to their homes and businesses; indicate preferred travel routes.	
	Provide traffic control for return of evacuees.	
	Coordinate temporary housing for evacuees that are unable to return to their residences.	
	Coordinate with institutional facilities regarding return of evacuees to those facilities.	
	If evacuated areas have sustained damage, provide the public information that addresses: <ul style="list-style-type: none"> • Documenting damage & making expedient repairs • Caution in reactivating utilities & damaged appliances • Cleanup & removal/disposal of debris • Recovery programs as outlined in the CEMP –Recovery Plan 	
	Terminate temporary shelter & mass care operations.	
	Maintain access controls for areas that cannot be safely reoccupied.	

5. APPENDIX 2 – PLANNING CONSIDERATIONS FOR EVACUATION OF THE DOWNTOWN CORE

During the business day, downtown Seattle becomes the most densely populated area in the region. Along with the number of workers, a significant number of people now live downtown. It is also the seat of government for both the City of Seattle and King County. A significant disaster requiring the partial or complete evacuation of the downtown core presents a number of unique challenges that will have to be addressed.

Any call for mandatory evacuation will be made by the Mayor of the City of Seattle and be broadcast using multiple communication methods in order to reach downtown workers and building owners. A call for sheltering-in-place can also be made directly to building security personnel. Building owners or major employers may be called upon to assist in these notifications using internal (building or company) tools or by other available means of communication.

Prior to any evacuation, property managers, businesses and building owners should have established and practiced plans that cover how their facility will evacuate in case of an emergency.

Key Assumptions

- A significant number of downtown workers rely on mass transportation to get to and from work.
- High winds may cause damage from flying debris.
- Falling ice can be a life threatening hazards during a significant winter storm.
- Workers can leave downtown quickly if an orderly phased plan can be implemented.
- A sustained power outage in the downtown core presents significant transportation and worker movement challenges.
- The Downtown area has multiple venues which regularly hold large-scale events, including during the regular work week.

Concept of Operations

Any evacuation plan involving the downtown core should be developed in the Seattle EOC and involve input from key agencies including:

- Seattle Police
- Seattle Fire Department
- King County Metro
- King County Metro Police
- Downtown Seattle Alliance.
- Building Owners and Management Association
- Century Link/Safeco Fields; Convention Center

As a part of any downtown evacuation plan, transit corridors should be established for the:

- Movement of vehicles
- Exclusive use of mass transit (e.g. 3rd avenue).
- Exclusive use of emergency vehicles

Any plan should identify assembly areas for those without transportation. At a minimum an assembly area should be designated:

- North of downtown for those who need to travel to points north.
- South of downtown for those traveling south of Seattle. Consideration should be given to areas that allow for embarkation of passengers onto trains (e.g. Sounder) as well as buses.
- East of downtown (east of I-5) for those working on First hill or who may not be able to get to one of the other two locations.
- King County Metro should establish shuttle transportation between the 3 assembly areas to allow for the movement of people.

Assembly areas need to allow for:

- Adequate transportation flow for buses and trolleys
- Space for embarkation of passengers onto multiple buses at the same time.
- Accessibility for people with access and functional needs.
- Pets
- Space for shelter, cots, food, and other support elements that may be needed by those waiting for transportation for prolonged periods.

Role of City Departments

Seattle Police

Seattle Police will lead the development of any evacuation and/or re-entry plan for the downtown core. This includes:

- Coordinate with Seattle Department of Transportation (ESF-1) on how best to manage traffic flow in and out of the downtown core
- Implement appropriate street closures and facilitate any downtown evacuation plan prior to, or during an event.
- Establish barricade perimeters and entry check points after an evacuation has been ordered.
- Establish entry policies to allow critical building owners, or tenants, access to “restricted” areas of downtown following a disaster.
- Provide resources for fulfilling requests to block off streets to effect post-event repairs.
- Provide traffic control on downtown streets where needed.
- Maintain order on downtown streets in the aftermath of an event.

Seattle Transportation

- Lead the development of an overall transportation plan for movement into and/or out of the downtown core.
- Remove debris from downtown streets after an event.
- Facilitate replacement/repairs to traffic control equipment as needed.

Seattle Fire

- Provide expertise to evaluate (and when necessary make recommendations about) the safety guidelines outlined in any evacuation or re-entry plans.

King County Metro

- Coordinate with SPD and SDOT on:
 - Establishing assembly areas for picking up evacuees
 - Ensuring any identified transportation corridors meet the needs (and are compatible with the use) of buses and trolleys.
- Provide information regarding availability of Bus and Light Rail operations to/from downtown businesses.
 - Prior to event (based on early closures and dismissals)
 - Service levels, availability, and timetables after an event

6. APPENDIX 3 – RE-ENTRY PLANNING CONSIDERATIONS

The following should be considered planning guidance for the development of event specific re-entry plans following medium or large scale evacuations.

Tiered reentry process

Any re-entry plan should consider the use of a tiered process for the access and management of personnel and resources in controlled areas. A tiered process allows for categorizing responders, recovery personnel, businesses, and residents into groups based upon safety considerations and priority of access to disaster areas. Tiered re-entry allows for quick deployment of resources and minimizes public exposure to hazardous conditions. The three-tiered system described below can be considered a starting point for the development of an event specified tiered plan:

- **Tier 1: Incident Stabilization:** Stabilize significant health and safety hazards to allow movement inside disaster area, establish access control, deploy first responders, identify and evaluate hazardous material threats, clear roadways, conduct search and rescue.
- **Tier 2: Damage Assessment/Critical Infrastructure Restoration:** Conduct preliminary damage assessments; re-establish critical infrastructure, public safety and hospital services; begin restoring power and utilities; manage debris; restore vital services and health care facilities.
- **Tier 3: Restoration of homes and businesses:** Allow for the return of general public. Begin reopening of businesses.

Perimeter security and access control plan

Seattle Police in conjunction with SDOT and other stakeholders will develop and implement an access control plan. Some key elements that a security access control plan should include are:

- Identification of the perimeter and whether an inner or outer perimeter is needed.
- Access or control points for entry and egress,
- Resources needed for execution of the plan including personnel, equipment, and materials,
- Which response tier is allowed in the zone or zones within the perimeter,
- The level of scrutiny that should be placed on the credentials, placards or agency identification for each responder.

Credentialing Policies

Credential policies should address the following:

- Identify the letter of access form that may be issued to individuals who require access through a checkpoint or into a secure perimeter or building.
- Identify vehicle placard form that will be used by public safety personnel to identify vehicles who have permission to be inside secure perimeters.

- Personal Identity Verification including a list of acceptable (recognized) forms of Identification.

APPENDIX 6 – ALERT AND PUBLIC WARNING ANNEX

Begins On Next Page

CITY OF SEATTLE
COMPREHENSIVE EMERGENCY MANAGEMENT PLAN

EMERGENCY OPERATIONS PLAN
ALERT & WARNING ANNEX

REVISED, AUGUST 2015

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1.0 INTRODUCTION

1.1 Purpose

This Annex to the Comprehensive Emergency Management Plan (CEMP) describes the means, organization, and process by which the City of Seattle will provide timely, accurate, and useful information and instructions to city employees and the general public throughout an emergency. It provides details on the organizational structure, department responsibilities, the decision making process, and methods by which protective action notices are developed, and communicated to City employees and the general public.

