

# **Sector Los Angeles-Long Beach**

## **White Paper**

**On**

**AMSC Port Evacuation/Recovery/Reconstitution  
Workshop held 12 October 2005**



**Presented**

**To**

**The Central California Area Maritime Security Committee**

**9 November 2005**

**Port Evacuation and Recovery/Reconstitution Workshop White Paper**

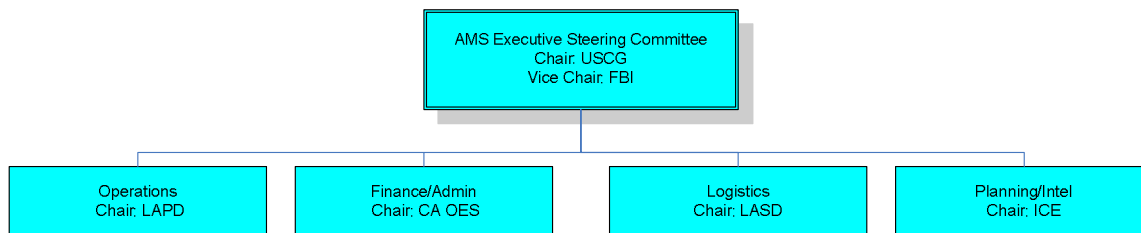
## Purpose

The purpose of this paper is to organize and distill the information gathered from the 12 October 2005 Central California Area Maritime Security Committee (CCAMSC) Evacuation and Port Recovery/ Reconstitution Workshop. This information will be used by the participants of a follow-on workshop which will be held in December 2006 to collaboratively determine the proper format and contents of an evacuation plan for the Los Angeles – Long Beach port complex.

## Chronological Background

According to the Subcommittee on Coast Guard and Maritime Transportation, “The Coast Guard is the lead Federal agency for maritime homeland security. The Coast Guard’s homeland security mission is to protect the U.S. maritime domain and the U.S. Marine Transportation System and deny their use and exploitation by terrorists as a means for attacks on U.S. territory, population, and critical infrastructure (1).” It also directed the Coast Guard Captain of the Ports to form an Area Maritime Security Committee (AMSC) to participate in this vital homeland security mission.

In February 2004, Captain P.V. Neffenger, Commanding Officer of Marine Safety Office Los Angeles – Long Beach, chaired the first meeting of the new Central California AMSC which has 21 members that represent the full spectrum of port stakeholders. The CCAMSC was configured to mirror the National Incident Management System/Incident Command System (ICS) structure to promote multi-agency planning and coordination and align with the National Response Plan. See below diagram for committee structure:



## Membership Legend

*USCG: U.S. Coast Guard, LAPD: Los Angeles Police Dept., CA OES: California Office of Emergency Services, LASD: Los Angeles Sheriff’s Dept., ICE: Immigration and Customs Enforcement.*

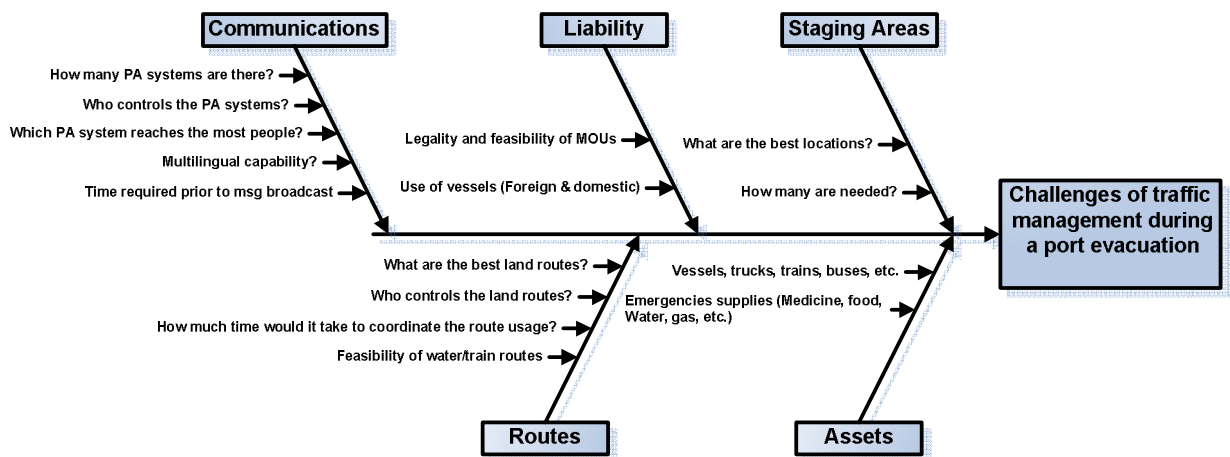
In response to this new mandate for increased port security, the CCAMSC initiated the Port Evacuation Subcommittee to start building an evacuation plan. This all-hazards plan would be the basis upon which any plan requiring the evacuation of the LA – LB port complex for natural or man-made disasters would be based. Over several meetings, the subcommittee discovered that a single Los

