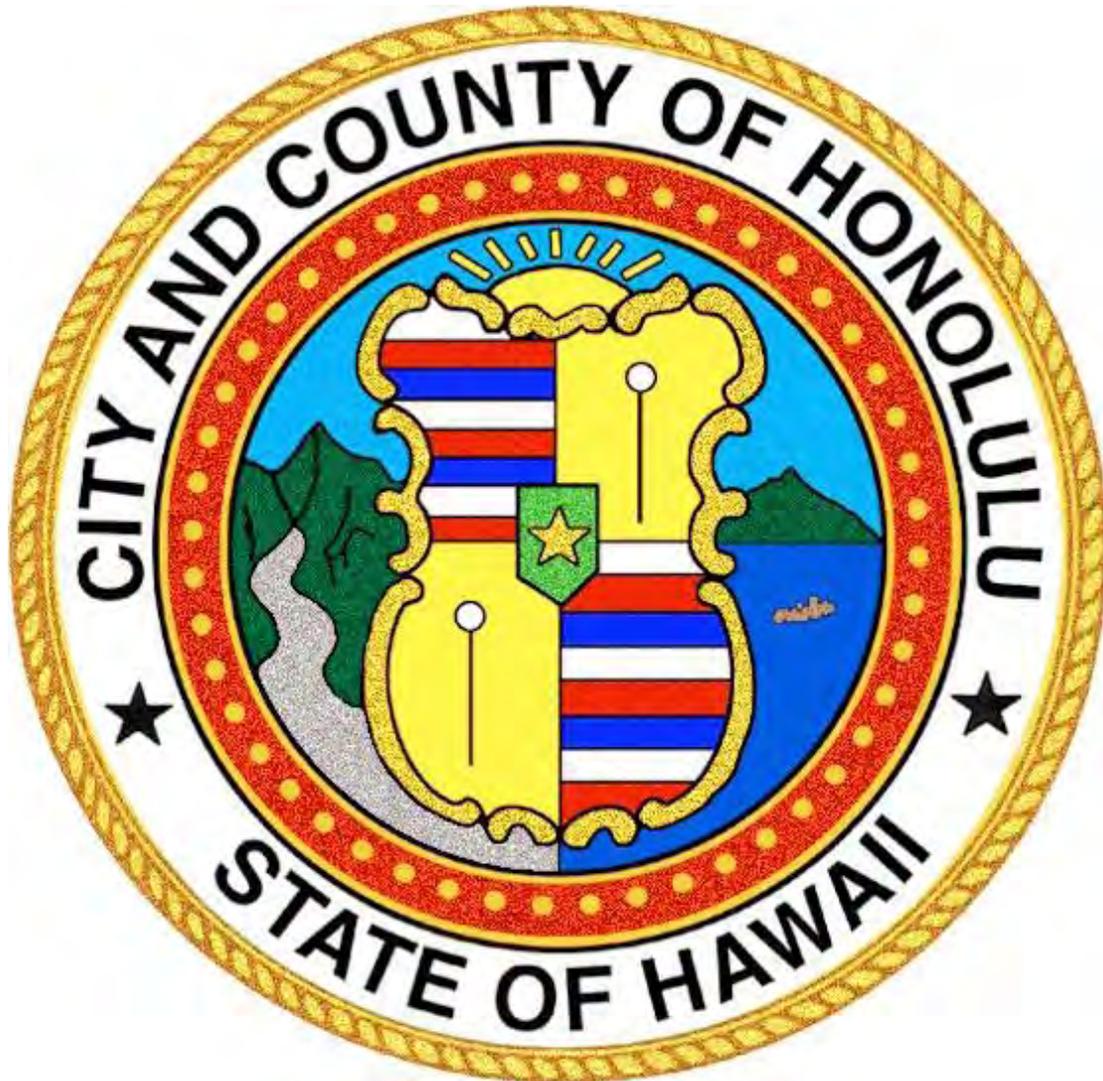


**City and County of Honolulu  
Hurricane Response  
Logistics Concept of Operations Annex**

03 September 2013



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## REVISION RECORD

As changes and updates are made, they should be documented with this page, as follows:

- Remove and destroy obsolete page
- Replace obsolete pages with the updated pages

REVISION RECORD				
Date	Change Number	Section	Updated by Individual	Description of Changes



## TABLE OF CONTENTS

1. OVERVIEW .....	1
2. COUNTY PREPAREDNESS .....	2
2.1 Identify Logistics Requirements .....	3
2.2 Identify Logistics Resources .....	9
2.3 Balance Logistics Resources with Requirements .....	11
2.4 Establish and Communicate Logistics Policies, Procedures, and Plans .....	32
3. RESPONSE .....	35
3.1 Logistics Field Activity Support .....	35
3.2 Logistics Ordering, Fulfillment, and Tracking .....	37
3.3 Information Sharing .....	40
3.4 Performance Metrics .....	42
3.5 Property and Equipment Management .....	43
4. LOGISTICS RECOVERY .....	45
4.1 Lessons Learned .....	45
4.2 Material Return, Reallocation, and Disposition .....	46
4.3 Material Replenishment and Refurbishment .....	48
5. ACRONYMS .....	49

## TABLES

Table 1. Key Resource Requirements .....	5
Table 2. Tier I Suggested Planning Factors .....	6
Table 3. Alternative Sources Advantages and Disadvantages .....	13
Table 4. Staging Area Types .....	19
Table 5. CPOD Site Criteria .....	22
Table 6. CPOD Types .....	22
Table 7. SCOR Performance Attributes .....	42
Table 8. Recommended Metrics .....	43



## FIGURES

Figure 1. Overlay of NRF Phases, SCOR Planning Steps, and Supply Chain Approach .....	1
Figure 2. National Emergency Management Distribution Network .....	17
Figure 3. Sample Staging Area Layout .....	21
Figure 4. Sample Type I POD Layout .....	23
Figure 5. Sample Type II POD Layout .....	23
Figure 6. Same Type III POD Layout .....	24
Figure 7. Logistics Section Organizational Structure .....	29
Figure 8. Resource Request Ordering Process .....	38
Figure 9. Sample State Logistics Call Agenda .....	41

## APPENDICES

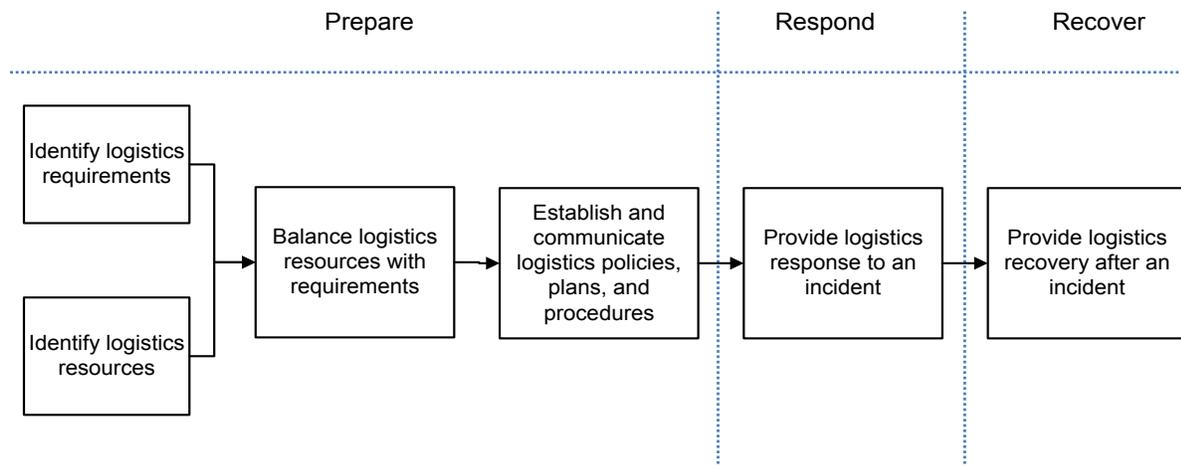
- Appendix 1: Perform lifesaving and sustaining measures
- Appendix 2: Mass care and sheltering
- Appendix 3: Minimize risks to visitors
- Appendix 4: Maintain functionality of the water distribution system
- Appendix 5: Deliver fuel to maintain essential services
- Appendix 6: Conduct debris clearance
- Appendix 7: Protect on-island critical resources
- Appendix 8: Maintain continuity of port operations
- Appendix 9: Restore power infrastructure



## 1. Overview

This Logistics Annex reflects the guidance of the *Federal Emergency Management Agency (FEMA) Logistics Operations Manual* and is consistent with the National Response Framework (NRF), National Incident Management System (NIMS), Incident Command System (ICS), and logistics best practices. The logistics concept of operations uses a Supply Chain Management (SCM) approach to establish a framework for how logistics should be accomplished in the City and County of Honolulu (hereafter referred to as ‘City’) throughout the disaster incident phases—prepare, respond, and recover. Figure 1 depicts the overlay of the NRF phases of incident support, the Supply Chain Operations Reference model (SCOR) planning process (see Section 3.4), and a standard supply chain planning and execution approach for response and recovery.

Figure 1. Overlay of NRF Phases, SCOR Planning Steps, and Supply Chain Approach



The NRF incident phases are not intended as distinct sequential steps, even within a single disaster. Rather, they are cyclical, and the supply chain steps and phases overlap. At any given time, the City may be operating in multiple phases and supply chain steps. For example, a county entity may be in the “prepare” phase for future disasters, while simultaneously managing and sustaining support during the “respond” phase for a current one, and documenting lessons learned during the “recover” phase of a previous one. Also, activities in the respond and recover phases continuously feed the planning process in the prepare phase.

The Department of Emergency Management (DEM) has defined nine disaster response objectives to guide its planning and response activities, as follows:



1. Perform lifesaving and sustaining measures
2. Mass care and sheltering
3. Minimize risks to visitors
4. Maintain functionality of the water distribution system
5. Deliver fuel to maintain essential services
6. Conduct debris clearance
7. Protect on-island critical resources
8. Maintain continuity of port operations
9. Restore power infrastructure

This Logistics Annex is intended to address the nine objectives, but because logistics support functions are cross-cutting across multiple objectives, much of the document is not specific to any one objective. This Annex also includes nine appendices, each devoted to specific operational logistics considerations and information for each of the nine objectives.

## *2. County Preparedness*

Logistics planning to respond to incidents should begin during the prepare phase and continue through all phases. To ensure adequate preparedness, emergency managers need to ensure incident supplies, equipment, services, and validated capabilities are available *before* an incident. During the prepare phase, emergency management planners, in collaboration with supply chain partners, plan, establish, and maintain incident response and recovery capabilities. At a minimum, this should include identifying potential sources for at least the most critical resources. When possible, this should also include establishing contingency agreements and contracts for supplies, equipment, facilities, and services against which specific orders can be placed during and after an emergency.

During the prepare phase, emergency management planners should take the following SCM planning steps:

- ◆ Identify logistics requirements
- ◆ Identify logistics resources
- ◆ Balance logistics resources with requirements



- ◆ Establish and communicate logistics policies, plans, and procedures

It is imperative that these steps be performed for each of the City's Hurricane Response Framework nine objectives. Establishing the logistics requirements during the preparedness step ensures that City planners have a complete view of the potential resource issues prior to the response phase. This process will also enable planners to determine major shortfalls that need to be addressed with other sourcing strategies. Given the City's unique geography, identifying the amount of resources that are required to be brought in from other counties or states will also provide planners a sense of how much equipment will be shipped through the major shipping routes.

## *2.1 IDENTIFY LOGISTICS REQUIREMENTS*

The process for identifying requirements begins with the identification of the incident scenarios that must be supported. The scenarios, along with the operational planning documents for response, furnish the basis for determining the materials and services that must be available to provide aid and restore critical infrastructure following a catastrophic event.

The following method should be used to identify requirements:

1. Prioritize the commodities, equipment, and services that will be determined to support planned scenarios on the basis of probability, risk, and location. When planning for multiple scenarios, ideally planners should determine the requirements for each so that they can better weigh the probabilities that the items will be required and their quantities.
2. Translate the operational requirements for the incident scenario into logistics requirements for the most critical items using established requirements models and planning factors. These include ones developed by the United States Army Corps of Engineers (USACE) for determining life-saving and life-sustaining requirements.
3. Update logistics requirements as a result of the after-action process for any incidents.

### *2.1.1 Key Logistics Resource Requirements*

Some supplies and services are more urgently needed than others for disaster response. Identify how those supplies and services will be sourced for optimum response during a disaster is critical. This Annex addresses a list of commodities, responder equipment and supplies, and services that planners have identified as the most important for the City. The items listed will be important in most disaster



responses, regardless of severity, but they will be especially necessary during a catastrophic event.

The list is divided into three categories:

- ◆ Commodities, including the life-saving and life-sustaining supplies; survivors are most likely to need during a disaster
- ◆ Equipment and supplies that responders need most to support survivors
- ◆ Services, which mostly include nonmaterial support, that aid first responders to meet the needs of survivors

Each of these categories is subdivided into three tiers based on its degree of necessity:

- ◆ Tier I items are the most critical for life-saving and life-sustaining reasons. Because these items are also likely to be required during the initial response, identifying sources for these items is the highest priority
- ◆ Tier II items are very important for response, but less so than Tier I
- ◆ Tier III includes other categories of items that are frequently required during a disaster, but are less critical than Tiers I and II

Table 1 provides a *sample* list of key commodities, responder equipment and supplies, and services that the City should consider.



*Table 1. Key Resource Requirements*

Tier	Commodities	Responder equipment and supplies	Services
I (Critical)	Water Food Blankets	Generators	Fuel Transportation of material Transportation of people
II (Important)	Cots Tarps Plastic sheeting Medical Ice Comfort kits	Safety items Personal protective equipment (PPE) Communications Responder supplies Portable sanitation Light stands Heavy equipment Sand bags	Additional staffing Warehousing Construction Base camp
III (Frequently required)	Pet supplies Infant care Feminine hygiene products Cleaning necessities Bug spray Sun screen Over-the-counter medications	Body bags Triage tags Shovels and sand for sandbags Generators Pumps and hoses Responder clothing Vehicle tires Personal floatation devices	

Note: Ensure that people with access and functional needs are addressed.

### 2.1.2 Resource Requirements Estimates

Emergency managers should estimate requirements for at least the highest-priority items (Tier I). The purpose of the estimates is to approximate the amount of critical commodities, equipment, and services likely to be required in the initial days of the scenario disaster so that informed decisions can be made on how the requirements might be resourced, alternative sourcing strategies assessed, and potential risks mitigated. Logistics planners in the City should carefully document their assumptions about the magnitude of survivors and sustainment time, and other relevant information used to develop the estimates. Estimates should be reviewed periodically to determine whether the assumptions still fit. Estimate information should be documented either in a State or County level Logistics Operations Plan (hereafter referred to as 'an OPLAN') or an alternative source readily accessible in the event of the disaster.

#### 2.1.2.1 TIER I REQUIREMENTS

As stated, Tier I items are the most critical and should demand the most pre-event planning attention. Table 2 shows suggested planning factors for City use in estimating requirements for Tier I items.