The City of Seattle fully utilizes the National Incident Management System (NIMS) and its concepts in all emergency and disaster related efforts. It is intended to be a living plan to be reviewed and revised on a cyclical base to maintain its efficiency.

1.2 Scope

The processes identified in this annex apply to all City departments, offices, staff, and elected officials.

This annex applies and should be used in all situations where a City department (or departments) needs to issue a protective action notice to an area larger than 16 square blocks.

This annex does not apply to situations where these functions can be successfully accomplished using ONLY on-scene personnel. This typically will involve small events. Examples include:

- A law enforcement event where a few houses need to be evacuated.
- An apartment building fire where door-to-door notifications can successfully do the job.

1.3 Situation

Situation statements that apply to all hazards can be found in the CEMP-Base Plan, Section II A. In addition to the all-hazard situation statements, the following specifically apply to the concepts of alert and notification of city departments or employees and public warning:

- The need to warn the public of impending danger could arise at any time. To reduce loss of lives, adequate and timely warnings must be provided.
- City decision makers and key department personnel must receive notification of emergencies as soon as possible in order to respond effectively to an emergency.
- City public information officers will play a central role in developing protective action notices to stakeholders and the general public.
- Prior to an emergency occurring, every reasonable action is taken to ensure that city employees and the public is informed of potential hazards and the protective measures that can be taken through a public awareness program.
- A higher authority (State of Washington and/or Federal Government) may initiate warnings through the use of the National Alert & Warning System (NAWAS) whenever a large-scale threat or emergency exists. Incidents falling into this category include, but are not limited to terrorist attacks, and biohazards or other catastrophic hazards.

- Given that the public receives and processes information in different ways, multiple systems will be used to communicate protective actions when possible.
- Events that require the issuance of a protective action notice can happen at any time.
- Infrastructure such as power outages, damage to cellular towers or phone exchanges, or cellular congestion may disrupt or prevent end users from receiving protective action notices on equipment that depend on these utilities.
- The City of Seattle does not have a fixed outdoor warning system.

1.4 Assumptions

A list of assumptions that apply to all hazards can be found in the CEMP-Base Plan, Section II C. In addition to the all-hazard assumptions, the following specifically applies to the concepts of alert and notification, and public warning:

- Alert and notification of city employees may be initiated by individual departments, department dispatch centers or other operating centers, or from the Office of Emergency Management.
- The amount of lead time available to provide warnings will vary from situation to situation. Some situations may occur without warning, precluding the ability to utilize some or all communication tools used to inform the public to take protective action.
- No single communication will reach all of the population of the City. A combination of systems will need to be used to reach the greatest number of people in the shortest amount of time.
- The proper use of adequate warning will save lives, reduce injuries, and protect property.
- Normal communications are not adequate to disseminate warning information to the general public and key stakeholder groups.
- Disruption and damage to the telecommunications infrastructure will likely occur in the event of a natural emergency or disaster. The type and degree of damage may impact the ability to utilize specific systems and delay the ability to disseminate protective action notices.
- Electronic news media are the primary sources of emergency information for the general public. However the public is becoming more reliant on social media sites for information.
- Large percentages of the population consider cell phone their primary means of voice communication and do not have land line phones.
- Existing media resources, if used effectively, will cooperate and facilitate dissemination of warnings and emergency public information.
- Local radio and television stations will broadcast Emergency Alert System (EAS) messages when requested by local government.
- During an emergency situation, rumors may develop, potentially causing unnecessary fear, confusion, and undesired public reactions.
- Augmentation of the Joint Information System (JIS) may be required to meet the information demand from the general public during an emergency situation.
- A variety of communication tools will be required to communicate protective action notices to special needs groups.

- Certain populations (for example non-English speaking populations) may not understand the messages, may be confused by them or may not trust them.
-

1.5 Key Terms

Protective Action Notice: A statement which instructs people to take immediate action to protect their life due to a danger or impending danger. A protective action notice typically involves a notice to immediately leave an area, or stay sheltered in place pending further instructions.

Evacuation: National Incident Management System defines evacuation as an organized, phased, and supervised withdrawal, dispersal, or removal of civilians from dangerous or potentially dangerous areas, and their reception and care in safe areas.

Incident Command System (ICS): The Incident Command System organizational element responsible for overall management of the incident and consisting of the Incident Commander (either single or unified command structure) and any assigned supporting staff.

Incident Commander (IC): The individual responsible for all incident activities, including the development of strategies and tactics and the ordering and release of resources. The IC has overall authority and responsibility for conducting incident operations and is responsible for the management of all incident operations at the incident site.

Incident Command Post: The field location where the primary functions are performed. The ICP may be co-located with the Incident Base or other incident facilities.

1.6 Legal Authorities Specific to Public Warning

- City Municipal Code, Chapter 10.02.020 - Authority of Mayor to issue certain orders
- City Municipal Code, Chapter 10.02.070 -Comprehensive Emergency Management Plan
- City Municipal Code, Chapter 10.02.080 -Emergency Management Organization
- PL 110-325 - Title 42 Chapter 126 Americans with Disabilities Act -ADA (1990) as amended:
<http://www.ada.gov/pubs/ada.htm>
- National Incident Management System (updated 2013): <http://www.fema.gov/national-incident-management-system>
- Presidential (Policy) Decision Directive 5 (2003) as amended:
<http://www.fas.org/irp/offdocs/nspd/hspd-5.html>
- Presidential (Policy) Decision Directive 8 (2011) as amended:
<http://www.dhs.gov/presidential-policy-directive-8-national-preparedness>

- Title 47 CFR , Part 73, Subpart G, Emergency Alert System, as amended; the Local Area or State EAS Plan

2. ORGANIZATIONAL CONCEPTS

2.1 Agency and Positional Responsibilities

2.1.1 *Mayor of the City of Seattle*

The Mayor, as the ultimate authority, approves or delegates approval of any protective action notice for the City of Seattle. The Mayor may:

- Authorize the release of any public warning information including protective action notices.
- Issue a declaration of Emergency or Civil Emergency Order when appropriate.
- Authorize activation of the City’s Emergency Operations Center (EOC).
- Provide necessary guidance and leadership.
- Through Emergency Support Function #15 (ESF #15) External Affairs, and in conjunction with appropriate department PIO’s, coordinate the dissemination of information through the Joint Information Center located at the Seattle EOC.

2.1.2 *Lead Agency or Incident Commander*

The lead agency for specific hazards as defined in the CEMP-Base Plan Section IV, C, 1 is responsible for:

- Through the lead agency’s PIO, or other designated person, coordinates the development and delivery of any protective action notice to the public.
- Initiating an Emergency Alert System (EAS) message through King County Sheriff’s Office Communication Center or their back-up, if protective actions by the public are time critical and will save lives.
- Ensuring that the OEM Staff Duty Officer is contacted as soon as possible after the initiation of an EAS message.
- Notification of the Seattle OEM Staff Duty Officer as appropriate and coordinates with the Office of Emergency Management on obtaining Mayoral approval for the release of protective action notices that do not require the initiation of an EAS message.
- Identification of specific message elements for protective action notices including defining the areas for which such notice(s) apply.
- Identification of requirements for route alerting and door-to-door warning for areas where other warning systems do not adequately reach the public.
- Coordination of the use of equipment and personnel for route alerting and door-to-door warning for scene specific notifications.

