UCLA School of Public Policy and Social Research
Department of Policy Studies

Applied Policy Project submitted to the Faculty of the Department of Policy Studies at the UCLA School of Public Policy and Social Research in partial fulfillment of the requirements for the degree of Master of Public Policy

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PORT SECURITY
APPLIED POLICY PROJECT

Recommendations to Improve Emergency Response Capabilities

at the

Port of Los Angeles

and the

Port of Long Beach

Warren Allen II
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Executive Summary

The Los Angeles/ Long Beach port complex is the nation's busiest seaport. If terrorists were to attack the port complex, then the economic damage would be catastrophic. In the short term, it is impossible to prevent an attack at the port complex. Consequently, effective first response planning is of paramount importance. The United States Coast Guard has formed a multi-agency Port Security Committee to organize local and state officials to develop emergency response plans for attacks on the port complex. Their endeavor is complicated by the fact that many local agencies from the City of Los Angeles, the City of Long Beach and Los Angeles County share jurisdiction over the port complex.

This report recommends measures for these local governments and agencies to improve their terrorism response plans at the port complex. By conducting over six-dozen interviews with elected officials, agency leaders, private stakeholders, and first responders, our research team identified *three broad policy problems* that may hinder efficient and effective emergency response at the port complex:

1) ***Oversight and Coordination:*** Local political decision makers do not sufficiently oversee emergency response planning and key stakeholders are absent from the planning process.

2) ***Inaccessibility of the Port Complex:*** Poor vehicle access may prevent first responders from reaching the facility and assisting victims.

3) ***Incompatible Communication Systems:*** Differences in radio technologies prevent agencies from communicating during a response and from coordinating emergency response efforts.

This report recommends that policymakers take the following measures to resolve these policy problems:

Problem 1: Oversight and Coordination

- ✓ ***Political Oversight: Specific local elected leaders should create an informal multi-jurisdictional political oversight "Group of Five" for port security.*** This group should include one representative from each local political entity that has jurisdiction over the port complex: Los Angeles Mayor James Hahn, Los Angeles City Councilmember Janice Hahn, Long Beach Mayor Beverly O'Neill, Long Beach City Councilmember Dan Baker, and Los Angeles County Supervisor Don Knabe. This "Group of Five" would meet on a regular schedule with the Captain of the Port, who would brief them, answer their questions, listen to their collective input, and communicate their feedback to the PSC and its planning group.

- ✓ ***Public Health Representation*: The Los Angeles County Department of Health Services should assign a senior public health official to the Port Security Committee to assist in the response planning process.**

- ✓ ***Private Sector Representation*: The Port Security Committee should meet periodically with private sector stakeholders, such as industry and labor representatives, and draw upon their knowledge and resources when developing response plans for the port complex.**

Problem 2: Inaccessibility of the Port Complex

- ✓ ***CERT Training*: The Los Angeles County CERT Advisory Committee should provide CERT training to prepare workers at the port complex to respond to an attack.** Community Emergency Response Team (CERT) training is a voluntary program that provides emergency preparedness training and allows civilians to supplement professional first responders' efforts.

- ✓ ***CERT Prioritization*: 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 receive CERT training because the port complex is a potential target for terrorism, but there is currently a backlog for training and no method of prioritization.

- ✓ ***Interagency Joint Training Team*: The CERT Advisory Committee should coordinate the creation of an interagency CERT Joint Training Team for the port complex.** To overcome resource constraints, 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.

- ✓ ***CERT Funding*: The CERT Advisory Committee should pursue both federal grants and private sector donations as funding alternatives for the interagency CERT Joint Training Team.**

- ✓ ***CERT Materiel*: 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.

Problem 3: Incompatible Communications Systems

- ✓ ***Interoperable Communications*: The Los Angeles Port Police should purchase two ACU-1000 Intelligent Interconnect Systems and hardwire them into an existing communications facility at the port complex.** The ACU-1000 provides site-specific interoperability between otherwise incompatible communications devices. This technology would offer great potential for improvements in coordination between agencies during an emergency response effort at the port complex.

- ✓ ***Communications Protocols*: The Port Security Committee should establish a unified communications protocol and test it during training exercises.** Failure to establish protocols and conduct training for using interoperable devices may result in excessive voice traffic and confusion during an emergency response.

Preparedness for a terrorist attack at the port complex requires cooperative action by both public and private stakeholders throughout Los Angeles County. These recommendations will further engender the teamwork that is imperative for effective planning and implementation of terrorism preparedness plans.

Introduction

"*The maritime terrorist threat poses a daunting challenge and adequate measures against it can never be completely guaranteed. With a vast nation to defend, the Coast Guard can neither predict nor prevent every conceivable attack. And in a free and open society, no department of government can completely guarantee our safety against ruthless killers who move and plot in shadows."*

– United States Coast Guard Maritime Strategy for Homeland Security[1]

The oceans no longer protect America. In fact, our seaports are among our nation's most vulnerable terrorist targets. Recent studies by the General Accounting Office, the Council on Foreign Relations, and the United States Coast Guard note that America's ports may prove to be the Achilles' heel of homeland security policy.[2] Ninety-five percent of all international cargo that either enters or leaves the United States is shipped through our seaports, but the United States Customs Service and other law enforcement agencies inspect only two percent of the shipping containers.[3] Consequently, terrorists have ample opportunities to deliver bombs and other destructive devices directly into the nation's shipping infrastructure.

The attack on the *USS Cole* in 2000 and the more recent attack on the French oil tanker *Limburg* show that terrorist groups such as Al Qaeda are both interested in maritime attacks and capable of executing them. America's seaports may be next: Some analysts believe that "the target closest to [Osama] bin Laden's heart likely remains a seaport that would allow him to go to his Allah in the belly of the Eagle – perhaps on the western seaboard of the United States."[4] Given this possibility, the Los Angeles and Long Beach port facilities warrant special attention as high-risk targets.

One cannot accurately assess the terrorism vulnerability of the Port of Los Angeles without also considering the vulnerability of the Port of Long Beach, which sits adjacent in Los Angeles County's south bay. Although they are business competitors, these ports share the same roadways, harbor, and workforce; and therefore, like conjoined twins, the ports also share their vulnerability. A terrorist attack at one port could easily impact its

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[1] U.S. Coast Guard, *Maritime Strategy for Homeland Security*, (Washington: Government Printing Office, 2002), 3.

[2] See U.S. General Accounting Office, *Port Security: Nation Faces Formidable Challenges in Making New Initiatives Successful*, (Washington: Government Printing Office, 2002); Council on Foreign Relations, *America Still Unprepared – America Still in Danger*, (New York: Council on Foreign Relations, 2002); and U.S. Coast Guard, *Maritime Strategy*.

[3] Senator Earnest F. Hollings, "Statement of Senator Earnest F. Hollings upon final passage of S.1214, the Maritime Transportation Security Act," 14 November 2002; available from http://hollings.senate.gov/~hollings/statements/2002B14648.html; Internet; accessed 1 March 2003.

[4] Mansoor Ijaz, "Al-Qaeda's Nightmare Scenario Emerges" *The Weekly Standard,* 19 February 2003. See also, Yonah Alexander and Tyler Richardson, "Maritime Terrorism Phase Next?" *Washington Times*, 20 October 2002, sec. B.

neighbor's docks. For this reason, the Coast Guard does not endeavor to protect the two ports separately, but instead protects the infrastructure as a single port complex.[5]

State and local policymakers, however, still consider the ports separately when determining public policy. The California Attorney General's Office recently released a list of the top 624 terrorist targets in California; the Port of Long Beach was ranked third, the Port of Los Angeles was sixth, and the Queen Mary cruise ship, which is berthed at Long Beach, was not far behind.[6] If the ports of Los Angeles and Long Beach had been considered together as pieces of a single port complex, then the Los Angeles/Long Beach port complex ("the port complex") may have been more accurately identified as the state's number one target, instead of Los Angeles International Airport (LAX).

The Port Complex by the Numbers

1	Port of Los Angeles's ranking among U.S. Ports
2	Port of Long Beach's ranking among U.S. Ports
3	Port Complex's ranking among Worldwide Ports
43	Percentage of all U.S. container imports passing through the port complex.
189	Millions of tons of cargo handled by the port complex in FY 2002
200	Billions of dollars of goods handled by the port complex in FY 2002
3,700	Acres of land covered by the Port of Los Angeles
259,000	Number of jobs in Southern California tied to the port complex
Source:	Port of Los Angeles and Port of Long Beach

If experts are correct to assert that Al Qaeda's ultimate military objective is "the economic paralysis of the West," then it is also worth noting that the port complex is more substantial to the nation's shipping infrastructure than LAX.[7] Although LAX is the world's third busiest airport and carries an average of 185,000 passengers per day, it ships only 2.1 million tons of cargo worth $80 billion annually.[8] In comparison, the port complex is the world's third busiest seaport, and handles 189 million tons of cargo worth $200 billion each year.[9] This tonnage represents 43 percent of the cargo containers shipped to and from the United States annually, more than all East Coast ports combined.[10]

[5] Commander George Cummings, USCG (Executive Officer, U.S. Coast Guard Marine Safety Office/ Group Los Angeles-Long Beach), interview by Matthew Hipp, San Pedro, CA, 17 January 2003.
[6] Steve Hymon, "LAX Ranks No. 1 on List of State Terrorist Targets," *Los Angeles Times*, 22 February 2003, sec. B.
[7] Mansoor Ijaz, "Al-Qaeda's Nightmare Scenario Emerges."
[8] Los Angeles World Airports, *Los Angeles World Airports Annual Report 2001*, 2001, 5.
[9] Port of Los Angeles, "Facts and Figures," *www.portofla.org*, 2001. Available from http://www.portofla.org/about/facts.htm; Internet; accessed 27 January 2003.
[10] Lieutenant Jeanne Reincke, USCG (U.S. Coast Guard Marine Safety Office/Group Los Angeles-Long Beach), interview by Seth Jacobson, San Pedro, CA, 13 January 2003.

A terrorist attack on the port complex may cause catastrophic economic damage.

Various models provide a basis for estimating the financial damage that a terrorist attack on the port complex would cause. The 2002 West Coast port shutdown, for example, provides a conservative, real-world approximation of the economic impact a terrorist attack might have. During the shutdown, Stephen Cohen, co-director of the Berkeley Roundtable on the International Economy, estimated that the first five days of port closures would cost the national economy $4.7 billion; he projected that a twenty-day closure would cause $48 billion in losses.[11] This exponential increase in Cohen's model is a consequence of America's dependence on international trade. According to Cohen, "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."[12] The actual amount of economic damage from the ten-day shutdown is still debatable, but estimates range from $1.7 billion to $20 billion.[13]

Three key differences between a potential terrorist attack on the port complex and the West Coast port shutdown suggest that a terrorist event would generate more dire economic consequences. First, the West Coast port shutdown did not directly produce deaths or significant damage to maritime and shipping infrastructure. Second, stakeholders in the 2002 shutdown were able to anticipate and prepare for the closure. Members of the International Longshore and Warehouse Union (ILWU) had been working without a contract for three months before the lockout and were accused of engaging in work "slowdowns" before the ports were actually closed. Ships that were in port were able to make efforts to unload and get underway before the port closed. A terrorist attack would not afford such a warning. The only preparation that stakeholders would have is the time that they invest ex-ante in training and planning. Third, the mechanisms for reopening the ports after the 2002 shutdown were clear: President Bush invoked the Taft-Hartley Act and a federal court ordered the ports to reopen. Moreover, the ILWU and Pacific Maritime Association (PMA) could have negotiated a contract and reopened the port. In contrast, following a terrorist attack, there is no clear statutory authority or standard operating procedure to reopen America's ports.[14] This confusion could extend port closures and complicate the resumption of shipping. Any of these factors could produce substantial, additional economic losses.

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[11] Simon Avery, "West Coast port shutdown heads into second week, increasing impact on economy," *The Associated Press*, 6 October 2002.
[12] Marla Dickerson and 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," *Los Angeles Times*, 4 October 2002, sec. A.
[13] Patrick Anderson and Ilhan Geckil, "Flash Estimate: Impact of West Coast Shutdown," 2002, 1. (PSAPP mimeograph collection.)
[14] Booze Allen Hamilton, *Port Security Wargame: Implications for U.S. Supply Chains*, (Washington: Booze Allen Hamilton, 2002), 52.

Other recent analyses of the economic impact of terrorist attacks at America's seaports also predict financial losses that are substantially worse than those caused by the 2002 shutdown. A wargame scenario by consulting firm Booz Allen Hamilton was *unable to determine an end to the economic damage* resulting from the discovery of an *undetonated* radiological "dirty bomb" at the port complex.[15] Participants shut down ports nationwide and conducted extensive container inspections upon reopening. They were forced to stop the simulation after 92 days and $58 billion in losses resulting from factory slowdowns, spoilage, lost sales, declining equity values, and diversions of export goods into domestic markets.[17] The damage from a dirty bomb actually detonated at the port complex could be far worse: a report by the Brookings Institution estimates that a weapon of mass destruction shipped by container or mail could cause up to $1 trillion in damage and disruption to the economy.[18]

"The consequence of a terrorist incident using a container would be profound…If terrorists used a sea container to conceal a weapon of mass destruction and detonated it upon arrival at a port, the impact on global trade and the global economy could be immediate and devastating – all nations would be affected. No container ships would be allowed to unload at U.S. ports after such an event."
- Commissioner, U.S. Customs Service[16]

Critical funding gaps hamper efforts to secure the nation's ports.

Despite the evidence that an attack on the port complex would produce disastrous economic consequences, critical funding gaps remain for port security. The Maritime Transportation Security Act of 2002 mandates new security requirements on both ports and vessels, but provides no federal funds to support them. In December 2002, the Coast Guard estimated that national port security efforts would cost $963 million in the first year and $535 million in recurring annual costs. To date, the federal government has allocated less than $370 million for these efforts and only $92 million has been disbursed.[19]

In April 2003, Senator Ernest Hollings proposed an amendment to include $1 billion for port security as part the $79 billion Wartime Supplemental Appropriations Bill, but it was

[15] The wargame scenario began with the discovery of a dirty bomb in a shipping container at the Port of Los Angeles and the arrest of three men on the FBI's Watch List with ties to Al Qaeda at the Port of Savannah. Three days later, a second dirty bomb was discovered in a shipping container in Minneapolis.
[16] Council on Foreign Relations, *America Still Unprepared*, 22.
[17] Booze Allen Hamilton, *Port Security Wargame*, 45.
[18] Michael E. O'Hanlon, et al., *Protecting the American Homeland: A Preliminary Analysis*, (Washington: Brookings Institution Press, 2002), 7.
[19] Ann Saccomano, "Stuck in a Deep Hole: Ports want more clarity from federal government on funding of security improvements," *Journal of Commerce*, 7 April 2003.

defeated by a vote of 52-47 in the Senate.[20] The final conference bill included only $20 million for port security.[21] The Senate did approve a Hollings-sponsored amendment to include $2 billion for port security in the 2004 Federal Budget, but there is no guarantee that Congress will approve these funds in the final budget.[22] Meanwhile, most of the $3.5 billion in emergency aid promised to the states after September 11, 2001 still remains tied up in the federal bureaucracy.[23]

Nationally, most ports and municipalities do not have the funds to implement the Maritime Transportation Security Act's new security requirements. As Stephen Flynn, Senior Fellow at the Council on Foreign Relations explains, policymakers have not resolved the issue of who will pay for port security:

> That issue has not really been resolved. Well, it's been resolved to the extent that the president's budget next year provides no money for port security…So it's pretty clear where the new requirements are going to have to be bankrolled, and it is at the port level. But we face a situation where virtually every major city and state in this country is hemorrhaging in red ink, and this industry itself operates on very thin profit margins. And so there isn't a whole lot of resources to bring to the table to address this glaring vulnerability.[24]

When compared to the federal funds allocated for airport security at LAX, the lack of funding for port security at the Los Angeles/Long Beach port complex is even more glaring. The airport has received $94 million; the port complex requested $70 million in post-September 11 port security grants, but has received only $10 million.[25]

The fact that policymakers treat the Port of Los Angeles and the Port of Long Beach as separate entities may also be a key factor that lowers the priority placed on funding for this high-risk infrastructure. If policymakers followed the Coast Guard's lead and treated these two ports as one complex, perhaps the facility might receive the resources necessary for its protection. Fortunately, the Coast Guard's recent efforts to coordinate federal, state, and local stakeholders to develop security and emergency response plans for the port complex may cultivate this perspective among policymakers.

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[20] Editorial, "Safe Harbor," *The Baltimore Sun,* 4 April 2003, sec. A. See also, Helen Dewar and Juliet Eilperin, "House and Senate Approve War, Anti-Terror Funds," *The Washington Post*, 4 April 2003, sec. A.