Angeles – Long Beach port complex evacuation plan does not exist. What does exist are a plethora of individual and uncoordinated facility, prison and first responder evacuation plans. The two closest surrounding communities, San Pedro, which is part of greater Los Angeles, and Long Beach also, do not have coordinated area evacuation plans. Additionally, many of the available plans do not account for the elements necessary for successful large-scale evacuation such as area traffic management, emergency public notifications and emergency services coordination.

During the summer of 2005, the United States experienced three consecutive hurricane disasters with response efforts that were heavily criticized by the public. . According to a National Public Radio article, “Large-scale evacuations require the work of local, state and federal officials. What’s the most difficult part of the process? The planning. Any evacuation plan is only as good as the process used to develop it. It needs to be integrated. Evacuating tens of thousands, or hundreds of thousands, of people will fail unless it’s done in an integrated process (1).” These incidents highlighted the nation-wide need for improved disaster preparedness and provided additional motivation for Los Angeles – Long Beach Evacuation Subcommittee to complete a plan. As a result, Sector Los Angeles – Long Beach and the Port of Los Angeles coordinated the 12 October 2005 CCAMSC Port Evacuation & Recovery/ Reconstitution Workshop. The data gained from this workshop was used as the basis for this paper which will be used by the follow-on workshop to help outline the future Los Angeles – Long Beach Port Evacuation Plan

## Traffic Management during a Port Evacuation

**Purpose:** To identify the challenges of traffic management during a port evacuation. The below fishbone diagram illustrates the main topics and associated issues that are discussed below:



The management of traffic flow during a port evacuation is a daunting task. The Port of Los

Angeles-Long Beach, the third busiest container port in the world, will face the task of evacuating thousands of persons from the port area via the already congested roadways of Los Angeles and Long Beach. The breakout session work group that was assigned this topic was diverse and included representatives from federal, state, and local governments. In addition, representatives from the large labor forces of the port attended. This work group identified many challenges that affect any attempt to evacuate the port. These challenges could be grouped into five major categories: communications, liability, staging areas, routes, and assets.

Communications was quickly identified as a huge challenge. How would the authorities effectively communicate with the thousands of evacuees? The group agreed that some form of a public address system coupled with sirens was the most effective and efficient means of communication. The next issue was identifying which organization would control the sirens. Although the group never reached a consensus on which organization should control the sirens, the Fire Departments clearly have the most experience with PA sirens and could be a logical choice. The group pointed out that one initial challenge with a siren warning system was to identify how many sirens would be required for the port area. Assuming that the siren system would be effective in raising the initial alarm and draw the evacuee's attention to the nearest radio/TV, the challenge of getting the emergency message to the evacuees must be considered. The group was very vocal and unified in emphasizing the importance of reducing the amount of time that elapses between the siren call and the first public address. Once you get the evacuee's attention via an alarm siren, he or she is going to naturally want to know what is going on and what needs to be done as soon as possible. With this time factor in mind, the person/organization that is to make the public addresses should be identified as quickly as possible. The group also stressed the importance of having all public addresses broadcasted simultaneously in Spanish considering the large Hispanic population of the port area.

Liability was another major challenge raised during the breakout session. Many organizations, both public and private, may want to assist during a major port evacuation but will decline due to the potential legal liabilities that may result from such an action. In short, organizations are fearful of being sued by evacuees. More over, such participation in an evacuation may not be covered by the organization's liability insurance. Therefore, waterborne ferries and bus companies may resist participation in an evacuation. Although some work group members expressed the opinion that these liability issues could be worked out, all of the work group members agreed critical time would be lost.