- Coordination of the development of the content of warning messages and Special News Advisories with their lead department PIO, JIC supervisor, and/or the EOC JIC as appropriate.

2 1.3 *Lead Agency PIO*

- Responsible for final draft of protective action notice
- Coordinates with appropriate parties (e.g. Public Safety Dispatch) to push any message out using the appropriate communication systems.
- Contacts JIC coordinator for assistance in coordinating follow up messaging.
- Coordinates with the Seattle EOC JIC when activated.

2 1.4 *City of Seattle OEM*

The City of Seattle OEM is responsible for:

- Sending alerts and notifications to the Emergency Executive Board, Disaster Management Committee members, and EOC Responders whenever the EOC is activated.
- Coordinating the development and update of this annex. This responsibility is assigned to the OEM Planning Coordinator unless otherwise specified by the Director of the OEM.
- Coordinates the development and dissemination of educational materials to the general public regarding the availability and use of warning systems used by the City of Seattle

2 1.5 *JIC Supervisor*

When contacted, leads and/or assists the lead agency PIO with:

- Dissemination of any protective action notice to the public.
- Development and dissemination of any follow up communications to the media and/or general public.
- Dissemination of any messaging over secondary communication systems.
- Establishes and manages the JIC at the EOC and ensures that the JIC can assume any public warning notification functions once it is properly staffed.
- Manages public messaging in coordination with King County JIC and other regional stakeholders, as appropriate, for timely, accurate and consistent communications.

2 1.6 *Public Safety Dispatch Centers (Fire & Police)*

Seattle Police and Fire each operate a 24-hour dispatch center. These centers have the following responsibilities related to public warning:

- When directed, execute the delivery of messages using the AlertSeattle system.

- Forward any protective action notices to King County Sheriff's Dispatch Center, *or* the King County Office of Emergency Management Duty Officer for dissemination on EAS.
- Notify appropriate personnel per department procedures including the OEM Staff Duty Officer.

2.1.7 Department Operations Centers and Department Points of Contact

- Seattle City Light, Seattle Public Utilities and Seattle Department of Transportation have 24 hour capability and will notify appropriate department personnel per their internal protocols.
- When EOC Department Representatives receive an emergency notification from any source, they will notify appropriate personnel in their departments per their internal protocols.

2.2 Sources for Receiving Alert and Warning Information

The City of Seattle has the following systems from which it can receive warning information.

2.2.1 Federal Sources

National Alert and Warning System (NAWAS): The National Warning System (NAWAS) is an automated telephone system used to convey warnings to United States-based federal, state and local governments. NAWAS is operated and fully funded by the Federal Emergency Management Agency (FEMA). Today, the system consists of over 2,200 telephone party lines. The interconnecting lines provide some protection by avoiding local telephone switches. This ensures they are available even when the local system is down or overloaded. The City of Seattle OEM has a NAWAS phone located in the OEM office area.

National Weather Service/National Oceanic and Atmospheric Administration (NOAA) Weather Radio: The National Weather Service routinely issues weather warning messages. These messages may include instructions for citizens to immediately take measures to protect their life. Key NOAA weather messages include

- Flood/Flash flood warnings
- Severe storm or tornado warnings
- High wind warning
- Tsunami warning
- Winter storm or blizzard warnings

In addition, the weather service may issue the following warnings at the request of other agencies including (in some cases) local government:

- Civil Danger Warning
- Civil Emergency Message
- Hazardous Materials Warning
- Evacuation or Shelter-in-Place warning
- Volcano Warning

NOAA also operates the NOAA Weather Radio (NWR; also known as NOAA Weather Radio All Hazards) network. This is a network of radio stations in the United States that broadcast continuous weather information directly from a nearby Weather Forecast Office of the service's operator, National Weather Service (NWS). NOAA Weather Radio broadcasts National Weather Service warnings, watches, forecasts, weather observations and other hazard information 24 hours a day. It also broadcasts alerts

of non-weather emergencies such as national security, natural, environmental and public safety (such as an AMBER Alert) through the U.S. Federal Communications Commission's (FCC) Emergency Alert System.

National Weather Service Seattle also has permission to use the K7MMI repeater system throughout much of western Washington including King County. Local ham radio operators will help operate the amateur radio workstation on the K7MMI system at 147.20 MHz and 146.980 MHz.

<http://www.k7mmi.net>.

2.2.2 State Systems

Comprehensive Emergency Management Network (CEMNET): CEMNET serves as the "PRIMARY" back-up communications system for direction and control of emergency operations in the State of Washington. CEMNET is a low band VHF system employing twelve (12) remote mountaintop base stations. The 12 stations are operated and controlled at the state Emergency Operations Center (EOC) through the Washington State Patrol microwave radio system

Seattle is assigned to the Northwest Regional Channel (F1-45.20MHz)

The Central Computerized Enforcement Service System (ACCESS): ACCESS is a web-based data network supporting state and local law enforcement agencies. This network is managed by Washington State Patrol (WSP) and is supported statewide through the WSP microwave radio system and leased circuits. ACCESS is employed by the state EMD for dissemination of warning, alert, and notification information to local jurisdiction emergency managers. EMD ACCESS terminal addresses are OLYEM or OLEM2.

2.2.3 King County/Region 6

Regional 800 MHz Radio Communications: The Seattle/King County Regional 800 MHz Trunked Radio System is comprised of interconnected sub regional analog trunked radio simulcast cells and intellirepeaters owned by the City of Seattle and other regional jurisdictions. The system supports approximately 14,000 radio users throughout King County, including police, fire, EMS, general government services, school districts and utilities, with the ability of radio users to communicate with their counterparts even while "roaming" outside their home area by connecting to other sub regional simulcast cells and intellirepeaters participating in the regional system. The system includes talk groups dedicated for emergency management use which can be used to convey (or receive) warning information as well as coordinate activities within and between agencies.

King County Flood Warning System: This system warns residents and agencies of impending floodwaters on major rivers so they can take action and prepare themselves before serious flooding occurs. In most locations, the warning system provides at least 2 hours lead time before floodwaters reach damaging levels.

King County Road Alert: King County Road Alert is a service for travelers on unincorporated roads in King County. Subscribers receive emails and/or text messages notifying them of a significant road closure or hazard has impacted travel.

Regional Public Information Network (RPIN): The Regional Public Information & Notification (RPIN) system is a subscriber-based public alert resource for residents to stay informed about severe weather forecasts, health risks, safety advisories, and emergency situations impacting the King County region. Registration is free and alerts are sent by email, mobile text, and/or voice.