[21] Representative C. W. Bill Young, "Press Release: Highlights of Wartime Supplemental Conference Report," www.house.gov, 12 April 2003. Available from http://www.house.gov/appropriations/news/108_1/04warsuppconf.htm; Internet; accessed 14 April 2003.

[22] Senator Fritz Hollings, "Sen. Fritz Hollings' Online Office: News," hollings.senate.gov, 12 April 2003. Available from http://hollings.senate.gov/inthenews_portsec.html; Internet; accessed 14 April 2003.

[23] Tina Daunt and Sue Fox, "California Anti-Terror Readiness Still Lacking," *Los Angeles Times*, 23 February 2003, sec. B.

[24] Stephen Flynn (Senior Fellow, Council on Foreign Relations), "Vulnerability of US ports 18 months following the 9/11 attacks," interview with Pam Fessler, "All Things Considered," broadcast on National Public Radio, 12 March 2003.

[25] Daunt and Fox, "California Anti-Terrorism Readiness Still Lacking." See also, Council on Foreign Relations, *America Still Unprepared*, 23.

Federal, state, and local agencies are developing both security and emergency response plans to prepare for attacks at the port complex.

The federal Maritime Transportation Security Act of 2002 requires the Coast Guard to develop Area Maritime Transportation Security Plans for both port security and emergency response at all domestic ports.[26] To meet this requirement, the Coast Guard leadership at the port complex, which is also responsible for all ports in Southern California, has formed a Los Angeles/Long Beach Port Security Committee ("PSC"). This committee consists of representatives from approximately fifteen federal, state, and local first response agencies, and is developing a security plan for the port complex.

The PSC has begun its analysis, but its task is Herculean. Although it is thoroughly assessing possible incident scenarios and developing first response plans, those plans will not be completed until at least late summer 2003.[27] Unfortunately, even the best response plans cannot anticipate all possibilities.

There are countless vulnerabilities at the port, and even the best preparations might not prevent an attack by determined terrorists. On the water, innocuous fishing boats and yachts pass just yards away from supertankers laden with petroleum products. On land, there is no credentialing system for either foreign or domestic workers, and it is almost impossible to determine the nature and purpose of individuals' activities at the port. As mentioned, officials inspect only two percent of the 9.5 million twenty-foot equivalent units, or TEUs, of containers that are shipped annually through the complex.[29] Nearly 95 percent of all ships at the port complex are foreign-flagged vessels that have lower security requirements for hiring seamen than American ships. Federal agencies are developing programs to mitigate the threats posed by these weaknesses, but these programs are long-term solutions.[30] In the interim, public officials and agencies must strengthen their capacity to *respond* to a terrorist attack at the port complex.

"On a scale of one to ten, we started at a one on September 10th, and we're up to about a two."
- Council on Foreign Relations Senior Fellow, on U.S. port security[28]

[26] U.S. Public Law 107-295, 107th Cong., 2d sess. (25 November 2002), 8.
[27] Commander George Cummings, USCG, "answers," Email to Matthew Hipp, 24 February 2003. Additionally, some projections estimate that port vulnerability studies for the nations fifty largest ports could take up to five years to complete. See Council on Foreign Relations, *America Still Unprepared*.
[28] Stephen Flynn, interview.
[29] Port of Los Angeles and Port of Long Beach Port Security Task Force, *Progress Report and Preliminary Recommendations*, December 2001, C-4 and D-1. (PSAPP mimeograph collection.)
[30] For example, there is a pilot program to develop electronic seals for containers, but they are currently only in use on a few hundred of the millions of containers that enter the U.S. each year. Pam Fessler, "Vulnerability of US ports 18 months following the 9/11 attacks," "All Things Considered," broadcast on National Public Radio, 12 March 2003.

The Coast Guard is providing effective federal leadership in its facilitation of emergency response planning within the PSC. Nonetheless, responsibility for emergency response and public safety is fundamentally the duty of local government.[31] Given the multi-jurisdictional nature of the port complex, Los Angeles County and the cities of both Los Angeles and Long Beach share the role of providing emergency response for any terrorist attack. In an effort to protect the lives and property of their citizens, first response agencies from these municipalities must collectively strategize, coordinate, and implement a well-orchestrated plan to counter any terrorist event.

The UCLA Port Security Applied Policy Project seeks to identify immediate measures to improve local response capabilities for an attack on the port complex.

This study focuses on identifying measures that local governments and agencies can take to improve emergency response in the event of a terrorist attack at the port complex. It seeks to make specific recommendations that are fiscally, politically, and legally viable. Additionally, it attempts to identify solutions that policymakers and agencies can implement swiftly because of the ports' clear and present vulnerability.

This study does not address issues where primary responsibility rests at the federal level, such as threat detection, deterrence, and many prevention issues. Likewise, inspection technology, background checks for port workers, credentialing, and interagency coordination problems between border protection agencies are all critical components of a comprehensive port security strategy, but fall outside the scope of this study.

We obtained information and reached our conclusions by interviewing more than six-dozen agency heads, policymakers, labor and industry representatives, and emergency service workers at the local, state, and federal level over a five-month period. We also conducted an extensive review of primary documents, press reports, and expert studies relating to port security, emergency management, multi-jurisdictional agreements, and national security threats. Finally, we examined best practices at the ports of Houston, New York/New Jersey, and Miami.

[31] Jack Weiss, *Preparing Los Angeles for Terrorism: A Ten-Point Plan*, October 2002, 7. (PSAPP mimeograph collection.)

Introduction

POLICY PROBLEMS

Our research revealed three broad, critical problems related to emergency response and coordination at the port complex:

1) *Oversight and Coordination: Emergency response at the port complex is a local planning challenge, but local political decision makers do not oversee it sufficiently and key stakeholders are absent from the planning process.*

2) *Inaccessibility of the Port Complex: Due to the port complex's location, poor vehicular accessibility will likely hinder first responders' ability to reach the facility and assist victims during an emergency.*

3) *Incompatible Communication Systems: Differences in radio technologies will prevent agencies from communicating and coordinating during a crisis response effort.*

Problem 1: Coordination and Oversight

"Governments at the local level are also moving to rethink roles and responsibilities to address the unique scale and scope of the contemporary threats from terrorism…Many regions are starting to assess how to restructure relationships among contiguous local entities to take advantage of economies of scale, promote resource sharing, and improve coordination of preparedness and response on a regional basis."

– GAO Report on Homeland Security[32]

BACKGROUND

In the past, interagency coordination between Los Angeles County's municipalities has been inefficient and has led to sub-optimal outcomes. For example, during the Los Angeles riots in 1992, Mayor Tom Bradley, Los Angeles Police Department Chief Darryl Gates and Los Angeles County Sheriff Sherman Block failed to communicate and cooperate. Instead of calling the Sheriff's Department for additional manpower, which could have arrived within an hour of the first outbreak of violence, Chief Gates requested National Guard support directly from the Governor's Office. It took three days for the National Guard to activate, deploy, and quell the rioting. Had the Los Angeles Police Department requested immediate support from the Sheriff's Department, it is likely that many of the 55 deaths, 2,000 injuries, and $1 billion in damages may have been prevented.[33]

Despite significant improvements in interagency coordination after the riots, recent events have demonstrated that problems remain. On July 4, 2002, an assailant shot and killed five people at the El Al ticket counter inside Los Angeles International Airport (LAX). An El Al private security guard shot and killed the assailant. Response by law enforcement agencies was overwhelming (some 425 officers from 10 different agencies responded) but disorganized. Tensions between agencies, including the Los Angeles Police Department and the FBI, emerged during the investigation. It was unclear who had command of either crisis management or emergency response.[34]

Nearly six months later, "Operation Nighthawk," a multi-agency terrorism simulation exercise conducted at LAX in November 2002 and January 2003 again revealed deficiencies in coordination between emergency medical and security personnel.[35] According to Los Angeles City Councilman Jack Weiss, "It took medical personnel far too long to reach the wounded…Several law enforcement officials commented on it the

[32] U.S. General Accounting Office, *Homeland Security: Intergovernmental Coordination and Partnership Will Be Critical to Success*, (Washington: Government Printing Office, 2002), 9.
[33] Robert Garrot (Assistant Manager, Los Angeles County Emergency Operations Center), interview by Adam Clampitt, Monterey Park, CA, 4 February 2003.
[34] Jennifer Oldham, "Response to LAX Shooting Flawed, Study Says," *Los Angeles Times*, 7 October 2002, sec. B.
[35] Greg Krikorian, "L.A. Seeks $100 Million From U.S. for Security," *Los Angeles Times*, 13 February 2003, sec. B.

night of the exercise."[36] After-action reports outlining specific failures identified in the exercise will be available in mid-April.[37]

Federal and state laws mandate planning for emergency response.

Both federal and state laws provide general guidelines for the development of emergency response plans and for the delineation of emergency management responsibilities. At the federal level, the Maritime Transportation Security Act of 2002 directs the U.S. Coast Guard to develop Area Maritime Transportation Security Plans for both port security and emergency response at all domestic ports.[38] Presidential Decision Directives 39 and 62 designate the FBI as the lead federal agency in charge of crisis management during a terrorist attack.[39] For emergency response, Title III of the Superfund Amendments and Reauthorization Act (SARA) requires states to develop and document plans that clearly delineate authority and responsibility in the event of a disaster, including terrorist attacks. Failure to comply with SARA requirements may negate a state's eligibility for federal Emergency Management Assistance funds.[40]

By state law, disaster incidents in California fall under the purview of county governments. The California Government Code effectually gives public officials legal authority to direct the activities of all public employees in the event of a declared disaster.[41] Most county agencies, including the Sheriff's Department, indicated that it was highly unlikely that organizations such as theirs would assume overall control over emergency response efforts in the wake of a terrorist attack, and would focus instead on providing support for other local agencies.

The California Government Code also establishes the Standardized Emergency Management System (SEMS) and mandates that state agencies follow its guidelines when responding to multi-agency and multi-jurisdiction emergencies in California; local governments must follow SEMS if they are also to receive reimbursement for response-related personnel costs.[42] SEMS creates an organizational structure that allows emergency managers to coordinate resources by categorizing and standardizing tasks. In accordance with SEMS guidelines, responders must follow the Incident Command

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[36] Ibid.
[37] Commander Mark Leap (Los Angeles Police Department), "Re: Port Security," Email to Warren Allen, 12 March 2003.
[38] U.S. Public Law 107-295, 107th Cong., 2d sess. (25 November 2002), 8.
[39] Although Presidential Decision Directive 39 assigns Federal Lead Agency responsibilities for counterterrorism to the FBI, the agency coordinates closely with local law enforcement authorities to provide a successful law enforcement resolution to the incident.
[40] Samuel Stratton, MD/MPH, interview by Adam Clampitt, Los Angeles, CA, 14 January 2003.
[41] California Government Code, Title 1 §3100 states, in relevant part, "…all public employees are hereby declared to be disaster service workers subject to such disaster service activities as may be assigned to them by their superiors or by law."
[42] Adam Sutkus (Director, California Governor's Office on Service and Volunteerism), phone interview by Seth Jacobson, 16 March 2003. See also, California Office of Emergency Services, *State of California Emergency Plan*, (Sacramento: 1998), 5.

System (ICS). ICS establishes which agency directs operations based on the nature and location of the occurrence during a multi-agency emergency response. In virtually all multi-jurisdictional events, such as those that would be encountered at the port complex, all parties with statutory and regulatory authority would establish a "Unified Command" to manage the incident.[43]

Under the Unified Command concept, agency managers share decision-making responsibility within a group. There is no formal "leader" and individual agencies maintain operational control and responsibility for their assets and personnel. Based on changes in the nature of an incident, agency leaders cooperatively transfer decision-making authority within the Unified Command group. Nonetheless, as recently as March 2003, a senior law enforcement official who is involved in the planning process expressed concern that, during a response to an incident at the port, "agencies may protect turf and operate independently."[44] To function effectively, Unified Command depends on trust and familiarity between agencies, which can only be established through regular training.[45]

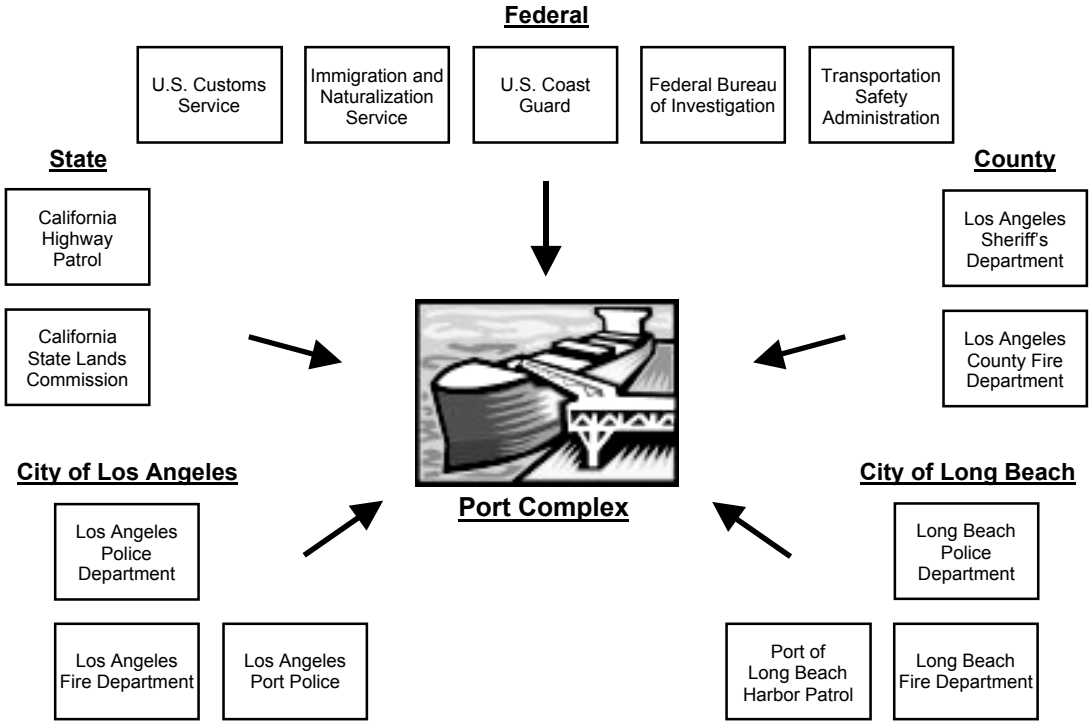
Despite established SEMS guidelines, it may be difficult to achieve coherent and effective command of an incident at the port complex. Due to the port complex's size, structure, and multi-jurisdictional geography, numerous agencies would respond to a terrorist attack at the location. *There is not one single agency with overall responsibility and jurisdiction*. Instead, as shown in Figure 1, responsibility for security and emergency management at the port complex is scattered across 15 agencies from the Cities of Los Angeles and Long Beach, the County of Los Angeles, and state and federal government. Most of these organizations created their emergency response plans independently and did not coordinate their planning with other agencies at the port.

PROGRESS TO DATE

The Coast Guard Captain of the Port, Captain John Holmes, is working with local, state, and federal agencies to develop a comprehensive security plan for the entire port complex. He has assembled a Port Security Committee ("PSC"), made up of eight county and municipal agencies, two state agencies, and four federal agencies. As shown in Table 1, each agency has a different jurisdictional role at the port complex. Chiefs and high-ranking command staff members represent the various agencies at the quarterly PSC meetings. A planning group from this committee is currently meeting three days per week to develop a "playbook" and target folders to guide emergency response at the port complex. The playbook will include a matrix that cross-references attacks by type and location, outlines immediate steps for response, and notes primary points of contact for

[43] Adam Sutkus, phone interview.
[44] Senior law enforcement official, confidential phone interview by Warren Allen, 11 March 2003.
[45] This view was expressed by several law enforcement agencies, including the Los Angeles Port Police, Long Beach Police Department, and FBI.

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



Source: Analysis by PSAPP

the various agencies.[46] The Coast Guard plans to complete work on the playbook by late summer 2003 and will distribute copies to the involved agencies, government officials, and maritime industry representatives.[47]

In sum, agencies are attempting to improve coordination and communication. Nine of the agencies on the PSC opened a 24-hour Joint Operations Center at the port complex in March 2003 to coordinate operations.[48] In the event of a terrorist attack (or other multi-jurisdictional incident), agencies have agreed to use the Coast Guard's Marine Safety Office on Terminal Island as the default incident command center and are attempting to work within SEMS guidelines.[49] Nevertheless, there remains no clear delineation of authority; therefore, agencies may not fully cooperate, which could cause inefficiencies and unnecessary casualties.

[46] Commander George Cummings, USCG, interview.
[47] Commander George Cummings, USCG, "answers," Email to Matthew Hipp, 24 February 2003.
[48] Few details have been made available about the Joint Operations Center due to the law enforcement sensitive nature of its operations. It includes representatives from the Coast Guard, FBI, and Los Angeles and Long Beach Police Departments. Patrick McGreevy and Sue Fox, "All Quite in L.A. as Disaster Centers Display Readiness," *Los Angeles Times*, 21 March 2003, sec. B. See also, Commander George Cummings, USCG, "RE: POLA/POLB Joint Operations Center," Email to Matthew Hipp, 9 April 2003.
[49] Commander George Cummings, USCG, "answers."