*Table 2. Tier I Suggested Planning Factors*

Tier I items	Suggested planning factors
Water	1 gallon per person per day
Meals	2 meals per person per day, including 1 hot meal
Blankets	One blanket per person
Generators	Types (200–750 kW) and quantity vary by application. Based on identified high-priority facility (hospital or shelter) needs
Fuel and Oil	Quantity based on the number of emergency responder vehicles, trailers transporting material that may require refueling, buses for evacuation, and generators that may require refueling The average fuel truck holds 9,000 gallons
Transportation of people	Based on the number of people requiring evacuation The average school bus capacity is 44–48 passengers The average commercial motor coach carries 45–53 passengers Does not account for the suggested seven day supply for individuals

While the number of impacted individuals will vary greatly with the specifics of an event, for planning purposes this document assumes up to two thirds of the population will require some sort of support, inclusive of those requiring shelter services or simply the provision of basic supplies. Utilizing a population figure of approximately 953,000 people in the City and County of Honolulu, this results in a figure of 635,000 impacted individuals. The process that follows describes assumptions and calculations for this example scenario using disaster planning factors. This same requirements calculation process should be used to estimate commodity requirements for alternative scenarios, including less severe disasters.

The following assumptions guide the logistics concept:

- ◆ Approximately 635,000 residents or visitors will require government assistance of some kind.
- ◆ Some visitors will not be able to evacuate the City before tropical storm-force winds arrive and will not be able to leave the City before the tropical storm force winds subsides.
- ◆ Full restoration of power will take several months
  - Power will take longer to fully restore for outlying areas.
- ◆ Damage to major ports will be disruptive, but not catastrophic.
- ◆ Resources from outside the City will not be available for at least seven days.



- ◆ Major road connections and road network will not be usable in their entirety for at least three days due to debris—particularly on the windward side of the island, although some parts of the highway may be passable immediately after the storm passes.

This results in the following initial requirements calculations for the initial seven-day period for three critical Tier I commodities:

- ◆ Water:  $1 \text{ gallon} \times 7 \text{ days} \times 635,000 \text{ individuals affected} = 4,445,000 \text{ gallons}$
- ◆ Meals:  $2 \text{ meals/day} \times 7 \text{ days} \times 635,000 \text{ individuals affected} = 8,890,000 \text{ meals}$
- ◆ Blankets:  $1 \text{ blanket} \times 635,000 \text{ individuals affected} = 635,000 \text{ blankets}$

Similarly, determining requirements for Tier 1 equipment requires that planners review the operational planning for a given scenario, make assumptions on the planning factors for that requirement, and then calculate the likely quantities required. The types and quantities of generators that will be required should be based on the specific high-priority facilities that require them, such as hospitals and shelters.

For services requirements, accurate quantification of requirements is generally less important than identifying sources that can provide them. The estimation of the requirements is mostly to determine whether the potential provider's capabilities is likely sufficient to respond to the range of requirements. Transportation requirements should be calculated as follows:

- ◆ Transportation of people should be based on the number of individuals who might require evacuation (635,000) and types of vehicles (such as buses) used to transport them.
- ◆ Transportation of material should be based on factors such as the nature, type, and amount of material needing to be shipped (water and meals, for example) and the distribution plan (who will provide specific disaster supplies to particular destinations).

Fuel should usually be limited to motor gasoline and diesel fuel and based on the number of vehicles (such as emergency response, commercial trailers, and buses) and equipment (such as generators) that require refueling. Fuel should not normally be provided directly to disaster survivors for a variety of reasons, such as expense and security concerns.



### 2.1.2.2 TIER II AND III REQUIREMENTS

The same approach for determining Tier I requirements can be applied to Tier II and III resources, if warranted. Because by definition these items are considered of lesser importance and more situation dependent than Tier I, less effort generally should be expended in planning for these items. As with Tier I items, an OPLAN for the incidents should provide the basis for this planning.

### 2.1.2.3 REQUIREMENTS PLANNING

While the above examples serve as a baseline requirement, the geography of the City may necessitate the need to increase the amount of days in which critical Tier I commodities are required. If Honolulu International Airport (HNL) will not be operational within seven days, the initial requirements for sustainment will need adjustment. Port operations will be critical to enable resupply for long-term requirements.

Planners should also determine long-term requirements based on potential damages. For instance, sheltered population may need to stay in shelters for more than seven days due to destruction, road inaccessibility, or other life-sustaining issues. With limited resources within the City, the sourcing will likely not be from the City, so planners must ensure they have identified the requirements necessary to support their population. Planners should account for not only the initial requirements, but also long-term requirements in a time-phased manner. Determining when the City needs commodities is just as important as determining how much the City needs.

To provide a sense of the magnitude of entire time-phased response, the State of Florida used the items below as part of their response to Hurricane Dennis, a Category 3 hurricane that made landfall on the Florida Panhandle in 2005.

- ◆ Sheltered population: approximately 30,000
- ◆ Water (gallons): 783,750
- ◆ Ice (lbs): 4,280,000
- ◆ Meal Ready-to-Eat (MREs): 217,440
- ◆ Tarps: 40,188
- ◆ Forklifts: 49
- ◆ Portable generators (25 KW to 3.2 GW): 30



The City currently has plans to shelter up to 635,000 individuals. However, Honolulu and Florida have unique needs and the above example should only serve to understand the magnitude of the requirements.

## *2.2 IDENTIFY LOGISTICS RESOURCES*

On the basis of identified logistics requirements, City planners should determine potential sources of supplies, equipment, and services using the following:

- ◆ Local and state government–owned, or stockpiled, supplies, equipment, and services
- ◆ Mutual aid and assistance agreements, such as the Emergency Management Assistance Compact (EMAC), and agreements with non-governmental organizations (NGOs) that provide incident support, such as the American Red Cross (ARC), for mass feeding and sheltering
- ◆ Commercial sources, including contracts with commercial enterprises at the local, state, or national level
- ◆ National inventories and contracts, established by national entities – such as FEMA, Government Services Agency (GSA), USACE, and the Defense Logistics Agency (DLA) – primarily for catastrophic incidents but may augment local sources in other situations
- ◆ Donations and volunteers

Each of these sources has certain advantages and disadvantages. When identifying resources, planners should also determine the logistics required to move the resources to their end-point. For instance, moving resources from a neighboring county to the City will require operational ports, cranes, and proper clearances.

### *2.2.1 County Logistics Resources Management Database*

To facilitate sourcing decisions, the City should prepare in advance a repository or database of on-island resources, whether commercial or government, that could help the City respond to a Category 4 hurricane or other disasters. The repository should include potential sources for Tier I, II, and III items as well as other emergency response material and services. The repository could provide information such as

- ◆ Local inventory sources;
- ◆ Potential suppliers;
- ◆ Applicable contracts or memoranda of understanding (MOUs); and



- ◆ Points of contact.

### 2.2.2 NIMS Typing

To ease and facilitate communication with off-island responders, the City repository could use standard NIMS typing to categorize resources. NIMS typing categorizes and describes response resources commonly exchanged during a disaster through mutual aid agreements.<sup>1</sup> Using standard typing facilitates the identification of resources through standard definitions. FEMA's National Integration Center (NIC) has developed and published more than 120 resource typing definitions. Most of the national resource definitions are for resource teams, such as a shelter management team. The definitions include both personnel requirements (number of people and required credentials) and equipment. The NIC is continuing resource typing work and has established new working groups for the ongoing initiative.

Currently NIMS Tier I resource typing definitions include the following:

- ◆ Animal health emergency
- ◆ Emergency medical services
- ◆ Fire and hazardous materials
- ◆ Incident management
- ◆ Law enforcement
- ◆ Law enforcement patrol team (strike team)
- ◆ Mass care
  - Field kitchen unit interim guidance
  - Shelter management team interim guidance
- ◆ Medical and public health
- ◆ Public works
- ◆ Search and rescue

Resource typing definitions can give emergency responders the information they need to request and receive the appropriate resources during an emergency or disaster. Ordering resources that have been typed using these definitions makes

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<sup>1</sup> FEMA, *Resource Management*, [www.fema.gov/resource-management#item4](http://www.fema.gov/resource-management#item4).



the resource request and dispatch process more accurate and efficient. FEMA encourages jurisdictions to request resources using NIMS resource typing definitions when possible to reduce ambiguity (For more information on NIMS resource typing, see the FEMA *Resource Management* web page.)<sup>2</sup>.

### 2.3 BALANCE LOGISTICS RESOURCES WITH REQUIREMENTS

The City should determine how best to satisfy potential logistics demands by balancing logistics resources with requirements, primarily during the prepare phase. This task involves determining which sources provide the best combination of cost, response time, availability, and capacity to meet each requirement. For local disaster planning, City planners can make these determinations, at least for the most critical items. For larger disasters, state emergency planners should participate in the balancing decisions on a state-wide basis.

Once existing resources have been determined and requirements have been identified, the next step is to find potential sources for the required items. Planners should determine which sources provide the optimum supply chain for each requirement and take as many pre-event steps as practicable to arrange for access. The following alternatives should be considered when taking these steps:

- ◆ Local or state government inventories, if available, offer an immediate, reliable source of supply and should be among the first sources of supply tapped during a disaster. Contracts for government-owned, vendor-managed inventories, if affordable, are often a good way to decrease the costs and risks associated with government-owned inventories while maintaining the assurance that they will be available when needed.
- ◆ Commercial sources are an alternative to government-owned inventories, particularly if the requirements are not large compared with the vendors' capabilities. For the City, commercial sources should be considered a primary source of supply for any Tier I, II, and III requirements that cannot be filled through government-owned inventories. To mitigate risks, these sources should at least be identified before a disaster and, when possible, contracts pre-negotiated for risk mitigation and strategic sourcing reasons. Pre-establishing contracts before an incident is generally preferable, especially for critical items, to expedite the ordering and delivery processes during a disaster and to obtain better pricing. However, if local rules prohibit contracting for disaster supplies before disaster funds become available, potential sources for the most important material and services should be pre-identified when possible. This will reduce uncertainty in sourcing if a disaster does occur. The chief advantage of these contracts is that they generally entail no cost to the government until

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<sup>2</sup> See Note 5, this chapter.



material is requested, and the vendor likely bears the risk of obsolete inventory. The chief disadvantages of these contracts are they increase the risk that the resources may not be available when and where needed and response times may be slower than with government-owned inventory.

- ◆ Mutual aid pacts, such as EMAC, and MOUs with NGOs, such as the ARC, may also reduce the need for locally owned inventory while mitigating risk somewhat. Through inventory sharing agreements, the City can lower the cost and risk of owning inventory and potentially improve response times compared with commercial sources. However, inventory availability is not guaranteed. Establishing these agreements pre-event should reduce response times during a disaster.
- ◆ Federal or national sources, such as FEMA, USACE, GSA, and DLA, are almost certain to be indispensable for the large amount of material and services required for longer-term response during a catastrophic event. FEMA and its national partners maintain inventories and pre-negotiated contracts for virtually all the Tier I and II commodities, and contracts for many other Tier I, II, and III items. The chief disadvantages are the sources are often not local, which may delay deliveries, and without a presidentially declared disaster, the State and the City must bear these costs.
- ◆ Generally, donations (and volunteers) should be channeled through NGOs, which are better able to use nonstandard items and untrained personnel, rather than be used as direct support to emergency responders. The major exception is when a donor is willing to commit prior to a disaster to provide required items or services and therefore can collaboratively plan, train, and exercise before an event. The chief advantage of donations is that they entail little or no cost, and if preplanned, may provide timely support. The chief disadvantages are that in most cases they are an unreliable source, and if not properly channeled, may divert management, distribution, and other resources from where they are most needed.



Table 3 summarizes the advantages and disadvantages of the alternative sources.

*Table 3. Alternative Sources Advantages and Disadvantages*

Alternative	Advantage	Disadvantage
Local and state government inventories	Short response time Reliability	Higher cost Obsolescence risks
Commercial sources	No inventory cost No obsolescence risk	Reduced reliability Longer response time
Mutual aid pacts/MOUs	Reduced cost Reduced obsolescence Reduced response times	Reduced reliability
Federal and national resources	Reliability Federal government bears inventory cost and obsolescence risk	Longer response time
Donations	Little or no cost if properly planned Short response time	Reduced reliability Higher cost, if not properly channeled

Source: FEMA, *Logistics Operations Manual*.

Pre-event planning will determine the optimal supply chain strategies for each material and service requirement, while allowing agencies to exercise responsible fiscal stewardship. Employing resources to meet anticipated requirements includes how to obtain resources, coordinate them, move and distribute material, manage staff logistics activities, and train and exercise logistics functions. Thus, five major strategies should be pursued to balance logistics resources with requirements:

- ◆ Strategic sourcing
- ◆ Coordination
- ◆ Distribution and transportation
- ◆ Staffing
- ◆ Training and exercise.

### *2.3.1 Strategic Sourcing*

Emergency managers in the City should employ strategic sourcing for supplies and services when possible. Strategic sourcing aggregates procurement requirements across City agencies to achieve larger procurements to increase the government’s leverage in the marketplace. An integrated sourcing strategy at the highest possible level also allows the City to de-conflict sources and avoid over-



allocation of a potential source's capacity. When multiple or local suppliers are desired for delivery assurance or other reasons, a single procurement activity should initiate buys to multiple sources. For commodities and services that are routinely procured for disaster support, pre-negotiated contracts established during the prepare phase will generally result in more favorable contractual terms and increase preparedness.

One obstacle to strategic sourcing is that some City agencies/organizations are prohibited from establishing disaster support contracts until they have a specific declaration, funding, and a defined immediate requirement. However, most are permitted to establish contracts for items they use routinely throughout the year.

For items that City planners cannot procure without disaster funding, they can often strategically source in other ways, including the following:

- ◆ State governments should establish contracts for emergency management items that both the State and City can use. Not only are contracts for consolidated requirements likely to produce better prices and delivery terms, but they also reduce the administrative burden of separate contractual actions.
- ◆ State and local governments should use national contracts established primarily for FEMA. GSA offers Blanket Purchase Agreements (BPAs) for a wide variety of supplies and services used by emergency managers, such as cots, generators, construction equipment, and transportation. County planners should review GSA's disaster purchasing website to learn more about these contracts.<sup>3</sup>
- ◆ During a catastrophic event, Joint Field Offices (JFOs) should establish local contracts to aggregate requirements of multiple agencies within the City. Similarly, at FEMA's behest, DLA has established BPAs for meals and hygiene kits that can be ordered from FEMA by JFOs and other emergency responders. DLA has also established emergency management contracts for fuel.

### *2.3.2 Logistics Coordination*

The process of logistics coordination begins during the preparedness phase. After City planners identify requirements and resources and balance them, they should meet with their supply chain partners to review and discuss preliminary requirements determinations, resource alternatives, and supply chain decisions. Supply chain partners may include other local and state emergency managers, national government entities, NGOs, and private-sector partners that perform

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<sup>3</sup> GSA, *GSA Schedules*, [www.gsa.gov/portal/category/100611](http://www.gsa.gov/portal/category/100611).



logistics and resource management functions in the City. The focus should be on the most critical items.

For critical commodities and equipment, such as water, meals, blankets, and generators, emergency managers may need to assess risk and determine the best risk mitigation strategies. To determine the best approach for fulfilling critical requirements, City planners should collaborate with their public and private sector supply chain partners.