Staging areas during a port evacuation are obviously important. What the work group pointed out

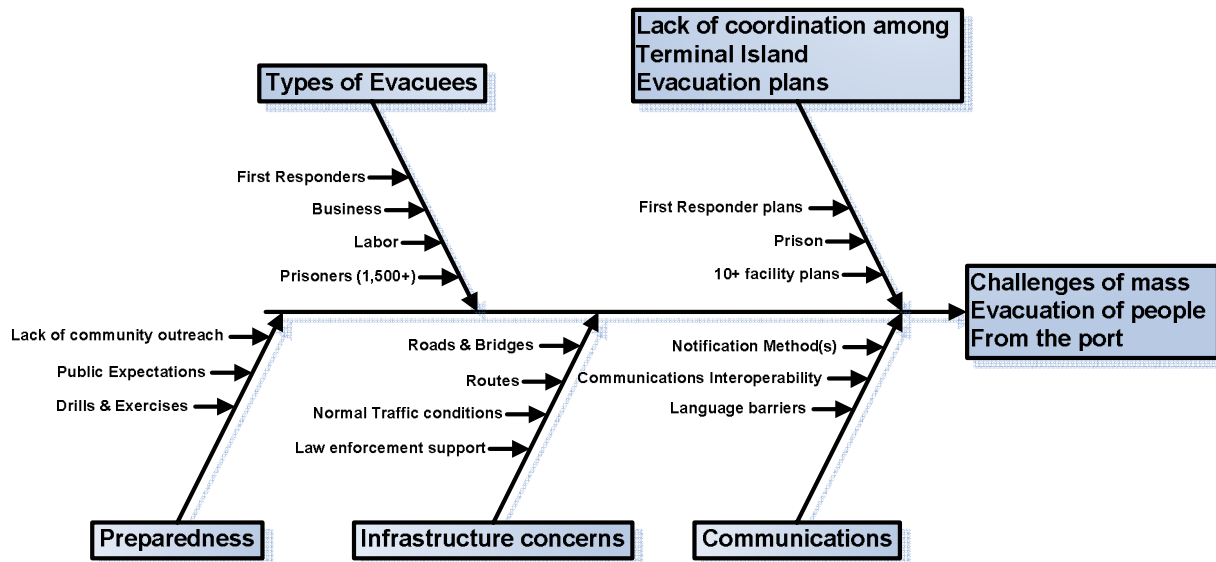
that although everyone understands the importance of staging areas during an evacuation, very few people understand and appreciate the challenge of identifying and establishing effective staging areas. The group quickly asserted that pre-determined staging areas would be a good idea if feasible. Open areas near major roads such as freeways would be best. One group member proposed the innovative idea of using container facilities as potential staging areas. The group also mentioned that the number of staging areas required should be identified as soon as possible. Furthermore, the needs of each of these staging areas should be clarified.

Routes for evacuation are of paramount importance. Everyone knows that the congested road system of the Greater Los Angeles area is a challenge for commuters on a typical day. To evacuate the thousands of people in the port area through one of the most densely populated metropolitan areas of the country will be challenging to the extreme. The group agreed that the best evacuation routes would be via the freeways and major surface streets. The concept of routing the majority of inbound freeway lanes for outbound use was received well by the group; one inbound lane would be reserved for first responders and other organizations involved in the event. Another point the group brought up was the question of "Who would be in charge of traffic management during a port evacuation?" The police would be a logical choice but there are several police forces that have authority within the port area such as the Los Angeles Police Department, the Long Beach Police Department, the Los Angeles Port Police, the Long Beach Harbor Patrol, and the California Highway Patrol. Which police force would be in charge and where? With the challenges of a land-based evacuation in mind, several members of the breakout session brought up the idea of waterside evacuation from the port via vessels. Unlike the City of New York, however, the Port of Los Angeles-Long Beach does not have a fleet of large capacity ferries. For the most part, the vessels we have in our port are inadequate for the task of mass evacuation.

The final major point that the breakout group mentioned was the importance of identifying key resources required for an evacuation effort. These resources may include buses, trains, vessels, and emergency supplies. Once the needed resources are identified, every effort needs to be made to ensure these resources are available on short notice for a port evacuation.

## **Mass Evacuation of People from the Port area**

**Purpose:** To identify the challenges of mass evacuation (including labor) from the port area. The below fishbone diagram illustrates the main topics and associated issues that are discussed in the following text:



The challenges of evacuating the thousands of persons that are in the port area are obviously many. The major challenges that were identified during this breakout session were: Type/volume of evacuees, preparedness, infrastructure concerns, lack of coordination between various individual evacuation plans, and communications.

Several thousand persons are on Terminal Island at any given time. Among this large population are: terminal operators, truck drivers, various business people, government officials, and even 1,500 convicts from the prison on the island. This large population and its diversity will pose significant challenges in the event of a port evacuation. For example, special actions will have to be taken to evacuate the prisoners from the island. The work group pointed out that since many of the truck drivers own their trucks, they will oppose any evacuation that would require them to leave their trucks behind.