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 became part of the Department of Homeland Security's Directorate of Border and Transportation Security.	
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 PSAPP

Problem 1: Coordination and Oversight

CRITICAL REMAINING WEAKNESSES

Although the PSC incorporates the majority of agencies involved with emergency response at the port complex, participation in this committee is voluntary and there is no formal protocol for keeping policymakers informed of progress. Additionally, there are other organizations and stakeholders that are notably missing from the planning process. This study identifies three specific weaknesses dealing with coordination and oversight:

1) Political stakeholders are removed from the planning process.

2) Public health officials are not included in the planning process.

3) Private sector stakeholders are not included in the planning process.

Weakness 1: Political stakeholders are removed from the planning process

"City managers, county executives, city councilpersons, county supervisors, business managers, security managers, building managers – YOU ARE NOT READY FOR A TERRORIST INCIDENT…If your job falls into one of the key management or elected positions I have mentioned above, you need to go on your own private fact finding tour, now – and I mean right now. You need to go on your own tour to determine the actual state of readiness in your local area, not what you have been told by the various bosses. They have their own interests to protect. I don't want to get too dramatic, but there are lives at stake, the lives of your co-workers and citizens, so for your own piece of mind I want you to verify what you've been told and make sure your local area is ready to handle one of these events."

– Public Entity Risk Institute Symposium Speaker[50]

Policymakers have a responsibility to ensure that broad goals are set for emergency response agencies. Emergency response at the port complex is a local planning challenge, but local policymakers have not overseen the process. Policymakers have informally delegated this responsibility to local agencies, but are not following up to maintain accountability. Policymakers should work with agencies to set priorities, establish completion dates, ensure consistent information flow, and set benchmarks to measure results. Policymakers and emergency response agencies have not sufficiently accomplished these tasks in planning for emergency response at the port complex. Additionally, in order to secure adequate funding for response efforts, elected representatives must remain informed of agencies' needs.

Oversight and coordination could be particularly helpful in the case of port-specific training exercises. To prevent critical failures during emergency response to a terrorist incident at the port complex, agencies must conduct training exercises to determine how decisions will be made during joint operations. Training exercises can be expensive to develop and execute. For example, "Operation Nighthawk," the multi-agency terrorism scenario at LAX, cost approximately $400,000.[51] In addition to the monetary constraints involved in conducting these exercises, many agencies are unable to dedicate personnel to training operations; consequently, emergency service workers conduct joint-training exercises infrequently.[52] The expense and infrequency of these operations necessitate that training coordinators maximize the information they glean from each exercise. Specifically:

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[50] Lieutenant John Kane (Sacramento Police Department, Disaster Planning and Emergency Preparedness), "The Incident Command System and the Concept of Unified Command at a Terrorist Incident" (paper presented at the Public Entity Risk Institute Symposium on Community Response to the Threat of Terrorism, Internet Symposium, November 2001), 1.

[51] Senior law enforcement official, confidential interview by Warren Allen, Los Angeles, CA, 20 February 2003.

[52] Senior law enforcement official, confidential interview by Warren Allen, Long Beach, CA, 10 January 2003.

Problem 1: Coordination and Oversight

1) Training coordinators need to incorporate all relevant stakeholders and agencies into the planning process.
2) Policymakers and agency heads need to allocate sufficient funding and resources to conduct training.
3) Information about "lessons learned" during the exercise must be disseminated effectively among stakeholders so that improvements can be made.

Better oversight and coordination can help to achieve all of these functions.

Interviews with city and county agencies and political officials revealed information gaps in the current planning process. For example, county officials expressed concern that the decision makers from the City of Los Angeles went to the City Emergency Operations Center (EOC) downtown instead of to the County EOC in Monterey Park on September 11, 2001.[53] The Assistant Manager of the County EOC confirmed, however, that Los Angeles City officials followed the correct protocol; the city was supposed to activate its own EOC and communicate with the county from there.[54]

Local elected representatives are not directly involved in the PSC's planning activities; consequently, the existing paths for information dissemination are decentralized and do not guarantee a consistent flow of information. For example, the Los Angeles Police Department regularly briefs members of the Los Angeles City Council, but the Sheriff's Department briefs the County Board of Supervisors upon request.[55]

The Los Angeles and Long Beach Harbor Commissions are potential avenues for political input and oversight; however, they function autonomously and govern the complex as two separate units. The five members of the Los Angeles Board of Harbor Commissioners are appointed by the Los Angeles Mayor, confirmed by the Los Angeles City Council, and serve five-year terms. The five members of the Long Beach Board of Harbor Commissioners are appointed by the Long Beach Mayor, confirmed by the Long Beach City Council, and serve six-year terms. By city charter, the Long Beach Harbor Commission has exclusive power over the Port of Long Beach. Both the mayor and the part-time city council have little involvement in port security issues, and receive informal briefings from the City Manager or the Port Commission.[56]

Despite their connections to the ports via the appointed Harbor Commissioners and various public safety agencies, policymakers are not well informed about procedures and responsibilities. Many are not even sure which groups and organizations are involved in

[53] Senior Los Angeles County officials (two), confidential interview by Warren Allen, Los Angeles, CA, 13 January 2003.
[54] Robert Garrot, interview by Adam Clampitt, Monterey Park, CA, 4 February 2003.
[55] Senior law enforcement official, confidential phone interview by Adam Clampitt, 20 February 2003.
[56] Cathy Weider (Chief of Staff, Office of Mayor, City of Long Beach), phone interview by Seth Jacobson, 19 March 2003.

the security planning process. For example, at least one senior county official was surprised to learn that public health officials are not included on the PSC.[58] Additionally, a representative from the Long Beach Board of Harbor Commissioners office indicated that the president of each commission sits on an executive steering committee for port security.[59] Coast Guard officials, however, stated that this steering committee has not formally met, because the commissioners could not find a time when they were available. Instead, the Captain of the Port has made himself available to brief the Harbor Commissions upon request; to date, only one such briefing has been requested.[60]

"Much of the success of future terrorism response efforts will depend on establishing close working relationships among the key players at various government levels."
- California Office of Emergency Services[57]

Overall, policymakers must work with agency heads to identify and address the challenges created by the port complex's multi-jurisdictional nature. Although the PSC is making progress toward this goal, elected leaders must articulate broad goals for the local agencies on the PSC, stay abreast of planning developments, improve communication between local government and response planners, facilitate training and enable resource acquisition. Policymakers can only meet these challenges if they collaborate across jurisdictional lines and actively engage in cooperative oversight.

[57] California Office of Emergency Services, *Local Planning Guidance on Terrorism Response: A Supplement to the Emergency Planning Guidance for Local Government*, (Sacramento: 1998), 9.
[58] Senior law enforcement official, confidential interview by Adam Clampitt, 24 February 2003.
[59] Senior Harbor Commission official, confidential phone interview by Adam Clampitt, 19 March 2003.
[60] Commander George Cummings, USCG, "RE: Questions on Board of Commissioners," Email to Matthew Hipp, 17 March 2003.

Problem 1: Coordination and Oversight

SELECTION CRITERIA

This study evaluates alternatives for improving political oversight using the following six criteria:

- ✓ Local control
- ✓ Standardized information
- ✓ Direct input to convey broad goals
- ✓ Coordinated funding
- ✓ Regular contact
- ✓ Short-term implementation

1) *Local control: Local officials should be able to implement the solution.*
   Alternatives that require extensive state or federal participation are generally more difficult to develop and implement because there are more parties involved; consequently policy options that fall under the purview of local governments are more likely to enjoy success.

2) *Standardized information: The solution should ensure that stakeholders receive unbiased, standardized information.*
   To minimize confusion between decision makers, alternatives should ensure that policymakers receive PSC progress reports from a single, neutral source. Currently, policymakers receive information from personnel under their jurisdiction, a process that can result in inaccurate reporting.

3) *Direct input to convey broad goals: Policymakers must set broad public safety goals and communicate them directly to response planners.*

4) *Coordinated Funding: Local policymakers should work across jurisdictions to secure funding.*
   By reducing competition for the same dollars, coordinated funding requests are more likely to enjoy success. Additionally, by reducing the potential for both redundancies and funding gaps, coordinating spending across political boundaries is more likely to result in efficient allocations.

5) *Regular contact: Policymakers should have regular contact with response planners.*
   Contact at regular intervals increases the opportunity to evaluate progress.

6) *Short-term implementation: Policymakers and involved agencies should be able to implement solutions in six months or less.*
   Given the present inability to prevent terrorist attacks and the existing geo-political climate, it is of paramount importance that local government quickly improves its ability to respond to incidents.

ALTERNATIVES

1) Include political stakeholders as full members of the Port Security Committee.

Representatives from the County Board of Supervisors, the Mayors of Los Angeles and Long Beach, and the City Councils of both Los Angeles and Long Beach could sit on the PSC. This alternative would give elected officials a formal voice in policy-making for emergency response procedures and would bring together both politicians and agency officials who have not been communicating effectively.

Strengths: Giving elected officials full representation on the PSC would ensure that they have the ability to provide input on shaping port security plans as they are being developed. In addition, inclusion on the PSC would guarantee that officials are informed on all debates, decisions and processes regarding port security issues through regular contact with first responders. Finally, working together on the PSC may foster greater cooperation among elected officials from the various jurisdictions, and increase their opportunity to identify ways to coordinate funding requests.

Drawbacks: Policymakers generally lack expertise in emergency response protocols. Consequently, elected officials' presence on the PSC could politicize the planning process and create inefficiencies. Emergency service workers are experts in public safety and have the knowledge to develop effective emergency response plans. Senior first response officials have expressed concern that elected officials may micromanage planning efforts.[61] Micromanagement may slow the process and dilute the plans' effectiveness. Although their presence on the PSC would permit direct input, policymakers may involve themselves in planning particulars instead of setting broad goals. Finally, there is no guarantee that they will coordinate funding requests.

[61] Senior law enforcement official, confidential phone interview by Adam Clampitt, 20 February 2003.

2) Create a multi-jurisdictional political oversight group for port security.

This group would include one representative from each local political body that has jurisdiction over the port complex (i.e., the Los Angeles City Council, the Los Angeles Mayor's Office, the Long Beach City Council, the Long Beach Mayor's Office, and the Los Angeles County Board of Supervisors). This "Group of Five" would meet on a regular schedule with the Captain of the Port, who would brief them, answer their questions, listen to their collective input, and communicate their feedback to the PSC and its planning group.

Strengths: Organizing stakeholders into this group would facilitate their constructive, efficient participation and direct input in the security planning process. In addition, this structure would ensure regular communication between the PSC and local policymakers and effectively standardize information. Finally, cooperation between city and county leaders across the major jurisdictions would cultivate a more cohesive, regional vision for port security than the current Balkanized approach. This cooperative approach could permit leaders to coordinate funding requests. Additionally, local policymakers can swiftly develop and implement an oversight group.

Drawbacks: Citing the Long Beach Port Commission's exclusive domain over shipping in Long Beach, the Office of the Mayor of Long Beach expressed political reservations about participating in an informal oversight group. The Mayor's Office would consider it, but needed to see more details.[62] In addition, elected leaders would still not directly participate in the planning process, so there is still a possibility that the final plan may not reflect their concerns and recommendations. Moreover, without being in the PSC meetings, policymakers could not directly assess dynamics between agency representatives and facilitate cooperation between them. Finally, there is no guarantee that the oversight group will work together to coordinate funding requests.

[62] Cathy Wieder, phone interview.

3) Create a central Port Authority.

Policymakers could establish a central Port Authority that would be responsible for the oversight of all operations at the port complex. Policymakers can establish a central Port Authority by merging all activities at both ports through a Joint Powers Authority. Similar to the Port Authority of New York/New Jersey, this Authority would not only oversee public safety with its own police and fire departments, but would also regulate economic activity at the entire port complex. A central Port Authority would effectively merge the two ports and create one board of commissioners with appointees from Los Angeles, Long Beach, and possibly Los Angeles County.

Strengths: The Port Authority would centralize public safety operations and effectively negate existing jurisdictional obstacles. A Port Authority would also centralize funding resources and might address the problem of agencies competing for the same dollars. Additionally, it could levy fees on port users to fund public safety efforts at the port complex. Elected officials would have one source from which to receive standardized information, and public safety issues would be managed with consistency and cohesiveness.

Drawbacks: Forming a Port Authority would face enormous political challenges. First, established interests may be unwilling to give a new agency control over the economic management of the port complex. Second, a Joint Powers Authority would violate the Long Beach Harbor Commission's exclusive jurisdiction over the Port of Long Beach. Therefore, implementation would likely require a charter change approved by a city-wide vote.[63] Third, local policymakers cannot unilaterally establish a Port Authority because doing so requires a state mandate. Given California's severe budget crisis, there may not be political support for the creation of a new agency of this magnitude.

[63] Cathy Wieder, phone interview.

4) Create a Joint Powers Authority for Public Safety to oversee port security operations.

A Joint Powers Authority (JPA) for Public Safety could oversee safety and security operations at the port complex, but would not take responsibility for economic operations. Los Angeles and Long Beach would maintain separate economic control over their respective ports through the existing Harbor Commissions, but the JPA for Public Safety would have control over emergency response issues in both jurisdictions. A JPA for Public Safety would be a state-legislated organization governed by officials from the cities of Los Angeles and Long Beach and Los Angeles County. The port complex's JPA for Public Safety would have the authority to make public safety decisions for the entire port complex, similar to the Alameda Corridor Transportation Authority's power to make multi-jurisdictional decisions regarding rail transportation.[64] The JPA for Public Safety and the Coast Guard would jointly coordinate emergency response. The port of Houston follows a similar model. The JPA could fund public safety with a small usage fee on containers entering and leaving the port complex.[65]

Strengths: A Joint Powers Authority for Public Safety would allow political officials the same regular contact and direct input as a full Port Authority without significantly altering businesses operations at the port complex. Consequently, the JPA for Public Safety would likely receive less opposition than a full Port Authority because its impact on the ports' economic operations would be minimal. In addition, a JPA for Public Safety would provide a single voice for the port complex in Sacramento and on Capitol Hill for security issues and may facilitate coordinated funding requests.

Drawbacks: A JPA for Public Safety would first require that Long Beach change its charter by citywide vote. After that, it could take an additional six months to three years for policymakers to approve and implement a JPA for Public Safety.[66] The creation of the JPA for Public Safety would still require approval by municipal governments, the state legislature, and the governor.[67] This process could be costly and require significant expenditures of political capital.

[64] James Hankla (CEO, Alameda Corridor Joint Powers Authority), interview by Adam Clampitt, Los Angeles, CA, 13 February 2003.
[65] Gene Skoropowski (CEO, Capitol Corridor Joint Powers Authority), phone interview by Adam Clampitt, 11 March 2003.
[66] Senior county official, confidential phone interview by Adam Clampitt, 18 March 2003.
[67] Ibid.

RECOMMENDATION

✓ ***Specific local elected officials should form an informal multi-jurisdictional oversight group for port security.***

Policymakers should establish an informal Group of Five representatives to interact with the Port Security Committee, receive progress reports from the Captain of the Port, and offer recommendations and additional resources from their respective jurisdictions. The committee should consist of appointees from the following five offices:

1) Los Angeles County Board of Supervisors, District 4 (Supervisor Don Knabe)
2) Los Angeles Mayor (Mayor James Hahn)
3) Los Angeles City Council, District 15 (Councilwoman Janice Hahn)
4) Long Beach Mayor (Mayor Beverly O'Neill)
5) Long Beach City Council, District 2 (Councilman Dan Baker)

The following items should considered as primary missions for the Group of Five:

☑ *Monitor Progress*: The Group should review the quarterly minutes from Port Security Committee and request additional information from the Captain of the Port as required.

☑ *Represent Constituents*: The Group should meet quarterly with the Captain of the Port to discuss concerns and follow up on any questions from the written reports.

☑ *Manage Information*: The Group should communicate the current status of port security to both their fellow elected officials and their constituents.

☑ *Cooperate for Funding*: The Group should work together to secure funds for training exercises, equipment, and other public safety items for the port complex.

A Joint Powers Authority is not a politically feasible short-term solution, but over the long term, policymakers should consider establishing a Joint Powers Authority for Public Safety. While informal oversight by the Group of Five will increase coordination in the short-term, a Joint Powers Authority for Public Safety would give appointed officials formal power at the port and ensure greater coordination of first responders and funding requests.

Weakness 2: Public health officials are not included in the planning process

"[A threat analysis working group] may be composed primarily of law enforcement personnel, but should involve representatives from other disciplines. For example, public health or medical representation may be advisable to address the impact of biological or chemical agents."

