

PORT SECURITY: IMPROVING EMERGENCY RESPONSE CAPABILITIES AT THE PORTS OF LOS ANGELES AND LONG BEACH

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Introduction

California's seaports are vital to the global economy and highly vulnerable to terrorist attack. Today, over 95 percent of the volume of all U.S. foreign trade moves through America's ports, but less than five percent of all shipping containers entering the United States are inspected. The relatively free flow of goods and services across America's borders creates inherent risks. At the same time, the concentration of shipping among a handful of international megaports and innovations in inventory management—such as “just-in-time” delivery systems that minimize warehouse inventories—have increased the potential economic disruption of a terrorist attack dramatically in recent years. As Stephen Flynn, Jeane J. Kirkpatrick Senior Fellow for National Security Studies at the Council on Foreign Relations and retired U.S. Coast Guard commander, recently noted, an attack on any single U.S. port would likely cause the entire global trading system to “go into gridlock.”¹

Precise damage estimates of such an unprecedented event are difficult to calculate. However, the 2002 labor dispute that led to a 10-day closure of all West Coast ports provides a useful baseline. Stephen Cohen, co-director of the Berkeley Roundtable on the International Economy, estimated that the first five days of the shutdown cost the national economy \$4.7 billion and increased exponentially over time.² Cohen also projected that had the labor lockout continued for 20 days, damages would have reached \$48 billion.³ Terrorist scenarios would likely be far worse because they are unanticipated, involve physical damage to shipping infrastructure, and are likely to trigger port closures nationwide. According to one study prepared for the U.S. Department of Transportation, apart from the casualties, detonation of a single nuclear device at a major seaport would cause \$100-200 billion in trade disruption.⁴ The same study predicted indirect economic damages of up to \$1.4 trillion in the United States alone.⁵

Yet three years after the September 11, 2001 terrorist attacks, America's 361 ports—including those in California—remain exceptionally vulnerable. Since 9/11, the federal government has spent twenty times more on aviation security than port security. As the 9/11 Commission concluded, such a lopsided transportation funding strategy makes sense only if officials intend to fight the last war.⁶ From 2002 to 2004, Congress spent a total of just \$563 million on port security. The United States spends that much every three days to finance the war in Iraq.⁷ Moreover, what new initiatives have been undertaken have not made appreciable progress in securing America's seaports. In one recent study, Stephen Flynn and Stanford management science professor Lawrence Wein concluded that despite new programs to monitor

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cargo loading and x-ray shipping containers, the probability of detecting a nuclear weapon transported by ship was still less than 25 percent under the best possible circumstances.⁸ Even more frightening, the probability of detecting a weapon shipped from an untrusted shipper and packed between heavy machinery in a twenty-foot container was nearly zero.⁹

The nation's two busiest container ports sit side by side in the heart of Southern California. Together, the Port of Los Angeles and Port of Long Beach constitute the busiest port complex in the United States and the third busiest in the world. The complex handles over 43 percent of all shipping containers entering or leaving the country—more than all of the ports on the East Coast *combined*—and carries more than \$200 billion in containerized cargo annually.¹⁰ Because of their critical economic importance, the ports of Los Angeles and Long Beach have been recognized by officials and experts alike as some of the most likely and inviting targets for terrorists. In a list of the top 624 terrorist targets in California released by the California Attorney General's Office in February 2003, the Port of Long Beach ranked third and the Port of Los Angeles ranked sixth.¹¹ Had the two ports been considered together as a single port complex, they might have been more accurately identified as the state's number one target, instead of Los Angeles International Airport (LAX).

In 2003, we, along with two other graduate students from the UCLA School of Public Affairs, conducted the first-ever study of emergency response planning and preparedness at the Los Angeles/Long Beach port complex.¹² Our aim was straightforward: we wanted to identify key security weaknesses at the nation's busiest port complex that local officials and agencies could remedy easily and quickly. We deliberately limited the scope of our study to problems that local governments had the power to solve. Thus, we did not address issues where primary responsibility rested at the federal level, such as intelligence and threat detection. Similarly, programs such as the Container Security Initiative and the Customs-Trade Partnership Against Terrorism (C-TPAT), while critical components of a comprehensive port security strategy, fell outside the scope of the study. Our search for the low-hanging fruit to improve port security at the local level quickly narrowed the range of potential issues to emergency response. As we discuss in greater detail below, even these issues turned out to be far less easy and quick to fix than initially expected.

Below, we provide a 10,000-mile check-up on the 2003 study, highlighting the three major policy problems the team identified in its initial report, tracing what happened to the recommended fixes for each problem, and identifying the obstacles and key success factors the project encountered.

Problem 1: Lack of Coordination and Oversight

Background

Coordination and political oversight of emergency response efforts is never easy; it requires planning for uncertainty, fast action in moments of crisis, and operations that almost always cross agency lines. However, we found coordination and oversight of emergency response efforts at the Los Angeles/Long Beach port complex to be especially problematic, for three reasons.

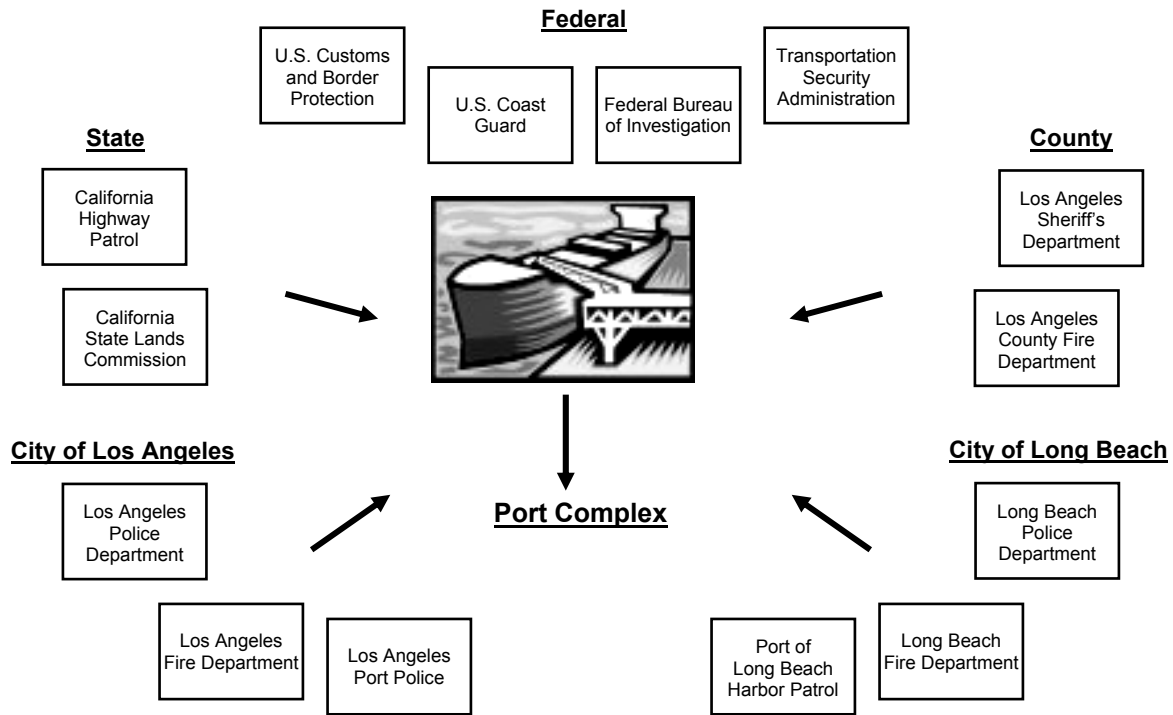
First, it is unclear exactly who is responsible for port security. At the federal level, the Maritime Transportation Security Act¹³ directs the U.S. Coast Guard to develop Area Maritime Transportation Security Plans for both port security and emergency response at all domestic ports and requires the designation of a Federal Maritime Security Coordinator for each area.¹⁴ The president has designated the Secretary of Homeland Security as “the principal Federal official for domestic incident management.”¹⁵ Yet the same directive recognizes that the initial responsibility for responding to a terrorist incident will likely fall on state or local authorities and gives lead responsibility for criminal investigations of terrorist acts to the U.S. Attorney General.¹⁶

State and local law do not elucidate the issue either. California’s “Standardized Emergency Management System” establishes guidelines that require the use of the Incident Command System during multi-agency and multi-jurisdiction emergency response. Local governments must follow these state guidelines in order to be eligible for reimbursement for response-related personnel costs.¹⁷ Under the Incident Command System, exactly which agency oversees emergency operations varies based on the nature and location of the event. During a multi-jurisdictional event, agencies are supposed to establish a “Unified Command” where agency managers share decision-making responsibility within a group.¹⁸ There is no formal “leader.” Individual agencies maintain operational control and responsibility for their own assets and personnel. And agency leaders are supposed to act cooperatively, transferring decision-making authority within the Unified Command group based on changes in the nature of an incident.