Preparedness is a key issue that was brought up during the breakout session. How prepared the port population is prior to an evacuation will be a huge variable. Fortunately, much can be done to improve preparedness. All of the work group members agreed that educational efforts focused on clarifying what the public should do in the event of an evacuation would be money well spent. The group also agreed that the public needs to be educated on what they should expect in terms of government (Local, State, Federal) services in the event of an evacuation.

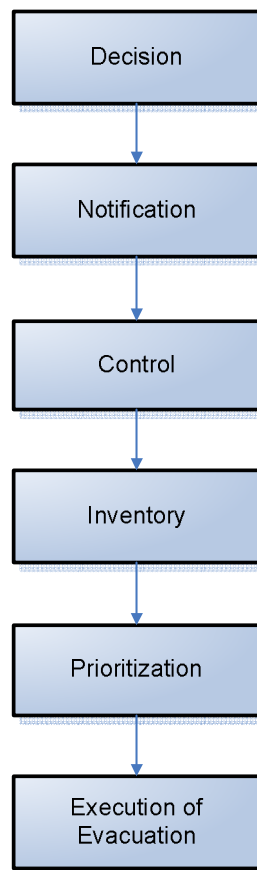
Another important issue raised during this breakout session was infrastructure concerns. A work group member pointed out that before we try to evacuate this huge volume of people we need to ensure that the roads and bridges are capable of supporting such an effort. Furthermore, the work group agreed that a massive coordinated effort of the various police departments would be required to facilitate such an effort.

The work group quickly pointed out that, although a number of organizations have evacuation plans, none of them were created to work with other organizations. The group all agree that this lack of harmony among the various evacuation plans would inevitably lead to difficulties as each organization would try to execute its own plan which may conflict directly with another organization's plan.

Communications was raised as a critical challenge in mass evacuation. A simple yet reliable Public Address/Notification system must be established. In addition, all first responders should use communication equipment that is compatible. For example, the radios of the Los Angeles Police Department should be able to communicate with the radios of the California Highway Patrol. In addition, the communication system must be multilingual to overcome any language barriers.

## **Challenges of Controlling Vessel Traffic during a Port Evacuation**

**Purpose:** To identify the processes and key components of controlling vessel traffic during a port evacuation. The below flow chart illustrates the main topics and associated issues that are discussed in the follow-on text:



Although controlling vessel traffic during a port evacuation was the topic for this breakout session, the group outlined the entire six-part process of which vessel control was only one part. All these elements together are necessary for the effective control of vessels during a port evacuation.

The first part of this process is the decision to evacuate vessels from the port and below is the considerations in this step:

- Does the USCG Captain of the Port make this decision unilaterally or is it collaborative process made with all appropriate stakeholders? Who has the statutory authority to make this decision?
- Will an evacuation of vessels from the Port Complex be scenario driven? In other words, can the decision be made to only evacuate the affected portions depending on the cause?

Part two of this process is notification and below is the considerations in this step:

- Who are the port stakeholders that must be notified?
- What public notification systems will be utilized to communicate this information to port stakeholders and the public? And, are the Public Information Emergency Response System (PIERS) used by USCG Sector LA – LB and the Community Alert Network System sufficient to accomplish this? What is the optimal combination of phone, automated call and media alert system necessary to accomplish this task?

Part three of this process is vessel control and below is the considerations in this step:

- Are there established protocols for evacuating vessels from the by zone or area grid?
- Are there enough tugs, line handlers, seafarers and other necessary items to conduct this activity?
- How will ships be prevented from getting underway by themselves in this situation?
- What team or group of stakeholders decides this protocol?

Part four of this process is vessel inventory. Below are the considerations in this step:

- Who develops this inventory, the Vessel traffic Service or the Marine Exchange?

Part five of this process is vessel priority. Below are the considerations in this step:

- Who will determine vessel flow once the vessels are prioritized?