–California Local Planning Guidance on Terrorism Response[68]

There is no medical or public health representative on the PSC.[69] In the wake of September 11, 2001 and the subsequent anthrax attacks, much focus was placed on preparing for incidents involving weapons of mass destruction, especially bioterrorism and radiological "dirty bombs." According to Dr. Samuel Stratton, Medical Director of the Los Angeles County Emergency Medical Services Agency, public health involvement in planning for emergency response at the port complex is a necessity.[70] The Los Angeles County Department of Health Services possesses a wealth of knowledge in these fields and has two branches that play key roles in surveillance, detection, and response to such incidents: the Emergency Medical Services Agency and the Public Health Division.

The county's Emergency Medical Services Agency is responsible for all pre-hospital treatment. This includes formulating policy and procedures for emergency medical response, including county disaster response, ambulance and paramedic service, and overseeing specialized emergency response hospitals, including trauma centers.[71] The agency also manages one of California's Disaster Medical Assistance Teams (DMAT). These teams, which are made up of physicians, nurses, and technicians, can deploy within eight hours to provide primary health care or augment local health care facilities. The Los Angeles team has also received Nuclear/Biological/Chemical (NBC) training.[72]

The Public Health Division is responsible for disease prevention, epidemiology, protecting the health of the citizens of Los Angeles County in general, and managing the county's public health laboratory.[73] They are integral to the detection of, and response to, a bioterrorist event.

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[68] California Office of Emergency Services, *Local Planning Guidance on Terrorism Response*, 6.
[69] Although there are no public health officials on the PSC, there are public health representatives on the Los Angeles Sheriff's Department's Terrorism Early Warning group (TEW) and the Long Beach Police Department's Terrorism Warning Group (TWG). Members of TEW and TWG are part of the PSC.
[70] Samuel Stratton, MD/MPH (Medical Director, Los Angeles County Emergency Medical Services Agency), interview by Adam Clampitt, Los Angeles, CA, 11 February 2003.
[71] Samuel Stratton, MD/MPH, interview by Matthew Hipp, Torrance, CA, 3 January 2003.
[72] Ibid.
[73] Los Angeles County Department of Health Services, "About Us Public Page," *LAPublicHealth.org*, 2003. Available from http://lapublichealth.org/phcommon/public/aboutus/aboutdisplay.cfm?ou=ph&prog=ph&unit=ph; Internet; accessed 6 March 2003.

Although the county's Department of Health Services was inadvertently excluded during the PSC's initial planning phases, efforts have been made during the course of this study to correct this omission. The Coast Guard has indicated that it has contacted both the Department of Health Services and the Centers for Disease Control (CDC) and, is seeking to incorporate them into the planning process at the port complex.[74] Additionally, the Coast Guard Captain of the Port has encouraged all agencies that have a role in the security of the port complex to participate in the PSC.[75]

SELECTION CRITERIA

Public health officials bring a unique and invaluable perspective to the emergency response planning process. To ensure that their knowledge and resources are used effectively, we established the following criteria to evaluate alternatives for including public health officials in the planning process.

- ✓ Direct input
- ✓ Regular contact
- ✓ Equal standing

1) *Direct input: Public health officials should be directly involved in the planning process.*

2) *Regular contact: Public health officials should meet regularly with member(s) of the PSC.*

3) *Equal standing: Public health officials are important to the planning process, and their input should carry equal weight as other members of the PSC.*

[74] Commander George Cummings, USCG, "answers," Email to Matthew Hipp, 24 February 2003.
[75] Commander George Cummings, USCG, "RE: DRAFT COPY – initial CG comments," Email to Matthew Hipp, 11 March 2003.

Problem 1: Coordination and Oversight

ALTERNATIVES

1) Assign a public health official to the Port Security Committee.

The Los Angeles County Department of Health Services could assign a public health official to sit on the Port Security Committee to participate in the emergency response planning process.

Strengths: Assigning an official to the PSC would allow the county's public health organization direct input into the emergency response planning process and give them equal standing on the PSC. The PSC would benefit from the expanded knowledge base and from regular contact with public health officials that could develop more effective response plans for weapons of mass destruction.

Drawbacks: Expands the PSC by adding additional participants, and requires senior officials to fit quarterly PSC meetings into their schedules.

2) Designate a public health official with whom the Port Security Committee could regularly consult.

The Los Angeles County Department of Health Services could designate a public health official with whom the Port Security Committee could consult on a regular basis.

Strengths: By not requiring him or her to attend all meetings, this structure would allow greater flexibility for both the PSC and the public health official. The PSC would benefit from access to the expanded knowledge base.

Drawbacks: Public health has a reputation for being "out of sight, out of mind." Regular contact might not occur and public health officials would not always be available to contribute to the planning process. Additionally, the lack of equal standing may diminish the public health officials' ability to participate effectively during interactions with the PSC.

RECOMMENDATION

✓ ***The Los Angeles County Department of Health Services should assign a senior public health official to the Port Security Committee to assist in the response planning process.***

The Los Angeles County Board of Supervisors should direct the Department of Health Services to assign a senior public health official to the PSC. This official should meet the following criteria:

1) Senior decision maker in the Department of Health Services.
2) Extensive knowledge about the county's public health infrastructure.
3) Extensive understanding of the county's preparations for weapons of mass destruction response.

Based on these criteria, we recommend either:

☑ Dr. Thomas Fielding, the Director of Public Health.
☑ Dr. Samuel Stratton, the Medical Director of the Emergency Medical Services Agency.

Additionally, the Department of Health Services should designate a mid-level official who can meet regularly with the PSC's planning group to help develop specific response plans for weapons of mass destruction.

Weakness 3: Private sector stakeholders are not included in the planning process

"Government at all levels must work together effectively, along with the private sector, business and industry, community based organizations and volunteers, to meet the challenges posed by a disaster."

– State of California Emergency Plan[76]

Private stakeholders at the port such as the International Longshore and Warehouse Union (ILWU) and the Pacific Maritime Association (PMA) have untapped expertise and material resources that may prove invaluable to response planning. The 20,000 local workers from the ILWU and other maritime unions have unique knowledge of the port complex and represent a significant manpower resource with skills that would be useful during a first response effort.[77]

The Los Angeles Board of Harbor Commissioners includes a "Community Advisory Committee" comprised of policymakers, labor groups, business groups, community organizations, and neighborhood councils. The group meets monthly, but the Harbor Commission limits public comments to three minutes per speaker and security matters are discussed in closed sessions.[78] Limited opportunities for public comment and closed-door sessions may be necessary to effectively conduct meetings, but they limit the potential to use the commission as a vehicle for public input in the security planning process. Finally, the Long Beach Harbor Commission and Los Angeles Harbor Commission may not coordinate citizen input across jurisdictional lines.

The ILWU and other unions have expressed discontent with the response planning process. They have not been invited to PSC meetings and have not been 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."[79] Additionally, port workers feel that emergency response is 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."[80]

The Pacific Maritime Association, which represents the shipping companies that use the port on a regular basis, has also expressed concerns about communication and involvement in the planning process. The PMA has financial resources and heavy equipment that may be of use in the event of a terrorist attack.

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[76] California Office of Emergency Services, *State of California Emergency Plan*, (Sacramento: 1998), 4.
[77] Luisa Gratz (President, ILWU Local 26), interview by Adam Clampitt, San Pedro, CA, 25 February 2003.
[78] Los Angeles Port, "Community Advisory Committee Page," *www.portofla.org*, 2003. http://www.portofla.org/community/pcac.htm; Internet; accessed 19 March 2003.
[79] Luisa Gratz, interview.
[80] Ibid.

SELECTION CRITERIA

Cooperation between the public and private sectors is of the utmost importance. In order for this relationship to produce optimum results, we used the following criteria to evaluate private sector inclusion alternatives.

- ✓ Direct input
- ✓ Regular contact
- ✓ Alternatives cannot compromise sensitive information

1) *Direct input: Private stakeholders should provide their opinions to the PSC or its members.*
   Private companies and port workers have expertise and resources that may be of value to the PSC.

2) *Regular contact: The PSC should regularly update Private stakeholders.*
   The PSC may make frequent changes to response plans, and it is vital that at-risk populations stay regularly informed. Furthermore, the PSC should take private sector resources and ideas into account for the planning process to work optimally.

3) *Alternatives cannot compromise sensitive information: "Law enforcement sensitive" information must not be revealed under any circumstances.*
   Private citizens do not undergo the same security screenings that government officials do, and it is necessary to protect information about port security that may jeopardize operations.

ALTERNATIVES

1) Incorporate private sector representatives into the Port Security Committee.

Representatives from private sector organizations, such as the PMA, ILWU, and other maritime unions, could become members of the PSC.

Strengths: This would allow private sector representatives, such as leaders from the PMA, ILWU, and other organizations, to provide direct input into the emergency response planning process. The PSC would gain first-hand knowledge of the available resources and expertise on a regular basis.

Drawbacks: Involving opposing groups such as the PMA and ILWU could politicize the PSC. Additionally, expanding the committee by opening seats to representatives from each of the numerous unions might greatly reduce its efficiency. Finally, many of the tactical plans and law enforcement information discussed by the PSC are sensitive in nature.

2) Consult regularly with private sector leaders.

The PSC could consult regularly with leaders from the PMA, ILWU, and other unions.

Strengths: By consulting regularly with industry and labor leaders, the PSC would be able to benefit from their expertise without fully incorporating them into the committee. This would also provide the private sector a regular opportunity to voice their concerns about port security and directly contribute to solutions. In addition, confidential information will remain secure since government officials will remain the only members of the PSC.

Drawbacks: This alternative would require greater additional effort on the part of the PSC to arrange additional meetings with private sector stakeholders.

RECOMMENDATIONS

✓ ***The Port Security Committee should meet periodically with private sector stakeholders, such as industry and labor representatives, and draw upon their knowledge and resources when developing response plans for the port complex.***

Stakeholders in the private sector workforce have resources and expertise that can be beneficial to the planning process. The following steps should be taken to access and incorporate those resources:

- ☑ The Captain of the Port or his designee should meet quarterly with leaders from industry and labor such as the PMA and ILWU. These meetings should involve an information exchange that benefits both the PSC and the private sector organizations.
- ☑ The PSC's planning group should interview representatives from both industry and labor to find out what resources they might be able to contribute to the emergency response plan, and listen to their other concerns and suggestions.
- ☑ The PSC should include the PMA, ILWU, and other maritime unions in terrorism response training exercises when practical and possible.

Summary of Recommendations

1) ***Specific local elected officials should form an informal multi-jurisdictional oversight group for port security.***

2) ***The Los Angeles County Department of Health Services should assign a senior public health official to the Port Security Committee to assist in the response planning process.***

3) ***The Port Security Committee should meet periodically with private sector stakeholders, such as industry and labor representatives, and draw upon their knowledge and resources when developing response plans for the port complex.***

Problem 2: Inaccessibility of the Port Complex

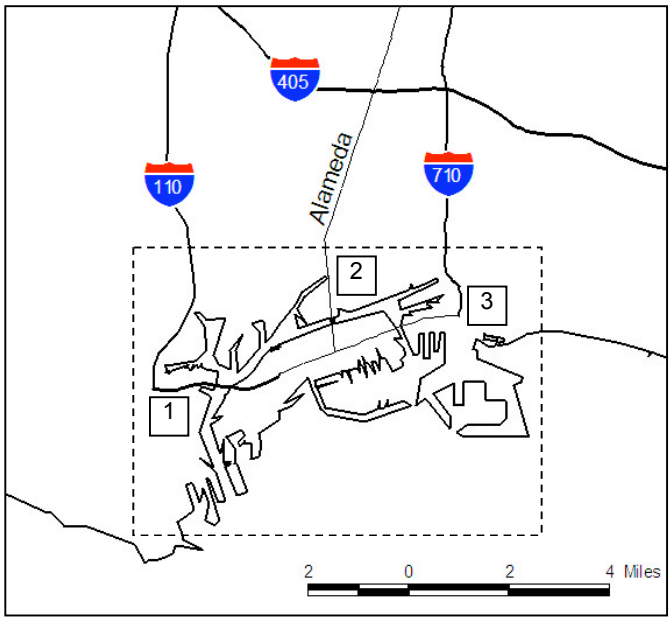
"Lights and sirens can do nothing about bumper-to-bumper traffic on the Harbor or Long Beach Freeways."

– Director, UCLA Institute for Transportation Studies[81]

BACKGROUND

In the event of a terrorist attack at the port complex, units from the Los Angeles Port Police, Port of Long Beach Harbor Patrol, Los Angeles Fire Department, Long Beach Fire Department, and Coast Guard are likely to be the first emergency responders on the scene. Only about 100 sworn law enforcement officers and firefighters are directly assigned to the port complex and on duty at any time.[82] These responders will likely require additional assistance from other public safety organizations throughout Los Angeles, Long Beach, and the County, including the Los Angeles Police Department, Long Beach Police Department, Los Angeles Sheriff's Department, and FBI. Many of these agencies have extensive personnel and materiel resources, but 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.

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



As seen at left, there are three main access roads into the port complex:

1) On the Port of Los Angeles side, the 110 Freeway crosses over the Vincent Thomas Bridge onto Terminal Island.

2) Just north of the port complex, Alameda Street branches off into Henry Ford Avenue and crosses over the Henry Ford Bridge onto Terminal Island.

3) On the Port of Long Beach side, the 710 Freeway crosses over the Harry Bridges Bridge onto Terminal Island.

Any or all of these access roads might be damaged in a terrorist attack or gridlocked by traffic.

Source: ESRI and Analysis by PSAPP

[81] Brian Taylor (Director, UCLA Institute of Transportation Studies), "Re: Traffic Studies," Email to Warren Allen, 5 March 2003.
[82] Based on interviews with the various law enforcement and fire agencies at the port complex.

Consequently, many emergency response personnel will need to drive to the port complex from other locations throughout Los Angeles County. 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 more than 32,000 cargo trucks to-and-from the port each day. Analysts project that the traffic will reach 91,000 trucks by 2020.[83] With freeway congestion in mind, Los Angeles Fire Department Battalion Chief Louis Rupoli, who works within the port complex at Station 49, cited concern that first responders may experience significant delays while trying to get to the port complex after a terrorist attack.[84]

For example, downtown Los Angeles, where both the Los Angeles Police Department and the Los Angeles Fire Department are headquartered, is about 27 miles from the Coast Guard's headquarters at Terminal Island. Therefore the estimated time of arrival for vehicles traveling in mild traffic at 55 miles per hour on the Harbor Freeway between these two locations is about 30 minutes. If a terrorist attack occurred during rush hour or if the general population panicked and flooded the roadways, first responders and reinforcements with vital equipment would be significantly slowed in gaining access to the port. Professor Martin Wachs, the Director of the Institute of Transportation Studies at UC Berkeley and former Transportation Advisor to Mayor Richard Riordan, advises that one can "assume twice or three times the travel time under congested conditions" between downtown and Terminal Island.[85] That is to say, what was a 30-minute trip could take from one to one-and-a-half hours. Like civilian drivers, first responders could do little to expedite this trip.[86]

Local policymakers have already begun to address the Long Beach Freeway's traffic problems, but there are no short-term solutions. In addition to needing more traffic lanes, the 1950's-era infrastructure has outdated interchanges and narrow or non-existent shoulders, all of which could also hinder the movement of emergency responders.[87] State Assemblyman Alan Lowenthal from Long Beach and other officials are mounting a campaign to rebuild the 18-mile southern stretch of the Long Beach Freeway to the port complex.[88] A local stakeholder advisory group estimates that the project could cost as much as $6 billion and take at least a decade to complete.[89]

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[83] Don Jergler, "Freeway Change Debated," *www.presstelegram.com*, 4 April 2003. Available from http://www.presstelegram.com/Stories/0,1413,204~21474~1297180,00.html; Internet; accessed 7 April 2003.
[84] Louis Rupoli (LAFD Battalion Chief), interview by Seth Jacobson, San Pedro, CA, 10 January 2003.
[85] Martin Wachs (Director, UC Berkeley Institute of Transportation Studies), "RE: Los Angeles Port Security," Email to Seth Jacobson, 4 March 2003.
[86] Brian Taylor, Email.
[87] Deborah Schoch, "Designs Offered to Keep Freight Moving," *Los Angeles Times*, 21 March 2003, sec. B.
[88] Deborah Schoch, "Hearings Set on Retooling of Long Beach Freeway," *Los Angeles Times*, 27 March 2003, sec. B.
[89] Ibid.

Problem 2: Inaccessibility of the Port Complex

In addition to freeway congestion, three other possible events could prevent first responders from reaching the port complex: a car accident on the freeway; a terrorist attack on the freeway; and either an attack or an accident on the Vincent Thomas Bridge. The most likely of these events may be a car accident on the freeway. Analysts have called the Long Beach Freeway "the most accident prone freeway in Southern California."[90] Compounding this risk, drivers may be further distracted by a terrorist attack at the port complex, and therefore become even more susceptible to accidents. Additionally, an attack on the port could be staged in conjunction with other attacks on local infrastructure targets, including the freeway system. Finally, terrorists planning an attack on the port complex could target the Vincent Thomas Bridge, which is the primary gateway into the port complex. Any of these scenarios might delay or prevent public safety workers from responding effectively to the event.