Although this system allows agencies to adapt to changing situations by avoiding a rigid organizational structure, it is highly dependent on informal trust and cooperation. As recently as 2003, a senior law enforcement official involved in the planning process at the port complex expressed concerns that “agencies may protect turf and operate independently” during a response to an incident at the port.¹⁹ Moreover, the Incident Command System effectively cloaks the issue of who is actually responsible for the security of the port complex. No single individual or agency has the authority to make decisions and be held accountable for the results. Instead, when it comes to planning for and responding to disasters at the port complex, the buck stops nowhere.²⁰

The second major impediment to effective coordination and oversight had to do with the political realities of the port complex itself. Although the two ports are geographically one place—they share the same harbor, the same roadways, and the same workforce—they are fierce business competitors and separate political entities. The two ports operate with separate management structures, separate police departments, and separate fire departments. They answer to different mayors and different city councils. In total, no fewer than fifteen different agencies from five different political jurisdictions bear some direct responsibility for security and emergency management at the port complex. (See Figure 1 and Table 1). Because of the size, structure, and multi-jurisdictional nature of the port complex, it is likely that numerous agencies would respond to a terrorist attack, and that these agencies would be poorly positioned to work effectively together. As a result, it may be difficult to achieve coherent and effective command of an incident at the port complex even with established guidelines.

Figure 1: Responsibility for Security at the Los Angeles/Long Beach Port Complex is Highly Fragmented Across Political Jurisdictions



Source: Analysis by Authors

Table 1: Responsibilities of Departments and Agencies Represented on the Los Angeles/Long Beach Port Security Committee

Federal	
U.S. Coast Guard (USCG)	Responsible for all security and response that occurs on the water surrounding the Ports of Los Angeles and Long Beach. Coordinates the Port Security Committee.
U.S. Customs Service	Responsible for the inspection of cargo entering the port complex.
Immigration and Naturalization Service (INS)	Responsible for all people arriving on ships at the port complex. Ensures that visas are current and all entrants are legal.
Federal Bureau of Investigation (FBI)	Responsible for evidence collection and crime scene investigation in the event of an attack on the port complex.
Central Intelligence Agency (CIA), Bureau of Alcohol, Tobacco, and Firearms (ATF), and Transportation Security Administration (TSA)	These agencies do not sit on the Port Security Committee, but are informally consulted.
Note: As of March 1, 2003, the Customs Service and INS merged and became U.S. Customs and Border Protection.	
State	
California Highway Patrol (CHP)	Responsible for security of the Vincent Thomas Bridge and freeway safety.
California State Lands Commission	Monitors "granted lands" – areas statutorily transferred to cities and counties by the California Legislature in order to develop harbors to further state and national commerce – to ensure compliance with the terms of the grant.
County	
Los Angeles Sheriff's Department (LASD)	Coordinates mutual aid agreements. The Sheriff serves as the ex-officio County Director of Emergency Services according to state law.
Los Angeles County Fire Department (LACoFD)	Assists city fire departments if they become overwhelmed. Their role is increased in importance if the governor declares a state disaster.
Local	
Los Angeles Police Department (LAPD)	The LAPD's Harbor Division is responsible for law enforcement on Los Angeles City property adjacent to the Port.
Los Angeles Port Police Department	Responsible for the safety and security of all passenger, cargo, and vessel operations at the Port of Los Angeles. Patrol waterfront by boat, helicopter, automobile, and bicycle.
Los Angeles Fire Department (LAFD)	Responsible for fire suppression and emergency medical response at the Port of Los Angeles.
Long Beach Police Department (LBPD)	Responsible for law enforcement at the Port of Long Beach and city property adjacent to the facility. The LBPD "port security unit" patrols the harbor by boat and typically deploys one to five officers in the port area.
Port of Long Beach Harbor Patrol	Responsible for security at the Port of Long Beach. Non-sworn Special Security Officers have limited law enforcement authority.
Long Beach Fire Department (LBFD)	Responsible for fire suppression and emergency medical response at the Port of Long Beach.

Source: U.S. Coast Guard and Analysis by Authors

Third and finally, the history of interagency coordination, even in less challenging circumstances, has not been particularly good. During the Los Angeles riots of 1992, Los Angeles Police Chief Darryl Gates requested National Guard support from the Governor’s Office – which took three days to arrive – rather than calling the Los Angeles County Sheriff’s office for additional manpower, which could have arrived within one hour.²¹ A 2002 shooting inside LAX drew a relatively fast and overwhelming response (some 425 officers from ten different agencies arrived on the scene), but tensions between agencies ran high and it was unclear who had command of either crisis management or emergency response.²² In May 2004, when a faulty transponder mistakenly signaled a hijacking on a Singapore Airlines flight, federal officials failed to relay the false alarm to any local authorities. As a result, LAX Airport police stormed the plane – with live ammunition. Once again, several agencies subsequently argued about who should have been in charge, with the FBI and Los Angeles Police Department agreeing that the Airport Police had violated protocols and the Airport Police and Transportation Security Administration insisting that appropriate action had been taken.²³ Commenting on the confusion among the agencies sharing jurisdiction over security at the airport, Los Angeles City Councilmember Jack Weiss explained, “Every addition to the alphabet soup of agencies at the airport potentially adds to confusion in times of crisis.”²⁴

What the 2003 Study Found

Following 9/11, the Coast Guard Captain of the Port began working with local, state, and federal agencies to develop a comprehensive security plan for the entire port complex. He assembled a Port Security Committee, made up of eight county and municipal agencies, two state agencies, and four federal agencies, each with a different jurisdictional role. Chiefs and high-ranking command staff members represented the various agencies at quarterly meetings. A planning group began meeting three days per week to develop a “playbook” that cross-referenced attacks by type and location, outlined immediate steps for response, and noted primary points of contact for the various agencies.²⁵

Although the establishment of the Port Security Committee was a step in the right direction, interviews with city and county agencies and political officials revealed significant information gaps in the planning process. Participation in the committee was voluntary and there was no formal protocol for keeping policymakers informed of progress. Most important, three sets of critical stakeholders were missing from the planning process: elected officials, public health officials, and private sector representatives.

Elected officials have a responsibility to ensure that broad goals are set for emergency response agencies, that priorities are made and sufficiently funded, that agencies talk to and work with one another, and that progress is evaluated. Elected officials also have the power to break bureaucratic logjams, particularly when responsibility for specific issues is unclear. Policymakers can only meet these challenges, however, if they collaborate across jurisdictional lines and actively engage in cooperative oversight.