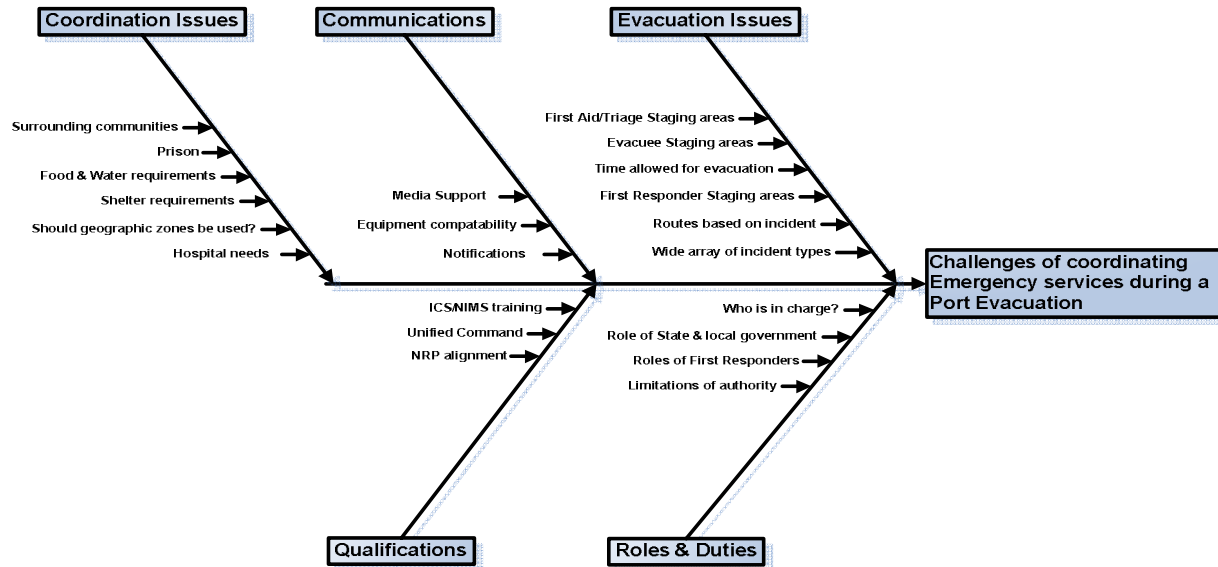
Part six of this process is execution of the evacuation order taking into consideration all the above parts of this process.

Captain of the Port Los Angeles – Long Beach Public Notice 3 – 97 addresses some of these issues. Its purpose is to give instruction for the safe and efficient dispersal of merchant vessels from the port complex.



# Coordination of Emergency Services during a Port Evacuation

**Purpose:** Identify the challenges of coordinating emergency services during a port evacuation. The below fishbone diagram illustrates the main topics and associated issues that are discussed in the following text:



The Port of Los Angeles-Long Beach and its surrounding areas are densely populated and contain an eclectic mix of challenges. Fire, explosion, looting, and mass injuries are all potential matters during times of major urban distress. A breakout session was held to discuss coordination of emergency services. From this session five major challenges were identified: Coordination, Communication, Evacuation, Qualifications, and Role and Duties.

Obviously, coordination is a huge issue. Each of the surrounding communities brings with it its own dynamic set of challenges. One that stands out in particular is the prison facility on Terminal Island. The current plan is to place all prisoners on board a vessel and take them out to sea. Other items brought up included distributing food and water to the surrounding communities, sheltering, and how to best support hospitals. The answers to these questions are most likely dependant on the type of incident. Geographic zones are one method the group proposed for coordination. This idea seems to have a lot of merit and is worthy of further development.

As with any event, effective communication will serve as a benchmark of success. Two key points quickly surface: how do authorities notify the public and how do multi-agencies communicate? Media sources such as television and radio can be utilized. Sirens and loudspeakers could become the next

options if media is compromised. Next, the group considered how the different agencies would talk. Equipment compatibility and training must be examined and addressed.