Jurisdiction-to-jurisdiction communications: Neighboring jurisdictions routinely share information with the City of Seattle. In cases involving public safety agencies, this information is typically shared from dispatch center to dispatch center. Information may also be shared through a system of Emergency

Management Duty Officers. The City of Seattle has a 24 hour Duty Officer number which can receive messages at any time, day or night. This process can be used to share information (including warning information) between emergency management offices and EOC's in the county. Public information coordination is a function of the Joint Information Center in support of regional messaging that is timely, accurate and consistent, as well as accessible by the diverse populations we serve.

2.2.4 Local Sources

City 800 MHz Radio Communications: The City operates its own frequencies on the County radio system. The City system has three channels that can be accessed by City departments, key local stakeholders, schools, amateur radio, and the National Weather Service. The system can be used to disseminate and receive warning information.

City Departments: In the course of their normal operations also utilize an 800Mhz radio system that can be used to provide those employees with protective action information during emergencies.

Public Safety Dispatch & 9-1-1 Center: Public safety dispatch and 9-1-1 centers serve as the first link between citizens and emergency services. Citizens can be the first ones to bring an event or emergency to the attention of emergency services. Additionally, Seattle Police Communications has access to the National Law Enforcement Telecommunications System (NLETS) which can be used by State and Federal authorities to convey warning information.

Seattle Staff Duty Officer (SDO): The SDO serves as the 24 hour point of contact for the Office of Emergency Management. The SDO can be used for both receiving and disseminating public warning information between government agencies. The SDO is rotated among a roster of staff members from within the OEM.

2.3 Systems Used for Disseminating Alert and Warning Information

At the incident commander's discretion, the public may be warned by route alerting using vehicles equipped with sirens and public address systems. Warnings may also be delivered by response personnel going door-to-door. Both of these methods are effective in delivering warning, but they are labor-intensive and time-consuming and may not be feasible for large areas.

In addition to the field notification methods (door-to-door, public address system), the following communication tools are available for disseminating public warning information to the populations within the City of Seattle:

2.3.1 AlertSeattle

AlertSeattle is a notification and warning system that enables the City to send the public and employees routine and emergency information. It may be used to warn the public to take immediate life protective measures and it may also be used to mobilize emergency responders during incidents. Messages are created and can be sent as texts, e-mails or voice calls. The City uses the system to alert both the public and city employees and will work similarly for both audiences:

- Public – The notification system allows the City to issue a city-wide alert message, reaching everyone who has signed up or to target a specific community based on an area drawn on an interactive map interface. Messages will then go out by text, e-mail or voice call as specified by the recipient when they sign up for the service.

- Employees - Emergency warning messages can be sent to City employees with notifications concerning campus-wide events or targeting messages to a specific building or even a floor of the building. Messaging can be sent to a smart phone, e-mail, flash alerts to computer screens and the building's public address system.

AlertSeattle will eventually incorporate the ability to send Wireless Emergency Alerts which is managed by the Department of Homeland Security and is described in greater detail below.

2.3.2 Emergency Alert System (EAS)

The [Emergency Alert System](#) (EAS) is intended to provide a means for government to provide emergency warning and instructions to the public. The City of Seattle receives EAS messages that contain warning information broadcast by Federal, State, or local government authorities.

As a condition of licensing, all commercial radio and television stations and cable television companies must participate in EAS and use their facilities to relay warning and instructions from government to the public. Broadcasters and cable companies must carry national security warnings and messages initiated by the President of the United States; they may broadcast alerts and messages initiated by state and local governments. The Federal Communications Commission encourages licensees to broadcast state and local warning and instruction messages, but the final decision on broadcasting such messages rests with the broadcaster.

KIRO/KOMO TV are the local primary stations for EAS broadcasts. All broadcasters monitor for original or relayed EAS messages, including from NOAA Weather Radio stations. The City of Seattle accesses EAS through the King County OEM Duty Officer or King County Emergency Coordination Center (ECC) if activated.

2.3.3 Wireless Emergency Alerts (WEA)

WEA, formerly known as the Commercial Mobile Alert System (CMAS), and prior to that as the Personal Localized Alerting Network (PLAN), is an alerting network designed to disseminate emergency alerts to mobile devices such as cell phones and pagers. WEA allows jurisdictions at all levels of government to send public warning alerts to participating wireless providers who will distribute the alerts to their customers with compatible devices via Cell Broadcast, a technology similar to Short Message Service (SMS) text messages that simultaneously delivers messages to all phones using a cell tower instead of individual recipients. There are three different kinds of alerts:

- Presidential Alerts – Alerts issued by the President or a designee;
- Imminent Threat Alerts – Alerts that include severe man-made or natural disasters, such as hurricanes, earthquakes, tornadoes, etc., where an imminent threat to life or property exists; and
- AMBER Alerts – Alerts that meet the U.S. Department of Justice's criteria to help law enforcement search for and locate an abducted child.

Mobile users are not charged for receiving these text-like alerts and are automatically enrolled to receive them.

2 3.4 Commercial Radio and TV

A significant percentage of the public still receives news from commercial radio or TV. Seattle has 10 TV and 11 major radio stations. In addition to EAS, Seattle has methods for communicating directly with news desks of most stations using normal communication channels and the internet.

2 3.5 Social Media/Websites

The City utilizes a number of different social media tools for communicating with stakeholders. Seattle departments operate their own blogs and/or twitter pages. The City has policies and capabilities in place to be able to push information from a central point to all of these pages to ensure consistent messaging in an emergency. Additionally, the City home page has the capability of hosting “alert” messages which are prominently displayed on the home page. There is also a page dedicated to hosting alert messages during times of emergency.

2 3.6 Seattle Channel

Seattle Channel is a government-access cable channel that is a part of the City of Seattle's Department of Information Technology. Programming decisions are based on content and are made independent of the Mayor and Seattle City Council. However, procedures are in place so that the channel can be used by the EOC's Joint Information Center during emergencies. Seattle Channel is on cable television channel 21 on Comcast (321 HD) and Wave (721 HD) to cable subscribers in Seattle. Programming is also available live on the web (www.seattlechannel.org).

2 3.7 NOAA Weather Radio

The [NOAA weather radio system](#) allows for transmission of emergency information on a nationwide system of transmitters that broadcast weather information 24 hours a day. A residence equipped with a NOAA weather radio can receive warning information on equipment that is not dependent on external power or user intervention.

The National Weather Service (NWS) operates the NOAA All-Hazards Network and is now used by the U.S. Department of Homeland Security (DHS) to send critical all-hazards alerts and warnings. The network supplements the existing alert and warning resources and serves as an additional delivery mechanism for sending life-saving information nationally, regionally, or locally.

The system also reaches persons who may be using computer software weather programs such as “Weatherbug” to receive information. The service is also monitored by State and Federal coordinating centers and provides a “backup” capability for notifying these centers of local emergencies. EAS broadcasts will also be picked up and carried over the NOAA radio network.

2 3.8 Dispatch Center Computer Aided Dispatch (CAD)

Both Seattle Police and Seattle Fire use CAD systems to assist in call taking and dispatching resources. These system are also capable of individual and mass notification of department employees and may be used for mobilization of resources as well as emergency notification.