Unfortunately, we found that elected officials from the relevant jurisdictions—the City of Los Angeles, the City of Long Beach, and the County of Los Angeles—were not equally informed about emergency response preparedness at the port complex and they were not collaborating actively to oversee the process. Instead, they had informally delegated this

responsibility to local agencies and then relied upon those agencies to keep them updated. This was problematic because agencies such as the Los Angeles and Long Beach Harbor Commissions functioned autonomously and governed the complex as two separate units. As a result, elected officials were not getting information about the entire port security picture. Indeed, in some cases, policymakers were not well informed about even their own piece of the port security picture. Some officials were unsure about which groups and organizations were involved in the planning process or assumed processes were actively working that had not yet begun.²⁶

We also found that there was no medical or public health representative on the Port Security Committee. In the wake of 9/11 and the subsequent anthrax scare, much focus was placed on preparing for incidents involving weapons of mass destruction, especially bioterrorism and radiological “dirty bombs.” Public health officials noted that the Los Angeles County Department of Health Services possesses a wealth of knowledge in these fields and public health involvement in emergency response planning at the port complex should be considered “a necessity.”²⁷

Finally, we found that private stakeholders were not being involved in the process. Specifically, organizations such as the International Longshore and Warehouse Union (ILWU) and the Pacific Maritime Association had untapped expertise and material resources that could aid response planning. The ILWU and other unions expressed discontent with the response planning process. They had not been invited to Port Security Committee meetings or asked to offer advice or resources. According to one union official, “ILWU hasn’t been involved [by the Port Security Committee] yet and people on [the Marine Transportation System Safety and Security Subcommittee] don’t listen.”²⁸ Additionally, port workers told us they felt that emergency response was being structured without their interests in mind. The same union official stated, “Employers are absolutely focused on commerce and couldn’t care less about security.”²⁹ The Pacific Maritime Association, which represents the shipping companies that use the port on a regular basis, also expressed concerns about communication and involvement in the planning process.

What the 2003 Study Recommended

We recognized that a perfect solution—such as realigning the two ports under a single political jurisdiction with one office responsible for emergency response planning and operations across both ports—was unfeasible. Seeking instead to maximize the effectiveness of the existing planning process, we recommended:

- Creating a “Group of Five” to establish multi-jurisdictional political oversight for the port complex. This group would include the Mayor of Los Angeles, the Mayor of Long Beach, the Los Angeles and Long Beach City Councilmembers whose respective districts include each port, and the Los Angeles County Supervisor whose district includes the port complex. The Group of Five would meet with the Captain of the Port on a regular basis to set priorities, assess progress, and discuss concerns. In addition, the Group of Five would work together to secure funds for training exercises and equipment for the port complex.

- Adding a senior public health official to the Port Security Committee from the Los Angeles County Department of Health Services.
- Holding regular, periodic meetings between the Captain of the Port and/or the Port Security Committee and private sector stakeholders, such as industry and labor representatives.

Status of Implementation

Varying degrees of progress have been made toward implementing each of our recommendations. The Coast Guard was quick to make efforts to correct the inadvertent omission of public health agencies from the Port Security Committee's initial planning phases. During the course of our study, the Coast Guard contacted both the Los Angeles County Department of Health Services and the Centers for Disease Control and Prevention in an effort to incorporate them into the planning process at the port complex.³⁰ In addition, the Coast Guard Captain of the Port reiterated his commitment to encouraging all agencies with a role in the security of the port complex to participate in the Port Security Committee.³¹

Since the 2003 study was completed, the Coast Guard has established a new organizational structure for coordinating port security planning. The Southern California Area Maritime Security (AMS) Committee was established pursuant to the Maritime Transportation Security Act.³² The existing Port Security Committee formed the nucleus of the new body and other members were added to further improve port security planning and coordination. The implementing regulations specifically require the inclusion of maritime industry stakeholders, including labor, as well as port stakeholders "affected by security practices and policies."³³ As a result, representatives from the ILWU and other unions have been brought to the table, as have representatives from the Pacific Maritime Association and individual shipping companies. Thus, it has built upon the success of the Port Security Committee and brought even more participants into the fold. During a recent visit, Council of Foreign Relations Senior Fellow Stephen Flynn applauded the group as a model for forging relationships between agencies. "It's not sexy . . . you can't bring a news camera in, but it's so important."³⁴

Although the AMS Committee is an excellent forum for information sharing and planning coordination, it continues to suffer from three of the same problems as the original Port Security Committee. First, the Coast Guard cannot compel membership in the AMS Committee; it can only invite participation. Second, the AMS Committee does not have any legal authority over participant (or non-participant) emergency response agencies or responders. If an agency does not like a policy decision that the AMS Committee makes, it is free to disregard it and walk away. Third, the AMS Committee does not have any budgetary authority over the participant emergency response agencies. It cannot force agencies to fund exercises and equipment purchases. To the extent that the committee maintains any influence over an agency's spending priorities, that influence rapidly attenuates for agencies such as the Los Angeles Police Department, which may play a key supporting role but whose primary jurisdiction is not necessarily the port complex. In short, policy decisions made by the AMS Committee lack the legal authority to mandate action. These problems reiterate the need to involve the elected officials who have budgetary authority and political influence over the agencies involved in port security.

Bringing the elected officials whose jurisdictions included the two ports together proved to be more difficult than expected. After Los Angeles County Supervisor Don Knabe and former Los Angeles Mayor Richard Riordan became personally involved, key officials from the relevant jurisdictions finally agreed to meet together. In September 2003, Supervisor Don Knabe, Los Angeles Mayor James Hahn, Los Angeles City Councilmember Janice Hahn, Long Beach City Councilmember Dan Baker, and a representative from Long Beach Mayor Beverly O'Neill's office gathered, along with officials from the Coast Guard, Pacific Maritime Association, and ILWU, to discuss port security at the Los Angeles/Long Beach port complex. As will be discussed further below, once these key players were in the same room, progress was made. According to Supervisor Don Knabe, "We have not had all these people sitting together at the table to discuss security needs at the ports of Los Angeles and Long Beach. . . . There may be two economic interests between the two ports, but there is one common concern about security and we should address it together."³⁵

Although these officials broke through some of the jurisdictional barriers and have demonstrated a commitment to securing the port complex, continued cooperation and focus are required to ensure ongoing progress. Because of the multi-jurisdictional nature of the port complex and the lack of a single governing body with authority over all of the entities involved, elected officials must play an integral role in overseeing the coordination of port security and emergency response. The Coast Guard invites elected officials to attend the quarterly AMS Committee meetings. Elected officials—or a member of their staff, in their absence—should attend these meetings. Such involvement would keep elected officials informed about the status of planning efforts, signal their support of the agencies' efforts, and help maximize cross-jurisdictional coordination.

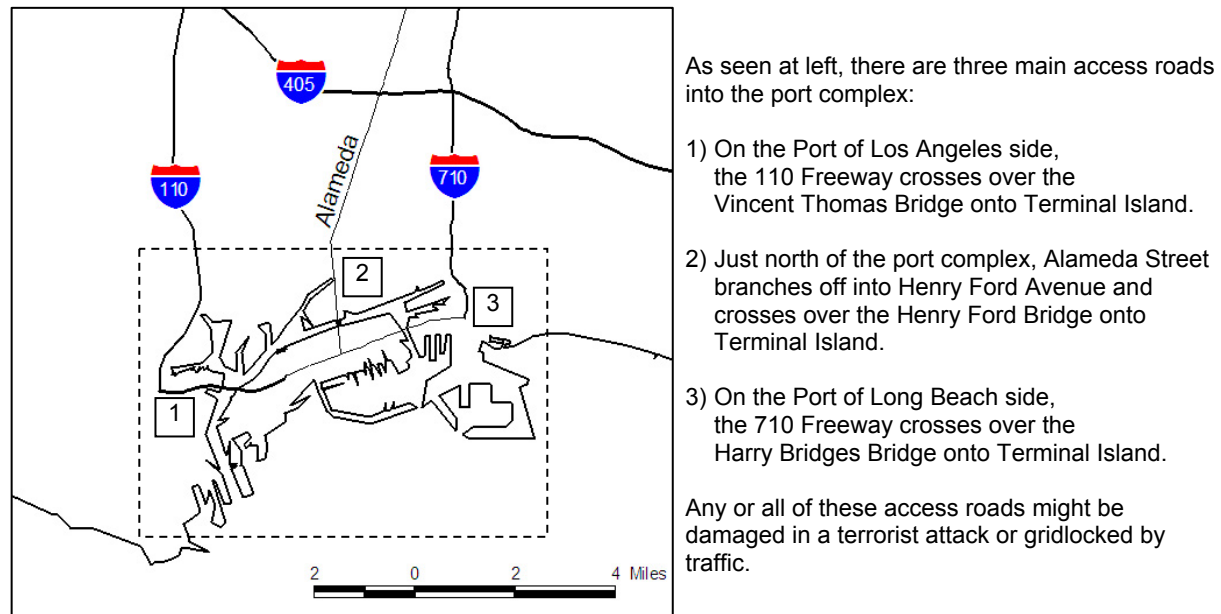
Problem 2: Inaccessibility of the Port Complex