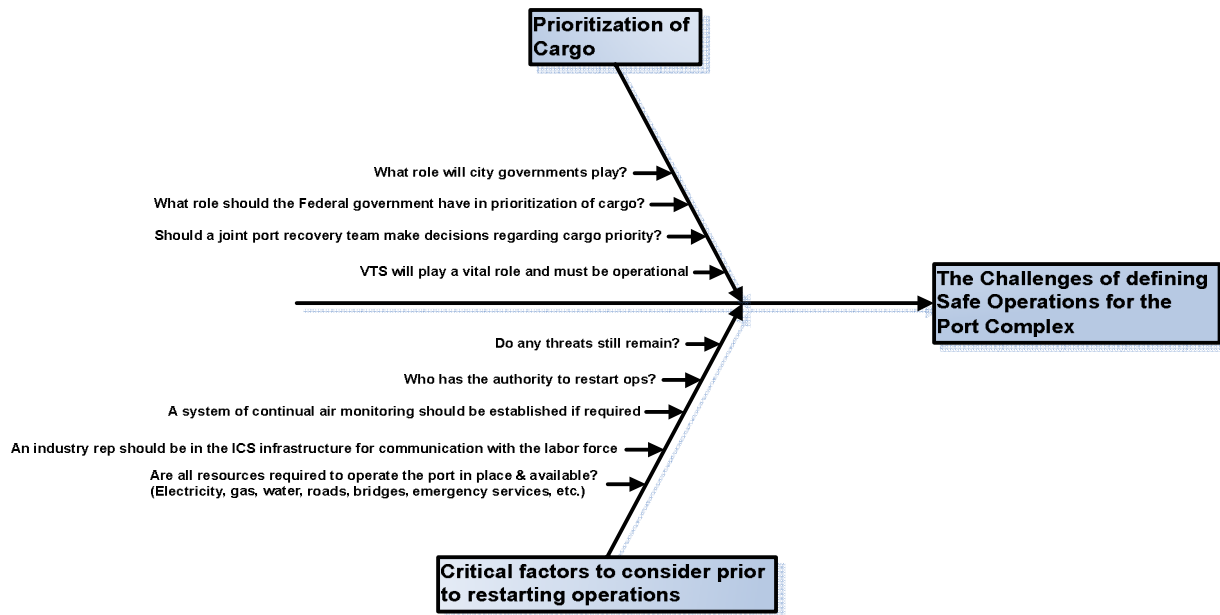
The group identified a few major issues in regards to evacuation. First, what are the types of incidents that will prompt an evacuation? It may be difficult but there must be some sort of determining factor in when a port evacuation is initiated. Staging areas were discussed and would serve as an effective coordination tool. First aid/triage, evacuee, and first responder are three types of staging areas that the group felt should be created. Routes are going to play a critical role. How are the emergency vehicles going to travel around the port area? Primary, secondary, and tertiary routes must be identified and practiced on.

Roles and duties leads the group to the question, "Who is in charge?" A clear line of authority and jurisdiction is always important and becomes even more so when the scope of an incident enlarges. Each agency must know their role and exactly where they fit into an incident. This increases not only the ability of first responders to rescue and protect people, but also increases the first responders own personal safety and security. What are the roles of the first responders? Are they to force people to move in an evacuation? That leads to limitations of authority. At what point does the government's power stop when it involves someone who does not want any help? It is critical to answer this question as quickly as possible.

Finally, the group discussed qualifications and training. It is only through consistent training and practice that first responders will achieve and maintain the skills and confidence necessary to fill their roles. ICS/NIMS training is required to ensure effective management of any incident requiring an ICS structure. The challenges in implementing ICS are evident even when involving a single agency and will only amplify when it involves a dozen or more.

## **Safe Port Operations**

**Purpose:** To define safe operations for the port complex. In other words, to determine when it is safe to go back to the port and restart work. The below fishbone diagram illustrates the main topics and associated issues that are discussed in the follow-on text:



This breakout session identified a number of critical factors to consider prior to restarting operations which are as follows.

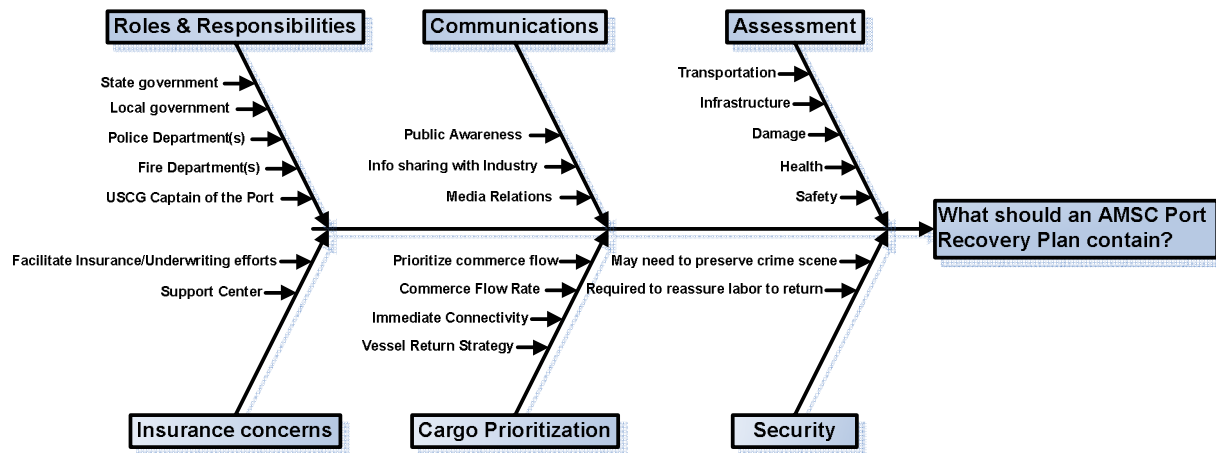
- Who will ultimately make the call that it is safe to return to the port and work? Will it be the Mayor, Governor, or a Federal Representative?
- What criteria will be used to determine that the port is safe to return to?
- What resources will be required to operate the port (e.g. electricity, water, gasoline, ship fuel, roads, bridges, emergency services, etc.)?
- Will senior labor representatives have places in the CCAMSC Unified Command?