2 3.9 City Issued Pager

A number of employees with the City of Seattle carry alpha-numeric pagers which can be used by dispatch centers to send notices to various branches of individuals including departmental and special branch call pagers.

2.3.10 *Email Distribution Lists*

A number of City departments and the EOC utilize distribution groups to communicate with important stakeholders and the general public. Critical distribution lists are kept at the EOC for use during emergencies. PIO's and key contacts within City departments also utilize distribution lists to forward messages to groups in times of emergency.

2.3.11 *Variable Message Signs*

Variable Message Signs (VMS) are electronic traffic signs used on roadways that can provide motorists with important information during emergencies. They may also recommend alternate routes, limit travel speed, warn of duration and location of problem or simply provide alerts or warnings. The City of Seattle Department of Transportation has access to a number of fixed and mobile signs that can be strategically placed along roadways around the City.

2.3.12 *Highway Advisory Radio*

Travelers Information Stations (TIS), also called Highway Advisory Radio stations (HAR) by the United States Department of Transportation, are licensed low-power AM radio stations operated by departments of transportation, local government, and other entities. The City of Seattle Department of Transportation has access to a number of fixed and mobile transmitters that can be used to distribute information during an emergency.

3. CONCEPT OF OPERATIONS

3.1 *Actions by Phases*

3.1.1 *Normal Operations*

Normal operations involve any mitigation and preparedness activities associated with employee notification or public warning. This includes activities that take place before any incident or event that would necessitate emergency public information or employee notification. This phase consists of the following major tasks:

- Train city employees who have responsibilities or roles that support the execution of responsibilities outlined in this annex.
- Educate the public on the ways in which they may receive information and what they should do when they receive a protective action notice.
- Ensure that notification groups and employee information is regularly updated.
- Conduct regular testing of employee notification and public warning systems and correct deficiencies as soon as possible.
- Conduct training and exercises that include the use of notification and warning systems.
- Evaluate new communication technologies that could enhance public warning capabilities.
- Routinely assess methods by which the public receives information and assess how any changes might impact their ability to receive or process protective action notices.

- Update and/or revise the Alert and Warning Annex to the CEMP.

3.1.2 Response

Response begins when there is awareness that an incident or event may occur or is already in progress. This includes any pre-event activities that may be undertaken prior to the onset of conditions or the event and consists of the following major tasks:

- Gain and maintain situational awareness.
- Establish a Joint Information System.
- Activate the Emergency Operations Center and Joint Information Center when necessary.
- Identify and notify personnel that develop and initiate emergency public information.
- Disseminate emergency information over multiple communication systems as appropriate.
- Provide emergency information to the public in accessible formats.
- Gather, coordinate, prepare, obtain authorization and release accurate information to the public in support of all facets of emergency operations.
- Manage public inquiries and rumors.
- Demobilize and/or reassign resources that are no longer necessary for emergency public information operations.
- Capture incident costs associated with emergency public information operations.

3.1.3 Recovery

Recovery includes short-term and long-term efforts to rebuild and revitalize areas affected by disaster. For the purposes of this plan, recovery will include the following tasks:

- Inform the public about recovery processes and programs.
- Submit and close out reimbursement claims for operations related to emergency public information.
- Conduct after action review of regional emergency public information operations and submit After Action Review and Corrective Action/Improvement Plan.

3.2 Warning Dissemination Strategy

The lead agency for the hazard is responsible for the development and issuance of the protective action notice. In most cases this falls to the scene incident commander unless otherwise specified. The incident commander may delegate portions of the process to their department's PIO.

Once the decision is made to issue a protective action notice, the incident commander or department lead shall:

- Coordinate with their department’s lead public information officer to ensure that the proper elements are provided, and included in any protective action notice.
- Review and approve specific message elements that will go into any protective action notice.
- Ensure the final notice is delivered to the point for dissemination using the identified system.

The Seattle EOC Joint Information Center may assume the responsibility of managing the development and issuance of any protective action notices once staff is in place. Any transfer of responsibilities will be approved by the Incident Commander and EOC Director prior to taking place.

A public information officer or other authority designated by the incident commander will be responsible for crafting of the warning message. In some cases multiple messages may need to be created in order to meet restrictions of various warning systems.

A diagram for the processing of a protective action notice can be found in [Appendix 4](#).

3.2.1 Authorization to Release a Protective Action Notice

As the Chief Elected Official, the Mayor has the ultimate authority on whether or not to issue a protective action notice to the public. However there will be instances where, due to factors such as time or accessibility, it may not be possible to obtain Mayoral approval. In cases where a delay could result in unacceptable risk to the public, the authority to issue a protective action notice rests with the following individuals (in order of authority):

1. The Director or Chief whose department is the designated lead for the hazards listed in the CEMP-Base Plan Section IV, C, 1.
2. If applicable, the on-scene Incident Commander whose department is the designated lead for the hazards listed in the CEMP-Base Plan Section IV, C, 1.

In cases where the event involves a community-wide emergency or other unique incident, decisions regarding public warning and protective action notices will be made at the EOC. In these situations, the determination to take protective actions will be made by a group of ESF leads at the EOC and led by the EOC Director. At a minimum, this group will consist of the senior EOC representatives present from Seattle Police, Seattle Fire, Seattle OEM (as the EOC Director), and Seattle Transportation. Should the EOC not be activated at the time, the Seattle Staff Duty Officer will coordinate the convening of a conference call (or meeting) of the key decision makers listed above to make the recommendation to the Mayor regarding the issuing of a protective action notice.

3.2.2 Selection of Warning Systems

Warning Areas Less Than 12 Square Blocks

The following systems will be used whenever a protective action notice is issued to an area that exceeds the capacity for field units to carry out, but involves an area less than 16 blocks (one mile):

- Alert Seattle
- Social Media (e.g. twitter)

It will be the responsibility of the lead PIO, in conjunction with the JIC Coordinator (as designated by the Mayor’s Communication Director) to assess the use of other possible communication systems that could be used to carry the message. A list of possible systems can be found in [Appendix 3](#).

Warning Areas Greater Than 12 Square Blocks

The following systems will be used whenever a protection action notice is issued to an area in excess of 16 blocks (one mile):

- Alert Seattle
- Social Media (e.g. twitter)
- Emergency Alert System (through King County Sheriff or King County OEM Duty Officer)

It will be the responsibility of the lead PIO, in conjunction with the JIC Coordinator (as designated by the Mayor’s Communication Director) to assess the use of other possible communication systems that could be used to carry the message. A list of possible systems can be found in [Appendix 3](#).

The use of field notifications such as door-to-door and public address systems are carried out at the discretion and approval of the incident commander or unified command, if established.

3.2.3 Development of Warning Message Elements

In all cases, a subject matter expert (or experts) **for the lead agency** will develop the following elements of information for warning messages:

- Describe the nature of the threat and anticipated impact to the public.
- Determine the area to be warned.
- Define the protective action to be taken (i.e. evacuate, shelter-in-place, etc.). In the case of evacuation the subject matter expert will identify the egress routes.
- Identify a “rally point” or a safe location where evacuees can assemble outside of the evacuation zone.
- Set a valid start and end time.