Nationally, the NRF established Emergency Support Functions (ESFs) as an overarching structure for coordinating support. Each ESF Annex of the NRF identifies the national ESF coordinator, primary and support federal departments and agencies, and, in some cases, NGOs. Within the State and the City, agencies and NGOs often serve in roles similar to their national ESF coordinator counterparts, for example, the State of Hawaii Department of Transportation (HDOT) serves at the State ESF 1 coordinator, and the ARC serves as the ESF 6 coordinator in the State Emergency Operations Center (EOC). For critical items and services, emergency managers should establish agreements with the ESF coordinators and NGOs, and contracts with private sector sources, when possible, during the prepare phase to help ensure integrated supply chains during a disaster.

Ideally, the State and City should coordinate operational and logistics plans and requirements. Through collaborative planning and forecasting, and inputs from supply chain partners on resource and supplier alternatives, planners can better determine the optimum supply chain approaches for initial disaster planning, management, and sustainment.

### *2.3.3 Distribution and Transportation*

Planners in the City should develop and document a comprehensive distribution and transportation strategy consistent with the guidance in this Logistics Annex. The strategy should include designing the distribution network; planning for storing, staging, and distributing life-saving commodities; moving material; transporting people; and removing debris. Following this guidance will facilitate synchronization of distribution and transportation planning.

#### 2.3.3.1 DISTRIBUTION STRATEGY

As with all emergency management strategies, the distribution strategy starts with leveraging state and local resources. The state and local distribution strategy includes processes and procedures for making life-saving and life-sustaining commodities, equipment, and services available to the affected population as quickly, efficiently, and safely as possible. Initial needs that can't be met through normal distribution channels should be supplied by state and local governments, donations, and volunteer agencies.



The distribution strategy should reflect the realities of the expected situation and include backup plans, where applicable. The City will leverage HNL for inbound shipments, but in the event that the airport is not operational, planners should establish other locations. The need to resupply from neighboring counties via seaports (referred to as the “Reverse Hub and Spoke” Method) may be an option for the City.

When the need exceeds state and local capabilities, under a presidential declaration, the State can request that FEMA provide the additional distribution needed. Primary FEMA commodities are water, meals, cots, blankets, tarps, plastic sheeting, roofing, personal hygiene kits, and generators. FEMA engages a *push/pull* strategy to distribute this material. Once federal staging areas, known as Incident Support Bases (ISBs) are established and initial *push* quantities are ultimately received by locally controlled Community Points of Distribution sites (CPODs), commodity support will revert to a *pull* strategy to meet follow-on support requests from each impacted area in the City.

As supported by the following national guidance, a supply chain management best practice is to maintain as few logistics touch points as possible:

- ◆ The fewer intermediate points the better, so long as resources can be tracked, accounted for, and efficiently and effectively delivered to the customers.<sup>4</sup>
- ◆ Physical handling of material should be minimized. Material will flow directly to CPODs when possible and through federal ISBs and state staging areas when necessary.<sup>5</sup>

Figure 2 depicts the emergency management distribution network that should be leverage during a disaster. In larger disasters, FEMA distribution centers ship material to federal ISBs. This material is then routed to local distribution points, such as CPODs and shelters, through state and county staging areas as necessary. Smaller disasters will have only state or county distribution operations. Material also flows from other sources, including all levels of government, commercial sources, and NGOs.

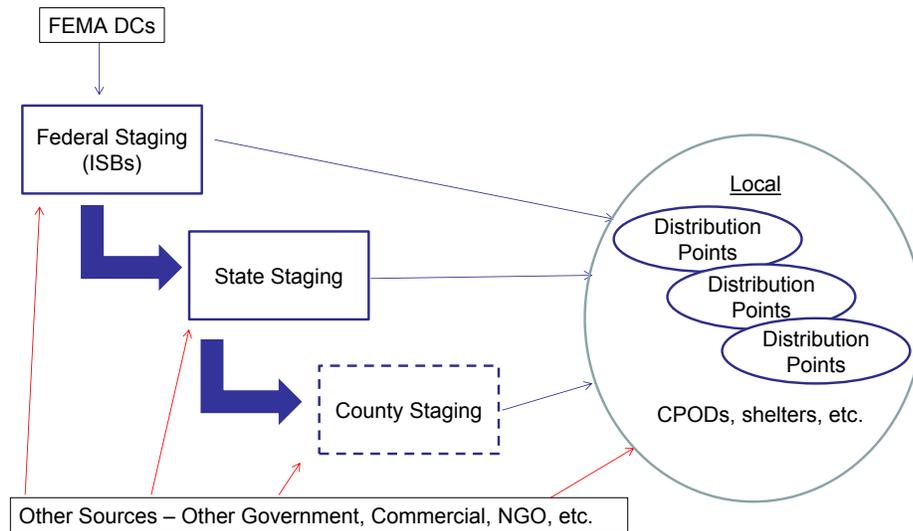
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<sup>4</sup> FEMA, *Federal Emergency Management Agency Incident Management Handbook*.

<sup>5</sup> FEMA, *Logistics Operations Manual*.



Figure 2. National Emergency Management Distribution Network



Note: FEMA DCs – FEMA Distribution Centers.

### 2.3.3.2 FEMA DISTRIBUTION CENTERS AND ISBS

FEMA currently operates nine distribution centers, with one on Oahu, one on Guam, and seven others located across the U.S. and its territories. These distribution centers enable FEMA to distribute supplies and equipment such as blankets, cots, emergency meals, tarps (roofing and plastic sheeting), water, durable medical equipment, critical medical supplies, and generators.

FEMA has pre-identified potential federal ISB locations, forward areas for staging federal resources, in the City as follows:

- ◆ The vicinity of HNL

Local and state pre-event distribution responsibilities include the following:

- ◆ Pre-identify and negotiate agreements with field logistics sites for:
  - State and local staging areas;
  - Local CPODs; and
  - Warehouses and other logistics sites and facilities.
- ◆ Develop plans for mobilizing, staffing, supplying, equipping, operating, and demobilizing logistics distribution sites and facilities.



The staffing of local and state distribution sites will be through organic personnel supplemented with additional staff from the Hawaii National Guard (HING), volunteer organizations, agreements with other government agencies or NGOs, and commercial contracts. Supplying logistics sites includes identifying requirements (such as cones, vests, gloves, and trash cans) and ideally storing them as kits that can be quickly distributed to site or facility locations. Planners should also pre-identify sources for equipment, including lights, forklifts, and pallet jacks. More operational and demobilization guidance is included in an OPLAN. The following subsections provide guidance on local and state pre-event planning for staging areas and CPODs.

#### *2.3.3.2.1 Planning for State and County Staging Areas*

State and county staging areas are sites established in the disaster area to support distribution to disaster survivors in the City. These sites support the following resource deficiencies:

- ◆ Commodities and other consumables
- ◆ Equipment and other non-consumable supplies
- ◆ Response teams (search and rescue, medical, etc.).

The staging areas receive resources from various sources, including all levels of government, commercial sources, and NGOs. These resources are staged for deployment directly to a point of need or a distribution sites outlined in an OPLAN or as designated by the State EOC.

City planners are responsible for selecting staging area sites. They should pre-identify potential sites on the basis of the following criteria:

- ◆ Location
  - Large, open area near major highway
  - Fenced or otherwise secure area
  - Separate ingress/egress routes for disaster shipments (one-way traffic)
  - On-site commercial or military airfield (desirable)
- ◆ Covered area
  - 20,000 to 150,000 square feet (can be open area with portable cover)
  - Administrative area



- Loading docks in permanent structures (desirable)
- ◆ Hardstand (paved or compressed rock)
  - 50,000 to 350,000 square feet for staging trucks (often a separate area for staging generators and other equipment)
  - Helicopter landing zone (if applicable).

The road network around the primary staging area is critical to maximize capacity. For the City, the HNL area deserves close study as a staging area candidate. Backup locations should also be identified if one of the main locations is unusable.

Table 4 shows examples of three different staging area types.

*Table 4. Staging Area Types*

Category	Type 1 (state and federal)	Type 2 (state)	Type 3 (county)
Fixed-wing aircraft space	Up to C-130 or C-17 military	N/A	N/A
Helicopter space	At least two military <sup>1</sup>	At least two military	At least one military
Covered space	At least 150,000 square feet—for tents or temporary buildings	At least 100,000 square feet—for tents or temporary buildings	At least 20,000 square feet—for tents or temporary buildings
Hardstand	At least 350,000 square feet—for commercial vehicle parking, outdoor storage, and material movement	At least 200,000 square feet—for commercial vehicle parking, outdoor storage, and material movement	At least 50,000 square feet—for commercial vehicle parking, outdoor storage, and material movement

Source: State of Florida, *State Unified Logistics Plan*, Annex 9, 2009.

<sup>1</sup> To accommodate two CH-47 helicopters, the landing zone should be 460 feet long by 230 feet wide.

N/A Not applicable

With regards to the City, examples of good locations for larger state staging areas (Type 1) include airports and military bases. Smaller state or county staging areas (Type 2 or 3) can be located at swap meet sites, agricultural centers or farmers markets, City corporation/base yards, industrial parks, small airports, fairgrounds, or leased facilities.

The City should pre-identify potential staging area locations. The City could also pre-negotiate no-cost agreements and leases with potential staging area sites. The following are suggested topics for discussion with the property owner or manager:

- ◆ Site geographic boundaries



- ◆ Available assets and on-site resources—material-handling equipment (MHE), staffing, etc.
- ◆ Facilities and utilities—power, water, rest rooms, etc.
- ◆ Use restrictions
- ◆ Landlord expectations
- ◆ Exit/entry points and parking areas (one-way traffic)
- ◆ Lighting
- ◆ Phones lines, information technology, network access
- ◆ Road access
- ◆ Responsibility for repairs
- ◆ Site security
- ◆ Refrigerated storage
- ◆ Liability

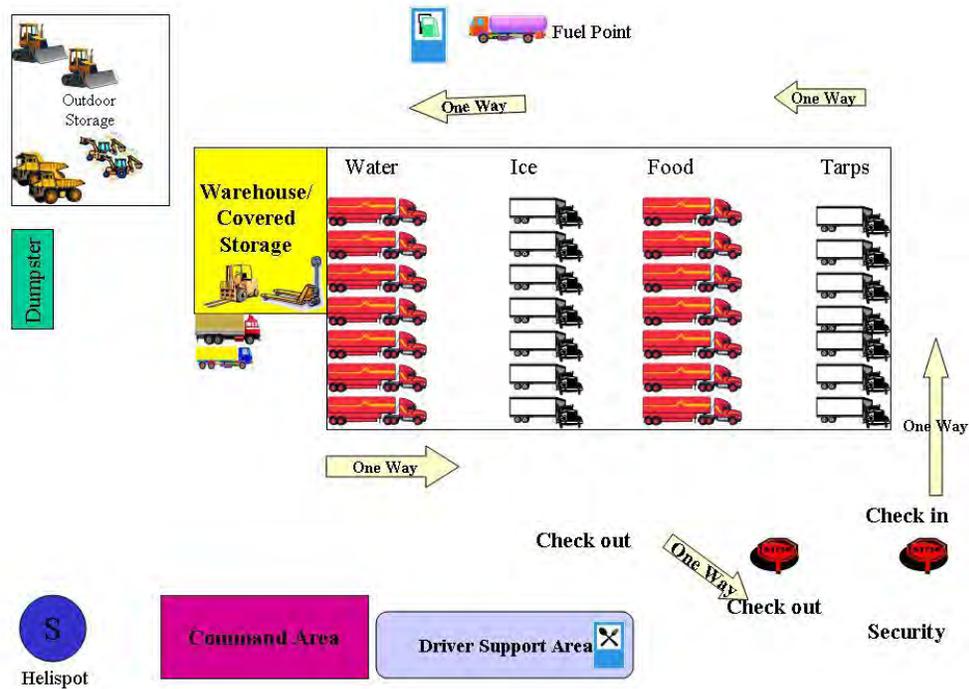
The City should typically plan to direct-ship resources to a point of distribution or end-user, especially for larger disasters. For small disaster event planning, counties may wish to identify city staging areas. Before deciding to designate staging areas, planners should consider potential shortages and capacity constraints that could impact efficient and effective operation of these sites. Considerations before designating city staging areas include the following:

- ◆ The supply chain management best practice is to minimize touch points in the supply chain
- ◆ Resources must be pushed out quickly
- ◆ Transportation resources will be in short supply
- ◆ Staffing resources will fall short

These cautions are most relevant to larger, catastrophic events where county staging areas could potentially compete for constrained resources with federal and state staging areas. However, establishing city staging areas to support smaller, localized disasters is often desirable and necessary, especially when state and federal staging areas have not been established.

Figure 3 shows a sample staging area layout, including a one-way traffic pattern, grouped commodities, and outdoor and covered storage areas. An OPLAN should detail the layout, setup, operation, and demobilization of staging areas.

*Figure 3. Sample Staging Area Layout*



Source: Puget Sound LRMP/Toolkit.

### 2.3.3.2.2 Planning for CPODs

CPODs are established post-event for distribution of life-sustaining commodities such as water, ice, food, tarps, and other bulk resources in the first 24 to 96 hours after an event.

CPODs are centralized locations where the public picks up life-sustaining commodities following a disaster or emergency. Commodities usually include shelf-stable food and water and possibly limited quantities of ice, tarps, and blankets. In addition to CPODs, the City can also distribute commodities through mobile distribution (common in rural areas) or direct delivery to a specific location. CPODs can accommodate vehicles (drive through), pedestrians (walk through), and mass transit (bus or rail). City planners should consider population density and whether people generally use cars when making decisions regarding how to locally distribute life-saving commodities.



City planners, who have responsibility for CPOD site selection, should identify potential sites on the basis of the criteria in Table 5.

*Table 5. CPOD Site Criteria*

Consideration	Specification
Location	Centrally located Adjacent to a major road Fenced or otherwise secure Traffic controls for safe one-way flow Adequate area for supply trucks to maneuver
Layout	Large open area for serving vehicle traffic (paved) A separate area to serve walkup residents Unique entrance/exit for staff and supply trucks
Staff needs	Sheltered break area for workers Working telephones or other viable communications Portable toilets or functional restrooms
Equipment	Forklifts and pallet jacks for offloading and moving commodities

As with staging areas, planners should negotiate a lease or agreement with the site owner or manager (see Section 2.3.3.2.1). FEMA has designated three types of CPODs<sup>6</sup>. Table 6 shows the people served per day, dimensions, staffing requirements, and description of each type.