Background

Although experts and officials often talk of first responders as firefighters and other emergency services agencies, the reality is that citizens usually function as the true first responders when tragedy strikes. Disasters such as the Mexico City earthquake of 1985 and the September 11, 2001 terrorist attacks on New York City have shown that family members, co-workers, and neighbors are often first on the scene. After the Mexico City earthquake, untrained civilians saved at least 800 people, and at least 100 civilians died while trying to save others.³⁶ Good emergency response planning makes use of the natural inclinations of citizens by training populations in vulnerable areas how to help themselves and help others until professional emergency response personnel can arrive. Well-managed civilian teams can work as force multipliers and expand emergency response capabilities.³⁷ With this idea in mind, Israel has trained approximately 100,000 civilians to aid in response to terrorist events.³⁸

Civilian training is important for emergency response at the port complex for three key reasons: traditional first responder staffing levels at the complex are low, crisis response requires additional assistance be brought in from outside, and the port complex is difficult to reach by ground routes even in the best of circumstances.

Figure 2: The Geographic Location of the Port Complex Limits Access



Source: ESRI and Analysis by Authors

Traditional response agencies such as firefighters and police have a very small contingent on duty at the complex at any given time. Between the Los Angeles Port Police, Port of Long Beach Harbor Patrol, Los Angeles Fire Department, Long Beach Fire Department, and Coast Guard, only about 100 sworn law enforcement officers and firefighters are directly assigned to the port complex and on duty during a typical shift.³⁹ As a result of these staffing levels, any significant incident would require assistance from other public safety agencies throughout Los Angeles County, including the Los Angeles Police Department, Long Beach Police Department, Los Angeles Sheriff's Department, and FBI. While these agencies have extensive personnel and materiel resources, they also have broad geographical areas of responsibility. Despite the economic importance of the port complex, these agencies cannot deploy their resources in a manner that favors the complex at the expense of other areas in their jurisdictions except in the event of a crisis.

This kind of surge model for emergency response makes sense in general; first responders cannot be everywhere all of the time. However, for surge capacity to work well, it must work fast. This is not likely to be the case at the Ports of Los Angeles and Long Beach. Because of the harbor's location, many emergency response personnel will need to drive to the port complex from other locations throughout Los Angeles County. But as shown in Figure 2, the 110 Harbor Freeway and 710 Long Beach Freeway are the only major roadways into the port area. These freeways carry an estimated 35,000 cargo truck trips to and from the port complex each day.⁴⁰ This means, for example, that any first responders traveling in traffic from downtown Los Angeles – where the Los Angeles Fire and Police Departments are headquartered – would take between one and one and a half hours to arrive.⁴¹ Indeed, Los Angeles Fire Department Battalion Chief Louis Rupoli, who works within the port complex at Station 49, expressed

concern that first responders may experience significant delays while trying to get to the port complex after a terrorist attack.⁴²

In addition to normal lags in response times, a traffic accident, a rush-hour attack, or mass panic make it likely that the port complex would be without substantial outside assistance for several hours. Analysts have called the 710 “the most accident prone freeway in Southern California.”⁴³ The concentration of port-related traffic also increases the likelihood that such accidents would involve large trucks, which take longer to clear. For example, in September 2003, the crash of a gasoline tanker truck closed the freeway for over twelve hours.⁴⁴ One month later, another truck crash closed the freeway for eight hours.⁴⁵ Timing an incident during rush hour also would significantly delay response times. And in one recent survey, 40 percent of respondents said they would ignore instructions from public officials to stay where they are after a radiological attack, with most choosing instead to return home.⁴⁶

All of these circumstances highlight the need to incorporate citizen training into emergency response plans. The good news is that Los Angeles has led the country with developing such training programs. The bad news is that these programs have been under-funded and under-utilized.

CERT

In 1985, the Los Angeles Fire Department developed a program for training civilians called Community Emergency Response Team (CERT). The seventeen-hour training program was created to train civilians to provide assistance “during disaster situations where the number and scope of incidents have overwhelmed the conventional emergency services.”⁴⁷ The course was designed primarily for groups such as community organizations and businesses to attend as a team. Graduates of the course are prepared to function both as members of a CERT team and as individual leaders who would direct untrained volunteers during the initial phases of an emergency.⁴⁸

By encouraging preparedness efforts and hazard mitigation, the effects of a disaster can be minimized considerably, as well as facilitate recovery. The benefits of this program are numerous. It has increased our overall level of disaster readiness, provided emergency skills that people may use in day-to-day emergencies, enhanced the bond between government and community, increased community spirit, and improved the quality of life for the people of our city.⁴⁹

The Federal Emergency Management Agency (FEMA) adopted the Los Angeles Fire Department’s CERT model, and since 9/11 has been directing grants to all of the 50 states to fund civilian CERT programs. FEMA seeks to double the number of CERT-trained civilians to 400,000 by 2005.⁵⁰ Although funds are limited, local officials have discretion over where their CERT allocations are spent and who receives priority in training programs.

What the 2003 Study Found

Given the size of the port complex, its limited access, and its vulnerability to terrorist attack, the study found general agreement that workers at the port complex should receive CERT training. The International Longshore and Warehouse Union (ILWU), other harbor-based unions, and the Pacific Maritime Association (PMA) agreed that port workers should be CERT trained.⁵¹

Moreover, first response agency leaders at the Los Angeles County Fire Department, Los Angeles Fire Department, Long Beach Fire Department and Los Angeles Police Department also believed that providing CERT training to port workers would generate substantial gains for supporting their emergency response plans.

Despite general agreement that training was needed, the study identified four overarching impediments to the effective training of port workers:

1. There were no established priorities for allocating the scarce CERT training resources throughout Los Angeles County and its municipalities.
2. There were not enough CERT instructors available to participate full-time in an effort to train the port workers.
3. There were not enough local funds available to pay for a concerted CERT training effort at the port complex.
4. There was no first aid or rescue equipment readily available for civilian volunteers at the port complex.

What the 2003 Study Recommended

Based on this near-universal agreement between first responders, industry, labor, and policymakers, the study recommended that the Los Angeles County CERT Advisory Committee, the interagency group that oversees CERT allocations in the county, make a dedicated effort to training workers at the port complex.

Specifically, we recommended:

1. The CERT Advisory Committee should prioritize high-risk populations, allocate CERT classes first to these high-priority groups, and set target percentages of volunteers to be trained within these populations. Port workers should then receive CERT training because the port complex is a high-risk target for terrorism.
2. To overcome resource constraints, the CERT Advisory Committee should coordinate the creation of an interagency CERT Joint Training Team for the port complex. The Los Angeles and Long Beach Fire Departments, Los Angeles County Fire Department, and Los Angeles Sheriff's Department should each dedicate one full-time CERT trainer from their existing staffs to train workers at the port complex. In addition, the American Red Cross should teach CERT modules that do not require instruction by professional first responders.
3. The CERT Advisory Committee should pursue both federal grants and private sector donations as funding alternatives for the interagency CERT Joint Training Team.
4. The interagency CERT Joint Training Team should provide each CERT-trained port worker with a small equipment kit. Many first response officials and port workers agreed that instead of using stockpiled caches of equipment, CERT-trained port workers should be allocated individual kits of first aid and safety equipment to keep with them at their job sites.

Status of Implementation

1. **CERT Training:** Initially, despite consensus about the need and value of CERT training, no action was taken because the program, like port security issues more broadly, fell across multiple political jurisdictions. We then took two steps to move the process forward. First, we made CERT training the focus of the first Group of Five meeting. The idea was to focus political attention on a concrete issue that already had the backing of key constituency groups to propel it forward. Labor and management representatives both attended the meeting and signaled their agreement on the outlines of a CERT program. Second, we designated one member of our team to be the point person for monitoring progress and coordinating implementation of the program on the ground.