Consequently, civilian workers at the port may need to both care for themselves and help others. Recent 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 the true first responders to a disaster event. After the Mexico City earthquake, untrained civilians saved at least 800 people, but at least 100 civilians died while trying to save others.[91] Training is available to teach civilian volunteers to protect themselves while trying to help others. Well-managed civilian teams can therefore work as force multipliers and expand emergency response capabilities.[92] With this idea in mind, Israel has trained approximately 100,000 civilians to aid in response to terrorist events.[93]

PROGRESS TO DATE

At the federal level, the president's new Citizen Corps Program is promoting a voluntary civilian training program for emergency preparedness called Community Emergency Response Team (CERT). The Federal Emergency Management Agency (FEMA) is directing grants to the states for civilian CERT training programs. FEMA's goal is to triple the number of CERT-trained civilians nationwide to 600,000 over the next two years.[94]

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[90] Don Jergler, "Freeway Change Debated."
[91] Federal Emergency Management Agency, "Community Emergency Response Team Overview," *Emergency Management Institute*, 2002. Available from http://training.fema.gov/emiweb/CERT/overview.asp; Internet; accessed 10 February 2003.
[92] Firefighter Jim Harkins (LAFD Disaster Preparedness Unit), interview by Seth Jacobson, Los Angeles, CA, 22 January 2003.
[93] Sheriff Lee Baca (Los Angeles Sheriff's Department), interview by Warren Allen, Monterey Park, CA, 24 February 2003.
[94] Federal Emergency Management Agency, "Citizen Corps" PowerPoint presentation, 2002. (PSAPP mimeograph collection).

The CERT program was first developed by the Los Angeles Fire Department in 1985. The following description is an excerpt from the Los Angeles Fire Department's CERT Course Syllabus:

> The Los Angeles Fire Department's "FREE" CERT program was developed because of the need for a well-trained civilian emergency work force. These teams will assist the government by responding during disaster situations where the number and scope of incidents have overwhelmed the conventional emergency services. The training program provides for community self-sufficiency through the development of multi-functional response teams who will act as an adjunct to the city's emergency services during major disasters. Through this unique program, people from community organizations, business and industry, and city employee groups will become members of CERT, or perform as individual leaders by directing untrained volunteers in the initial phase of an emergency.
>
> The CERT members receive 17 hours (one day a week for seven weeks) of initial training. The seven-week course is followed by continuing education programs, including full day biannual refreshers.
>
> The ability of a business or community to effectively recover from the devastating effects of an earthquake requires the active participation, planning, and cooperation of all levels of the population. The fundamental responsibility for preparedness, however, lies with every individual.
>
> 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.[95]

In addition to the curriculum originally developed by the Los Angeles Fire Department, FEMA has added a new terrorism module to the CERT curriculum, which expands the overall training to 20 hours.

California's Governor Gray Davis has asked the Governor's Office on Service and Volunteerism ("GO SERV") to take the lead role in administering these FEMA funds for developing local Citizen Corps councils and CERT training. In an effort to integrate volunteer preparedness efforts with the state's existing first response organization, GO SERV is implementing this CERT training effort consistent with SEMS. That is to say, GO SERV is distributing the funds to local Operational Areas, such as Los Angeles County. Each Operational Area is allocating the funds according to the decisions made by its multi-jurisdictional county stakeholder group, and consistent with its emergency response plans.[96] Within Los Angeles County Operational Area, the Chief Administrative Office/Office of Emergency Management coordinates this effort.[97]

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[95] Los Angeles Fire Department, *Community Emergency Response Team Program, Course Syllabus*, 2003. (PSAPP mimeograph collection).
[96] Adam Sutkus, phone interview by Seth Jacobson, 16 March 2003.
[97] Sandra Shields (Emergency Manager, Los Angeles County Office of Emergency Management), "RE: Draft Report," Email to Seth Jacobson, 18 March 2003.

Problem 2: Inaccessibility of the Port Complex

The Los Angeles County Fire Department is the lead agency for managing CERT programs throughout the Operational Area. The department chairs the Operational Area's CERT Advisory Committee, which also includes the Sheriff's Department and the Los Angeles Fire Department, and is tasked with developing a coordinated CERT program for the Operational Area.[98] The CERT Advisory Committee is currently developing a 2003 CERT Work Plan that includes the following:

"We don't want to be treated as victims. We want to be treated as partners, who have expertise and capabilities that can be helpful during the first response efforts. We want to be part of the planning, training, vigilance, and response efforts. Our people are in the trenches and know the port as well as anyone."
- President, ILWU Local 26[99]

PMA totally supports [voluntary CERT training for port workers]."
- Vice President of Training, Pacific Maritime Association[100]

1) Needs assessment and program priorities.
2) CERT Standards
3) CERT training materials
4) CERT "Train-the-Trainer" capability
5) Method for gathering CERT statistics and program accomplishments

Los Angeles County Sheriff Lee Baca has articulated a goal of providing CERT training to 100,000 county citizens and has voiced particular concern about the need for "training target groups in high-risk areas," such as workers at the port complex.[101] The International Longshore and Warehouse Union (ILWU), other harbor-based unions, and the Pacific Maritime Association (PMA) agree that port workers should be CERT trained.[102] 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 believe that providing CERT training to port workers would generate substantial gains for supporting their emergency response plans.

✓ ***The Los Angeles County CERT Advisory Committee should provide CERT training to prepare workers at the port complex to respond to an attack.***

Based on universal agreement between first responders, industry, labor, and policymakers, this study recommends that the Los Angeles County CERT Advisory Committee provide CERT training for workers at the port complex.

[98] Sandra Shields, Email.
[99] Luisa Gratz, interview by Seth Jacobson, San Pedro, CA, 25 February 2003.
[100] Bob Dodge (Vice President of Training, Pacific Maritime Association), interview by Seth Jacobson, Long Beach, CA, 5 March 2003.
[101] Sheriff Lee Baca, interview.
[102] Luisa Gratz, interview by Seth Jacobson, 25 February 2003. Bob Dodge, interview.

CRITICAL REMAINING WEAKNESSES

Although emergency responders, industry, and labor are in general agreement that CERT training for workers at the port complex is a good idea, there is no governmental plan to provide this training to the 20,000 unionized workers at the port complex. This study identifies four overarching weaknesses that are hindering the effective, concerted CERT training plan of port workers.

1) There are no established priorities for allocating the scarce CERT training resources throughout Los Angeles County and its municipalities.

2) There are not enough CERT instructors available to participate full-time in an effort to train the port workers.

3) There are not enough local funds available to pay for a concerted CERT training effort at the port complex.

4) There is no first aid or rescue equipment readily available for civilian volunteers at the port complex.

Problem 2: Inaccessibility of the Port Complex

Weakness 1: There are no established priorities for allocating the scarce CERT training resources throughout Los Angeles County and its municipalities

The scarcity of resources for conducting CERT training is compounded by a lack of strategic allocation of CERT classes statewide. There is currently no federal or state governmental guidance for prioritizing which specific high-risk populations should receive training; and no models exist for establishing target percentages that should be trained within each population in order to ensure that an efficient number of individuals are CERT trained.[103] California's GO SERV Citizen Corps program may help to develop this guidance through a multi-stakeholder process now underway, but in the short term, any prioritization processes or target percentages must be determined locally.[104] For example, the Los Angeles Operational Area's CERT Advisory Committee could define these priorities and targets within its 2003 CERT Work Plan.

Meanwhile, CERT is a voluntary program, and agencies simply schedule classes based on local civilian demand. A community organization, such as a church, school, or business, must contact a training agency to schedule a class for interested volunteers. Although the port complex is a high-risk target, its workers have not proactively sought training, and they receive no formalized preferences in the CERT scheduling system. Consequently, port workers must wait for the next available class like other civilians, while proactive volunteers in lower-risk locations are scheduled to receive CERT training first.

For example, in July 2003, the Los Angeles County Fire Department plans to establish pilot CERT programs in the communities of Inglewood, Palos Verdes, Palmdale, West Hollywood, and the unincorporated areas of East Los Angeles.[105] One reason that the county fire department plans to target these five communities is that they are not within the jurisdiction of the Los Angeles Fire Department's CERT training program. In addition, they were selected based on factors such as population density, number of government offices, and earthquake risk.[106] Nonetheless, the Operational Area's resources might be more efficiently allocated by training civilians at the port complex rather than training volunteers in many of these neighborhoods, whose populations may be exposed to comparatively lower risks.

[103] Adam Sutkus, phone interview by Seth Jacboson, 13 March 2003.
[104] Adam Sutkus, phone interview by Seth Jacboson, 16 March 2003.
[105] Sandra Shields, "Fact Sheet: 2003 Citizen Corps and CERT Grant," 18 March 2003. (PSAPP mimeograph collection.)
[106] Chief David Stone (Los Angeles County Fire Department), phone interview by Seth Jacobson, 1 April 2003.

SELECTION CRITERIA

This study uses the following criteria to evaluate alternative solutions for establishing priorities to allocate CERT training resources.

- ✓ Standardized guidance
- ✓ Risk-based assessment
- ✓ Efficiency
- ✓ Facilitates volunteerism

1) *Standardized guidance: All CERT training agencies must utilize the same prioritized list of high-risk locations and populations.*
   Without standardized guidance, agencies may simply continue to allocate scarce training resources to low-risk civilians. Standardizing priorities will ensure that high-risk populations are more likely to receive CERT training than low-risk civilians.

2) *Risk-based assessment: Policy makers must base this standardized guidance on a risk assessment of all populations in the county.*
   CERT training resources should be allocated to high-risk populations. While other factors may also be considered, risk must be the primary variable in any evaluation.

3) *Efficiency: The prioritization process should seek to maximize the efficient use of scarce CERT training resources.*
   This study weighed at least three forms of efficiency: that high-risk people are trained instead of low-risk people; that people who prefer to be trained receive training; and that target percentages for CERT trained civilians within any group allocate training to the minimum number of people who can maximize the benefits for any local population.

4) *Facilitates volunteerism: The prioritization process should not discourage people from seeking CERT training.*
   CERT depends on civilians volunteering to receive training. Any process designed to allocate scarce CERT training resources should foster that volunteerism, and not frustrate those individuals who want to serve their communities as CERT volunteers.

Problem 2: Inaccessibility of the Port Complex

ALTERNATIVES

1) Identify high-risk locations and target them for enrollment, giving them priority for CERT training.

The CERT Advisory Committee could prioritize high-risk locations throughout the county, and set target percentages for training populations within these areas. Workers and citizens living near these locations would receive priority status for CERT training. Training agencies in these high-risk areas would then actively contact local organizations that could recruit civilians for these classes.

Organizations in low-risk locations could still sign up for classes, but if civilians from a higher-risk area wanted training, then these low-risk civilians would need to understand that their classes could be rescheduled. Until their target percentages were trained, high-risk populations would continue to receive priority status. Meanwhile, lower-risk populations could also seek to cultivate basic emergency response skills by both enrolling in the American Red Cross's first aid classes and following suggestions outlined by the Los Angeles County Emergency Operations Center's Emergency Survival Program.[107]

Strengths: This process would allocate limited resources more efficiently.

Drawbacks: This process may discourage interested volunteers who happen to live or work in low-risk locations. If they sign up for classes that are later cancelled, these potential volunteers may become particularly frustrated.

2) Within the existing process, give high-risk individuals priority enrollment.

The CERT Advisory Committee could identify high-risk populations and target percentages. Instead of rescheduling entire low-risk classes, however, individuals from high-risk areas could be permitted to replace low-risk students, beginning with the last low-risk students who joined the class (i.e., low-risk students would be replaced in reverse order of their signing up). Additionally, low-risk volunteers could be contacted and a voluntary exchange could be arranged.

Strengths: While still not optimal for facilitating volunteerism, this system may be less discouraging than Alternative #1 to those potential volunteers in populations that are low-risk. It would prioritize high-risk target areas while still allowing proactive organizations and individuals in low-risk areas to receive training. At least some of the most proactive low-risk members may be able to take the class, instead of being rescheduled.

[107] Joyce Harris (Los Angeles County Office of Emergency Management) phone interview by Seth Jacobson, 24 March 2003.

Drawbacks: This system may discourage high-risk volunteers. By not rescheduling the classes, but instead simply allowing high-risk individuals to take classes scheduled in low-risk locations, high-risk volunteers may be forced to travel inconvenient distances to low-risk areas, in order to receive training.

RECOMMENDATION

✓ ***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.***

Step 1: Prioritization
The CERT Advisory Committee should identify high-risk locations within the Operational Area whose populations should be given priority for CERT training.

In establishing this guidance, the Committee can use both the California Attorney General's High Risk Terrorism Target List and the selection criteria developed by the Los Angeles County Operational Area to allocate funds for the Domestic Preparedness Equipment Program.

Moreover, the CERT Advisory Committee should take the lead to set percentage goals for training adequate numbers within these populations over specific timeframes. For example, in order to achieve an effective ratio of on-duty CERT-trained workers at the port complex, it may not be necessary to train all 20,000-port workers. A more efficient effort might target 10%-30% of port workers for training, which could be achieved within two years.

To further optimize the training of these target percentages, the ILWU, other maritime unions, and PMA should identify and recommend the training of critical staff members in key positions. These CERT graduates could then become team leaders for their respective work-shifts and organizational settings.

Step 2: Outreach
The CERT Advisory Committee should then coordinate with public, private, and non-profit organizations within these high-risk areas to encourage their scheduling classes with local CERT training agencies.

Step 3: Training
Local CERT training agencies should then coordinate their efforts with the CERT Advisory Committee to grant priority for CERT classes to organizations in high-risk areas. These organizations should receive priority until the target percentage of volunteers within each population has completed CERT training. Meanwhile, the CERT

Advisory Committee should also recommend that lower-risk populations cultivate basic emergency response skills by both enrolling in the American Red Cross's first aid classes and following the suggestions outlined by the Los Angeles County Emergency Operations Center's Emergency Survival Program.

Step 4: Evaluation
The CERT Advisory Committee should evaluate progress and update goals semi-annually.

Note: This process would likely place the port workers near the top of the priority list.

Weakness 2: There are not enough CERT instructors available to participate full-time in an effort to train the port workers

Local first response agencies do not currently have adequate staffing to provide CERT training to the 20,000 port workers, let alone 100,000 countywide.

The Los Angeles Fire Department has estimated that four full-time CERT trainers would be needed to train 20,000 port workers in four years. Two trainers teach each class. This dedicated team could train 5,000 workers each year.[108] Currently, the fire department's Disaster Preparedness Unit employs only eight CERT instructors to train all of Los Angeles, and two of them are on paid leave. Although the department has requested additional funds to hire more trainers, public budget constraints are forcing the city to instruct the CERT unit "to do more with less."[109] Across the harbor, the Long Beach Fire Department is also facing budget constraints. The department employs two full-time CERT instructors and, and would like to expand its program, but Long Beach's fiscal condition is forcing the department to evaluate cuts in services, including CERT training.[110] At the county level, the Los Angeles County Fire Department and the Los Angeles Sheriff's Department have received funds to develop CERT training programs, but will not be ready to launch them for at least three months.[111]

That said, Los Angeles Fire Department's CERT classes were originally booked through 2003, but the department has sought to work with our research team and the ILWU to reschedule four classes to teach port workers from March through July.[112] Assuming that the fire department could teach these classes through the end of the year, about 1,000 workers could be trained. While this number is meaningful, it would take twenty years to train all of the workers at that pace. Moreover, in July, half of these classes will be rescheduled for CERT training at the Ontario Airport, and there is no guarantee that the other two classes will be committed to the port for the rest of the year. In the meantime, the fire department has indicated that it will continue to explore its schedule to identify available class times for training port workers.[113]

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[108] Captain Don Lee (LAFD Disaster Preparedness Unit), "CERT Training," Email to Seth Jacobson, 26 February 2003.
[109] Firefighter Stacy Gerlich (LAFD Disaster Preparedness Unit), interview by Seth Jacobson, Los Angeles, CA, 5 March 2003.
[110] Captain Scott Clegg (Long Beach Fire Department), phone interview by Seth Jacobson, 11 March 2003.
[111] Investigator Mike Brown (Los Angeles County Fire Department), phone interview by Seth Jacobson, 3 March 2003. Natalie Macias (Los Angeles Sheriff's Department), phone interview by Seth Jacobson), 24 February 2003.
[112] Firefighter Stacy Gerlich, interview by Seth Jacobson, Los Angeles, CA, 4 March 2003.
[113] Ibid.