3.2.4 Guidance for Truncating Messages

In cases where the message size must be reduced to meet the limitations of the communication system, PIOs should attempt to place the following elements in the outgoing message (in order of priority):

- Nature of the threat
- Location of the threat
- Source to get more information (e.g. tune to media for more information)

Additional elements should be included (if possible) in the following order:

- Protective action to be taken

- Geographic area to be evacuated.
- Evacuation routes
- Anticipated impacts to the public.

3.2.5 Final Message Approvals & Release

The PIO of the lead agency is responsible for the final message development and release of protective action notices until such time as the Joint Information Center in Seattle EOC is staffed. Once staffed, the EOC JIC assumes responsibility for managing the development of messages and their release.

The lead department will utilize existing departmental policies and procedures for ensuring that the SUBJECT MATTER EXPERT and PIO are able to conduct two way communications for the purpose of developing and issuing protective action notices. Procedures should include multiple ways for communicating. In most cases messages will be communicated to department dispatch centers that will then disseminate the messages.

3.3 Updating and/or Cancelling Protective Action Notices

Updates to protective action notices should always be done whenever:

- There is a change in protective actions that need to be taken.
- There is a change in the geographic impact area recommended for the protective action notice.
- The notice is extended or cancelled.

The lead PIO will contact and then coordinate with the EOC JIC supervisor to ensure that any updates or cancellations of protective action notices are communicated using the appropriate systems. The JIC Coordinator may be supported by other PIOs or a qualified Seattle Staff Duty Officer as needed.

Consideration should be given to using **all** of the same systems that were used for the initial notification.

The EOC JIC will take responsibility for updates and cancellations once the JIC is sufficiently staffed.

3.4 Compliance Monitoring

Several methods will be used to monitor public compliance with protective action notices. Methods used can include:

- Monitoring of traffic cameras from either Washington Department of Transportation or Seattle Department of Transportation.
- Use of spotters (e.g. ACS or CERT volunteers) located along evacuation routes to relay information
- Monitoring of media outlets and live television feeds.
- Use of air assets from King County, the State of Washington, or the Civil Air Patrol.

Compliance monitoring will be managed by the Seattle EOC.

3.5 Coordination with Neighboring Jurisdictions

There will be times when a warning issued by the City of Seattle will impact other jurisdiction. In the event a public warning statement extends into another jurisdiction, the issuing agency will coordinate with the Local Warning Point (LWP) of a neighboring jurisdiction or county whenever warning statement has the potential to impact the population of that neighboring jurisdiction by the following means:

1. Direct coordination with the public safety dispatch center of the effected jurisdictions.
2. Through the OEM Staff Duty Officer who will then facilitate contact and coordination with King County OEM. These agencies will, in turn coordinate directly the emergency manager of the effected jurisdiction. The Seattle EOC may assume the responsibility of coordination once it is activated and staffed.

3.6 Warning Considerations for Populations with Access and Functional Needs

Any protective action notice will almost certainly include individuals who have access and functional needs. These needs will vary in their degree, and a variety of communication systems will need to be used. The following are considerations that should be used when selecting additional methods for public warning events. Users should note the system disadvantages found in [Appendix 2](#) when selecting a system.

3.6.1 Deaf/Hard of Hearing

The following are potential communication solutions that are specific to the hard of hearing.

- Closed captions
- Television crawls that do not block the captions
- American Sign Language
- Personal warnings
- Loop technology in public address systems
- Email
- Social media such as Facebook and/or Twitter

Seattle communication systems which encompass at least one of these options are:

- Door-to-door notification
- Street-by-street public address systems
- AlertSeattle
- EAS
- Wireless emergency alerts
- Commercial radio and TV
- ADA Accessible Websites
- Email distribution lists

- NOAA Weather Radio
- Highway Advisory Radio
- Seattle Channel
- Social and online media

3.6.2 *Blind/low vision*

The following are effective communication solutions that are specific to those who are blind or have low vision:

- Auditory alerts
- Large print
- Braille
- Video description
- Text-to-speech
- Raised print signs
- Accessible websites (i.e. screen-reader friendly)

Seattle communication systems which encompass at least one of these options are:

- Door-to-door notification
- Street-by-street public address systems
- AlertSeattle
- EAS
- Commercial radio and TV
- ADA Accessible Websites
- NOAA Weather Radio
- Highway Advisory Radio
- Seattle Channel

3.6.3 *Deaf-blind*

The following are effective communication solutions that are specific to those who are deaf and blind:

- Personal warnings
- Bed shakers
- Vibrating pagers
- Rewritable braille machine

Seattle communication systems which encompass at least one of these options are:

- Door-to-door notification
- EAS
- Commercial radio and TV
- (city issued) pager
- ADA Accessible Websites

3 6.4 Cognitive & Developmental Disabilities

The following are effective communication solutions that are specific to those who have intellectual or developmental disabilities:

- Plain language/instructions
- Picture boards
- Instructions for caregivers.
- Television media

Seattle communication systems which encompass at least one of these options are:

- Door-to-door notification
- Media (re)broadcasts of messages

3 6.5 Psychiatric Disabilities

The following are effective communication solutions that are specific to those who have psychiatric disabilities:

- Plain language/ instructions
- Instructions treatment

Seattle communication systems which encompass at least one of these options are:

- Door-to-door notification

3 6.6 Limited English Proficiency

The following are effective communication solutions that are specific to those with limited English proficiency:

- Simple language/instructions
- Picture boards
- Interpreters for people with LEP
- Translated information

Seattle communication systems which encompass at least one of these options are:

- Door-to-door notification

- Street-by-street public address systems
- AlertSeattle
- Commercial radio and TV
- ADA Accessible Websites
- Email distribution lists
- Seattle Channel

4. ADMINISTRATION AND MAINTENANCE

The Office of Emergency Management is responsible for revisions and updates to this annex. Revisions and updates are incorporated into the City's Emergency Management Strategic Plan.

4.1 Record Keeping

Responding departments should maintain records of protective action notices, press releases, warning logs, and other relevant materials related to the incident. If time and resources permit, consider keeping a record of individual and neighborhood notifications. Seattle OEM will maintain a record of all WebEOC entries and sign in sheets for the EOC operations supporting the incident.

4.2 Post Incident Review

The Seattle CEMP Base Plan, Section IV. D, outlines the process to be used to ensure a proper after action review is conducted for all EOC activations and significant events. A standard template of questions is asked for all incidents. In addition to that consideration should be given to evaluating the concepts in this plan. Specific elements to consider in any post incident evaluation include:

- The appropriate use and effectiveness of communication tools.
- The appropriate mix of communication tools.
- Assessment of public compliance with issued protective action notices.
- The process for assessment, development, and communication of protective action notices between the various elements in the field and off site (such as dispatch centers).
- Appropriate assignment of responsibilities.
- The effectiveness of collaborating with neighboring jurisdictions, schools, and businesses.
- The effectiveness of messaging to populations with access and functional needs.
- The process for determining and communicating reentry once the emergency had concluded.