The strategy proved successful at breaking the impasse. At the Group of Five meeting in September 2003, all local officials agreed that the port workers must receive CERT training to prepare them to respond to an attack. Los Angeles Mayor James Hahn then tasked the Los Angeles Fire Department with fulfilling this goal and with giving port workers highest priority in the program. Thanks to the Mayor's leadership, the Fire Department has now allocated priority to port workers and training has begun.

To date, 25 port workers have received the full 20-hour CERT course and 250 ILWU warehouse guards underwent an abridged 8-hour CERT program that fulfilled a contractual agreement for training between the labor union and management.⁵² The Coast Guard, the Los Angeles Fire Department, and the ILWU are tailoring the CERT curriculum specifically to address hazards at the port complex. They plan to complete the development of this port-specific CERT curriculum and launch the new training program in 2005.⁵³ Moreover, ILWU is determining a workforce training plan and schedule to ensure that CERT training maximizes the safety and security of the on-duty workforce at all times. After training an as-yet-to-be-defined number of core maritime workers, the Los Angeles Fire Department and the ILWU plan to schedule a training-the-trainer program for the ILWU leadership. In that way, the union will be able to continue to offer CERT training to its workforce in the future, with ongoing support from the fire department. The Los Angeles Fire Department will then use this program developed with ILWU to extend its training to the rest of the workforce at the port complex. Finally, the Coast Guard is developing plans to include CERT-trained workers in its emergency response exercises.

2. **Interagency Joint Training Team:** subsequent to the release of our report, the Los Angeles County Sheriff's Department, the Los Angeles County Fire Department, and the American Red Cross began to coordinate efforts to provide CERT training to citizens throughout Los Angeles County; but an Interagency Joint Training Team for the port complex has not been established. Instead, LAFD is planning to provide the CERT training at the port complex.
3. **CERT Funding:** Given the lack of a joint training team for the port complex, the CERT Advisory Committee has not pursued federal grants and private sector donations as funding alternatives for a CERT training program for port workers. The Area Maritime

Subcommittee for Training, however, is exploring these funding alternatives to support the CERT program at the port complex.

4. **CERT Materiel:** Small equipment kits have not yet been provided to trained workers. The Area Maritime Security Training Subcommittee has begun to discuss how to obtain these kits from either the American Red Cross or the private sector.

The Coast Guard, the Los Angeles Fire Department and ILWU have made significant progress toward providing CERT training for port workers. We are confident that these stakeholders are moving in the right direction. Moreover, their efforts may provide best practices for training the workforces at other ports both nationally and internationally. That said, much remains to be done. Specifically, the CERT program needs to:

- **Establish and Meet Training Targets:** with projections of 20,000 unionized maritime workers at the port complex BY 2006, it may take years to train a few thousand of them. The CERT training program must set aggressive-but-reasonable targets for the number of workers to be trained, and must meet these training goals.
- **Augment CERT Training Resources:** the Los Angeles Fire Department's Disaster Preparedness Unit staffs only six full-time CERT trainers for the City of Los Angeles. They may lose additional trainers to injuries, budget cuts, or National Guard call-ups. Satisfying training demands at the port complex will likely require working with statewide officials to garner greater resources from Washington, involving the private sector, creatively managing existing county-wide CERT resources, or some combination.
- **Integrate Trained Workers into Exercises:** the workforce has not participated in homeland security drills at the port complex. Coast Guard and other planning agencies must include at least those workers who have received CERT training.
- **Review, Revise, and Improve:** the plan must include a feedback process for evaluating the effectiveness of the training, and for improving upon this program where possible.

Problem 3: Incompatible Communications Systems

Background

Efficient, accurate communication is critical to the success of any emergency response. Although nearly every emergency response agency uses some form of radio communications, very few use radios that are compatible with those used by other agencies. As a result, many first responders cannot communicate with others, whether to coordinate a rescue or to call for assistance. Studies have suggested that many deaths inside the World Trade Center on 9/11 might have been avoided if the firefighters had radios that allowed them to hear transmissions from NYPD helicopters outside reporting that the towers were about to collapse.⁵⁴ Because of this tragedy, there has been a growing focus on developing interoperable communications solutions for emergency response agencies.

In order for any two radios to be interoperable with each other, there must be three areas of compatibility. First, the radios must use the same signal type, either analog or digital. Thus, agencies with digital radios generally cannot talk to agencies with analog radios. Second, the radios must operate in the same frequency spectrum or range of frequencies. Commonly used frequency bands for radio communications include UHF, VHF, and HF. Agencies that operate radios in different frequency spectrums cannot communicate with each other. Third, even if signal type and spectrum match, the radios must operate on a common channel. Thus, even though many emergency response agencies still utilize analog UHF radios, communications challenges remain because most of these agencies do not share common channels.

Although the ability to communicate between agencies is of critical importance, maintaining clear lines of communication both up and down, as well as across, the chain of command for each agency is also a concern. In general, agencies need to maintain operational command and control of their own field assets. Therefore, a field asset will generally receive instructions from its own agency's command and control organization. When assets from various agencies are working together in the same vicinity, there may be circumstances where communication between them is appropriate. For example, in a typical search and rescue operation where both the Coast Guard and another agency respond, the Coast Guard will not tell the other agency's boat where to go, but once on scene, the boats will contact each other to coordinate the rescue effort.

Similarly, consideration must also be given to the volume of radio traffic that an interoperable system would have to support. A study of first response at the World Trade Center on September 11, 2001 conducted by McKinsey & Company concluded that communications were completely overwhelmed by police officers, EMS personnel, and firefighters speaking at the same time.⁵⁵

What the 2003 Study Found

The numerous agencies involved with port security at the Los Angeles/Long Beach port complex maintained different communications technologies and did not have a plan in place to facilitate communication between first responders. For example:

- The Coast Guard, which was the lead federal agency for port security and headed efforts to develop response plans for the port complex, could only communicate with waterborne assets from other agencies, such as Los Angeles County Lifeguard and Los Angeles Fire Department boats. It did not have direct radio communications with any of the other emergency response agencies' land-based assets.
- Although the Los Angeles Port Police could communicate directly with the Los Angeles Police Department, neither agency could communicate with the Los Angeles Fire Department unless the fire unit was carrying a police radio. Only 500 such radios were distributed citywide, so most firefighters would not be able to contact police officers directly.
- The Los Angeles Fire Department did not have direct communications with the Long Beach Fire Department.

- The Los Angeles Port Police did not have direct communications with the Port of Long Beach Harbor Patrol.

Thus, in the event of a terrorist incident at the port complex, many emergency workers would not be able to communicate with each other directly. The only plans in place to facilitate interagency communication were to co-locate agency decision makers in the incident command post so that they could broadly relay information to their personnel. However, as one city official noted, this system “[would] not make it possible for responders from different agencies to communicate with one another directly or monitor each other’s radio traffic.”⁵⁶

What the 2003 Study Recommended

After comparing several alternatives, the study recommended that the Los Angeles Port Police purchase two ACU-1000 “Intelligent Interconnect Systems” and hardwire them into an existing communications facility at the port complex. The ACU-1000 is a commercially available solution that provides site-specific interoperability between otherwise incompatible radios. The device can be configured to patch⁵⁷ the audio feeds from up to twelve communications devices, including analog or digital radios, cellular or landline phones, and internet feeds. Purchasing two devices would permit twice as many connection possibilities and provide a useful degree of redundancy, should one unit malfunction. This technology would offer great potential for improvements in coordination between agencies during an emergency response effort at the port complex.

The study also noted the importance of establishing protocols for using whatever communications technology was ultimately selected. According to the National Task Force on Interoperability, “True interoperability must comprise a comprehensive strategy that combines radio communication systems, radio training and drills, common terminology, standard operational procedures, and a unified incident command when the situation warrants it.”⁵⁸ Without standardized procedures, interoperability may overwhelm communication channels and produce more harm than good. Thus, the study recommended that the Port Security Committee develop a unified communications protocol and test it during training exercises. This communications plan would include details about what channels each agency would use when responding to an emergency at the port, how those channels would be patched using the ACU-1000, and how the interoperable frequencies would be used. Failure to establish protocols and conduct training for using interoperable devices may result in excessive voice traffic and confusion during an emergency response.