Problem 2: Inaccessibility of the Port Complex

SELECTION CRITERIA

This study uses the following criteria to evaluate alternative solutions for providing CERT training to port workers.

- ✓ Speed
- ✓ Cost
- ✓ Instructors' expertise
- ✓ Strain on resources

1) *Speed: A training program for port workers must be launched as soon as possible.*
   Given the high probability for a terrorist attack at the port complex, port workers should begin CERT training as soon as possible. Moreover, the program should seek to train the target percentage of workers as quickly as possible.

2) *Cost: Any training program must work within constraints provided by available funds.*
   Although the benefits of a CERT training program for port workers justifies potentially high costs, available funds are limited.

3) *Instructors' expertise: Teachers must have a thorough understanding of CERT topics.*
   The port complex is an unusual location that presents extreme environmental hazards for any emergency response situation, including docks surrounded by water; toxic and flammable liquids; labyrinthine corridors of steel shipping containers; hundreds of warehouses containing unknown products; heavy machinery; and shifting coastal winds. It is essential that CERT trainers for this port program are first response experts, so that they can apply their expertise to provide port workers effective CERT training that has been tailored for these unusually treacherous conditions.

4) *Resource depletion: The solution should seek to minimize depletion of a single agency's resources.*
   Given that resources are scarce for all first response agencies, the solution should seek not to burden one agency's existing resources to provide all of the CERT training. Depletion of one agency's resources may create other public safety problems within that agency's jurisdiction.

ALTERNATIVES

1) Hire four full-time CERT instructors to train port workers. Annual cost to train 10% - 30%: $255,000 - $265,000[114]

Los Angeles Fire Department could seek additional funds to hire and train four additional CERT instructors who would be dedicated full-time to training workers at the port complex.

Strengths: This program would be able to train 5000 workers each year. Moreover, it utilizes firefighters' expertise without placing substantial burdens on the Los Angeles Fire Department's existing resources.

Drawbacks: This program may not be able to launch soon enough. From the moment the Los Angeles Fire Department receives funding for these firefighters, it would take at least six months to both hire and train them, until they could begin teaching.[115] Realistically, the launch of this alternative could be delayed until 2004.

2) Create an interagency CERT Joint Training Team for the port complex. Annual cost to train 10% - 30%: $315,000 - $325,000[116]

The Los Angeles and Long Beach Fire Departments, Los Angeles County Fire Department, and Los Angeles Sheriff's Department could each contribute one full-time CERT trainer from their existing staffs. In addition, the American Red Cross (Red Cross) could provide an instructor to teach CERT modules that do not require instruction from professional first responders. These modules could include Disaster Preparedness; Disaster Medical Operations, which teaches concepts such as first aid; and Disaster Psychology and Team Organization. This multi-agency, cooperative training structure would be similar to that of an existing, local law enforcement training organization, the South Bay Regional Training Center.

Strengths: By using existing CERT trainers from various agencies, the Joint Training Team could begin training port workers this year. In addition, using the Red Cross to teach some of the modules may increase the number of classes that can be taught simultaneously, and therefore increase the speed with which the target percentage of workers can be trained. Finally, this program achieves these gains by leveraging the expertise of both the professional first responders and the Red Cross instructors.

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[114] Estimates by PSAPP Team based on email correspondence with Captain Don Lee, Firefighter Jim Harkins, and Firefighter Stacy Gerlich. See Appendix C for additional details.
[115] Firefighter Stacy Gerlich, interview by Seth Jacobson, Los Angeles, CA, 4 March 2003.
[116] Estimates by PSAPP Team based on email correspondence with Captain Don Lee, Firefighter Jim Harkins, and Firefighter Stacy Gerlich. See Appendix C for additional details.

Drawbacks: This alternative takes one CERT trainer from each agency's resources; and each agency would also need to commit time for interagency coordination.

3) Train the Port workers to become CERT trainers ("Train-the-Trainers"). Annual cost to train 10% - 30%: $255,000 - $265,000[117]

A private consulting firm could train ten port workers as CERT trainers. These newly trained workers could then provide CERT instruction full-time (three classes each day, five days each week) to the other workers at the port. Disaster Consultants, Inc., based in Los Angeles, is available to conduct this training.[118] Other companies are available regionally to do this work as well.[119]

Strengths: At a cost similar to the other alternatives, a private consulting firm could begin training the ten trainers almost immediately. The trained workers could then train their co-workers as quickly as, if not faster than, the other alternatives.

Drawbacks: The new worker-trainers would have no first response expertise compared to professional first responders, which would limit the depth of the training that they can provide. The ILWU and other unions have said that this lack of expertise would concern them.[120]

[117] Estimates by PSAPP Team based on email correspondence with Captain Don Lee, Firefighter Jim Harkins, Firefighter Stacy Gerlich, and Caryn Friedenthal. See Appendix C for additional details.
[118] Caryn Friedenthal (Disaster Consultants, Inc.), "community emergency response team program," Email to Seth Jacobson, 26 February 2003.
[119] Adam Sutkus, phone interview by Seth Jacobson, 16 March 2003.
[120] Luisa Gratz, interview by Seth Jacobson, San Pedro, CA, 25 February 2003.

RECOMMENDATION

✓ ***The CERT Advisory Committee should coordinate the creation of an interagency CERT Joint Training Team for the port complex.***

Within the SEMS framework for the local Operational Area, the CERT Advisory Committee should coordinate the Los Angeles County Fire Department, the Los Angeles Sheriff's Department, the Los Angeles Fire Department, the Long Beach Fire Department and the American Red Cross to develop Memorandums of Understanding in which each agency agrees to contribute one existing, full-time CERT trainer to a Joint Training Team to train the port workers.

If the Joint Training Team were to set a target to train 30% of the port workers, they could achieve this goal in less than 1.5 years at an estimated cost of about $325,000 for Year 1 and $162,500 for Year 2. Realistically, however, if this team were to start training workers this year, it would launch its efforts no earlier than June. Consequently, the estimated costs would be reversed; *$162,500 for 2003 and $325,000 for 2004, and the team could achieve its goal by the end of 2004.*

The CERT Advisory Committee should contact the following agency representatives to coordinate this effort:

Los Angeles County Fire Department:	Chief David Stone, (323) 881-2403
Los Angeles Sheriff's Department:	Natalie Macias, (323) 526-5015
Los Angeles Fire Department:	Captain Don Lee, (818) 756-9674
Long Beach Fire Department:	Captain Scott Clegg, (562) 570-2577
Red Cross, Los Angeles Chapter:	Sharon Counselman-Keith, (213) 739-5214

Weakness 3: There are not enough local funds available to pay for a concerted CERT training effort at the port complex

Local, county, and state budgets are already stretched thin. Therefore, local policymakers will need to secure outside funding to support these CERT training efforts.

SELECTION CRITERIA

This study uses the following criteria to evaluate alternative funding sources.

- ✓ Speed
- ✓ Level of Interest
- ✓ Public Perception
- ✓ Multiple Opportunities
- ✓ Expectations
- ✓ Discretion

1) *Speed: The CERT program must be able to use the funds quickly.*
   Securing funds is the major gating issue for launching the program. The program cannot hire trainers without this funding.

2) *Level of Interest: The funding source should already have expressed a preference for the CERT program.*
   Given pervasive resource constraints due to the weak economy, the source of funding should likely have a predisposition for providing the funds for CERT training. If they have not expressed a prior interest in CERT, then it may be challenging to secure funds from them.

3) *Public Perception: The source cannot present a risk of public impropriety.*
   A governmental program for public safety should not secure funds from sources that may evoke public objection. Widespread public objections may hinder the program's ability to both use the funds and function effectively.

4) *Multiple Opportunities: The source offers many opportunities to seek funds.*
   A source of funding may present a number of different opportunities to seek money. These opportunities may include different grant programs, various qualifying categories, or exposure to a large number of potential donors.

5) *Expectations: The source's expectations should be easily managed.*
   Any funding source will have expectations about both the use of its funds and the relationship that it would forge with the program. If these expectations are well defined in advance, then they may be more easily managed. If the source's expectations are poorly articulated in advance, then the program may have difficulty both administering the funds and managing its relationship with the source.

6) *Discretion: The program should seek flexibility in its ability to decide how to use funds.*
   Given that this CERT training program for port workers is unprecedented, it may be helpful for the program managers to have flexibility on how they spend their budget to meet the program's goals. Otherwise, the program may be forced to spend on certain budget line items that it does not need, while other unexpected needs remain unfunded, a situation that could cause the program to under-perform.

ALTERNATIVES

1) Seek Federal funds through Citizen Corps and other federal grants.

The federal government is actively funding local CERT training through FEMA grants to the states for Citizen Corps programs. The states must deliver 75% of this funding to the local level. In 2002, California received $1.66 million of the $21 million in federal grants that were distributed for developing Citizen Corps councils and CERT training programs.[121] Of that amount, Los Angeles County received $261,588.[122] This local allocation was determined by a base-plus-population formula.[123] From the county's grant, $241,563 is going to CERT training programs and $20,025 is funding the development of Citizen Corps councils.[124]

In the 2003 federal budget, $20 million was earmarked for CERT training.[125] Although FEMA will articulate the exact amount by June, California expects to receive between $1.3 million and $1.5 million, assuming distribution is calculated similarly to 2002. Although it is too early to say whether other factors may be considered for the distribution of these funds, it is possible that the state will utilize a formula similar to the 2002 calculation, which would give Los Angeles County about $250,000.[126] These Citizen Corps funds could then be used both to expand existing programs and to train-the-trainers.[127] It is worth noting as well that, for 2004, the president has requested $181 million for Citizen Corps. If Congress approves this request, then California may receive nearly a 10-fold increase in its CERT and Citizen Corps development funding.[128]

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[121] Adam Sutkus, phone interview by Seth Jacobson, 11 March 2003.
[122] Memo from David Janssen (Chief Administrative Officer, Los Angeles County) to Los Angeles County Board of Supervisors, 4 February 2003. (PSAPP mimeograph collection.)
[123] Adam Sutkus, phone interview by Seth Jacobson, 16 March 2003.
[124] Sandra Shields, "Fact Sheet: 2002 Citizen Corps and CERT Grant," 18 March 2003. (PSAPP mimeograph collection.)
[125] Consolidated Appropriations Resolution, 2003 [H.J.RES.2.ENR]
[126] Adam Sutkus, phone interview by Seth Jacobson, 13 March 2003.
[127] Memorandum from Chuck Supple (Executive Director, Governor's Office on Service and Volunteerism), "Status Report: Citizen Corps Implementation," 15 October 2002. (PSAPP mimeograph collection.)
[128] Adam Sutkus, phone interview by Seth Jacobson, 11 March 2003. In March, the Department of Homeland Security released $566 million for improving first response capabilities nationwide. California has been allocated the largest piece of these funds, $45 million. These funds are not available for CERT training, but are part of a federal Domestic Preparedness Equipment Program to provide better equipment

Strengths: It may be easy to seek these funds. The CERT training program for port workers appear to fit within the guidance established for the Citizen Corps program funds.[129]

Drawbacks: Local policymakers may need to wait too long to obtain the funds. California may receive its portion of the $20 million for CERT training as early as April or as late as September.[130]

2) Seek Private Sector donations for CERT

CERT is already structured to receive donations, and the Los Angeles Fire Department unit has received offers from potential corporate donors.[131]

Strengths: There are many possible corporate donors. Further, the program may have greater discretion to decide how it uses these donations, rather than working within the constraints of public funding guidance. In this way, it may be able to develop more creative solutions for the program's needs.

Drawbacks: It may be a hard sell. There are industry organizations, such as the Homeland Security Advisory Council (HSAC), seeking to support America's homeland security efforts, but companies within these organizations may not be interested to donate funds for CERT training for port workers. They may instead want to fund programs that are more directly related to their products, brands and consumers.[132] In addition, private sector donations risk public relations problems. For example, one potential corporate sponsor for LAFD's CERT program was rejected because the company was a purveyor of alcoholic beverages.[133] Finally, private donors may have unclear expectations, and so managing them may be challenging compared with following the guidance defined by the public sector.

to first responders, and to train them to use this equipment. Steve Sellers (California Office of Emergency Services), phone interview with Seth Jacobson, 17 March 2003.

[129] Adam Sutkus, phone interview by Seth Jacobson, 16 March 2003.

[130] David Grannis (Senior Policy Advisor to United States Congresswoman Jane Harmon), "RE: CERT Training for Port Workers," Email to Seth Jacobson, 10 March 2003.

[131] Firefighter Jim Harkins, interview by Seth Jacobson, Los Angeles, CA, 22 January 2003.

[132] Don Sheetz (Co-Chair, Homeland Security Advisory Council, Los Angeles Region), phone interview by Warren Allen, 13 March 2003.

[133] Firefighter Jim Harkins, interview.

RECOMMENDATION

- ✓ ***The CERT Advisory Committee should pursue both federal grants and private sector donations as funding alternatives for the interagency CERT Joint Training Team.***

Private funding and federal grant requests are not mutually exclusive avenues. Local policymakers should pursue both options, but should do so in a coordinated manner. Private donations can both supplement Citizen Corps grants and support county and statewide emergency preparedness efforts that are consistent with SEMS.

In the public sector, the CERT Advisory Committee should coordinate funding requests for the CERT Joint Training Team through Sandra Shields at the Los Angeles County Office of Emergency Management: 323-980-2254. At the state level, the CERT Advisory Committee can also coordinate with Adam Sutkus at the Governor's GO SERV office: 916-324-3056.

In the private sector, the CERT Advisory Committee should seek corporate contributions through the Homeland Security Advisory Council (HSAC). The CERT Advisory Committee should coordinate with Mark Nathanson, HSAC Co-Chairman, Los Angeles Region: 310-474-6512.

Weakness 4: There is no first aid or rescue materiel readily available for civilian volunteers at the port complex

Emergency responders and CERT volunteers would need specialized equipment to respond effectively to a terrorist incident or other disaster at the port complex. The federal Office of Domestic Preparedness has taken steps to store stockpiles of emergency response equipment called "Prepositioned Equipment Program Pods" ("PEP Pods") in strategic locations around the country. Each PEP Pod contains enough detection, decontamination, personal protective equipment and other materiel to support 150 local emergency service workers during a weapon of mass destruction response. PEP Pods consist of two semi-trailer truckloads of equipment and are distributed throughout the country in order to provide a response time of less than 24 hours to any location. If necessary, planes or helicopters would transport the equipment from storage locations to an incident. PEP Pods are not yet operational. Further, county officials do not know when these stockpiles will be operational, and first responders have not received training in how they will be used.[134]

There are no other significant materiel stockpiles at the port complex. The Los Angeles Police Department has requested $11.3 million dollars in federal assistance for first responder protection equipment in their latest budget request.[135] Neither the Los Angeles Police Department nor the FBI were able to identify specific items in their budget requests that were going to be dedicated to use at the port complex, but they indicated that they would like to store 2,225 "Class B" gas masks and chemical protection suits in the harbor area. Each suit costs approximately $225.[136] Absent specific funding for these items and other first response equipment, these agencies cannot dedicate materiel resources to the port complex because they have broader geographical areas of responsibility.[137] The Port Police do not have adequate fiscal resources to stockpile enough equipment to support a multi-agency disaster level response.

Neither the PEP Pods nor the public safety agency stockpiles are designed for civilian use. As mentioned, it is possible that port workers would be extremely involved in first response efforts. In that case, it would be helpful for each worker to have search-and-rescue tools including a first aid kit, leather gloves, goggles, a flashlight, a helmet, a simple respirator or mask, and water. In addition to any of these items that may be provided as job-related equipment, CERT-trained port workers should have access to these tools, in the event of an emergency.

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[134] Senior law enforcement official, confidential phone interview by Adam Clampitt, Los Angeles, CA, 20 February 2003.
[135] Senior law enforcement official, confidential interview by Warren Allen, Los Angeles, CA, 20 February 2003.
[136] Ibid.
[137] Senior law enforcement official, confidential interview by Warren Allen, Los Angeles, CA, 21 February 2003.

SELECTION CRITERIA

This study uses the following criteria to evaluate alternatives for deploying materiel.

- ✓ Accessibility
- ✓ Cost

1) *Accessibility: in the event of an attack, the materiel must be readily available.* Port workers must be able to access materiel without waiting for first responders to airlift it to them. By then, many casualties could occur that may have been avoided.

2) *Cost: deploying the necessary materiel must not be cost-prohibitive.* As with all other expenses itemized in this study, the availability of funds provides constraints for both purchasing and deploying the first aid and rescue materiel.

ALTERNATIVES

1) Stockpile emergency response equipment throughout the port complex. Cost: $350,000[138]

Stockpiling materiel in warehouses at each port terminal would provide support for the estimated 20,000 civilian workers at the port each day. If there is an attack, workers could utilize these caches of civilian first aid and rescue materiel.

Strengths: Strategically distributing these stockpiles to each port terminal potentially makes the materiel more accessible to workers than if they needed to wait for first response agencies to distribute these first aid and rescue tools.