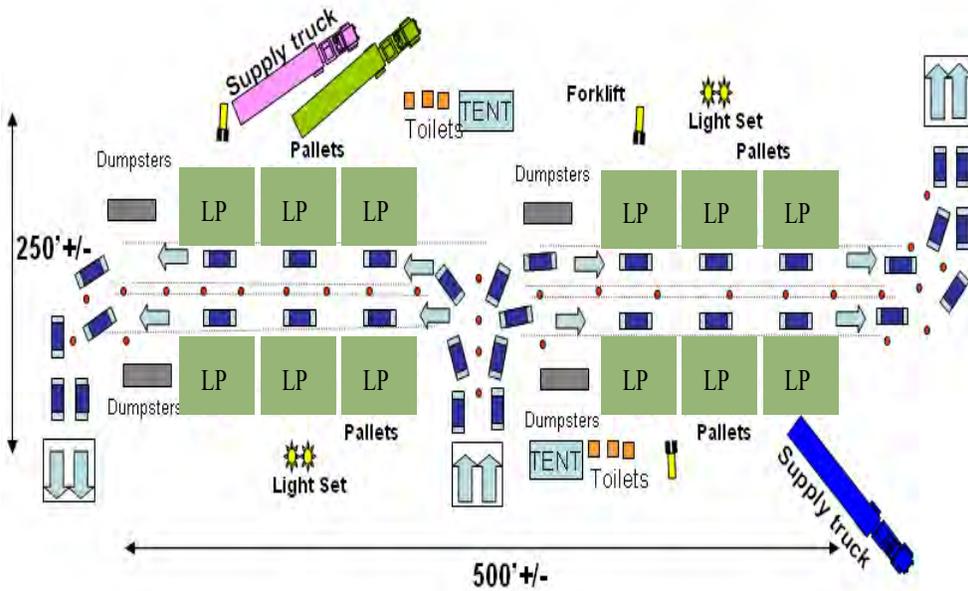
*Table 6. CPOD Types*

Category	Type I	Type II	Type III
People served per day	20,000 (560 vehicles/hour)	10,000 (280 vehicles/hour)	5,000 (140 vehicles/hour)
Dimensions	250 by 500 feet	250 by 300 feet	150 by 500 feet
Staff	Day: 78 Night: 10	Day: 34 Night: 6	Day: 19 Night: 4
Description	Four vehicle lanes and 12 loading points	Two vehicle lanes and six loading points	One vehicle lane and three loading points

Figures 4 through 6 show sample layouts for each CPOD type.

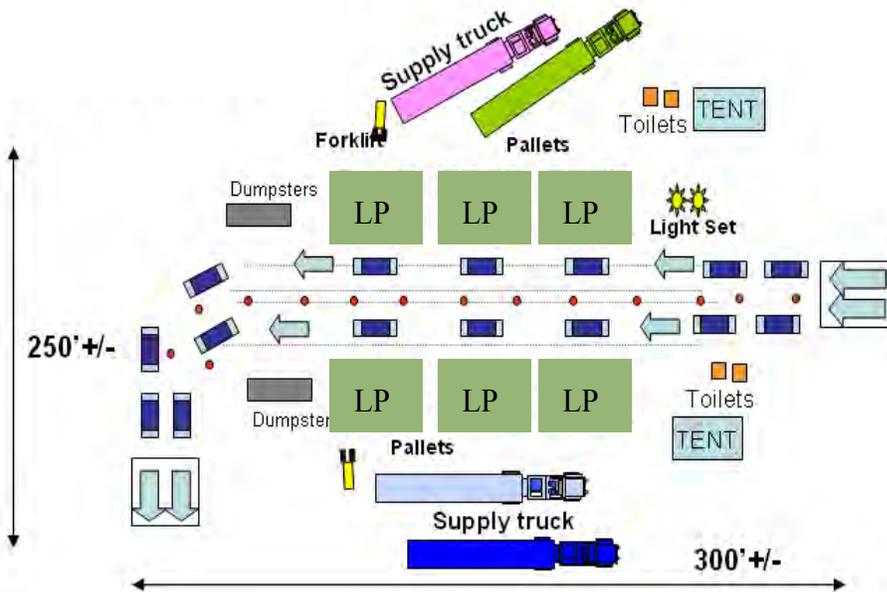
<sup>6</sup> FEMA, IS-26: Guide to Points of Distribution, Emergency Management Institute, <http://training.fema.gov/EMIWeb/IS/courseOverview.aspx?code=is-26>.

Figure 4. Sample Type I POD Layout



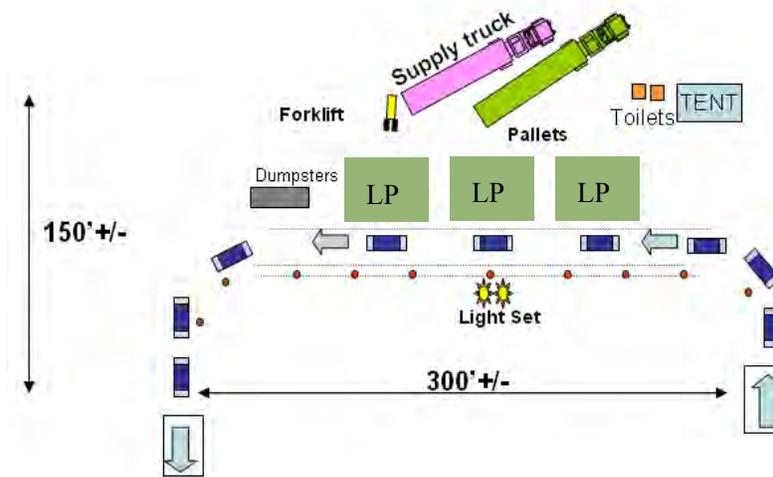
Source: FEMA, IS-26: Guide to Points of Distribution, Emergency Management Institute, <http://training.fema.gov/EMIWeb/IS/courseOverview.aspx?code=is-26>.

Figure 5. Sample Type II POD Layout



Source: FEMA, IS-26: Guide to Points of Distribution, Emergency Management Institute, <http://training.fema.gov/EMIWeb/IS/courseOverview.aspx?code=is-26>.

Figure 6. Same Type III POD Layout



Source: FEMA, IS-26: Guide to Points of Distribution, Emergency Management Institute, <http://training.fema.gov/EMIWeb/IS/courseOverview.aspx?code=is-26>.

The number of CPODs that the City should pre-identify depends on the following:

- ◆ The vehicle throughput, which determines the number of people that can be served per day
- ◆ The local community population base, as reported in census and population density maps
- ◆ Potential travel restrictions due to debris, blocked bridges, etc.
- ◆ Remote and special communities, which will not be able to travel to CPOD locations so they must be served by other means, including mobile distribution
- ◆ The need for primary and backup sites to ensure CPODs are not located in the disaster zone

#### 2.3.3.2.3 Documenting Logistics Sites and Facilities

Planners should use an OPLAN to document pre-identified staging areas, CPODs, and other logistics sites and facilities, including the following:

- ◆ ISBs
- ◆ Base camps
- ◆ Warehouses



- ◆ Airports
- ◆ Helipads
- ◆ Evacuation assembly points
- ◆ Reception centers
- ◆ Shelters
- ◆ EOCs
- ◆ Joint information centers (JICs)

For all sites, planners should record the following in the City repository:

- ◆ Site name
- ◆ Site address
- ◆ On-site point of contact (if applicable)
- ◆ State and county points of contact
- ◆ Additional site details as available, including size, type, covered space, use restrictions, maps, and site layouts.

### 2.3.3.3 TRANSPORTATION STRATEGY

Movement control processes focus on the effective deployment of transportation resources to support response and recovery operations. Transportation requirements include resources to move material, transport people, and clear debris. When possible, planners should identify transportation requirements, resources, and solutions pre-event, including establishing contracts with transportation providers. However, forecasting all possible scenarios that may require transportation support is difficult, especially for larger disasters. For this reason, transportation planners at all levels should strive to compile a catalog of capabilities and capacities of potential transportation sources—organic, NGO, and commercial—that can be accessed as needed.

#### *2.3.3.3.1 Local and State Transportation Responsibilities*

Depending on the severity of a disaster, local and state logistics personnel will be responsible for executing the following steps when a transportation requirement is identified:

1. Confirm the delivery location



2. Determine the mode of transportation
3. Determine the route
4. Determine the required security or special needs
5. Source the transportation
6. Confirm the delivery

City planners should coordinate with State Civil Defense (SCD) and HDOT under ESF 1 to:

- ◆ Obtain periodic transportation infrastructure damage assessments;
- ◆ Determine transportation carriers and priorities;
- ◆ Schedule transportation to move emergency personnel, supplies, and equipment;
- ◆ Provide equipment and operators for movement of supplies, equipment, and personnel;
- ◆ Coordinate identification and use of rail and aviation assets and facilities;
- ◆ Provide access to potential transportation firms to haul debris;
- ◆ Coordinate and establish refueling depots for emergency vehicles; and
- ◆ Provide space, as available, for staging transportation resources.

City planners should coordinate with State EOC under ESF 7 for logistical support.

When a very large incident requires a high volume of transportation resources, a Movement Coordination Center (MCC) should be established under the logistics section of the state EOC to support transportation operations. Routing all transportation requests through a centralized point provides the benefits of centralized transportation planning, apportioning, allocating, de-conflicting, and coordinating. This centralization also facilitates in-transit visibility of disaster response resources. This visibility allows for better planning and diversion of resources to meet emerging, higher-priority requirements. The MCC's coordination functions are as follows:

- ◆ Employ all means of transportation (multimodal) to support the concept of operations.



- ◆ Establish transportation policies consistent with:
  - Relative urgency of need;
  - Port and terminal capabilities;
  - Transportation asset availability; and
  - Priorities set by the Supply Coordination Officer (SCO).

The mission and scope of the MCC includes the following:

- ◆ Expediting the coordinated movement of numerous in-state and out-of-state resources to get them to disaster survivors
- ◆ Minimizing delays and expediting rapid response and recovery efforts
- ◆ Identifying potential modes of transportation in partnership with stakeholders, including
  - Truck, vehicle, and other road-based means;
  - Railway; and
  - Air cargo
- ◆ Identifying existing transportation contracts
- ◆ Establishing appropriate transportation contracts if they are not already in place.

The recommended transportation model features centralized (state) planning and local (City) execution. Centralizing control of movements at the highest level is most efficient, providing a needed focal point for transportation planning and resource allocation at each level of command to share awareness of current and future requirements and capabilities. However, states should decentralize control of mode and terminal operations, assigning local organizations to control specific transportation assets to meet a requirement. This decentralization of execution enhances local flexibility to prioritize support and accomplish the mission.

#### *2.3.3.3.2 FEMA Transportation Roles and Responsibilities*

When state and local resources are overwhelmed during a major, presidentially declared disaster, the National Response Coordination Center (NRCC) will plan and coordinate all aspects of national transportation support for the FEMA regions, including FEMA Region IX. Incident-specific transportation resources



(such as trucks, planes, and boats) will fall under the operational control of the JFO. In accordance with the NRF, the FEMA Transportation Management Branch will coordinate transportation, and process and execute movement of material from storage facilities and vendors to incident survivors. FEMA transportation services include the following:

- ◆ Multimodal transportation
- ◆ Fuel ordering
- ◆ Various fleet maintenance and management tools for internal FEMA assets
- ◆ Services in response to requests from other federal organizations

The GSA Tenders Program is the primary source of acquiring transportation during all disaster phases. To maintain flexibility and responsiveness, FEMA may reach out to federal partners through the mission assignment process or acquire transportation support via FEMA acquisition channels.

#### *2.3.4 Staffing*

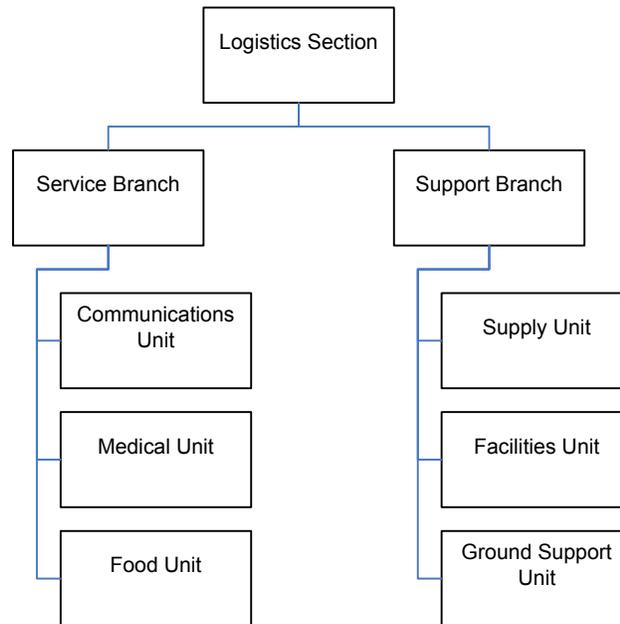
Trained logistics staff members will need to fill positions in the EOC logistics section, operational areas such as CPODs and staging areas, and other ESF 7 functions. This section provides guidance on how the City should organize, identify, mobilize, and demobilize their staff in support of a logistics response.

##### 2.3.4.1 ORGANIZING LOGISTICS STAFF

Figure 7 shows a sample ICS logistics organization structure. The City should consider these positions as ones that would need staffing in a larger event and update their existing plans accordingly.



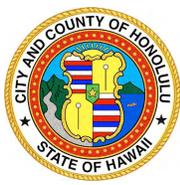
Figure 7. Logistics Section Organizational Structure



Typical functions of the units in the logistics section are as follows:

- ◆ *Communications unit.* Plans communications and acquires, sets up, maintains, and accounts for communications equipment.
- ◆ *Medical unit.* Provides medical services to incident personnel.
- ◆ *Food unit.* Determines food and water requirements, plans menus, orders food, provides cooking facilities, cooks, serves, maintains food service areas, and manages food security and safety concerns.
- ◆ *Supply unit.* Orders, receives, stores, and processes all incident-related resources, personnel, and supplies.
- ◆ *Facilities unit.* Sets up, maintains, and demobilizes all facilities used in support of incident operations. Also, provides the facility maintenance and security services required to support incident operations.
- ◆ *Ground support unit.* Provides all ground transportation during an incident. Also, maintains and supplies vehicles, keeps usage records, and develops incident traffic plans.

Logistics section staff members may perform other functions related to logistics management, as required, such as managing CPODs and staging areas, managing



logistics support technology or databases, and working with transportation and logistics contractors.

The EOC also requires logistics staff support to guide the situational awareness and decision-making efforts. EOCs can be organized in a number of ways, but ESF 7 should be represented in some capacity.

#### 2.3.4.2 IDENTIFYING LOGISTICS STAFF

County emergency management full-time staffing levels are already very limited, and the demand for additional trained and qualified personnel will quickly escalate during a Category 4 hurricane event. The State and the City should pre-identify and train staff members to augment County planners' ability to provide logistics response and recovery rapidly and efficiently. Potential sources for additional logistics staff members include

- ◆ HING;
- ◆ Volunteers;
- ◆ Private-sector contract personnel.

Some tasks may be performed by generalists, while others will require trained logistics staff members to perform specific logistics functions (such as manning the EOC logistics positions, sourcing requirements, coordinating transportation, setting up and operating logistics staging areas and CPODs, managing property accountability, and ensuring resource distribution). To the extent possible, local governments should cross-train personnel to perform multifunctional tasks, thereby improving the flexibility to meet local response demands. When cross-training is not possible, just-in-time training fills the gap to introduce generalists to their logistics-related duties.

Emergency planners should collaborate across the islands to identify the key logistics staff positions required during an emergency. Further, emergency planners should determine the training and credentials required to fill these key staff positions. This approach can help state and local governments maintain consistent training, exercise, and credential programs to achieve uniform proficiency across the City.

#### 2.3.4.3 MOBILIZING LOGISTICS STAFF

Planning for mobilization includes steps to recall logistics staff members and prepare them for their duties during an emergency. The City should do the following to ensure their logistics locations and functions are fully staffed:



- ◆ Develop organizational charts and rosters of the personnel that will support an emergency response. Keep them up to date and accessible.
- ◆ Notify appropriate staff members on how to report for duty in the event of a recall.
- ◆ Periodically test the recall process to ensure that the alert notifications, calling chains, or methods of recalling staff members work without delay.
- ◆ Set up a sign-in and credential check process to ensure that only people allowed to be at the logistics site are present.
- ◆ Brief incoming personnel on the emergency situation, logistics function, mission objectives and task, and safety.
- ◆ Develop job action sheets, reporting templates, and other tools to support logistics staff members in their roles. Make these available to applicable staff members at the initial briefing.