Status of Implementation

In mid-2003, the Los Angeles Port Police began making plans to purchase a Raytheon “First Responder” command and communication vehicle.⁵⁹ The First Responder is a mobile command and control system, essentially made up of two ACU-1000s mounted in a sport utility vehicle. Because it is built around the ACU-1000, the First Responder can be configured to patch almost any audio feed from a variety of communications devices.

Our study cautioned against relying on mobile interoperability devices like the First Responder for use at the port because they might have difficulty reaching the port complex during an emergency. Recognizing this drawback, the Port of Los Angeles and the Los Angeles

Port Police decided to purchase a First Responder exclusively for use at the port complex. By keeping the vehicle onsite, transit time to the port complex would be reduced to a non-issue. The Port Police opted for a mobile system over the ACU-1000 because of concerns that fixed sites like their communications center might be vulnerable as targets.⁶⁰

After initially considering the Raytheon First Responder, the Los Angeles Port Police now intend to purchase a similar system built into a cargo van rather than a sport utility vehicle because of its additional capacity for personnel and equipment.⁶¹ Unfortunately, as of October 2004, the Port Police have not yet acquired this system, nor have any other agencies at the port complex purchased new interoperable communications devices.

As a result, the current plan is to rely on interoperability systems brought in by agencies outside of the port complex, such as the Los Angeles Sheriff's Department. Although this is better than nothing, relying on an outside agency's equipment is susceptible to the exact problem identified in the 2003 report—there will likely be considerable delays in getting the equipment to the port complex after an incident occurs.⁶² Moreover, there may be delays in configuring the equipment for use because each agency's radios require specific cables and pin configurations to interface with the interoperable device.⁶³ Thus, in the initial stages of a terrorist attack, when the situation is most chaotic, emergency responders will be no better off than they were on 9/11. They will be unable to communicate with each other to coordinate their rescue and response efforts.

Once an agency is able to get an interoperability system to the port complex and the unit is configured for use, however, initial testing has shown that it will be a valuable tool. In August 2004, the port complex participated in the Southern California component of a nationwide training exercise called Determined Promise 2004 ("DP-04"). During DP-04, the Los Angeles Sheriff's Department brought its Raytheon First Responder system to the port complex and set up a communications link between the Coast Guard and SWAT teams from the Los Angeles Police Department and FBI.⁶⁴ One Coast Guard officer indicated that, although he had been skeptical about the system before the exercise, it "worked like a charm" and he was really impressed with its capacity to patch together diverse communications systems.⁶⁵

Despite its apparent success during DP-04, the First Responder and similar systems have not yet been fully tested in an emergency environment at the port complex. One major point of feedback from DP-04 has been that there was a considerable amount of pre-staging of personnel and equipment.⁶⁶ In other words, the agencies involved in the exercise knew what was going to happen and when it would take place. This allowed agencies to allocate resources and position equipment ahead of time. This was an artificiality of the exercise, but must be taken into account when evaluating the effectiveness of systems such as the Raytheon First Responder.

It is also important to remember that exercises like DP-04 should be viewed as learning points and stepping stones, not as endpoints. The Coast Guard has recognized this and is planning future exercises that will test interagency communications protocols.⁶⁷ Without effective protocols for using interoperable communications equipment, even the best technology is useless. Therefore, one goal of future exercises should be for agencies to test their ability to establish and exercise interagency communications in a realistic operating environment without

advance warning. As one Coast Guard officer put it, “The single most important thing in communications is a communications plan. You can talk about technology, but if we have pre-agreed upon frequencies and everyone knows what those frequencies are . . . we have a survivable response.”⁶⁸

Obstacles and Success Factors

Taking a step back, we find three major obstacles to the fast and effective improvement of emergency response at the port complex. The first has to do with the nature of the problem itself. Homeland security policy in general, and port security emergency response in particular, is a thorny, complex, and new issue for local officials. There is no standard literature on port security emergency response, no clearly established set of best practices. While aspects of emergency response are old, key elements related to counter-terrorism are new and changing constantly. As a result, developing expertise takes time and sustained attention, the two resources in shortest supply for most local elected leaders, their staffs, and agency officials. Our study of the ports of Los Angeles and Long Beach took more than eight months of full-time work by a team of five, and implementation of our recommendations—which we thought could be done in three to six months—was still in progress in late 2004.

The second constraint is related to the first: political incentives to take action in port security are weak. From a politician’s point of view, port security emergency response planning is the worst of all worlds: it requires extremely high up front costs for benefits that will be realized only in the future—most likely when the official is already out of office, and maybe never. In addition, making homeland security policy requires making tough choices about where to dedicate limited resources. These are exactly the kinds of choices many politicians try to avoid. When such choices cannot be avoided, then longer term planning usually takes a back seat to shorter-term gains. Consider, for example, a mayor who must decide whether to dedicate additional police officers to lowering the crime rate or enhancing counter-terrorism surveillance at the port. Any politician with a reasonably developed sense of self-preservation focuses on crime and leaves port security for another day.

Moreover, even within the area of homeland security, electoral incentives create sub-optimal policy outcomes. The natural impulse of any elected official is to focus on issues of greatest concern to constituents. This sounds good in theory. The problem is that it works poorly in practice. While most California citizens are concerned about terrorism, few have visited the port complex or worry about its security, and fewer still pay close attention to the details of how elected officials handle the arcane details of CERT training, radio interoperability, or cross-agency coordination. Instead, since 9/11, the public and the press have focused their concern on higher visibility but less likely and lower damage targets such as LAX and the security of local drinking water supplies.

The misplaced allocation of homeland security dollars can be seen at every level of government. Since 9/11, Congress has distributed more than \$13 billion to state governments with a formula only Washington could concoct: 40 percent was split evenly, regardless of a state’s population, targets, or vulnerability to terrorist attack. The result: safe places got safer. While rural states with fewer potential targets and low populations, such as Alaska and

Wyoming, received more than \$55 per resident, target-rich and densely populated states like New York and California were short-changed. New York received \$25 per person, California just \$14. California's state officials used a similar formula to distribute federal funds within the state, exacerbating the under-funding of urban areas.

At the local level, Mayor Hahn's most publicized initiative has been a controversial \$9 billion to move the main terminal of Los Angeles International Airport.⁶⁹ To put the plan's price tag into some perspective, it is nearly twenty times more than the entire federal government's total spending on port security since 9/11. In short, political incentives create strong pressures for local elected officials to put the right emphasis on the wrong issues.

Third and finally, the multi-jurisdictional boundaries of the port complex pose significant problems. Who exactly is responsible for overseeing the planning and operation of emergency response at the Ports of Los Angeles and Long Beach? The answer is everyone and no one. Although the Coast Guard Captain of the Port has made great strides in serving as the *de facto* coordinator of all city, county, state, and federal agencies involved in port security, he holds no control over key assets, he serves a mission that encompasses far more than local emergency response, he does not have a permanent post, and he cannot succeed without help. Bureaucratic rivalries between the two ports, the two cities, and the layers of governmental agencies make that help difficult to get.

CERT training highlights the difficulties created by the port complex's fragmented political authority. Even this program, which was funded by the federal government and which was supported by every major stakeholder at the port, including both labor and management, did not initially succeed. Why? Because no one office and no one official had responsibility for making it happen. Only when Mayor Hahn took the initiative to create that responsibility by designating the Los Angeles Fire Department as the main agency point of contact, did training begin.

Key Success Factors

Despite these obstacles, progress has been made. Looking back, we find three key factors for success: neutral analysis, long-term involvement, and political leadership.

As outsiders, we had certain advantages and disadvantages while working to implement the recommendations from the 2003 study. The majority of these factors seemed to work in favor. For example, as a third party, we were able to operate as a neutral broker—especially between organizations that have traditionally been somewhat adversarial, such as the labor unions and the shipping association. Because we were not already entrenched in a position, many agencies and organizations were more willing to speak more frankly with us than other agencies that were more involved. In addition, because we were a new set of eyes looking at the issues, we were often able to provide a different perspective, or at least a perspective that looked across agency boundaries. While individuals and agencies had critical pieces of the puzzle, no one agency or person had ever put those pieces together.

