
City of Emeryville



ID-2017-692 -

Attachment 1: EOC Standards Guidance Document

Guidance Document

January 2017



Introduction

The purpose of the City of Emeryville Emergency Operations Center (EOC) Standards Guidance Document is to provide the City of Emeryville with practical guidelines to use in the planning and design of their primary and alternate EOCs. This document is intended to improve the City's emergency preparedness and management by identifying a standard for establishing secure, interoperable, and sustainable EOC facilities.

It is recognized that the City of Emeryville has unique needs, constraints, and considerations as they plan for their EOC. In order to account for those aspects, this guidance document offers both baseline standards that can be worked toward in the short-term and ideal standards that can be planned for in the future. The intent of doing so is to assist the City in making decisions about what is necessary and realistic to meet immediate needs, and to allow room for future growth.

Federal Guidelines

An EOC is essential for the effective direction, control, and coordination of emergency response efforts. A well-designed EOC, coupled with well-trained personnel, will enable the efficient coordination of response and recovery activities. Based on guidelines provided by the Federal Emergency Management Agency (FEMA), an EOC should encompass the following five characteristics. Each of these elements has been taken into consideration in the development of this standards document, and is reflected throughout.

- **Survivability:** The EOC is able to remain operational during an emergency. There is a designated alternate EOC that can be activated and used if the primary is destroyed, damaged, or not accessible.
- **Security:** The EOC guards against potential risks and protects operations from the unauthorized disclosure of sensitive information. It has sufficient security and structural integrity to protect the facility, its occupants, and communications equipment and systems from relevant threats and hazards.
- **Sustainability:** The EOC supports operations for an extended duration. It is able to sustain operations 24 hours a day/seven days a week during all emergency situations without interruption.



To the extent practical, the EOC is located in a place that is not a high-risk area for known hazards such as flood zone, other natural hazard, nuclear power plant, hazardous material sites, etc.

- **Interoperability:** The EOC fosters the ability for EOC staff to share common principles of operations and exchange routine and time-sensitive information with responding agencies and other EOCs (city, county, state) in a timely manner.
- **Flexibility:** It is possible to scale EOC operations and adapt operational space to an all hazards event. The EOC has sufficient space, equipment, furniture, administrative supplies, telecommunications, computer support, etc., available to satisfy mission requirements.



Part 1: Physical EOC Standards

1.1 Primary EOC

General Resources

Baseline	Ideal
• Internet and network capabilities with built-in redundancies ◦ Data jacks/secured wireless capability • One computer/laptop per EOC position • Telephones • Printers • Copiers • Portable radios • Video displays visible to all • Fax machine • Maps • Clear signage • Office supplies (pens, notebooks, file folders, staplers, masking tape, copy paper, etc.) • ICS and other departmental forms • Emergency plans (hard and soft copies) • Extension cords • Visible organization chart • White boards for each section • Food/water/other supplies to sustain continual operations for up to 30 days ◦ 10 days of food: 5 days of MRE's; 5 days of provisions from outside vendor ◦ MRE's consisting of three, 1,200 calorie meals per person per day, requiring no refrigeration ◦ Outside food vendors: contracts often require 48 hour notice ◦ 10 days of bottled water • HVAC system • Emergency generator with ability to power the EOC and all facilities (HVAC, radios, computer systems, etc.) ◦ Permanently wired with automatic start and transfer ◦ Located so that noise or fumes do not interfere with the EOC	• Emergency management software, such as CalEOC • Incident radios (two-way radio) for each EOC section • Synchronized clocks visible in all EOC rooms/break-out rooms • Moveable furniture/equipment that allows reconfiguration of the space according to the situation and required staff level • Workstations for each EOC position containing voice and data connections



Baseline	Ideal
Self-contained fuel system with a minimum four-day reserve	

Facility Guidelines

Baseline	Ideal
- Facility is resistant to hazards (seismically reinforced, sprinkler systems, etc.) and located away from threats based on hazard analysis - Facility is located within close proximity to emergency services personnel and other agencies represented in the EOC - Sufficient space for one or two representatives from each agency Adequate parking - ADA compliant - Building is secure with controlled access - Restrooms - Mechanical/electrical switch room - Food service area - Storage area for maps, procedures, publications, supplies, etc.	- Facility is away from public parking areas within proximity of the facility or direct-driven access to the facility - Communications Room for radio/telephone and support equipment, including space for backup dispatch center and amateur radios - Conference/break-out rooms to hold shift briefings, strategy meetings, etc. - Media assembly and briefing room - Sleep area - Personal hygiene areas (to include shower, laundry, and basic related supplies) - Space for external and non-jurisdictional entities - Helicopter landing area

Operating Procedures/Agreements

Baseline	Ideal
- Standard Operating Procedures (SOP's) for activation, layout, setup and managing of the EOC during disaster activation - If located in a multiple use facility, a Memorandum of Understanding (MOU) exists among the agencies using the facilities	- Identify conditions that would cause relocation to the Alternate EOC - Procedures for relocating from the Primary to Alternate EOC