#### 2.3.4.4 DEMOBILIZING LOGISTICS STAFF

Planning for demobilizing the staff begins as soon as it is mobilized. The planning should develop a timeline for demobilization as well as do the following:

- ◆ Consider the arrangement of commercial transportation or other support to return staff members home.
- ◆ Evaluate whether any staff member is fatigued or otherwise has safety issues before releasing staff members. Provide follow-up services for medical, occupational, or mental health issues related to the incident.
- ◆ Debrief the staff and conduct a “hot wash” to collect lessons learned.
- ◆ Collect written logistics logs or reports that are required for documentation or developing the After-Action report/Improvement Plan (AAR/IP).
- ◆ Determine priorities and the schedule for dismissing staff members. This may include dismissing contract or mutual aid staff members first to address cost constraints. Alternatively, staff members first to arrive on scene may be considered for early release due to fatigue.

#### 2.3.5 Training and Exercises

Training and exercises are crucial components in achieving state and local logistics emergency preparedness. The City training and exercise programs should encompass all levels of staff, from senior leaders to field responders, and involve



all impacted agencies, and stakeholders. They should also involve all support partners (local, state, federal, private sector, and NGOs) and emphasize training across multifunctional areas to provide the greatest staffing flexibility and backup support likely to be required during an emergency.

#### *2.4 ESTABLISH AND COMMUNICATE LOGISTICS POLICIES, PROCEDURES, AND PLANS*

Logistics preparedness requires that planners develop synchronized, actionable policies, procedures, and plans. Coordination among federal, state, and local logistics planners and their private-sector and NGO partners is the foundation for preparedness. Through this collaboration, sound policies and standardized procedures are incorporated into an actionable, scalable logistics plan that can be implemented for all disasters, regardless of severity. Once approved, the information must be communicated to the response organizations that provide timely and effective critical logistics support.

##### *2.4.1 Operational Logistics Planning*

An overall logistics strategy should be derived from the existing City planning efforts, not supersede them. This Logistics Annex focuses on pre-event preparedness and provides the framework for building the coordination necessary to execute an effective logistics response to disasters ranging from small scale emergencies to catastrophic events. As noted in Section 1, the nine appendices focus on immediate pre-event actions needed to execute a response and are organized in conformance with the City's Hurricane Response Framework nine objectives.

Pre-event synchronization of federal, state, and local strategies can create standardization among partners and enable consistency in response execution. State and local logistics planners should review their logistics policies to determine those that apply and can be easily adopted to support an effective response. They should also determine the organizations that can best provide the logistics resources, services, and support needed during an event of any severity. From this analysis, guidelines and agreements can be developed to facilitate coordinated logistics response and recovery.

##### *2.4.2 Tactical Logistics Planning*

Response to a disaster will require post-event, tactical execution of operational logistics plans. An OPLAN should provide guidance for and coordinates tactical-level logistics activities across the City. An OPLAN should be actionable and scalable as it applies to all types and severities of disasters. Further, an OPLAN should focus on post-event logistics activities, covering the following topics:

- ◆ Communications



- ◆ Transportation
- ◆ Water
- ◆ Energy—fuel
- ◆ Energy—electricity
- ◆ Mass care (shelter/Hub Reception Center)
- ◆ CPODs
- ◆ Logistics staging areas
- ◆ Pets
- ◆ Badging
- ◆ Base camps

An OPLAN contains actionable, tactical guidance as well as logistics forms, layouts, locations, job aids by function, and checklists.

### *2.4.3 Support Agreements and Commercial Contracts*

Coordinated and pre-established logistics support agreements, MOUs and Memorandums of Agreement (MOA), and commercial contracts ensure accelerated support and rapid availability and flow of critical logistics resources, supplies, and services during times of chaos and confusion.

The importance of these formal agreements extends past the act of providing rapid assistance. The costs of mutual aid assistance can be great, so agreements need to be in place before a disaster to adequately reimburse the assisting party and not treat the cost as a charitable donation. FEMA will reimburse agencies providing mutual aid as outlined by the Stafford Act, Title 44 Code of Federal Regulation (CFR). To ensure the assisting party receives reimbursement, a pre-established agreement has to be in place, between the requesting and assisting parties, before the disaster.

#### 2.4.3.1 SUPPORT AGREEMENTS

Pre-established agreements facilitate rapid, short-term deployment of emergency support before, during, and after an incident.<sup>7</sup> To the extent possible, the City should establish mutual aid and assistance agreements between the State and the City, the private sector, and NGOs pre-event. Another means of obtaining support

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<sup>7</sup> FEMA, *Resource Management*, [www.fema.gov/resource-management](http://www.fema.gov/resource-management).



is through the use of EMAC, a valuable means of obtaining reciprocal emergency aid and assistance between states. These agreements also ensure the timely reimbursement of costs incurred by agencies rendering assistance.

#### *2.4.3.1.1 Mutual Aid Agreements*

Pre-established mutual aid and assistance agreements with the State of Hawaii and among the other counties will ensure support requirements, such as personnel, equipment, materials, and services, are provided quickly. City planners should identify potential logistics requirements, the organizations that can support the requirements, and where shortfalls exist. They should further examine existing local and state mutual aid and assistance agreements to determine those that can support these requirements as is or if modified. The analysis will reveal if any further agreements should be developed to increase resource availability and improve response and recovery efforts.

#### *2.4.3.1.2 NGO Agreements*

Support and assistance from ARC, private sector, and other volunteer organizations is invaluable during disaster response and recovery. Their ability to provide personnel as well as source and deliver critical supplies and equipment reduces the burden on planners.

The City could develop pre-event agreements with NGOs to ensure roles and responsibilities and accountability can be defined in advance, thus enabling organizations to prepare and be ready to respond immediately upon notification. The agreements should be reviewed annually to ensure information is accurate and current.

#### *2.4.3.1.3 Federal/Military Agreements*

FEMA partners with states, local governments, and other agencies to effectively and efficiently leverage national resources during emergencies. FEMA also enters into agreements with agencies such as ARC to provide support during times of disaster. Mutual aid agreements established with federal agencies follow the instructions in *FEMA 9523.6—Mutual Aid Agreements for Public Assistance* and *FEMA 322—Public Assistance Guide*, which contain guidelines for mutual aid agreements that render lending jurisdictions eligible for reimbursement for costs associated with mutual aid support.

United States Department of Defense (DoD) Instruction 4000.19, *Interservice, Intraservice and Intra-governmental Support*, and National Guard Regulation 5-2, *National Guard Support Agreements*, describe the guidance and procedures that must be followed to execute support agreements with DoD and the National Guard.



The City could review existing federal and military support agreements and determine the ability of each to be used in support of mutual aid assistance requirements. Those that can be expanded to cover City requirements should be updated and new agreements developed, if required.

#### 2.4.3.2 COMMERCIAL CONTRACTS

Stockpiling supplies and equipment pre-event is costly and may not be feasible for the City, given projected risks and budget restrictions. However, establishing pre-event sources and negotiating commercial contracts to procure critical supplies, equipment, services, and facilities during an emergency is a best practice that applies to the City. Although states and local governments have commercial contracts in place to meet day-to-day requirements, they are unlikely to be adequate to meet emergency response demands.

Postponing requirements determination and contracting until after an event can delay and negatively impact the response efforts. Pre-event contracts should be performance-based and clearly define the resources required, performance standards, metrics for evaluating performance, and cost. The State also need to evaluate the potential for the City to leverage state contracts.

### 3. Response

Under the NRF, primary responsibility for fulfilling incident support requirements of survivors falls initially upon local and state governments, and then moves to FEMA Region IX when state and local capabilities have been exceeded. Incident support requirements fall into two broad categories: materiel and services. Four major strategies will guide response actions:

- ◆ Logistics field activity support
- ◆ Logistics ordering, fulfillment, and tracking
- ◆ Information sharing
- ◆ Performance metrics

#### 3.1 LOGISTICS FIELD ACTIVITY SUPPORT

Local, state, and federal emergency managers should pre-identify the locations of their field activities when possible to facilitate response. Field activities cover a variety of emergency management sites, including the following:

- ◆ EOCs
- ◆ Staging areas and ISBs



- ◆ CPODs
- ◆ Other emergency management operations sites, such as reception and sheltering activities

The level at which field activities are required is a function of the size of the incident.

### *3.1.1 EOC Support*

The City has a permanent location for its EOC (the Department of Emergency Management), but does not fully staff it unless activated during an emergency. If the disaster response requirements exceed local capabilities, the City should request support from the State EOC. These requests should be submitted through the appropriate office in accordance with established state procedures.

The State should activate its EOC to assume the overall coordination role for a disaster beyond the capability of the counties. The State EOC should coordinate with the local EOC to determine the extent of the support required. If the State determines that the disaster requirements also exceed its capabilities, it should also request federal assistance through FEMA Region IX. If the State governor requests and the president agrees to declare an incident a national disaster, the federal government will fund federal disaster assistance under the Stafford Act.

For presidentially declared disasters, additional federal coordination and support may require Unified Coordination. Unified Coordination is the term used to describe the primary state/Federal incident management activities conducted at the incident level. Unified Coordination is typically directed from a Joint Field Office (JFO), a temporary Federal facility that provides a central location for coordination of response efforts by the private sector, NGOs, and all levels of government. Unified Coordination is organized, staffed, and managed in a manner consistent with NIMS principles using the NIMS/ICS structure. The Unified Coordination Group (UCG) comprises senior leaders representing Federal and comprises senior leaders representing Federal and state interests and, in certain circumstances, tribal governments, local jurisdictions, and the private sector. UCG members must have significant jurisdictional responsibility and authority. The composition of the UCG varies from incident to incident depending on the scope and nature of the disaster. The UCG leads the unified coordination staff. Personnel from state and Federal departments and agencies, other jurisdictional entities, the private sector, and NGOs may be assigned to the unified coordination staff at various incident facilities (e.g., JFO, staging areas, and other field offices). The UCG determines staffing of the unified coordination staff based on incident requirements.

FEMA headquarters will generally deploy logistics Incident Management Assistance Teams (IMAT) to disaster locations to help establish the federal government's initial on-scene response capability. The teams will provide both



personnel and material necessary to establish field activities, such as JFOs and ISBs. A standard pack-up module of equipment and supplies will accompany the team to facilitate establishment of the JFO.

### *3.1.2 Staging Area and CPOD Support*

The City should staff and operate its respective staging area(s) (ISBs at the federal level) to assist in the distribution of federal resources. If local staging areas are actually required, the State and City should staff and operate them.

### *3.1.3 Other Field Office Support*

Some larger incidents may require EOCs to establish specialized emergency management field activities. For example, some states utilize Reception, Staging, Onward Movement, and Integration (RSOI) sites to facilitate the coordination and movement of resources for larger disasters involving the mobilization and deployment of multijurisdictional and multidiscipline emergency management teams. Emergency managers may also need to establish shelters to provide temporary housing for survivors. Generally, EOCs make the decision to establish these miscellaneous field activities, and the sites should be predetermined if possible.

## *3.2 LOGISTICS ORDERING, FULFILLMENT, AND TRACKING*

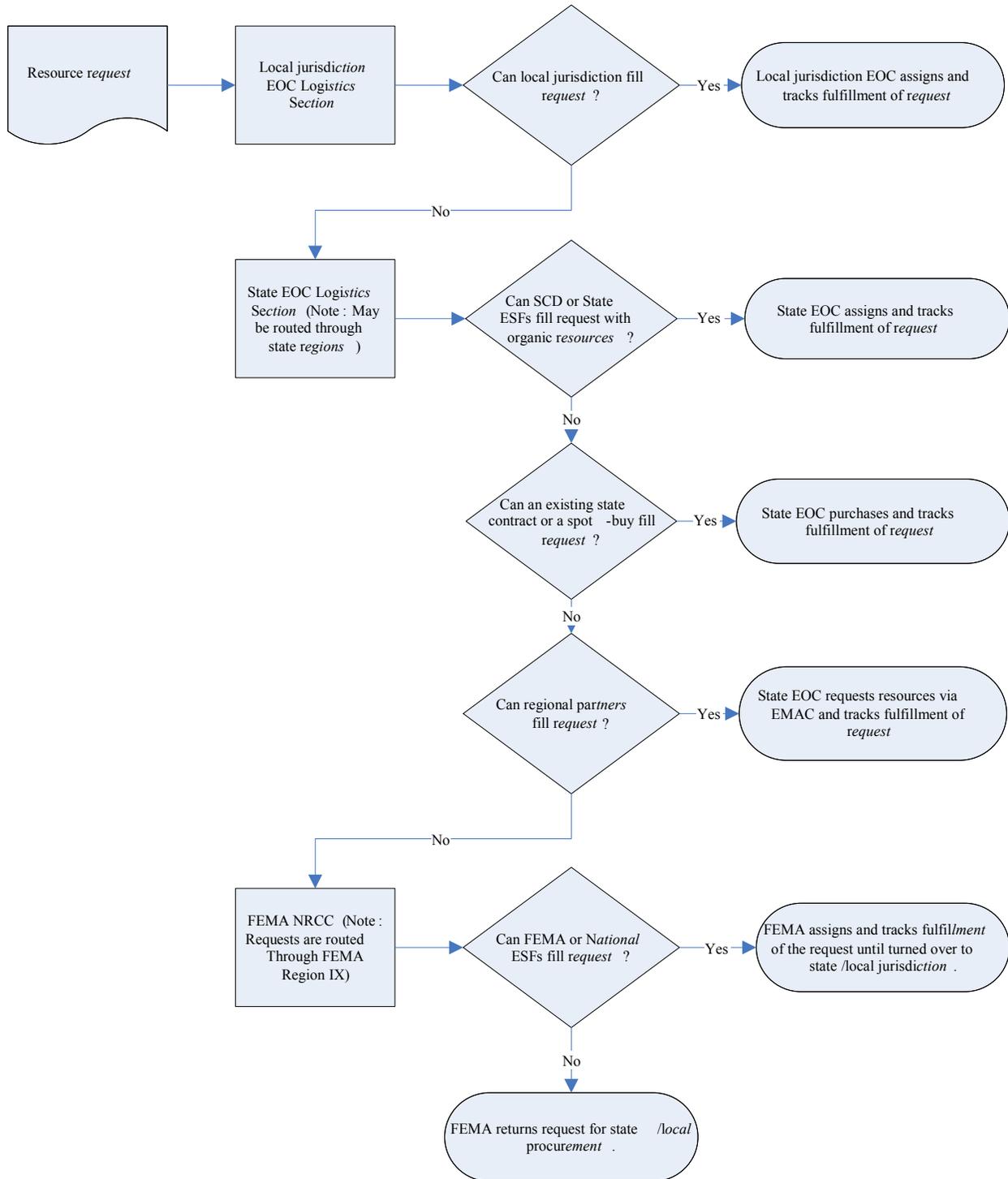
Resource ordering, fulfillment, and tracking during an incident are vital to the success of disaster response. During disaster response, the EOC should track its resources from initial order through final delivery to the requester or end-user. A disaster will often involve multiple ordering points and mechanisms, such as the state, open market purchases, or mutual aid resources. To facilitate the management and tracking of resource orders, a single-point ordering process should be established. The intent of single-point ordering is to collocate the ordering processes in the ordering unit or the logistics section of the field activity. Single-point ordering is the process required to effectively manage and track all resource orders.