The work group also made some additional comments regarding the topic of cargo prioritization. Although this discussion topic was not directly linked to breakout session's main topic, the work group did pose some interesting comments and questions regarding cargo prioritization.

- What roles will the government (local, state, federal) play regarding cargo prioritization?
- Should a joint port recovery team make cargo priority decisions?
- Is the Vessel Traffic System necessary in this process?

## AMSC Port Recovery Plan Contents

**Purpose:** To identify what essential contents should be in an AMSC Port Recovery Plan. The below fishbone diagram illustrates the main topics and associated issues that are discussed in the follow-on text:



The group began by clearly identifying the difference between port recovery and reconstitution. The defined recovery is getting back to the useable state to facilitate the port's use, while Reconstitution is getting back to the pre-event state. Once the concept of recovery was clearly identified the group identified five major issues to be considered during the preparation of a port recovery plan: roles and responsibilities, communications, assessments, cargo prioritization, and security.

First, who determines the port is safe to begin recovery? The group established the assumption that any incident requiring the closure of a port would be run utilizing the incident command system. Port stakeholders should have their roles and responsibilities clearly identified under the incident command system. A Unified Command, the structure that brings all the incident commanders of the major organizations involved in the incident, would be the body to decide when it is safe to begin recovery operations. The Unified Command membership will be dependent upon what triggers the event.

Second, communications amongst responders, port stakeholders, media, and the public was another major issue discussed for inclusion in a port recovery plan. Internal communications during a multi-agency response and recovery effort has been identified as a consistent problem and one that must be addressed in any operational plan. Just as important to the group was the issue of presenting a clear, accurate, and unified message to the public, media, and most importantly to the port stakeholders. It is the responsibility of the unified command to convey to the port workers that it is truly safe to begin recovery.

Third, how do we determine it is safe to begin recovery? A variety of assessments will need to be conducted in order to determine the suitability of the port to begin operations. The type of assessments to be conducted will be determined by the type of event that triggered the evacuation but will typically include infrastructure, health and safety, transportation system, and damage. The group also discussed

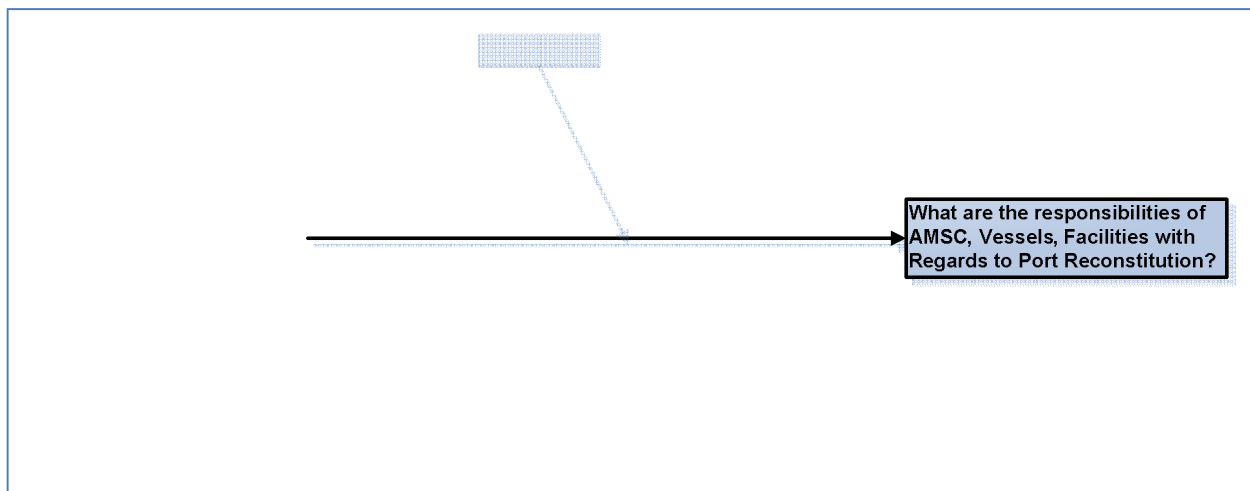
the development of thresholds to determine when people and businesses can resume operations, and the development of contact checklists for assessment teams.