1.2 Alternate EOC

General

Baseline	Ideal
• Equipped to perform the same basic capabilities as the primary EOC (meets baseline standards identified in 1.1) • Capable of accommodating the same security levels and communications functions as the primary EOC	• N/A

Operating Procedures/Agreements

Baseline	Ideal
• SOP for activation, layout, setup and managing of the Alternate EOC • If located in a multiple use facility, an MOU exists among the agencies using the facilities	• N/A



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Part 2: Technology Capabilities

2.1 Communications

Baseline	Ideal
• Radios with frequencies to communicate with field personnel (police, fire, health, school, transportation systems, hospitals, public works, utilities, Red Cross), other cities/counties, and the state • Radio tower to support radio equipment (may be remotely located) • Landline phone or cable / Voice Over Internet Protocol (VOIP) phone ◦ Government Emergency Telecommunications Services (GETS) Cards • Fax line and machine • Emergency notification system with pre-populated contact groups for rapid notification • Memorandum of Agreement (MOA) with local Amateur Radio Operators Group to provide emergency communications support • E-mail with Encryption	• Video conference system between EOC and executive / elected officials and Joint Information Center (JIC) • Digital radio • Agency-assigned cellular phones for on-call staff ◦ Wireless Priority Service (WPS) cards • Satellite data and telephone • Encrypted data-transfer service • Digital patch-panels (ties together feeds from radios and phones) • Video conferencing from mobile devices with first responders • Emergency notification system with geographic / jurisdictional alerts, mobile application for on-call staff, and disruptive tech to encourage evacuation • Message customization to self-identified communications needs (language preference, sensory impairments)

2.2 Consoles, Media Displays, Support Equipment

Baseline	Ideal
• Ability to project or display computer desktops visible to the entire EOC • Ability to project or display local, national, and international news outlets • At least one computer (mobile or console) available for each represented position / role • Color printer / copier / scanner with standard-sized paper • Router / modem with capacity for 30 device connections, with un-restricted data streaming	• Position-specific user profile for each represented chair in the EOC • Plotter or color printer with large-sized paper • Router / modem with capacity for 60 device connections, with un-restricted data streaming • One spare computer for every two designated EOC positions



2.3 Geographic Information Systems (GIS)

Baseline	Ideal
• Current maps, printed or digital, of the jurisdiction area (aerial images current within three years) • Data-layers include streets / highways, jurisdictional boundaries, major population centers, and topography	• Data-layers include prioritized traffic routes, critical infrastructure, socio-demographics, utility lines / sources, and internal floor plans for buildings within the jurisdiction • Maps are editable by multiple users simultaneously • Manual or automated plume / impact-area modeling through polygon overlay or based on data feeds

2.4 Resource Tracking for Personnel and Assets

Baseline	Ideal
• Map overlay with location of deployable assets • Ability to track assets from staging through deployment to demobilization (physical equipment, consumable materials, personnel) ◦ Database should track cumulative dollar and time values ◦ All entries cross-referenced with designated mission/task number ◦ Input via barcode scanner • Generates unique identifier (alpha-numerical scheme) for each asset • National Incident Management System (NIMS) typing with standardized nomenclature • Ability to print a water-proof badge with an individual's name, photo, affiliated agency, and relevant certifications, that can be read with an optical barcode scanner	• Geocoded assets with map overlay • Radio Frequency Identification (RFID) tags for all assets • Ability for assets to check-in and check-out of the response site with real-time updates to a viewable database • Ability to print incident-specific badges with imbedded proximity chips or Near Field Communication (NFC) capability



2.5 Emergency Public Alert and Warning System

Baseline	Ideal
• Ability to activate the Emergency Notification System / Neighborhood Early Warning System • Ability to contact media outlets • Ability to distribute press releases • Ability to monitor television, radio, and social media, and to extract data in real-time • Ability to create messaging that supports access by non-English speakers • Ability to create messaging that supports access by those with functional needs	• Dedicated briefing area with capacity (power and space) for multiple camera feeds and pre-installed wiring for high-definition video • Ability to utilize the Integrated Public Alert and Warning System (IPAWS), including Wireless Emergency Alerts and the Emergency Alert System • Repository for development and posting of public information documents ◦ System should allow for archive of past events • Automated translation of messaging that supports access by non-English speakers • Automated creation of messaging that supports access by individuals with functional needs

2.6 Emergency Management Software (if applicable)

Baseline	Ideal
• Document sharing ability (reference materials, EOC Action Plan, situation status report) • Ability for EOC staff to quickly submit situational status information and view the incident common operating picture • Automatically time / date stamp each post in 24-hour format with clock synchronization • Ability to aggregate real-time weather, flood-stage, data into graphs / charts • Redundant hosting servers (fail-over or cloned), if not remote / cloud-hosted	• Live data / video feeds • Position-specific user profile • Auto-populating ICS forms • Access to electronic situational awareness dashboard on agency-issued mobile devices



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