Field activities receive, store, and dispatch resources on the basis of requests from an end-user. The EOCs should prioritize the fulfillment of the orders and track their fulfillment and delivery to the requester.

Figure 8 depicts the ordering, fulfillment, and tracking process, which spans the local, state, and federal levels of response.



Figure 8. Resource Request Ordering Process





All requests for emergency management resources should begin at the local level, using its applicable ordering system and established channels. The City has varying levels of access to the state systems. Some agencies in the City cannot directly submit electronic orders and must forward their requests to the state to enter them into their automated system.

Before passing requests to the State, the City should fill their resource requests until their resources are exhausted. Local resources may include inventories, mutual aid agreements, and local purchases and contracts. Requests that cannot be filled locally are then passed to the applicable State EOC. The State EOCs use a similar process to fill the resource requests. If the State cannot fill a request, it may pass it to the FEMA NRCC via the FEMA Region IX Regional Resource Control Center (RRCC) using FEMA's inventory management system.

The NRCC acts as the clearinghouse for nationally sourced supplies and services. It may fill requests using inventories, contracts, and agreements among FEMA and its other national ESF partners, such as the Department of Transportation, GSA, DLA, and USACE. FEMA and its federal ESF partners maintain inventories and contracts for most life-saving and life-sustaining commodities, such as water, meals, and blankets; equipment, such as generators; and kits for emergency responder teams. The NRCC will attempt to fill requests through these sources, or it may instruct the requestor to procure the material and services at the field level.

FEMA headquarters controls and accounts for nationally sourced materiel until it is delivered to ISBs. While at the ISB, FEMA Region IX physically controls and accounts for the material as national assets. The NRCC provides delivery information, such as destination and timing of deliveries, and maintains a log of all actions taken for each requirement. Once the material is turned over to the state or the City, FEMA ceases to track it.

For a catastrophic disaster such as a Category 4 hurricane, the NRCC may initially push supplies to the ISBs in anticipation of requests to reduce response times. FEMA determines when to release planned waves of initial response material on the basis of planning factors for the operation and the warehouse or vendor that will issue the material.

All resources requested through a local or state field activity should be tracked by that state or the City using existing web-based tools, as available. To the extent possible, planners should maintain a core set of information to accurately track the resources requested or deployed. At a minimum, the following data elements should be tracked:

- ◆ The time the resource was requested



- ◆ The location where the resource is needed
- ◆ Who is fulfilling the resource request
- ◆ How the resource is being routed
- ◆ Who is authorized to accept the resource
- ◆ Updates as the resource is being acquired and transported
- ◆ When the resource is delivered
- ◆ When the resource is returned, deactivated, or demobilized

### *3.3 INFORMATION SHARING*

Information sharing between the counties in Hawaii is vital to effective logistics and resource management. On the tactical level, getting the right information to the right person at the right time allows logistics support functions to meet critical needs and minimize mistakes and duplicative effort. On the strategic level, briefing decision makers with timely information allows managers to make informed decisions about the use of scarce resources.

#### *3.3.1 Logistics Calls*

When complex logistics activities are required, the State EOC should initiate a state logistics call and include county partners, as required. The purpose of the call is to facilitate information sharing between the State EOC, affected areas of the City, and organizations offering assistance. The state logistics call should take place at least once daily when the State EOC is operational and supporting resource requests.



Figure 9 shows an example conference call agenda. Notes from the call should be posted electronically on the web for future reference.

*Figure 9. Sample State Logistics Call Agenda*

<p>State Logistics Call Agenda</p> <ol style="list-style-type: none"><li>1. Status of Staging Areas<ul style="list-style-type: none"><li>• Inventory status</li><li>• Expected or projected deliveries</li><li>• Issues</li></ul></li><li>2. Status of Points of Distribution<ul style="list-style-type: none"><li>• Consumption rates</li><li>• CPODs open</li><li>• Projected needs</li></ul></li><li>3. Resource Status<ul style="list-style-type: none"><li>• Current resources available</li><li>• Resources requested in the last 24 hours</li><li>• Ongoing missions</li><li>• Resources en route</li><li>• Resource deficiencies</li><li>• Resource projections</li><li>• Resource issues</li><li>• Coordination to reduce competition for the same resources</li></ul></li><li>4. EMAC and Mutual Aid Status<ul style="list-style-type: none"><li>• Number of personnel deployed</li><li>• Requests made</li><li>• Requests filled</li><li>• Outstanding requests</li><li>• Requests completed</li><li>• Issues</li></ul></li><li>5. Federal Assistance</li><li>6. City Issues and Updates</li></ol>
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### 3.3.2 Information Systems

Information systems allow for consistent and readily available information on resource management to support an emergency, local or catastrophic. To the extent possible, planners should coordinate and standardize information systems:

- ◆ Cataloging resources in a logistics resource repository
- ◆ Identifying the resource tracking systems to be used in each state and recommending common data elements to be used



### 3.4 PERFORMANCE METRICS

The City could also implement a performance metrics strategy based on the SCOR model, which outlines suggested performance and strategic metrics for tracking supply chain performance. The SCOR model describes five standard performance attributes that supply chain managers use to track performance (Table 7).

Table 7. SCOR Performance Attributes

Attribute	Definition
Reliability	The ability to perform tasks as expected, consistently getting the orders right
Responsiveness	The consistent speed at which products and services reach the customer
Agility	The ability to respond to external influences, such as changes in the market
Costs	The cost of operating the supply chain processes, including labor, material, and management and transportation costs
Assets	The ability to efficiently use assets to support the supply chain

Planners should establish metrics in as many of the five performance attributes as applicable. These metrics should document performance expectations and assess the logistics response to a disaster. They should be measurable and quantifiable, linked to responsible organizations or agencies, and well-defined. For each metric, data sources, computation method, and frequency of measure should be clearly defined. Every effort should be made to select metrics where measures and data are readily available.

Table 8 lists several critical metrics that City planners could consider to assess their logistics response actions.



*Table 8. Recommended Metrics*

Attribute	Metric and definition
Reliability	Perfect order fulfillment
	Getting the right item to disaster survivors, shelters, or field operations is critical to emergency response success. This metric measures the percentage of orders delivered completely, accurately, with the proper documentation, and without damage.
Responsiveness	Order fulfillment cycle time
	Wait time is a concern for all supply chains, but emergency supply chains have the added criticality that time saved often means lives saved. This metric is the average actual cycle time to fulfill an order to the end user.
Agility	Upside supply chain flexibility
	The ability to quickly ramp up operations when a disaster occurs demonstrates supply chain success. This metric measures the time required (in days) to achieve an unplanned sustainable 20 percent increase in quantities delivered.
Costs	Supply chain management cost
	Emergency managers are asked to be good stewards of public or donated funds. This metric tracks the sum of the costs associated with the supply chain (except for the cost of goods).

### *3.5 PROPERTY AND EQUIPMENT MANAGEMENT*

Effective property management provides oversight, internal controls, and technical services for accountability of the City’s property assets. Without structured property management, the loss of equipment is a higher risk.

#### *3.5.1 Approach to Property Accountability*

Property managers should account for property belonging to a specific City agency during the inventory process in accordance with local property management regulations and policies. City planners should manage the transfer of property and equipment throughout the City using the recommended procedures that follow.

#### *3.5.2 Accountable Property Officer Role*

The City should assign an Accountable Property Officer (APO) to record, secure, maintain, and track property. For the assigned location, the APO should

- ◆ Ensure all accountable property received is properly marked and inventoried;
- ◆ Prepare accountable property reports;



- ◆ Establish internal controls;
- ◆ Issue equipment, such as cell phones and computers;
- ◆ Establish tracking mechanisms for recoverable accountable property;
- ◆ Inventory the staging area or other temporary logistics operations “wall to wall” at closeout; and
- ◆ Recover and properly dispose of property during the demobilization phase.

### *3.5.3 Property Transfer*

When the City receives a resource from a vendor or another county, it should take the following steps to ensure the resource is documented properly:

- ◆ Upon receipt of the resource, verify the quantity and quality of goods, services, or materials. The City or agencies should retain the appropriate documentation, including invoices, bills of lading, and property transfer forms.
- ◆ Retain records regarding the receipt and disbursement of property and equipment for a minimum of three years or the length of time required.
- ◆ Retain all vendor records, invoices, bills of lading, and receipts verifying disbursement for a minimum of three years or the length of time required.
- ◆ Record all disbursements subject to federal audit and retain disbursement records.

### *3.5.4 Lost and Found property*

Property managers at the City that lose or find property at their location should take the following steps:

- ◆ Advise personnel supporting logistics operations to turn in lost or found property or equipment to the location’s security office.
- ◆ Contact neighboring counties or the State via conference call or e-mail to see whether the lost item belongs to a neighboring areas within the City, making every effort to quickly transfer the item to the owning jurisdiction.
- ◆ Hold unclaimed property for a minimum of 60 days or the length of time required by the City.



### *3.5.5 Property Accountability Systems*

The City should ideally maintain accountability for all types of property using an automated property management system of record with the following asset management capabilities:

- ◆ Life-cycle management
- ◆ Inventory management
- ◆ Redistribution and asset visibility
- ◆ Maintenance
- ◆ Authorized allowances

Property management systems should also support financial reporting by calculating depreciation on the basis of asset type. Ideally, property management systems should interface with local accounting systems.

## *4. Logistics Recovery*

The recovery phase includes actions taken to return to normal operations after the emergency. Logistics operations during this period should:

- ◆ Capture lessons learned for adoption in future events;
- ◆ Return material to its original locations or owners; and
- ◆ Replenish or refurbish material to usable condition for future events.

Recovery also includes demobilizing the staff, sites, and facilities used during emergency operations (see Section 2.3.4 for personnel and Section 2.3.3 for CPODs and staging areas). Where fuels, fertilizers, industrial chemicals, or other hazardous materials are involved, the U.S. Environmental Protection Agency and local counterparts may also need to be involved in remediation and risk mitigation activities.

### *4.1 LESSONS LEARNED*

The City's lessons-learned aims to capture both positive and negative lessons learned during emergency response or exercise events. Lessons learned can be documented at any point during an event, but they are often addressed in the AAR/IP. Documenting lessons learned gives future teams supporting emergency response information to increase their effectiveness and efficiency.



#### 4.2 MATERIAL RETURN, REALLOCATION, AND DISPOSITION

Demobilization planning begins as soon as mobilization starts. As response actions decline, the logistics sections should begin executing demobilization activities. They should work to ensure all equipment and supplies are accounted for and usable material is returned to the issuing organization in accordance with any federal, state, or local regulations.

##### 4.2.1 Planning and Coordination

Developing a demobilization plan early allows for a swift transition to returning material at the end of operations. As response operations begin to diminish, local incident commanders and the EOCs will demobilize agencies from their respective operations. Planners should note indications that the incident may be ready to implement a material return plan, including

- ◆ Fewer resource requests being received;
- ◆ More resources spending more time in staging;
- ◆ Excess resources identified during planning processes; and
- ◆ Accomplishment of incident objectives.

During demobilization, a coordination conference call, as a part of the Incident Command Post (ICP) process, is essential to transfer resources within the City. The conference call should include logistics personnel in the City, local emergency coordinators, and State EOC personnel. The call should include discussion of the following for transferring resources:

- ◆ The supplies and equipment no longer required
- ◆ Whether excesses are economical to recover, and if not, their disposition, such as donation or destruction
- ◆ For material economical to recover, a ship-to location
- ◆ Transportation methods and arrangements
- ◆ Locations for returns and disposition activities
- ◆ Schedule of returns
- ◆ Documentation required to record receipt of a return



Planners should identify the location of returns and disposition during demobilization planning. State and county staging areas may be the preferred sites because they are located in proximity but not within the disaster area.

#### *4.2.2 Priority of Returns*

The City may differ in how they establish release priorities for resources assigned to an incident. As a general rule, the cost of time keeping resources or resource shelf life should be considered when determining the resources to release first. Expensive resources should be monitored carefully to ensure they are released as soon as they are no longer needed. The following is an example of release priority order:

1. Contracted or commercial resources
2. Mutual aid and assistance resources
3. First-in agency resources
4. Resources needed for cleanup or rehabilitation.

#### *4.2.3 Accountable Items*

Logistics section disposition actions for accountable, or nonexpendable, resources, such as multiuse equipment and durable items, include the following:

- ◆ Ensuring all equipment, supplies, and other non-expendable resources are accounted for and returned to the issuing organization in accordance with agreements and contracts.
- ◆ Coordinating disposal of contaminated supplies and equipment in accordance with established regulations and policies.
- ◆ Returning resources not in restorable condition may be declared as excess on the basis of the controlling city, agency, or organization regulations.

#### *4.2.4 Consumable Items*

Logistics section disposition actions for consumable resources, such as water, food, fuel, and other one-time-use supplies, include the following:

- ◆ Check the shelf life and condition of unused and unopened consumable resources. Follow the controlling jurisdiction, agency, or organization regulations for adding those items back into inventory, donating them, or disposing of them.



- ◆ Dispose of resources that require special handling, such as biological waste and contaminated supplies, debris, and equipment. Handle them according to governing federal, state, and local regulations and policies.

#### *4.3 MATERIAL REPLENISHMENT AND REFURBISHMENT*

After returns are completed, the City may opt to restore the material resources to fully functional capability and prepare the resource for the next mobilization.

##### *4.3.1 Accountable items*

Planners should begin preparation activities in anticipation of the next event for accountable items by

- ◆ Repairing or replacing supplies;
- ◆ Restoring equipment to fully functional capability and prepare it for the next mobilization; and
- ◆ Replacing broken or lost accountable items through the appropriate resupply process.

##### *4.3.2 Consumable Items*

Planners should replenish consumable items by

- ◆ Restocking at the point from which a resource was issued; and
- ◆ Recording the shelf-life of the items obtained.

##### *4.3.3 Documentation*

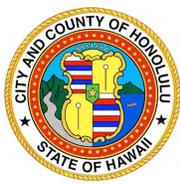
The City should update its records of property following the return and replenishment of material:

- ◆ APOs should conduct final inventory and review of the accountable property and ensure that it is properly recorded and retained.
- ◆ Once material is replenished and refurbished, planners should update their resource database to note the quantity and condition of the material, making the data available to the State EOC.