4.3 Testing and Maintenance of Warning Systems

The following outlines the testing and maintenance procedures for the two primary warning methods used by the City of Seattle:

AlertSeattle: Specific testing for Alert Seattle is set in the AlertSeattle Use Policy and Guidelines, Section 4.2. Additional information on the process for testing can be found in specific standard operating procedures for City departments

Emergency Alert System (EAS): The Central Puget Sound Area Emergency Alert System Plan outlines the regular testing of EAS with area broadcasters. As the access point for the City of Seattle, King County OEM also routinely tests the ability to push messages to EAS using the Integrated Public Alert and Warning System. Procedures for testing and use by King County are found in the King County Office of Emergency Management Emergency Alert System (EAS) Release Procedures document.

Other systems are used and/or tested on a regular basis by the departments that control them.

5. APPENDIX 1 – SAMPLE WARNING MESSAGES

5.1 Warning-Shelter-in-Place

Date: _____ Time: _____

The City of Seattle _____ (name of department ordering the evacuation) advises the public to EVACUATE In an area of (part of the City) _____ **due to a** (type of incident) _____
located at (location)_____.

The following streets border this area:

On the North: _____

On the East: _____

On the South: _____

On the West: _____

Due to the nature of this situation, you must act IMMEDIATELY!

(Shelter In Place Issues, Check All Applicable)

If you are located in this area, do the following immediately in order to protect yourself:

- Go inside your home, workplace, or the nearest building that appears to be reasonably air tight and stay there. Take your pets with you.
- Close all doors, windows, and any fireplace dampers.
- Turn off any heating or cooling system that draws in air from the outside.
- Keep your radio on and tuned to receive emergency announcements and instructions.
- Gather items that you may need to take with you if you are advised to evacuate.
- People traveling in vehicles should seek shelter in the nearest air tight structure. If a suitable structure is not immediately available, travelers should roll up car windows, close air vents, and turn off the heater or air conditioner until they reach a suitable building.
- If shelter is not immediately available, keep a handkerchief, towel, or damp cloth snugly over your nose and mouth until you get indoors.
- Students at the following school(s) are taking shelter at their schools: _____. Parents should not attempt to pick up students at school until the hazardous situation is resolved and they are advised it is safe to do so.

If you know of any neighbors or co-workers with hearing or language problems or other communication needs, please advise them of this message.

**DO NOT CALL 9-1-1 UNLESS YOU HAVE AN EMERGENCY THAT REQUIRES POLICE, FIRE, OR EMS RESPONSE.
MONITOR THE RADIO AND TELEVISION FOR UPDATES.**

Shelter In Place Area Map or Sketch:

5.2 Warning –Evacuation

Date: _____ Time: _____

The City of Seattle _____ (name of department ordering the evacuation) advises the public to EVACUATE In an area of (part of the City) _____ **due to a** (type of incident) _____ **located at** (location)_____.

The following streets border this area:

On the North: _____

On the East: _____

On the South: _____

On the West: _____

Due to the nature of this situation, you must act (immediately, within the next 6 hours, etc.)_____.

(Evacuation Issues, Check All Applicable)

Persons in the evacuation area should use their own transportation to immediately leave the area and seek shelter with friends or family.

Persons needing shelter may report to (shelter or marshaling area name and address)_____.

Buses will be available to pick up anyone who needs transportation to the shelter.

You may need to stay out of the area for as long as (timeframe, if known) _____.

If you need special items such as eyeglasses, prescription drugs, special medical equipment, or diapers, take them with you. Do NOT re-enter the evacuation area or delay your evacuation to get these items.

Persons with a disability, who cannot leave the area should call _____ to request emergency transportation. This number is only for emergency transportation requests.

Students at the following school(s) are being evacuated: _____. **Parents are advised to listen to radio or TV for information on where they may pick up their children.**

(Shelter-In-Place Issues, Check if Applicable)

Persons who are in the above area should stay inside, close all windows and doors and shut off all ventilation such as air conditioners and furnaces.

Bring pets inside.

(Additional Instructions)

Persons in areas surrounding the evacuation zone should monitor the media for details and updates.

Citizens should use text messaging instead of cell phone calls whenever possible to keep lines open for emergency calls

**DO NOT CALL 9-1-1 UNLESS YOU HAVE AN EMERGENCY THAT REQUIRES POLICE, FIRE, OR EMS RESPONSE.
MONITOR THE RADIO AND TELEVISION FOR UPDATES.**

Evacuation Area Map or Sketch:

5.3 Supplemental Evacuation Information

The City of Seattle has issued the following advisory for those who live, work, or are visiting in City of Seattle.

Due to the threat of _____, the Seattle _____ recommends that people who live, work or are visiting inside the following area should evacuate to protect their health and safety:

[Describe area boundaries.]

Use the following evacuation routes: [list evacuation routes]

You should take the following emergency supplies with you :

- clothing for your family for several days
- bedding, pillows, and towels for each family member
- prescription medicines, list of prescribing doctors and their contact number(s)
- Spare eyeglasses
- soap and toiletries
- baby food and diapers
- address book or list of important telephone numbers
- checkbook, credit cards, and cash
- driver's license and identification cards
- portable radio and flashlight, with extra batteries

Plan where you will stay until the emergency situation is resolved. Staying with relatives or friends or in a hotel or motel is a good choice. If you cannot find another place to stay, temporary public shelters will be/have been opened at:

Take your pets with you, but make sure you bring a leash, crate, or cage for them as well as pet food.

Secure your property before you depart. Shut off all appliances, except refrigerators and freezers. Lock all doors and windows.

Expect travel delays on evacuation routes. If you have a substantial distance to drive, you may want to take drinks and ready-to-eat food in your car in case you are delayed.

If you have no means of transportation or if you are physically unable to evacuate on your own, ask a neighbor to help you.

If you have neighbors or co-workers, who need help or do not have transportation, offer to assist them if you can.

If you know of any neighbors or co-workers with hearing or language problems or other communication needs, please advise them of this message.

Please do not use your telephone except to report a true emergency. Stay tuned to this station for more information and instructions from local officials. If you missed some of the information in this advisory, it will be broadcast again soon.

APPENDIX 2 – EAS CHECKLIST

The following is a checklist for utilizing EAS. The King County Sheriff's Office 9-1-1 Dispatch Center will initiate all EAS messages on behalf of the City of Seattle.

1. Verify the emergency and ensure that it meets all of the following criteria:
 - a. Lives are in danger.
 - b. Direction provided via EAS has the potential to save lives.
 - c. Effective warning cannot be accomplished by other means.
2. Identify corresponding Event Code
3. Determine whether or not a voice message is needed
4. Following instructions specific for your location and equipment, program the EAS encoder with Source, Event Code, Location, Duration, etc.
5. Where applicable, include the following information in the voice message:
 - a. The name of the agency delivering the message
 - b. What will happen
 - c. When it will happen
 - d. Where it will happen
 - e. Geographic area affected (if multiple jurisdictions are affected, include all)
 - f. Emergency protection measures for the public
 - g. If evacuation is required, identify the hazard area and specify desirable transportation routes or direction of travel for evacuees
 - h. Reassurance that officials are addressing the incident
 - i. A statement encouraging people to avoid using telephone systems for the first few hours except for life threatening emergencies
 - j. Advise the public to listen to their local news radio station for more emergency information.
6. Verify that the Internet infrastructure is working or that the Local Relay Network radio channel is not in use and no corresponding EAS messages have been received from another agency.
7. Transmit the message.