Drawbacks: First responders indicated that stockpiling these items in locations throughout the port complex might not be effective because, regardless of how close these stockpiles may be to an incident, the workers still may not be able to access them during an emergency.[139]

2) Provide each CERT-trained port worker with a small equipment kit. Cost: $105,000[140]

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.[141] These kits would

[138] Estimates by PSAPP Team based on email correspondence with Firefighter Jim Harkins, Caryn Friedenthal, and senior port complex officials. See Appendix C for additional details.
[139] Sheriff Lee Baca, interview by Warren Allen, Monterey Park, CA, 24 February 2003.
[140] Estimates by PSAPP Team based on email correspondence with Firefighter Jim Harkins, Caryn Friedenthal. See Appendix C for additional details.
[141] Los Angeles Fire Department, Los Angeles County Fire Department, Los Angeles Sheriff's Department, and ILWU all expressed general agreement with this idea.

include the equipment identified above, but would be individually packaged in small duffle bags or backpacks that each worker could bring to the job site.

Strengths: If CERT-trained port workers each have basic first aid and rescue equipment on hand, they will have easy access during a terrorist event.

Drawbacks: Workers may lose their kits or forget to bring them to work. In that case, accessibility would be impaired and costs would increase when workers replaced their lost kits.

RECOMMENDATION

✓ ***The interagency CERT Joint Training Team should provide each CERT-trained port worker with a small equipment kit.***

As a CERT graduate, each port worker should be presented a tool kit containing first aid provisions, leather gloves, goggles, a flashlight, a helmet, a simple respirator or mask, and water, all of which should fit into a small backpack.

Workers should then be asked to bring their kits to their daily workstations. If they lose their kit, they should be able to purchase another one at cost.

Summary of Recommendations

1) ***The Los Angeles County CERT Advisory Committee should provide CERT training to prepare workers at the port complex to respond to an attack.***

2) ***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.***

3) ***The CERT Advisory Committee should coordinate the creation of an interagency CERT Joint Training Team for the port complex.***

4) ***The CERT Advisory Committee should pursue both federal grants and private sector donations as funding alternatives for the interagency CERT Joint Training Team.***

5) ***The interagency CERT Joint Training Team should provide each CERT-trained port worker a small equipment kit.***

Problem 3: Incompatible Communications Systems

"The Pentagon incident [on September 11, 2001] demonstrates in a very public way how critically important communications capabilities are for public safety agencies. Imagine the challenge of 50 different local, state, and federal public safety agencies responding at the Pentagon – 900 different radio users, operating on multiple radio systems, and attempting to communicate with one another."

–Public Safety Wireless Network (PSWN) Program Manager[142]

Interoperable communications technology has been one of the most publicized suggestions for improving emergency response since the September 11, 2001 terrorist attacks. Studies have suggested that many deaths inside the World Trade Center could 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.[143] A similar recipe for disaster exists at the port complex because the various public safety agencies maintain different communications technologies and do not currently have a plan in place to facilitate communication between first responders.

BACKGROUND

Interoperable radio communications require three areas of compatibility. First, agencies must operate in the same frequency spectrum or range of frequencies. Commonly used frequency bands include UHF, VHF, and HF. Second, radios must use the same signal type, either analog or digital. Third, even if the spectrum and signal type match, radios must share a common channel. As shown in Table 2, the various agencies involved with emergency response at the port complex use several different types of communications technologies. Agencies that operate in different frequency spectrums

Table 2: Emergency Response Agencies Use Different Communications Technologies

Frequency Spectrum	Agency
800 MHz (Digital)	Los Angeles Police Department
	Los Angeles Port Police
UHF (Analog)	Los Angeles Sheriff's Department
	Los Angeles County Fire Department
	Los Angeles Fire Department
	Long Beach Police Department
	Long Beach Port Security
	Long Beach Fire Department
VHF (Analog)	US Coast Guard
HF (Analog)	California Highway Patrol

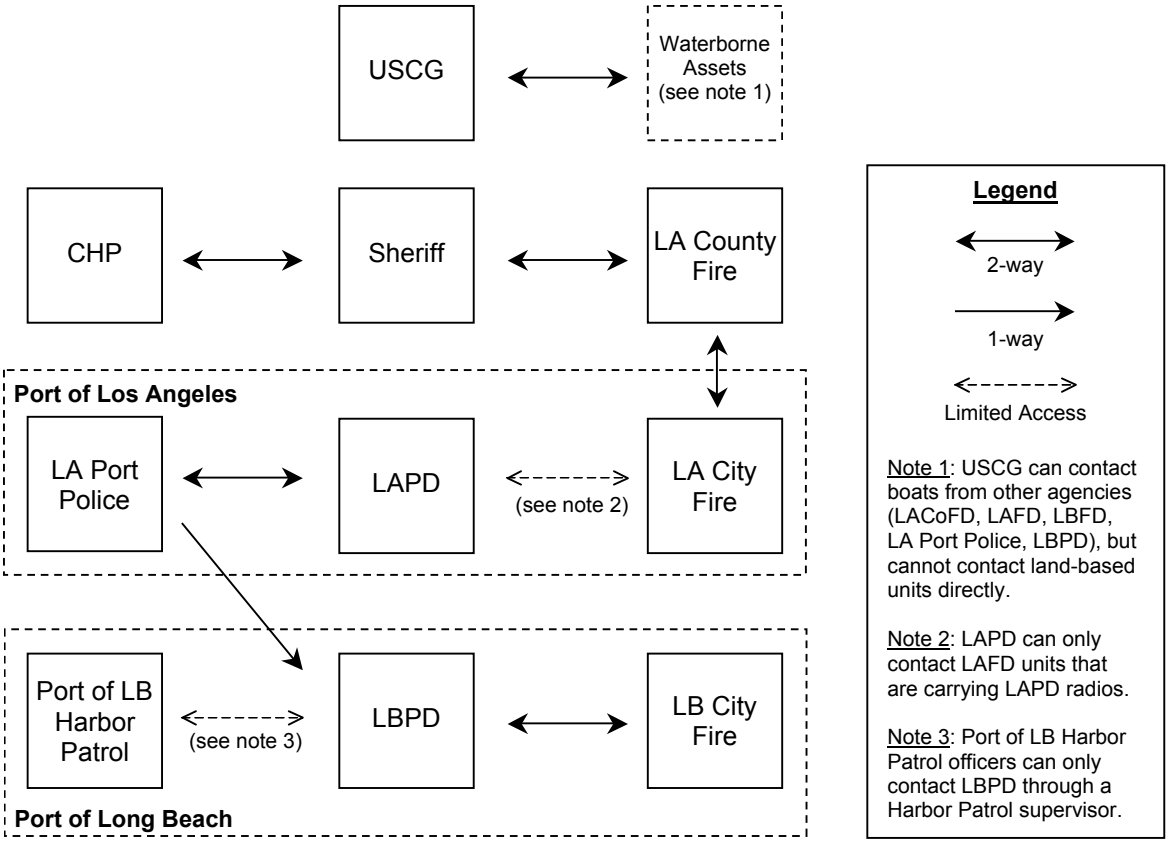
Source: Analysis by PSAPP

[142] Public Safety Wireless Network, "New Report Details Public Safety Radio Communications at Pentagon on Sept. 11th," *PR Newswire*, 1 February 2002.

[143] "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." National Task Force on Interoperability, *Why Can't We Talk? Working Together to Bridge the Communications Gap to Save Lives*, February 2003, 4.

cannot communicate with each other. Similarly, agencies with digital radios generally cannot talk to agencies with analog radios. Although the majority of agencies still utilize analog UHF radios, communications challenges remain because most of these agencies do not share common channels.

Figure 3: Many Agencies Responsible for Port Security Cannot Communicate With Each Other



Communications Gaps:

- Coast Guard, which has taken the lead in developing response plans for the port complex, has no direct radio communications with the land-based assets of any other emergency responders.
- Los Angeles County Sheriff has no direct radio communications with any of the port agencies.
- Police responsible for security at the Port of Los Angeles do not have 2-way communications with their Long Beach counterparts.
- Firefighters at the Port of Los Angeles do not have any communications with their Long Beach counterparts.
- Even within Los Angeles, police and fire departments cannot communicate directly with each other unless the firefighters are carrying a police radio.
- California Highway Patrol, which could provide crucial information about road accessibility to the port complex in an attack, has no direct radio communications with any of the port agencies.

Source: Analysis by PSAPP

Problem 3: Incompatible Communications Systems

PROGRESS TO DATE

As depicted in Figure 3, some emergency response agencies can communicate with each other in a coordinated response to an attack at the port complex. For example, the Los Angeles Port Police can communicate directly with the Los Angeles Police Department's Harbor Division and the Long Beach Police Department can communicate directly with the Long Beach Fire Department. Additionally, under the Standardized Emergency Management System (SEMS), agency decision makers will co-locate at command posts during incidents and can broadly relay information to their personnel. As Los Angeles City Councilman Jack Weiss notes, however, this system "does not make it possible for responders from different agencies to communicate with one another directly or monitor each other's radio traffic."[145]

> **"In an era where technology can bring news, current events, and entertainment to the farthest reaches of the world, many law enforcement officers, firefighters, and emergency medical service personnel working in the same jurisdiction cannot communicate with one another."**
>
> **- National Task Force on Interoperability[144]**

Law enforcement agencies can also communicate on the California Law Enforcement Mutual Aid Response System (CLEMARS) frequency, operated by the California Highway Patrol (CHP), but any large-scale incident involving multiple agencies would likely overwhelm the frequency.[146] CLEMARS is primarily useful when a police unit is out of its own agency's primary radio range and needs to communicate with the CHP or other local police departments.

CRITICAL REMAINING WEAKNESS

Emergency response agencies at the port complex still lack interoperable communications capability.

Weakness: Agencies lack interoperable communications capability.

Figure 3 also highlights six critical communications gaps that result from communications incompatibilities:

1) The Coast Guard, which has taken the lead in developing response plans for the port complex, operates on VHF-band radios and can only communicate with waterborne assets from other agencies, such as the Los Angeles County Lifeguards and the Los Angeles Fire Department. They do not have direct radio communications with any of the other emergency response agencies' land-based assets.
2) The Los Angeles Sheriff's Department has no direct radio communications with any of the agencies at the port complex.

[144] National Task Force on Interoperability, *Why Can't We Talk?* 2.
[145] Jack Weiss, *Preparing Los Angeles for Terrorism*, 7.
[146] Senior law enforcement official, confidential interview by Warren Allen, Los Angeles, CA, 21 February 2003.

3) The Los Angeles Port Police do not have direct radio communications with the Port of Long Beach Harbor Patrol. In order to relay information from the Los Angeles side to the Long Beach side, the Port Police must initiate contact with the Long Beach Police Department on one of four channels; the Long Beach Police must then contact a Long Beach Harbor Patrol supervisor who can relay the transmission to the Long Beach Harbor Patrol officers. Neither the Port of Long Beach Harbor Patrol Officers nor the Long Beach Police Department can initiate communications with the Los Angeles Port Police.[147]
4) The Los Angeles Fire Department, the primary fire suppression response agency at the Port of Los Angeles, does not have communications with the Long Beach Fire Department, the primary fire suppression response agency at the Port of Long Beach.
5) The Los Angeles Police Department can only communicate with Los Angeles Fire Department units that are carrying police radios. Approximately 500 such radios are distributed citywide, but most firefighters cannot contact police officers directly.[148]
6) The California Highway Patrol, which is responsible for the security of the Vincent Thomas Bridge and could provide crucial information about road accessibility, does not have direct radio communications with any port agencies.

SELECTION CRITERIA

There are additional considerations for port-specific interoperability alternatives beyond the criteria that typically guide communication technology acquisitions. Specifically, the following six criteria should be used when evaluating port-specific interoperable communications options:

- ✓ Connectivity
- ✓ Control over interoperability
- ✓ Accessibility
- ✓ Vulnerability of infrastructure
- ✓ Cost
- ✓ Technological limitations

1) *Connectivity: Solutions should connect all relevant agencies.*
Given the importance of the port complex and the number of agencies that would respond in the event of a major terrorist incident, it is important that solutions connect all relevant agencies. Technologies that cannot connect every agency are of limited use, because they may produce the same failures as the fragmented communications systems used at the World Trade Center.

2) *Control over interoperability: More interoperability is not always better.*
Although the ability to communicate between agencies is of critical importance, solutions must be approached with a degree of caution and awareness toward maintaining clear lines of communication both up and down, as well as across, the chain of command for each agency. In general, agencies need to maintain operational command and control of their own field assets; therefore, a field asset will generally

[147] Senior law enforcement official, confidential interview by Warren Allen, Long Beach, CA, 10 January 2003.
[148] Jack Weiss, *Preparing Los Angeles for Terrorism*, 7.

receive instructions from its own agency's command and control system. 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 case 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.[149]

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.[150] If the port agencies' primary communications channels were all patched onto a single frequency, a similar failure may occur, resulting in response delays or unnecessary loss of life.

3) *Accessibility: Solutions must be readily accessible during an emergency at the port complex.*
The purpose of having interoperable communications capabilities is for first responders to be able to communicate while responding to a major emergency. Solutions that require excessive time to transport or configure will be of limited use.

4) *Vulnerability of infrastructure: Solutions cannot not rely on a fragile infrastructure.*
Systems that rely on a fragile infrastructure are inherently vulnerable. The communications infrastructure may sustain damage during a terrorist attack, or might suffer a technical failure. Centralized common systems require more redundancy because they are vulnerable, and breakdown could have disastrous consequences.

5) *Cost: Higher priced solutions do not necessarily buy better results.*
Communications solutions range in price from $50 cell phones to satellite systems that cost hundreds of millions of dollars. High-end solutions do not guarantee effective results and may not be the best choice for the port complex's needs. Additionally, there is an enormous gap between local homeland security needs and the availability of federal money to fund those needs. Given this challenge, cost effectiveness is critical.

6) *Technological limitations: Consideration must be given to the possible technological limitations of solutions.*
Although a thorough technical analysis of each alternative is beyond the scope of this study, we seek to identify possible technological pitfalls that should be considered when evaluating solutions.

[149] Commander George Cummings, USCG, interview.
[150] McKinsey & Company, *Improving FDNY's Preparedness*, (New York: McKinsey, 2002), 8.

Regardless of what technological solution first responders select, agencies at the port complex must establish protocols for its use in advance. 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."[151] Without standardized procedures, interoperability may overwhelm communication channels and produce more harm than good.

ALTERNATIVES

There are a number of possible solutions to the problem of incompatible communications systems. On a broad level, these fall into two categories: solutions that involve creating a new radio system from the ground up and solutions that involve "patching" existing communications technologies together.[152] This study identified five alternatives for interoperable communications, outlined in Table 3 and detailed below.

Table 3: Interoperable Communications Alternatives

Solution	Cost	Patches	Strengths	Weaknesses
Interagency Radios	$4,800 per radio	N/A	✓ Maintains chain of command	✓ Cost-prohibitive to implement for large number of users ✓ Requires responders to carry two radios
ACU-1000	$100,000 per unit	6-7	✓ Onsite (ready access) ✓ Could be pre-configured ✓ Can cover all agencies ✓ Relatively low cost	✓ Limited number of patches
Raytheon "First Responder"	$250,000 - $300,000 per unit	10	✓ Pre-packaged solution ✓ Could be used at other locations	✓ Transport and configuration time will result in delays unless stored at the port complex ✓ Has not been tested
Expansion of Countywide Patch	$80 million	3 (currently) 6 (planned)	✓ Expansion of a currently existing system ✓ Planned coverage would included all agencies ✓ Countywide solution	✓ Limited number of patches for countywide use ✓ Dependent on a vulnerable infrastructure ✓ Handheld radios at the port may be too low-power to use
Countywide Interoperable System	Over $100 million	N/A	✓ Full interoperability by all participating agencies ✓ Countywide solution	✓ Cost-prohibitive ✓ Requires expanded infrastructure and may not be ideal for Los Angeles County ✓ Technological problems ✓ Federal and state agencies may not have access

Source: Analysis by PSAPP

[151] National Task Force on Interoperability, *Why Can't We Talk?* 18.
[152] A patch may be thought of as a link that connects two previously incompatible communications systems.

Problem 3: Incompatible Communications Systems

1) Purchase additional radios specifically for interagency use. Cost: $4,800 per unit ($240,000 for 50 radios)

In 2000, the UCLA division of the University of California Police Department (UCPD) established interoperable communications by purchasing Motorola XTS 3000 radios and programming them with other law enforcement agencies' frequencies. The cost per unit (i.e., one handheld radio) with software upgrades and supporting hardware was approximately $4,800. The UCLA Police Department chose this model because it allows officers to access other agencies' primary, secondary, and specialized frequencies. The UCLA Police Department purchased eighteen of these radios for approximately $86,000. As a result, patrol officers can communicate on almost every emergency service frequency in Los Angeles County.