## 5. Acronyms

AAR/IP	After-Action Report/Improvement Plan
APO	Accountable Property Officer
ARC	American Red Cross
BPA	Blanket Purchase Agreements
CFR	Code of Federal Regulation
City	City and County of Honolulu
CPOD	Community Points of Distribution
DEM	Department of Emergency Management
DLA	Defense Logistics Agency
DoD	United States Department of Defense
EOC	Emergency Operations Center
EMAC	Emergency Management Assistance Compact
ESF	Emergency Support Functions
FEMA	Federal Emergency Management Agency
GSA	Government Services Agency
HDOT	State of Hawaii Department of Transportation
HING	Hawaii National Guard
HNL	Honolulu International Airport
ICP	Incident Command Post
ICS	Incident Command System
IMAT	Incident Management Assistance Teams
ISB	Incident Support Bases



JFO	Joint Field Offices
JIC	Joint Information Center
MHE	Material-Handling Equipment
MCC	Movement Coordination Center
MOA	Memoranda of Agreement
MOU	Memoranda of Understanding
MRE	Meal Ready-to-Eat
NGO	Non-Governmental Organizations
NIC	National Integration Center
NIMS	National Incident Management System
NRCC	National Response Coordination Center
NRF	National Response Framework
OPLAN	Logistics Operations Plan
PPE	Personal Protective Equipment
RRCC	Regional Resource Control Center
RSOI	Reception, Staging, Onward Movement, and Integration
SCD	State Civil Defense
SCM	Supply Chain Management
SCO	Supply Coordination Officer
SCOR	Supply Chain Operations Reference model
State	State of Hawaii
USACE	United States Army Corps of Engineers



# APPENDICES



# APPENDIX 1: PERFORMING LIFESAVING AND SUSTAINING MEASURES

This appendix supplements the Logistics Annex for the City. It is a complement to the principles outlined in the Logistics Concept of Operations, but provides objective-specific details for emergency management personnel. These appendices should be considered working documents, continually updated as circumstances or procedures change. Blanks or incomplete information highlight where logistics procedures are not yet finalized, so should serve as a call to action for emergency management planners.

<b>Primary County Point of Contact:</b>	
<b>Phone:</b>	
<b>Email:</b>	
<b>Address:</b>	

Performing lifesaving and sustaining measures is of the highest priority for emergency planners and responders. This objective includes identifying and providing medical treatment to persons affected by the incident.

Tasks	Phase <sup>1</sup>	Partner interface	Resource Requirements	Resource Shortfalls
Notify all vendors of an impending event under a “warning order”	Phase 1b: Elevated Threat	Vendors: POC Phone Commodity  POC Phone Commodity	Telephone, internet, or other communications assets.	
Finalize all commodity and equipment forecast models, utilize county Logistics	Phase 1b: Elevated Threat	Model administrator Commodities to be included in the model:	Model	

<sup>1</sup> As defined in the County Emergency Operations Center Hurricane and Tropical Cyclone Response Checklist, Concept of Operations.



**City and County of Honolulu**  
**Appendix 1: Performing Lifesaving and Sustaining Measures**

<b>Tasks</b>	<b>Phase<sup>1</sup></b>	<b>Partner interface</b>	<b>Resource Requirements</b>	<b>Resource Shortfalls</b>
resource management databases, and draft provisional orders.		<ul style="list-style-type: none"> <li>• Medical supplies</li> <li>• Water</li> </ul> See Logistics Annex Section 2.2.1 and 2.3		
Activate medical response components of Points of Distribution (PODs) personnel, equipment, and transportation 60 hours prior to event.	Phase 1c: Credible Threat	<b>LSA Location and POCs;</b> <b>POD Location and POCs;</b> <b>Equipment storage location</b> See Logistics Annex Section 2.3.3.2.1	Medical supplies, storage equipment (refrigerators), fuel storage, housing and mess area for staff.	
Activate and staff Medical Response and Urban Search and Rescue teams 48 hours prior to the event.	Phase 1c: Credible Threat	Contact <b>HR POC.</b>	Staff and equipment.	
Oversee the response of all pre-positioned medical resources, equipment, and personnel.	Phase 2: Incident and Incident Response	<b>Distribution partners, Federal and state counterparts, community groups, VOADs, County response personnel.</b>	Trucks, assets to clear roadways (see Appendix F, Debris Clearance), medical kits, staff, water bladders, fuel, generators.	
Verify the viability medical and search and rescue response teams.	Phase 2: Incident and Incident Response	<b>Medical and Search and Rescue Team locations and POCs:</b>	Communications equipment, generators.	
Within 36 hours of event, oversee medical and rescue commodity inventory and back-fill as needed.	Phase 3: Post Incident	<b>POD POC and location information</b> See Logistics Annex Section 3.2	Trucks, forklifts, personnel.	
Coordinate and oversee Federal resources if event has been declared.	Phase 3: Post Incident	<b>FEMA POC</b> See Section 2.3 of the Logistics Annex.	Resources requested.	
Re-run commodity forecasts models and re-order supplies as needed.	Phase 3: Post Incident	<b>Model location and administrator</b> Commodities to be included in the model:	Commodity forecast models, communications assets.	



## APPENDIX 2: MASS CARE AND SHELTERING

This appendix supplements the Logistics Annex for the City. It is a complement to the principles outlined in the Logistics Concept of Operations, but provides objective-specific details for emergency management personnel. These appendices should be considered working documents, continually updated as circumstances or procedures change. Blanks or incomplete information highlight where logistics procedures are not yet finalized, so should serve as a call to action for emergency management planners.

<b>Primary County Point of Contact:</b>	
<b>Phone:</b>	
<b>Email:</b>	
<b>Address:</b>	

Mass care and sheltering includes identifying and providing shelter and commodities to persons affected by the event.

Tasks	Phase <sup>1</sup>	Partner interface	Resource Requirements	Resource Shortfalls
Notify all vendors of an impending event under a “warning order”	Phase 2b: Elevated Threat	Vendors: John Doe 555-555-5555 Water  POC Phone Commodity	<ul style="list-style-type: none"> <li>• Telephone, internet, or other communications assets</li> <li>• MOUs/MOAs</li> </ul>	
Finalize all commodity and equipment forecast models, utilize county Logistics resource management databases, and draft provisional orders	Phase 2b: Elevated Threat		Tier I, II, and III commodity requirement factors <ul style="list-style-type: none"> <li>• Food</li> <li>• Water</li> <li>• Debris Clearance</li> </ul>	
Activate Points of	Phase 2c: Credible	POD Location and	<ul style="list-style-type: none"> <li>• Personnel</li> </ul>	

<sup>1</sup> As defined in the County Emergency Operations Center Hurricane and Tropical Cyclone Response Checklist, Concept of Operations.



**City and County of Honolulu**  
**Appendix 2: Mass Care and Sheltering**

<b>Tasks</b>	<b>Phase<sup>1</sup></b>	<b>Partner interface</b>	<b>Resource Requirements</b>	<b>Resource Shortfalls</b>
Distribution (PODs) personnel, equipment, and transportation X hours prior to event. Resupply LSA and PODs as required.	Threat/ Phase 3: Post Incident	POCs: Equipment storage location	<ul style="list-style-type: none"> <li>• LSA Locations</li> <li>• Forklifts/Pallet Jacks</li> <li>• Light Towers</li> <li>• Large freezers</li> <li>• Fuel storage</li> <li>• Generators</li> <li>• Base camps for responders</li> </ul>	
Activate shelters personnel, equipment, and transportation.	Phase 2c: Credible Threat	Shelter Locations and POCs: VOAD POCs: Equipment and storage location	<ul style="list-style-type: none"> <li>• Shelters</li> <li>• Cots</li> <li>• Comfort kits</li> <li>• Buses to transport evacuees</li> <li>• Maintenance</li> <li>• Drivers</li> <li>• Mobile Feeding Kitchens</li> </ul>	
Oversee the response of all pre-positioned resources, equipment, and personnel.	Phase 2: Incident and Incident Response/ Phase 3: Post Incident	Distribution partners, Federal and state counterparts, community groups, VOADs, County response personnel.	<ul style="list-style-type: none"> <li>• Personnel</li> <li>• LSA Locations</li> <li>• Forklifts/Pallet Jacks</li> <li>• Light Towers</li> <li>• Large freezers for ice</li> <li>• Fuel storage</li> <li>• Trucks, assets to clear roadways (see Appendix F, Debris Clearance), medical kits, mobile kitchens, staff, water bladders</li> </ul>	
Verify communications is operational between LSAs, PODs, and shelters.	Phase 2: Incident and Incident Response	POC	<ul style="list-style-type: none"> <li>• Communications equipment</li> <li>• Generators</li> </ul>	
Coordinate and oversee Federal resources if event has been declared.	Phase 3: Post Incident	FEMA POC Resources requested	<ul style="list-style-type: none"> <li>• Communications assets</li> </ul>	



## APPENDIX 3: MINIMIZE RISK TO VISITORS

This appendix supplements the Logistics Annex for the City. It is a complement to the principles outlined in the Logistics Concept of Operations, but provides objective-specific details for emergency management personnel. These appendices should be considered working documents, continually updated as circumstances or procedures change. Blanks or incomplete information highlight where logistics procedures are not yet finalized, so should serve as a call to action for emergency management planners.

<b>Primary County Point of Contact:</b>	
<b>Phone:</b>	
<b>Email:</b>	
<b>Address:</b>	

Visitors, who are often unfamiliar with the area and the local resources that may be present, experience unique challenges when preparing for and responding to an emergency event. This objective includes responding to the distinctive needs of a tourist population.

<b>Tasks</b>	<b>Phase<sup>1</sup></b>	<b>Partner interface</b>	<b>Resource Requirements</b>	<b>Resource Shortfalls</b>
Notify all hotels, resorts, and tourism establishments of impending event and verify their expectations for visitors.	Phase 2b: Elevated Threat	Hotels/Resorts: POC Phone  POC Phone	<ul style="list-style-type: none"> <li>• Telephone, internet, or other communications assets</li> <li>• MOUs/MOAs</li> </ul>	
Estimate number of visitors on the island and incorporate them within commodity and equipment forecast models.	Phase 2b: Elevated Threat	Hotel/Resort officials are expected to care for visitors' basic needs, but they may require additional supplies.	<ul style="list-style-type: none"> <li>• Food</li> <li>• Water</li> <li>• Fuel</li> </ul>	

<sup>1</sup> As defined in the County Emergency Operations Center Hurricane and Tropical Cyclone Response Checklist, Concept of Operations.



**City and County of Honolulu**  
**Appendix 3: Minimize Risk to Visitors**

<b>Tasks</b>	<b>Phase<sup>1</sup></b>	<b>Partner interface</b>	<b>Resource Requirements</b>	<b>Resource Shortfalls</b>
Secure translation assistance and communications resources to keep visitors informed.	Phase 2c: Credible Threat/ Phase 3: Post Incident	Translation Resources Communications assets  Location and POC	<ul style="list-style-type: none"> <li>• Translators</li> <li>• Communications equipment</li> </ul>	
Pre-position any needed equipment or resources at tourist sheltering locations.	Phase 2c: Credible Threat	Shelter/Hotel/Resort locations and POCs:	<ul style="list-style-type: none"> <li>• Water</li> <li>• Food</li> <li>• Fuel</li> </ul>	
Verify the viability of all sheltering locations; Oversee the response of all pre-positioned resources, equipment, and personnel.	Phase 2: Incident and Incident Response/ Phase 3: Post Incident	Shelter/Hotel/Resort locations and POCs:	<ul style="list-style-type: none"> <li>• Communications equipment</li> </ul>	
Coordinate and oversee Federal resources if event has been declared.	Phase 2: Incident and Incident Response	FEMA POC Resources requested		



## APPENDIX 4: MAINTAIN FUNCTIONALITY OF THE WATER DISTRIBUTION SYSTEM

This appendix supplements the Logistics Annex for the City. It is a complement to the principles outlined in the Logistics Concept of Operations, but provides objective-specific details for emergency management personnel. These appendices should be considered working documents, continually updated as circumstances or procedures change. Blanks or incomplete information highlight where logistics procedures are not yet finalized, so should serve as a call to action for emergency management planners.

<b>Primary County Point of Contact:</b>	
<b>Phone:</b>	
<b>Email:</b>	
<b>Address:</b>	

Clean and accessible water is critical for human health and survival. This objective includes the assessment and repair of the water utility and distribution system. The City assumes that the numerous wells located on Oahu should serve as a redundant and abundant source of on island freshwater, which obviates the need for importing drinking water from other islands or the mainland.

Tasks	Phase <sup>1</sup>	Partner interface	Resource Requirements	Resource Shortfalls
Notify water works personnel an impending event, begin preparation for impact.	Phase 1b: Elevated Threat	Water Personnel <b>POC:</b> <b>Phone:</b> <b>Role:</b>  <b>POC:</b> <b>Phone:</b> <b>Role:</b>	<ul style="list-style-type: none"> <li>• Communications equipment</li> </ul>	
Pre-order or pre-position equipment or supplies that are	Phase 1b: Elevated Threat	Suppliers: <b>POC:</b> <b>Phone:</b>	<ul style="list-style-type: none"> <li>• Water distribution spare parts.</li> </ul>	

<sup>1</sup> As defined in the County Emergency Operations Center Hurricane and Tropical Cyclone Response Checklist, Concept of Operations.



**City and County of Honolulu**  
**Appendix 4: Maintain Functionality of the Water Distribution System**

<b>Tasks</b>	<b>Phase<sup>1</sup></b>	<b>Partner interface</b>	<b>Resource Requirements</b>	<b>Resource Shortfalls</b>
critical for anticipated repairs.		<b>Role:</b>		
If warranted, seal off water system and close it entirely.	Phase 1c: Credible Threat	Water Personnel <b>POC:</b> <b>Phone:</b> <b>Role:</b>		
Oversee the response of all pre-positioned resources, equipment, and personnel.	Phase 2: Incident and Incident Response		<ul style="list-style-type: none"> <li>• Debris clearance equipment</li> </ul>	
Verify the extent, if any, of damage to the system, and prioritize response resources.	Phase 3: Post-Incident	<b>Warehouse and commodity center locations and POCs:</b>	<ul style="list-style-type: none"> <li>• Debris clearance equipment</li> </ul>	
Communication any service disruptions, advisories, and expectations for repair to customers.	Phase 3: Post-Incident	<b>Communications director:</b>	<ul style="list-style-type: none"> <li>• Communications equipment</li> <li>• Media contacts</li> </ul>	
Coordinate and oversee Federal resources if event has been declared.	Phase 3: Post-Incident	<b>FEMA POC:</b> Resources requested		



## APPENDIX 5: DELIVER FUEL TO MAINTAIN ESSENTIAL SERVICES

This appendix supplements the Logistics Annex for the City. It is a complement to the principles outlined in the Logistics Concept of Operations, but provides objective-specific details for emergency management personnel. These appendices should be considered working documents, continually updated as circumstances or procedures change. Blanks or incomplete information highlight where logistics procedures are not yet finalized, so should serve as a call to action for emergency management planners.

<b>Primary County Point of Contact:</b>	
<b>Phone:</b>	
<b>Email:</b>	
<b>Address:</b>	

This objective focuses on the distribution of fuel within the island. It also includes the maintenance of essential services such as law enforcement, fire services, medical services, utilities, telecommunications, transportation systems, sanitation systems, and other services that may be needed.

Tasks	Phase <sup>1</sup>	Partner interface	Resource Requirements	Resource Shortfalls
Notify fuel vendors and pier personnel of an impending event with “warning order”	Phase 1b: Elevated Threat	Vendors: POC Phone Commodity  POC Phone Commodity	<ul style="list-style-type: none"> <li>• Telephone, internet, or other communications assets</li> <li>• MOUs/MOAs</li> </ul>	
Finalize fuel orders and ensure that all storage tanks are filled. Verify that storage capacity is secure.	Phase 1b: Elevated Threat	Port personnel and storage stakeholders	<ul style="list-style-type: none"> <li>• Fuel storage tanks</li> </ul>	

<sup>1</sup> As defined in the County Emergency Operations Center Hurricane and Tropical Cyclone Response Checklist, Concept of Operations.