Fourth, how do we prioritize cargo flow? It is impossible to predict what event may occur that will trigger an evacuation but the type of event and areas that may be impacted will significantly effect how cargo is prioritized. The group discussed how to determine what cargos were the most important to bring into the port first. Also a cargo flow rate may need to be developed and incorporated into the plan to assist with dealing with congestion issues. The suggestion was also made to utilize the skills of the Pacific Maritime Association in order to develop a cargo prioritization plan due the fact that includes labor for moving the cargo.

Fifth, how could security issues affect the recovery process? Currently, no contingency plan can be developed without considering the issue of security. Security was discussed from two perspectives, how does security affect the actual recovery process and the potential need to preserve a crime scene. Security must be maintained at all times not only for the responders but for the port area in general.

## Responsibilities of AMSC, Vessels, and Facilities

**Purpose:** To clarify the responsibilities of the AMSC, vessels, and facilities with regard to port reconstitution. The below fishbone diagram illustrates the main topics and associated issues that are discussed in the follow-on text:



businesses together reestablish the economic vitality of the port. The next step the group discussed was defining “economic vitality.” Clearly, each port would have to define economic vitality in terms of success metrics. Examples of success metrics could be: number of containers offloaded, barrels of oil offloaded, number of ships received in port, percentage of port workers back on the job, etc. Although the group did discuss some potential success metrics, no consensus within the breakout session was reached in regards to which success metrics should be used or the target numbers attached to the metrics.

The group struggled with the task of trying to define the role of the AMSC with regard to port reconstitution. Several members contended that the AMSC should have no role in port reconstitution. To further support this point, one member stated “The task of port reconstitution is a matter of business. Matters of business should be left to business.” Some members commented that the AMSC could have minor role in port reconstitution focused on communications and media relations stressing the importance of having a single voice that updated the public regarding the reconstitution of the port. The AMSC’s new Joint Information Center could potentially be that single voice.

Defining the role of vessels during port reconstitution was a far more straight-forward task for the work group. The role of a vessel during port reconstitution is to: (a) move as directed, (b) ensure the vessel is safely moored or anchored within the port area, (c) maintain vessel security, (d) ensured that the vessel is in compliance with environmental regulations, and (e) manage vessel crew and any other personal aboard the vessel.

The work group’s last task was to define the role of port facilities. The group stated that the role of the port facilities should focus on: (a) damage & safety assessments, (b) regulatory compliance, (c) define labor needs, and (d) coordinate vessel and cargo movement.

## **Critical Path/Value Stream of the Port**

**Purpose:** To identify the critical path/value stream of the port.

The critical path of the port is the process of moving of goods through the port. This path is important because if any part of this process was to be eliminated, the flow of cargo would be halted regardless of the status of the other parts of the path. Senior leadership must understand and appreciate the theory of the critical path. If a port and its surrounding metropolitan area were negatively impacted by a disastrous event, the productivity of the port would be temporarily diminished. The senior leaders already understand the importance in facilitating the recovery of the port because it would be vital in providing goods to the recovering metropolitan area. However, a decision to double the number of

longshoremen offloading vessels would not boost cargo flow if there are no tug vessels available to assist the large cargo vessels to their berths. The assistance that the tug vessels provide is a critical segment of the critical path. If all of the tug vessels were destroyed, the cargo flow would stop until the tugs were replaced.

Because the Port of Los Angeles-Long Beach is the third busiest container port in the world, the work group naturally focused on the critical path of containerized cargo.

- The first segment of the critical path occurs when the cargo vessel comes within 25 nautical miles of the port. At this distance, the vessel must announce its intentions to enter the port.
- The second segment occurs when a port pilot boards the vessel three nautical miles from the port to navigate it to its berth within the port. For safety and regulatory reasons, a qualified port pilot must be used during this part of the critical path.
- The third segment occurs shortly after the second segment begins. The tugs arrive shortly after the pilot boards the vessel to help the vessel to its berth. The second and third segments end as soon as the fourth segment is completed.
- The fourth segment is the safe mooring of the vessel to the pier (berth) provided by the port.
- The fifth segment is the facility provides the vessel moored at its pier any needed services such as offloading equipment, longshoremen, electricity, fuel, and water.
- The sixth segment is the offloading of the cargo vessel by longshoremen.
- The seventh segment is the temporary storage of the cargo at the facility.
- The eighth and last major segment of the critical path is the loading of the cargo onto trucks