The second key factor is long-term involvement. Policy analyses often identify problems and recommend solutions, then move on to new issues. We started with such an approach, but

soon realized success required a long-term commitment. Neutrality provides credibility, but not trust. Particularly in an area where the best data sources are people, building relationships with stakeholders was crucial for determining weaknesses and developing strategies to overcome them. This has meant spending a significant amount of time on location, down at the port complex, meeting with people in person. Though much remains to be done, it is clear from this experience that achieving any serious progress requires moving from the role of policy analyst to policy partner.

Finally, there is no substitute for the power of personal political leadership. This maxim is particularly true when formal political power is fragmented or unclear. Supervisor Don Knabe's personal contact with each of the key policymakers was instrumental to overcoming resistance to holding the Group of Five meeting. Mayor James Hahn cut through the multi-jurisdictional confusion about who should provide CERT training for the port workers by tasking the Los Angeles City Fire Department with getting the job done. Similarly, Coast Guard Captain Peter Neffenger and his predecessor Captain John Holmes used personal political leadership more than statutory authority to create new coordinating committees to share information, oversee planning, and facilitate cooperation across agencies, companies, and other stakeholders. Not surprisingly, we found that officials, when they choose, can play a fundamental role in setting priorities, shaping perceptions, and overcoming resistance.

Conclusion

Three years after 9/11, California's seaports remain exceptionally vulnerable to terrorist attack. Of the roughly seven million containers entering the country each year, fewer than 5 percent are inspected at all. As one Coast Guard official put it, "Once a ship enters the harbor, we're in response mode, not prevention."

We found three crucial weaknesses in emergency response planning at the Ports of Los Angeles and Long Beach: poor oversight and coordination across political lines, insufficient planning attention to the physical inaccessibility of the complex for first responders, and radio interoperability problems. Progress has been made in all three areas. Local officials have begun meeting together through the Coast Guard's Area Maritime Security Committee and the Group of Five. Training is underway to ensure that port workers will be able to act more effectively as their own first responders. And the port complex plans to have a mobile patch unit and procedures in place to ensure that different agencies can communicate in the event of a crisis.

But much more remains to be done. The key problems are the political incentives to focus on other issues, the fragmented power over the port complex, and the relatively low profile port security has received in the public debate. Continued progress in port security emergency response will require sustained attention and political leadership.

Endnotes

¹ Stephen Flynn, The Limitations of the Current Cargo Container Targeting, *Written Testimony before the Subcomm. on Oversight and Investigations of the House Comm. on Energy and Commerce*, 108th Cong., Mar. 31, 2004, http://www.cfr.org/pub6907/stephen_e_flynn/the_limitations_of_the_current_cargo_container_targeting.php.

² See Simon Avery, *West Coast Port Shutdown Heads into Second Week, Increasing Impact on Economy*, THE ASSOCIATED PRESS, Oct. 6, 2002.

³ See *id.* See also Marla Dickerson & Evelyn Iritani, *One World Linked by Containers; Trade: Changes in Shipping in the Last Three Decades Have Made the Western Port Shutdown an Event of Global Scale*, L.A. TIMES, Oct. 4, 2002, at A1 (quoting Cohen as stating, “Thirty years ago, when we had a dock closure, foreign trade didn’t matter to our economy. It was trivial. . . . It’s quite different now. It’s an integrated system, and if you cut the supply line, you stop the system.”).

⁴ See ABT ASSOCIATES INC., THE ECONOMIC IMPACT OF NUCLEAR TERRORIST ATTACKS ON FREIGHT TRANSPORT SYSTEMS IN AN AGE OF SEAPORT VULNERABILITY 3 (2003), http://www.abtassoc.com/reports/ES-Economic_Impact_of_Nuclear_Terrorist_Attacks.pdf (Apr. 30, 2003).

⁵ *Id.*

⁶ See NATIONAL COMMISSION ON TERRORIST ATTACKS UPON THE UNITED STATES, THE 9/11 COMMISSION REPORT 391 (2004) (hereinafter THE 9/11 COMMISSION REPORT).

⁷ Stephen E. Flynn, *The Neglected Home Front*, FOREIGN AFF., Sept./Oct. 2004, at 20, available at <http://www.foreignaffairs.org/20040901faessay83504/stephen-e-flynn/the-neglected-home-front.html>.

⁸ See Flynn, *supra* note 1.

⁹ *Id.*

¹⁰ In 2003, the Port of Los Angeles handled cargo valued at \$122.0 billion and the Port of Long Beach handled cargo valued at \$95.9 billion. See Port of Long Beach, *About the Port > Overview*, at http://www.polb.com/html/1_about/overview.html (last visited Sept. 27, 2004); Port of Los Angeles, *Facts and Figures*, at <http://www.portoflosangeles.org/about/facts.htm> (last modified Sept. 2004).

¹¹ See Steve Hymon, *LAX Ranks No. 1 on List of State Terrorist Targets*, L.A. TIMES, Feb. 22, 2003, at B1.

¹² See WARREN T. ALLEN II, ET AL. PORT SECURITY APPLIED POLICY PROJECT: RECOMMENDATIONS TO IMPROVE EMERGENCY RESPONSE CAPABILITIES AT THE PORT OF LOS ANGELES AND THE PORT OF LONG BEACH (2003), available at <http://www.riuks.org/publications/documents/PortSecurity.pdf> (May 16, 2003).

¹³ Maritime Transportation Security Act of 2002, Pub. L. No. 107-295, 116 Stat. 2064, 2066 (codified as amended in scattered sections of 14 U.S.C. and 46 U.S.C.).

¹⁴ See 46 U.S.C. §§ 70103(a)(2)(G)(ii), 70103(c) (2004). The Coast Guard has designated each Coast Guard Captain of the Port as the Federal Maritime Security Coordinator for his respective zone, “including all ports and areas located therein.” 33 C.F.R. § 103.200 (2004).

¹⁵ Management of Domestic Incidents (Homeland Security Presidential Directive/HSPD-5), 39 WEEKLY COMP. PRES. DOC. 280 (Mar. 10, 2003).

¹⁶ See *id.*

¹⁷ Telephone Interview with Adam Sutkus, Director, California Governor’s Office on Service and Volunteerism, (Mar. 16, 2003). See also, CALIFORNIA OFFICE OF EMERGENCY SERVICES, STATE OF CALIFORNIA EMERGENCY PLAN 5 (1998).

¹⁸ Telephone Interview with Adam Sutkus, *supra* note 17.

¹⁹ Confidential Telephone Interview by Warren Allen with senior law enforcement official (Mar. 11, 2003).

²⁰ It is important to note that, while it does contribute to the “who is responsible for port security” dilemma, emergency response agencies generally speak quite highly of the Incident Command System. In fact, the federal government has adopted the system as part of the National Incident Management System and, beginning in Fiscal Year 2005, will begin conditioning federal grants to state and local agencies on their adoption of the Incident Command System. See Management of Domestic Incidents, *supra* note 15.

²¹ Interview by Adam Clappitt with Robert Garrot, Assistant Manager, Los Angeles County Emergency Operations Center, Monterey Park, Cal., (Feb. 4, 2003).

²² See Jennifer Oldham, *Response to LAX Shooting Flawed, Study Says*, L.A. TIMES, Oct. 7, 2002, at B3.

²³ See Jennifer Oldham et al., *Agencies Criticize LAX Handling of Hijack Alert*, L.A. TIMES, May 6, 2004, at B1.

²⁴ *Id.*

²⁵ Interview with Commander George Cummings, USCG, Executive Officer, U.S. Coast Guard Marine Safety Office/Group Los Angeles-Long Beach, San Pedro, Cal. (Jan. 17, 2003).