**City and County of Honolulu**  
**Appendix 5: Deliver Fuel to Maintain Essential Services**

Contact distribution partners (trucks, fuel stations) to verify their operational plans.	Phase 1b: Elevated Threat	Fuel distribution partners:	<ul style="list-style-type: none"> <li>• Fuel truck</li> <li>• Fuel pipelines</li> </ul>	
Preposition equipment and resources at essential service locations (generators at telecommunications locations).	Phase 1b: Elevated Threat	Essential service POC: Telecommunications Transportation Wastewater treatment Emergency service Utility	<ul style="list-style-type: none"> <li>• Generators</li> <li>• Service-specific spare parts</li> <li>• Communications equipment</li> <li>• Buses/transport equipment</li> <li>• Debris clearance equipment</li> </ul>	
Oversee the response of all pre-positioned resources, equipment, and personnel.	Phase 2: Incident and Response	Essential service POC: Telecommunications Transportation Wastewater treatment Emergency service Utility	<ul style="list-style-type: none"> <li>• Generators</li> <li>• Service-specific spare parts</li> <li>• Communications equipment</li> <li>• Buses/transport equipment</li> <li>• Debris clearance equipment</li> </ul>	
Forecast fuel need and order additional supplies.	Phase 3: Post Incident	Forecast model POC Fuel procurement POC	<ul style="list-style-type: none"> <li>• Forecast factors and model</li> </ul>	
Coordinate with port or airport operators to receive fuel shipments.	Phase 3: Post Incident	Port POC Airport POC	<ul style="list-style-type: none"> <li>• Fuel storage infrastructure</li> </ul>	
Coordinate and oversee Federal resources if event has been declared.	Phase 3: Post Incident	FEMA POC	<ul style="list-style-type: none"> <li>• Communications assets</li> </ul>	



## APPENDIX 6: CONDUCT DEBRIS CLEARANCE

This appendix supplements the Logistics Annex for the City. It is a complement to the principles outlined in the Logistics Concept of Operations, but provides objective-specific details for emergency management personnel. These appendices should be considered working documents, continually updated as circumstances or procedures change. Blanks or incomplete information highlight where logistics procedures are not yet finalized, so should serve as a call to action for emergency management planners.

<b>Primary County Point of Contact:</b>	
<b>Phone:</b>	
<b>Email:</b>	
<b>Address:</b>	

The objective focuses on removing debris from roadways that support emergency response and the restoration of essential services provision. This effort is focused on removing downed trees, brush, gravel, construction material, vehicles, personal property, and potentially hazardous materials.

<b>Tasks</b>	<b>Phase<sup>1</sup></b>	<b>Partner interface</b>	<b>Resource Requirements</b>	<b>Resource Shortfalls</b>
Notify all contract holders and County resources of impending event and expectations.	Phase 1b: Elevated Threat	Debris Removal Contracts: POC Phone  POC Phone	<ul style="list-style-type: none"> <li>• Telephone, internet, or other communications assets</li> <li>• MOUs/MOAs</li> </ul>	
Order necessary equipment and supplies for hazardous materials response. Review plan for haz mat storage and disposal.	Phase 1b: Elevated Threat	Commodities and Procurement POC  Haz Mat POC	<ul style="list-style-type: none"> <li>• Haz Mat clean up kits</li> <li>• Trucks/transport vehicles</li> </ul>	
Identify and preposition bulldozers, tractors, and other	Phase 1c: Credible Threat	Resource, location and administrator	<ul style="list-style-type: none"> <li>• Bulldozers and other earth-moving equipment</li> </ul>	

<sup>1</sup> As defined in the County Emergency Operations Center Hurricane and Tropical Cyclone Response Checklist, Concept of Operations.



**City and County of Honolulu**  
**Appendix 6: Conduct Debris Clearance**

<b>Tasks</b>	<b>Phase<sup>1</sup></b>	<b>Partner interface</b>	<b>Resource Requirements</b>	<b>Resource Shortfalls</b>
road clearance equipment.			<ul style="list-style-type: none"> <li>• Tractors</li> <li>• Chainsaws</li> <li>• Trucks</li> <li>• Fuel</li> <li>• Fuel storage</li> </ul>	
Secure fuel resources, and have transportation/distribution assets in place to get fuels to needed equipment.	Phase 1b: Elevated Threat/ Phase 1c: Credible Threat	Fuel Location and POCs: Transportation plan and POCs:  Equipment storage location	<ul style="list-style-type: none"> <li>• Fuel</li> <li>• Fuel storage</li> <li>• Fuel trucks</li> </ul>	
Activate personnel to respond to debris removal need.	Phase 1c: Credible Threat	POC.	<ul style="list-style-type: none"> <li>• Communications equipment</li> <li>• EMACs</li> </ul>	
Oversee the response of all pre-positioned resources, equipment, and personnel.	Phase 2: Incident and Incident Response	POC	<ul style="list-style-type: none"> <li>• Bulldozers and other earth-moving equipment</li> <li>• Tractors</li> <li>• Chainsaws</li> <li>• Trucks</li> <li>• Fuel</li> <li>• Fuel storage</li> </ul>	
Oversee fuel inventory and equipment resources---back-fill as needed.	Phase 2c: Credible Threat/ Phase 3: Post Incident	POC	<ul style="list-style-type: none"> <li>• Fuel</li> <li>• Fuel storage</li> <li>• Fuel trucks</li> </ul>	
Coordinate and oversee Federal resources if event has been declared.	Phase 3: Post Incident	FEMA POC Resources requested	<ul style="list-style-type: none"> <li>• Communications assets</li> </ul>	



## APPENDIX 7: PROTECT ON-ISLAND CRITICAL RESOURCES

This appendix supplements the Logistics Annex for the City. It is a complement to the principles outlined in the Logistics Concept of Operations, but provides objective-specific details for emergency management personnel. These appendices should be considered working documents, continually updated as circumstances or procedures change. Blanks or incomplete information highlight where logistics procedures are not yet finalized, so should serve as a call to action for emergency management planners.

<b>Primary County Point of Contact:</b>	
<b>Phone:</b>	
<b>Email:</b>	
<b>Address:</b>	

This objective includes the protection of critical on-island resources.

Tasks	Pre/Post Event	Partner interface	Resource Requirements	Resource Shortfalls
Notify all critical resource managers of an impending event.	Phase 2b: Elevated Threat	Resources: John Doe 555-555-5555 Resource  POC Phone Resource	<ul style="list-style-type: none"> <li>• Communications equipment</li> </ul>	
Forecast the needed resources, personnel, and equipment to protect the resource.	Phase 2b: Elevated Threat/ Phase 2c: Credible Threat		<ul style="list-style-type: none"> <li>• Water</li> <li>• Debris removal equipment</li> <li>• Police protection</li> <li>• Pumps</li> </ul>	
Pre-position resources as needed.	Phase 2b: Elevated Threat/ Phase 2c: Credible Threat	Equipment type and locations; POCs:	<ul style="list-style-type: none"> <li>• Water</li> <li>• Debris removal equipment</li> <li>• Police protection</li> <li>• Pumps</li> </ul>	



**City and County of Honolulu**  
**Appendix 7: Protect On-Island Critical Resources**

<b>Tasks</b>	<b>Pre/Post Event</b>	<b>Partner interface</b>	<b>Resource Requirements</b>	<b>Resource Shortfalls</b>
Oversee the response of all pre-positioned resources, equipment, and personnel.	Phase 3: Post Incident	Resources: John Doe 555-555-5555 Resource  POC Phone Resource	<ul style="list-style-type: none"> <li>• Water</li> <li>• Debris removal equipment</li> <li>• Police protection</li> <li>• Pumps</li> </ul>	
Coordinate and oversee Federal resources if event has been declared.	Phase 3: Post Incident	FEMA POC	<ul style="list-style-type: none"> <li>• Communications equipment</li> </ul>	



## APPENDIX 8: MAINTAIN THE CONTINUITY OF PORT OPERATIONS

This appendix supplements the Logistics Annex for the City. It is a complement to the principles outlined in the Logistics Concept of Operations, but provides objective-specific details for emergency management personnel. These appendices should be considered working documents, continually updated as circumstances or procedures change. Blanks or incomplete information highlight where logistics procedures are not yet finalized, so should serve as a call to action for emergency management planners.

<b>Primary County Point of Contact:</b>	
<b>Phone:</b>	
<b>Email:</b>	
<b>Address:</b>	

This objective is focused on assessing and, if applicable, restoring the operations of the ports. This may include dredging or clearing shipping lanes, repairing terminals and cranes, and restoring infrastructure. Given that the island can only receive goods and external assistance via airport or seaport, this object underscores the criticality of receiving goods and commodities via sea as a means to respond to emergencies.

Tasks	Phase <sup>1</sup>	Partner interface	Resource Requirements	Resource Shortfalls
Notify major shipping and distribution stakeholders and pier personnel of an impending event and their role in response plan.	Phase 2b: Elevated Threat	Stakeholder: POC Phone Commodity  POC Phone Commodity	<ul style="list-style-type: none"> <li>• Communications assets</li> </ul>	
Identify bottleneck commodities where port operations are critical for delivery, and pre-order these.	Phase 2b: Elevated Threat	Port personnel and storage stakeholders	<ul style="list-style-type: none"> <li>• Fuel</li> <li>• Recent ship manifest, or some other means to determine key resources</li> </ul>	

<sup>1</sup> As defined in the County Emergency Operations Center Hurricane and Tropical Cyclone Response Checklist, Concept of Operations.



**City and County of Honolulu**  
**Appendix 8: Maintain the Continuity of Port Operations**

<b>Tasks</b>	<b>Phase<sup>1</sup></b>	<b>Partner interface</b>	<b>Resource Requirements</b>	<b>Resource Shortfalls</b>
Review port clean-up and restoration operational plans with US Coast Guard, US Corps of Engineers, and other stakeholders.	Phase 2c: Credible Threat/ Phase 3: Post Incident	USCG and USACE POC	<ul style="list-style-type: none"> <li>• Port emergency clean up and response plan</li> </ul>	
Preposition equipment and resources as needed (cranes, generators)	Phase 2c: Credible Threat	POC.	<ul style="list-style-type: none"> <li>• Cranes</li> <li>• Pumps</li> <li>• Dredges</li> <li>• Dozers</li> <li>• Trucks</li> <li>• Chainsaws</li> <li>• Generators</li> <li>• Forklifts</li> <li>• Lighting towers</li> <li>• Sonar equipment</li> </ul>	
Asses operational of the port, coordinate response with Coast Guard	Phase 2: Incident and Incident Response/ Phase 3: Post Incident	Coast Guard POC	<ul style="list-style-type: none"> <li>• Lights</li> <li>• Sonar equipment</li> <li>• Trucks</li> <li>• Pumps</li> <li>• Fuel</li> </ul>	
Oversee the response of all pre-positioned resources, equipment, and personnel.	Phase 2: Incident and Incident Response		<ul style="list-style-type: none"> <li>• Cranes</li> <li>• Pumps</li> <li>• Dredges</li> <li>• Dozers</li> <li>• Trucks</li> <li>• Chainsaws</li> <li>• Generators</li> <li>• Forklifts</li> </ul>	



**City and County of Honolulu**  
**Appendix 8: Maintain the Continuity of Port Operations**

<b>Tasks</b>	<b>Phase<sup>1</sup></b>	<b>Partner interface</b>	<b>Resource Requirements</b>	<b>Resource Shortfalls</b>
			<ul style="list-style-type: none"> <li>• Lighting towers</li> <li>• Sonar equipment</li> </ul>	
Forecast fuel and/or equipment needs and order additional supplies.	Phase 3: Post Incident	Port management and vendors	<ul style="list-style-type: none"> <li>• Fuel and equipment forecast</li> </ul>	
Coordinate and oversee Federal resources if event has been declared		FEMA POC Resources requested		
Coordinate with USACE clearance of shipping channel and response.				



## APPENDIX 9: RESTORE POWER INFRASTRUCTURE

This appendix supplements the Logistics Annex for the City. It is a complement to the principles outlined in the Logistics Concept of Operations, but provides objective-specific details for emergency management personnel. These appendices should be considered working documents, continually updated as circumstances or procedures change. Blanks or incomplete information highlight where logistics procedures are not yet finalized, so should serve as a call to action for emergency management planners.

<b>Primary County Point of Contact:</b>	
<b>Phone:</b>	
<b>Email:</b>	
<b>Address:</b>	

Tasks	Phase <sup>1</sup>	Partner interface	Resource Requirements	Resource Shortfalls
Notify all power plant and distribution stakeholders of event.	Phase 1b: Elevated Threat	POC Phone  POC Phone	<ul style="list-style-type: none"> <li>• Communications equipment</li> </ul>	
Finalize fossil fuel and equipment forecast models and fill all storage facilities.	Phase 1b: Elevated Threat	Source energy storage facility location and POC.	<ul style="list-style-type: none"> <li>• Fuel</li> <li>• Trucks</li> <li>• Debris clearing equipment</li> <li>• Lighting</li> </ul>	
Evaluate energy potential from renewable sources and determine if and how they may be impacted.	Phase 1b: Elevated Threat	Renewable locations, source fuel, and POC	<ul style="list-style-type: none"> <li>• Renewable power estimates</li> </ul>	
Pre-position equipment and resources to areas of anticipated need.	Phase 1c: Credible Threat	Utility team POC	<ul style="list-style-type: none"> <li>• Generators</li> <li>• Trucks/cherry pickers</li> <li>• Repair equipment</li> </ul>	

<sup>1</sup> As defined in the County Emergency Operations Center Hurricane and Tropical Cyclone Response Checklist, Concept of Operations.



**City and County of Honolulu**  
**Appendix 9: Restore Power Infrastructure**

<b>Tasks</b>	<b>Phase<sup>1</sup></b>	<b>Partner interface</b>	<b>Resource Requirements</b>	<b>Resource Shortfalls</b>
			<ul style="list-style-type: none"> <li>• Lighting towers</li> </ul>	
Notify EMAC partners of potential need and be informed of response capabilities.	Phase 1c: Credible Threat	EMAC details	<ul style="list-style-type: none"> <li>• Communications equipment</li> </ul>	
Verify the viability of energy production and distribution assets and support personnel.	Phase 2: Incident and Incident Response	Power plants, POC	<ul style="list-style-type: none"> <li>• Debris clearance equipment</li> <li>• Generators</li> <li>• Trucks/cherry pickers</li> <li>• Repair equipment</li> <li>• Lighting towers</li> </ul>	
Oversee the response of all pre-positioned resources, equipment, and personnel.	Phase 3: Post Incident	Power plant POC Transmission and Distribution POC	<ul style="list-style-type: none"> <li>• Debris clearance equipment</li> <li>• Generators</li> <li>• Trucks/cherry pickers</li> <li>• Repair equipment</li> <li>• Lighting towers</li> </ul>	
Deploy EMAC resources as needed.	Phase 3: Post Incident	EMAC POC	<ul style="list-style-type: none"> <li>• Communications equipment</li> </ul>	
Communicate conditions and expectations with consumers.	Phase 3: Post Incident	Communications director	<ul style="list-style-type: none"> <li>• Communications equipment</li> <li>• Media contacts</li> </ul>	
Coordinate and oversee Federal resources if event has been declared.	Phase 3: Post Incident	FEMA POC Resources requested	<ul style="list-style-type: none"> <li>• Communications equipment</li> <li>•</li> </ul>	