Strengths: Supervisors and commanders from the various emergency response agencies would be able to communicate with each other using the Motorola radios and still communicate with their own agencies via their primary radio. This control over interoperability would maintain vertical control within the chain of command while still allowing interagency coordination.

Drawbacks: The UCLA system becomes cost-prohibitive beyond a certain number of handsets. For $240,000, agencies could purchase and program only 50 Motorola XTS 3000 handheld radios. Although these radios provide more frequencies, the number of radio units available inherently limits the number of users. Connectivity depends on whether the first responders actually have the radio or not. Additionally, this alternative requires responders to carry two radios (their agency's primary radio and the interoperable device).

2) JPS Communications ACU-1000 Intelligent Interconnect System. Cost: $100,000 per unit[153]

The ACU-1000 Intelligent Interconnect System is a commercially available solution for establishing site-specific interoperability. The rack-mounted device can be configured to patch the audio feeds from up to twelve communications devices, including analog or digital radios, cellular or landline phones, and internet feeds. The ACU-1000 is well tested, and is currently in use by public safety agencies nationwide, including the Alexandria Police Department, Maryland State Police, and Chicago Department of Emergency Communications. It can be operated manually at the console or remotely via an internet or radio connection.

[153] Research for this study revealed a wide range of prices for the ACU-1000, ranging from $15,000 to $100,000. Basset Sales, the Southern California sales representative for JPS Communications, quoted a price of $26,234 for a complete system, not including the radios (up to 12) that must be attached. The $100,000 figure is based on estimates by local law enforcement agencies for a fully configured system.

Strengths: Dedicating an ACU-1000 to the port complex would create a permanent communications infrastructure for interagency coordination. First responders would not have to wait for a mobile communication system to arrive from offsite and it could be pre-configured with the radio frequencies for all responding agencies. This would ensure rapid access and broad connectivity for all agencies. Additionally, this is a relatively low cost solution.

Drawbacks: The ACU-1000 is limited to creating six patches. Adding a second unit doubles the number of available inputs to 24, but only increases the number of patches to seven. There may be technical challenges resulting from interference between patched frequencies.

3) Raytheon "First Responder" Command and Communication Vehicle. Cost: $250,000 - $300,000 per unit

The Raytheon "First Responder" is a mobile command and control system, essentially made up of two ACU-1000s mounted in a sport utility vehicle. Like the ACU-1000, it can be configured to patch almost any audio feed, including analog or digital radio channels, cellular or landline phone signals, and internet feeds, but must be near the scene of an incident to be effective. The Los Angeles Police Department and Los Angeles Sheriff's Department are currently contracting with Raytheon to purchase two mobile systems for approximately $550,000 and plan on transporting them to incidents that require multi-agency response.[154] They plan on expanding available coverage by purchasing three to five additional units, for a total cost of $1.2 million to $2.1 million.

Strengths: This alternative provides a mobile interoperable communications solution that could be used at any multi-agency event. The Los Angeles County Sheriff's Department and the Los Angeles Police Department are already moving toward this solution.

Drawbacks: The Raytheon system has three critical problems. First, it has not been tested in Los Angeles County or under emergency conditions. Second, due to the port's geographic location and the high probability that a terrorist incident would wreak havoc on freeway traffic, there could be considerable delays in getting one of the Raytheon trucks to the port. As a result, there would be no communications interoperability at the time it is needed most, during the critical minutes after an attack when responders are first arriving on the scene and trying to coordinate their efforts. Third, since, "The First Responder" would be arriving from offsite, the system would need to be configured with the correct frequencies upon arrival, causing additional delays in response time. The Los Angeles Police

[154] Ibid. Also, Commander Mark Leap (Commanding Officer, Uniformed Service Division, Los Angeles Police Department), interview by Warren Allen, Los Angeles, CA, 20 February 2003.

Department and Los Angeles Sheriff's Department both acknowledged these limitations, but do not currently have plans to station a "First Responder" unit at the port complex because they maintain responsibility for broad geographical areas.[155]

4) Expansion of Countywide Patch. Cost: $80 million.

The Los Angeles Sheriff's Department is presently upgrading its communications infrastructure to allow local agencies to "patch" into each other's radio frequencies. The Sheriff's Communications Center presently maintains a limited ability to patch UHF and 800 MHz-based frequencies using four UHF and two 800 MHz channels. They are attempting to upgrade their VHF and 800 MHz capabilities to facilitate patching by any agency in the county.[156] The communications center, located in Monterey Park, would set patches upon request from departments involved in a multi-agency response. The number of agencies that can currently be supported at the same time is limited: at most, the system can establish patches for three simultaneous two-way radio conversations.[157]

The Los Angeles Sheriff's Department communications division indicated that their current equipment can patch the frequencies used by the Los Angeles Port Police, Los Angeles Police Department, Long Beach Police Department, Los Angeles Sheriff's Department, Los Angeles County Fire Department, and California Highway Patrol.[158] *The Coast Guard is noticeably absent from this list.* However, the port may be too far away from the Sheriff's Department's communications infrastructure for the low-wattage handheld radios used by most agencies to benefit from the patch. The communications division is scheduled to test the system's geographic range in April 2003. The county will have to pay approximately $80 million to upgrade its hardware and acquire licenses for four new VHF frequencies and two additional 800 MHz frequencies. This will give them a total of four UHF channels, four VHF channels, and four 800 MHz channels (for a total of six possible patched connections).

Strengths: This alternative uses existing systems and would increase interoperability. The wide range of frequencies that the Los Angeles Sheriff's Department will include in the upgraded system should provide connectivity for the agencies that would respond to an emergency at the port complex.

Drawbacks: The countywide patch is a very expensive solution. Additionally, there are technical challenges that may limit accessibility to this system;

[155] Senior law enforcement official, confidential interview by Warren Allen, Los Angeles, CA, 20 February 2003. Also, senior law enforcement official, confidential interview by Warren Allen, Los Angeles, CA, 24 February 2003.
[156] Robert Sedita, *SCC Radio Room: Voice Interoperability Projects for the New Millennium*, 2002. (PSAPP mimeograph collection.)
[157] Lieutenant Stephen Webb (Los Angeles Sheriff's Department Communications and Fleet Management Bureau), phone interview by Warren Allen, 20 February 2003.
[158] Ibid.

handheld radios might lack the power to reach the county's communications infrastructure from the port complex. Even if the test is successful and the county pursues the scheduled upgrades, there are two key problems that will remain. First, the system will be limited to establishing six patches countywide. Six patches might be adequate to handle an incident at the port complex, but if there are simultaneous incidents at other locations in the county, the six patches will be inadequate to handle the load. Second, the system is dependent upon a countywide infrastructure that would be vulnerable to attack or failure. Finally, port agencies would require an intermediary (i.e., the Los Angeles Sheriff's Department) to set the patch.

5) Countywide Multi-Agency Interoperable System. Cost: > $100 million

In 1996, Orange County signed a $70 million contract with Motorola to develop a new countywide digital communications system. Almost all public safety workers in Orange County's 34 cities can now communicate on their handheld radios. They have also largely standardized their communications protocols and use common codes, terminology, and radio procedures. Los Angeles County has studied the Orange County model in the past, but many of the 88 independent cities were unable or unwilling to pay for the communications upgrades.[159]

Strengths: This alternative would result in true communications interoperability with excellent connectivity between county and city agencies. Any police officer would be able to contact any firefighter from virtually anywhere in the county, as would any other public safety worker.

Drawbacks: Although the Orange County model may appear to be an ideal long-term solution for interoperable communications, it is not a viable short-term option for Los Angeles County because of its expansive geographic area and number of public safety agencies involved. While there are approximately 25 law enforcement agencies and 12 fire departments responsible for Orange County's 800 square mile area, there are over 60 law enforcement agencies and 35 fire departments covering Los Angeles County's 4,000 square miles. Duplicating the system in Los Angeles County would require vast infrastructure improvements and would be cost-prohibitive, on the order of hundreds of millions of dollars. Additionally, there have been technological challenges with the system in Orange County. The most notable of these challenges deal with low signal strength and dead zones. The system was designed for maximum coverage, but users frequently experienced failures inside buildings; police could not use their radios in the Irvine and Tustin police headquarters and

[159] Senior Los Angeles County official, confidential interview by Adam Clampitt, Los Angeles, CA, 24 February 2003.

firefighters reported having to stand near open windows to use their radios.[160] The 800 MHz spectrum is also used by other commercial radio operations. Orange County has experienced situations where commercial radio antennas that utilize 800 MHz frequencies cause interference and completely block transmission in the areas surrounding them.[161] Finally, this alternative does not provide connectivity with state or federal agencies that do not use a compatible 800 MHz digital system.

[160] Jack Leonard, "O.C. Planted Own Seeds of Radio System Snafu," *Los Angeles Times*, 1 July 2000, sec. B.
[161] 2000-2001 Orange County Grand Jury, *999 – Officer Needs Assistance: 800 MHz Radio – A Public Safety Perspective*, 2001, 6. (PSAPP mimeograph collection.)

RECOMMENDATION

✓ ***The Los Angeles Port Police should purchase two ACU-1000 Intelligent Interconnect Systems and hardwire them into an existing communications facility at the port complex.***

The Los Angeles Port Police should purchase two ACU-1000s and hardwire them into their communications center. Alternative sights might include the Coast Guard's Marine Safety Office or the Vessel Traffic Service, but these are federal or private facilities. The devices should be hardwired into an existing dispatch center that is staffed 24 hours a day so they can be immediately utilized in the event of an emergency, ensuring that the right people will have communications access at the right time.

The Department of Homeland Security recently released $45 million in grant money to California for first responder equipment and exercises. The Los Angeles Port Police should apply for a $200,000 grant to cover the cost of two ACU-1000s, radios, and associated equipment through the Office of Emergency Services' Los Angeles County Operational Area. Point of contact for the grant application is Sandra Shields at 323-980-2254

Purchasing two ACU-1000 units would permit twice as many connection possibilities and provide a degree of redundancy, should one unit malfunction.

If funds are severely limited, the department should purchase a single ACU-1000 unit and request that all first response agencies at the port complex provide one of their own radios. This would result in more limited interoperability, but would distribute the cost across a larger number of agencies.

✓ ***The Port Security Committee should establish a unified communications protocol and test it during training exercises.***

The Port Security Committee must develop a unified communications protocol for use at the port complex. This communications plan should include details about what channels each agency will use when responding to an emergency at the port, how these channels will be patched using the ACU-1000, and how interoperable frequencies will be used. This communications plan should be tested during a training exercise at the port complex, and then reviewed and revised as required. If these guidelines are not put in place prior to an emergency, interoperable radios could produce more harm than good.

Problem 3: Incompatible Communications Systems

Summary of Recommendations

1) ***The Los Angeles Port Police should purchase two ACU-1000 Intelligent Interconnect Systems and hardwire them into an existing communications facility at the port complex.***

2) ***The Port Security Committee should establish a unified communications protocol and test it during training exercises.***

Conclusion

Preparedness for a terrorist attack at the Los Angeles/Long Beach port complex requires cooperative action by both public and private stakeholders throughout the Los Angeles County Operational Area. This report's recommendations provide a roadmap for enhancing collaborative efforts among these stakeholders. The Group of Five provides an organization for elected officials to strengthen their coordination and oversight of the planning process. Additional recommendations will ensure the inclusion of essential voices in the planning process. The CERT Joint Training Team will swiftly organize and train port workers to help save the lives of high-risk populations. The ACU-1000 technology will best enable effective communication among the first response agencies at the port complex. These recommendations will further engender the teamwork that is paramount for effectively planning and implementing any terrorism preparedness plans for the port complex.

If government remains unable or unwilling to provide necessary funds for port security and emergency response, however, strong policy analysis and stakeholder teamwork may be wasted. The current federal budget provides only unfunded mandates for port security. Given the high threat risk and catastrophic economic consequences associated with an attack on the port complex, the federal government's unwillingness to provide comprehensive funding for security and emergency response measures at this facility reveals a critical weakness in the efforts of the federal Department of Homeland Security. The political leaders of Los Angeles County must do more both to raise awareness of this policy failure at the federal level and to move quickly to secure federal dollars. Until the County Operational Area receives these funds, the thousands of shipping containers that enter the port complex each day will remain potential, modern-day Trojan horses.

Appendix A: Interviews

Alameda Corridor Transit Authority

American Red Cross

Bassett Sales Corporation

California Governor's Office of Service and Volunteerism

California Homeland Security Advisory Council

California Office of Emergency Management

California State Office of Emergency Services, Coastal Region

Capitol Corridor Joint Powers Authority

Department of Transportation

Disaster Consultants Inc.

Emergency Network of Los Angeles

Federal Bureau of Investigation

Governor Michael S. Dukakis

Harbor-UCLA Medical Center

Houston Port Authority

International Longshore and Warehouse Union

Long Beach Fire Department

Long Beach Harbor Commission

Long Beach Police Department

Los Angeles City Emergency Preparedness Department

Los Angeles City Fire Department

Los Angeles County Board of Supervisors

Los Angeles County Emergency Medical Services Agency

Los Angeles County Office of Emergency Management

Los Angeles Police Department

Los Angeles Port Police

Los Angeles Sheriff's Department

Marine Firemen's Union

Appendix A: Interviews

Marine Transportation System Advisory Council

Masters, Mates, and Pilots Union

Mayor Richard Riordan

Miami Dade Metropolitan Police Department

Miami Seaport

Office of Los Angeles City Councilman Jack Weiss

Office of Los Angeles City Councilwoman Janice Hahn

Office of Long Beach Mayor Beverly O'Neill

Office of United States Congresswoman Jane Harman

Pacific Maritime Association

Sailors Union of the Pacific

Science Applications International Corporation (SAID)

Transportation Security Administration

United States Coast Guard

University of California at Berkeley Department of Urban Planning

University of California at Los Angeles Department of Urban Planning

University of California at Los Angeles School of Public Health

University of California Police Department

Verizon Communications Corporation

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Appendix C: Estimated Costs Associated With CERT Training for Port Workers

Weakness 2 (Alternative 1): Hire Four Full-Time CERT Instructors				
	Quantity per Year	Unit Cost	Cost per Year	Total Training Time (In Years)
Trainers	4	$60,000	$240,000	
Students/Year	5000			
Projector	2	$3,500	$7,000	
Manual	5000	$1.70	$8,500	
Laptop	2	$2,000	$4,000	
Bandage	5000	$0.50	$2,500	
Fire Extinguisher	1250	$100	$125,000	
CERT Vest	5000	$2	$10,000	
CERT Helmet	5000	$2.25	$11,250	
Cost/year 100% trained			**$408,250**	**4**
Cost/year 30% trained			**$298,175**	**1.2**
Cost/year 10% trained			**$266,725**	**0.4**

Weakness 2 (Alternative 2): Create an Interagency CERT Joint Training Team for the Port Complex				
	Quantity per Year	Unit Cost	Cost per Year	Total Training Time (In Years)
Trainers	5	$60,000	$300,000	
Students/Year	6000			
Projector	2	$3,500	$7,000	
Manual	6000	$1.70	$10,200	
Laptop	2	$2,000	$4,000	
Bandage	6000	$0.50	$3,000	
Fire Extinguisher	1500	$100	$150,000	
CERT Vest	6000	$2	$12,000	
CERT Helmet	6000	$2.25	$13,500	
Cost/year 100% trained			**$499,700**	**3.3**
Cost/year 30% trained			**$367,610**	**1.0**
Cost/year 10% trained			**$329,870**	**0.3**

Weakness 2 (Alternative 3): Train the Port Workers to Become CERT Trainers (Train-the-Trainers)				
	Quantity per Year	Unit Cost	Cost per Year	Total Training Time (In Years)
Private Consulting Firm	1	$2,500	$2,500	
Trainers	10	$24,000	$240,000	
Students/Year	5000			
Projector	1	$3,500	$3,500	
Manual	5000	$1.70	$8,500	
Laptop	1	$2,000	$2,000	
Bandage	5000	$0.50	$2,500	
Fire Extinguisher	1250	$100	$125,000	
CERT Vest	5000	$2	$10,000	
CERT Helmet	5000	$2.25	$11,250	
Cost/year 100% trained			**$406,450**	**4**
Cost/year 30% trained			**$296,375**	**1.2**
Cost/year 10% trained			**$264,925**	**0.4**

Weakness 4: Cost to Supply Emergency Kits to Port Workers				
	Cost per Kit	10% Supplied	30% Supplied	100% Supplied
Emergency Kit	$17.50	$35,000	$105,000	$350,000

* Certain costs, like transportation of trainers and communication costs, are not included.

** Calculations are based on interviews with Captain Don Lee, Firefighter Jim Harkins, and Firefighter Stacy Gerlich from the LAFD Disaster Preparedness Unit, as well as Caryn Friedenthal from Disaster Consultants, Inc.

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