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- ²⁶Senior law enforcement official, confidential interview by Adam Clappitt, 24 February 2003; Senior Harbor Commission official, confidential phone interview by Adam Clappitt, 19 March 2003.
- ²⁷ Interview by Adam Clappitt with Samuel Stratton, M.D./M.P.H., Medical Director, Los Angeles County Emergency Medical Services Agency, Los Angeles, Cal., (Feb. 11, 2003).
- ²⁸ Interview by Adam Clappitt with Luisa Gratz, President, ILWU Local 26, San Pedro, Cal. (Feb. 25, 2003).
- ²⁹ *Id.*
- ³⁰ E-mail from Commander George Cummings, USCG, to Matthew Hipp (Feb. 24, 2003, 09:21:37 PST) (on file with authors).
- ³¹ E-mail from Commander George Cummings, USCG, to Matthew Hipp (Mar. 11, 2003, 16:26:40 PST) (on file with authors).
- ³² See 46 U.S.C. § 70112(a)(2)(A) (2004) (authorizing the Secretary of Homeland Security to “establish an Area Maritime Security Advisory Committee for any port area of the United States” and “request such a committee to review the proposed Area Maritime Transportation Security Plan . . . and make recommendations to the Secretary that the Committee considers appropriate”).
- ³³ 33 C.F.R. § 103.305(a) (2004).
- ³⁴ Stephen Flynn, Remarks at the Southern California Area Maritime Security Committee Meeting (Aug. 12, 2004).
- ³⁵ Press Release, Los Angeles County Supervisor Don Knabe, *Knabe Hosts Port Security Summit of Leading Local Officials* (Sept. 25, 2003), <http://knabe.com/news/releases/2003/september/security.html>.
- ³⁶ Federal Emergency Management Agency, *Emergency Management Institute - Community Emergency Response Team Overview*, at <http://training.fema.gov/emiweb/CERT/overview.asp> (last visited Oct. 10, 2004).
- ³⁷ Interview with Firefighter Jim Harkins, LAFD Disaster Preparedness Unit, Los Angeles, Cal. (Jan. 22, 2003).
- ³⁸ Interview by Warren Allen with Sheriff Lee Baca, Los Angeles Sheriff’s Department, Monterey Park, Cal. (Feb. 24, 2003).
- ³⁹ Based on interviews with the various law enforcement and fire agencies at the port complex from January to March 2003.
- ⁴⁰ Sue Fox, *Plan Aims to Reduce Truck Congestion at Ports*, L.A. TIMES, Aug. 22, 2004, at B6.
- ⁴¹ E-mail from Martin Wachs, Director, Institute of Transportation Studies, University of California, Berkeley to Seth Jacobson (Mar. 4, 2003, 21:28:13 PST) (on file with authors).
- ⁴² Interview with Battalion Chief Louis Rupoli, Los Angeles Fire Department San Pedro, Cal. (Jan. 10, 2003).
- ⁴³ Don Jergler, *Freeway Change Debated*, LONG BEACH PRESS-TELEGRAM, Apr. 3, 2003.
- ⁴⁴ See Sharon Bernstein & Deborah Schoch, *Tanker Truck Blast Kills Driver, Forces Evacuations*, L.A. TIMES, Sept. 24, 2003, at B3.
- ⁴⁵ See Sharon Bernstein et al., *6 Killed When Big Rig Loses Control on 710*, L.A. TIMES, Oct. 10, 2003 at B1.
- ⁴⁶ See ROZ LASKER, CENTER FOR THE ADVANCEMENT OF COLLABORATIVE STRATEGIES IN HEALTH, REDEFINING READINESS: TERRORISM PLANNING THROUGH THE EYES OF THE PUBLIC 8, 32 (2004), <http://www.cacsh.org/pdf/RedefiningReadinessStudy.pdf> (Sept. 14, 2004).
- ⁴⁷ Los Angeles Fire Department, *Community Emergency Response Team Program: Course Syllabus*, <http://www.cert-la.com/CERT-syllabus.pdf> (last visited September 24, 2004).
- ⁴⁸ *Id.*
- ⁴⁹ *Id.*
- ⁵⁰ See Citizen Corps, *Community Emergency Response Teams (CERT)*, at <http://www.citizencorps.gov/programs/cert.shtm> (last visited Oct. 10, 2004).
- ⁵¹ Interview with Luisa Gratz, President, ILWU Local 26, San Pedro, Cal. (Feb. 25, 2003); Interview with Bob Dodge, Vice President of Training, Pacific Maritime Association, Long Beach Cal. (Mar. 5, 2003).
- ⁵² E-mail from Stacy Gerlich, Firefighter, Disaster Preparedness Unit, Los Angeles Fire Department to Seth Jacobson (Oct. 27, 2004, 08:53:06 PST) (on file with authors).
- ⁵³ *Id.*
- ⁵⁴ See, e.g., NATIONAL TASK FORCE ON INTEROPERABILITY, WHY CAN’T WE TALK? WORKING TOGETHER TO BRIDGE THE COMMUNICATIONS GAP TO SAVE LIVES 4 (2003) (“As police and firefighters swarmed the [World Trade Center] searching for survivors, incident commanders outside were hearing warnings from helicopters circling the scene from above that the towers were beginning to glow and were dangerously close to collapse. Radio communications were a lifeline for the hundreds of police officers who received the word to evacuate the building—all but 60 police officers escaped with their lives. Tragically, hundreds of New York firefighters didn’t receive that warning because they were using a different communications system.”).

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- ⁵⁵ MCKINSEY & CO., IMPROVING FDNY'S PREPAREDNESS 8 (2002), http://www.nyc.gov/html/fdny/html/mck_report/toc.html (last visited Oct. 9, 2004).
- ⁵⁶ JACK WEISS, PREPARING LOS ANGELES FOR TERRORISM: A TEN-POINT PLAN 7 (2002), *available at* <http://www.lacity.org/council/cd5/pdf/SecurityPlanfinal.pdf> (Oct. 2002).
- ⁵⁷ A patch may be thought of as a link that connects two previously incompatible communications systems.
- ⁵⁸ NATIONAL TASK FORCE ON INTEROPERABILITY, *supra* note 54, at 18.
- ⁵⁹ Telephone Interview by Warren Allen with David Malin, Emergency Preparedness Coordinator, Port of Los Angeles, (June 9, 2003).
- ⁶⁰ *Id.*
- ⁶¹ E-mail from David Malin, Emergency Preparedness Coordinator, Port of Los Angeles to Matthew Hipp (Oct. 18, 2004, 08:05:12 PST) (on file with authors).
- ⁶² For example, the Los Angeles Sheriff's Department's interoperable communications unit is stored at a communications center in East Los Angeles, some twenty-five miles from the port complex. E-mail from Sgt. William D. Barbe, Communications Center, Los Angeles Sheriff's Department, to Matthew Hipp (Nov. 1, 2004, 15:33:00 PST) (on file with authors).
- ⁶³ Telephone Interview with David Malin, Emergency Preparedness Coordinator, Port of Los Angeles, (Oct. 25, 2004).
- ⁶⁴ E-mail from Sgt. William D. Barbe, *supra* note 62.
- ⁶⁵ Interview with Lieutenant Commander Drew Cromwell, USCG, Assistant Chief, Planning Department, U.S. Coast Guard Marine Safety Office/Group Los Angeles-Long Beach, Los Angeles, Cal. (Aug. 25, 2004).
- ⁶⁶ Lieutenant Commander Drew Cromwell, USCG, Remarks at the Southern California Area Maritime Security Committee Meeting (Aug. 12, 2004). *See also* e-mail from David Malin, *supra* note 61.
- ⁶⁷ Interview with Lieutenant Commander Drew Cromwell, USCG, Assistant Chief, Planning Department, U.S. Coast Guard Marine Safety Office/Group Los Angeles-Long Beach, Los Angeles, Cal. (Oct. 19, 2004).
- ⁶⁸ *Id.*
- ⁶⁹ For a useful analysis of the plan, see TERRY L. SCHELL ET AL., DESIGNING AIRPORTS FOR SECURITY: AN ANALYSIS OF PROPOSED CHANGES AT LAX (RAND Issue Paper, 2003), <http://www.rand.org/publications/IP/IP251/IP251.pdf> (last visited Oct. 10, 2004).