8. Verify that the message was transmitted.
9. Keep a record of all message transmissions

APPENDIX 3 – WARNING COMMUNICATIONS SYSTEMS MATRIX

Method	Home	Work	In Transit	Our Words	Our Time	Attention to Device Required	Advantages	Disadvantages	Activation Method	Message Size Limitations
Door-to-Door Notification	Yes	Yes	No	Yes	Yes	No	<p>Confirms that public has received notification</p> <p>Verifies who is still in the evacuation zone</p> <p>Able to answer questions and clarify information</p>	<p>Time consuming</p> <p>Very staffing intensive</p> <p>Personnel may not be able to access sites (security, etc.)</p> <p>People may not be receptive or trusting of someone coming to their door.</p> <p>Potentially places personnel at risk</p> <p>Information is limited to personnel’s knowledge</p> <p>Need process to transport, track and update personnel</p> <p>Personnel may not speak language of message recipients</p>	On-site personnel	None

Method	Home	Work	In Transit	Our Words	Our Time	Attention to Device Required	Advantages	Disadvantages	Activation Method	Message Size Limitations
Street-by-Street Public Address Systems	Yes	Some	No	Yes	Yes	No	Reaches public that is not monitoring the media or have a phone	Staffing intensive Message may be “Garbled” or difficult to understand Message may not be heard by all Message may not be trusted	On-site personnel	None, however message length need to be short as possible due to movement of the broadcast vehicle relative to the person receiving it.
Commercial Radio and TV	Yes	Yes.	Yes.	No	No	Yes – TV/ radio	Source is widely used by public.	Information is at Broadcaster’s discretion. Information is heavily filtered.	City PIOs EOC	None
Websites Social Media	Some	Some	Some	Yes	Yes	Yes- Computer/ Internet	Can provide detailed and written information to media and public Can provide links to supporting information Quickly updated.	Public must have internet access Retweets can cause confusion with message as time goes on.	City PIOs EOC	Twitter: 140 characters Others: variable but less restrictive than twitter.

Method	Home	Work	In Transit	Our Words	Our Time	Attention to Device Required	Advantages	Disadvantages	Activation Method	Message Size Limitations
Alert Seattle	Yes	Yes	Some	Yes	Yes	Yes	<p>Gets our words directly to public</p> <p>Can be used in emergency and non-emergency situations</p> <p>Uses 9-1-1 database as well as registered contact devices.</p> <p>Conveys both voice and text messages that can be received by both limited sight and hearing populations.</p>	<p>Individuals must register contact device online</p> <p>Public must have working contact device</p> <p>Some communications systems require power to work (e.g VOIP)</p> <p>Simultaneous call limitations</p>	Authorized Users	<p>Phone Text: 160 characters</p> <p>Email: 1000 characters (short) 9948 characters (long)</p> <p>Text-to-Voice: 3000 characters</p>
Emergency Alerting System (EAS)¹	Yes	Yes	Some	Yes	No	Yes- Radio or TV on	<p>Broadcasts information over area broadcasters who participate.</p>	<p>Used only in emergency situations (immediate threat to lives)</p> <p>Broadcasters must agree to carry information</p> <p>Can only be accessed through King County.</p>	King County OEM	Maximum of 2 minutes

¹ The integrated Public Alert and Warning System (IPAWS) provides the capability of simultaneously disseminating alert messages over the following systems: EAS, Wireless Emergency Alerts, and NOAA Weather Radio. Currently both King County OEM and the State of Washington DEM have IPAWS.

Method	Home	Work	In Transit	Our Words	Our Time	Attention to Device Required	Advantages	Disadvantages	Activation Method	Message Size Limitations
Wireless Emergency Alerts (WEA)²	Yes	Yes	Some	Yes	No	No – Must hear cell phone	<p>Doesn't require cell phone registration to receive message.</p> <p>Can designate an area smaller than a county.</p> <p>Can "punch through" cell congestion</p> <p>Text message can be received by certain limited sight and hearing populations</p>	<p>Used only in emergency situations (immediate threat to lives)</p> <p>Allows for only VERY short messages.</p> <p>Limited when there is damage to cell infrastructure.</p> <p>May not reach all cell phones</p> <p>Can only be accessed through King County (IPAWS)</p>	King County or State (via EAS)	Maximum of 90 characters
NOAA Weather Radio	Yes	Yes	Limited	Yes	Yes	Yes- NOAA Radio	<p>Alerts individuals and businesses with an audible warning tone.</p> <p>NOAA radios can receive notifications during power outages</p>	<p>Must have NOAA radio set to alert.</p> <p>Requires power or battery</p>	<p>PIO's via NWS</p> <p>EOC via NWS</p> <p>EAS*</p>	None

² Alert Seattle will be used to send WEA messages starting no later than January 1, 2016. IPAWS through King County will become a secondary (backup) means of communication once that capability is live in Alert Seattle

Method	Home	Work	In Transit	Our Words	Our Time	Attention to Device Required	Advantages	Disadvantages	Activation Method	Message Size Limitations
City Issued Pager	Yes	Yes	Yes	Yes-to users	Yes-to users	Yes- Pager	Immediately notifies City employees with a pager.	Message is brief and not detailed Reaches only those monitoring and who have a pager	??? Public Safety Dispatch Centers	240 characters
Email Distribution Lists	Yes	Yes	No	Yes	Yes	Yes	Conveys our messages in its entirety. Can include maps or other images with messaging.	User must access to, and be checking email	OEM SDO EOC Public Health CCN	None
Variable Message Signs	No	No	Yes	Yes	Yes	Yes	Reaches vehicles in Transit There are both fixed and portable message signs that can be deployed to specific locations Good tool for broadcasting follow up messages.	Drivers have to see message as they are driving. Portable message signs take time to position and setup.	SDOT	Portable Message Signs = 48 characters (including spaces) Fixed, roadside boards = 96 characters

Method	Home	Work	In Transit	Our Words	Our Time	Attention to Device Required	Advantages	Disadvantages	Activation Method	Message Size Limitations
Highway Advisory Radio	Some	Some	Some	Yes	Yes	Yes – Must be tuned to radio station	Portability allows for our message to reach targeted areas in the affected areas. Effective way for pushing updates to emergencies.	Takes time to set up. Public must first be told to listen to specific radio station and have working radio.	SDoT	
Seattle Channel	Yes	Yes	Yes	Yes	Yes	Yes – Must have TV and Cable, internet, or mobile device	Allows for direct control of messaging and the posting of updates	Users will have to have cable and a working TV to and/or Internet connection access.	Seattle Channel Staff EOC JIC	None

APPENDIX 4 - ISSUING OF WARNING INFORMATION – PROCESS CHART

