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**NAVAL  
POSTGRADUATE  
SCHOOL**

**MONTEREY, CALIFORNIA**

**THESIS**

**STRATEGIC CHANGES FOR THE FIRE SERVICE  
IN THE POST - 9/11 ERA**

by

Douglas M. Weeks

September 2007

Thesis Advisor:  
Second Reader:

David Brannan  
William Austin

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**STRATEGIC CHANGES FOR THE FIRE SERVICE IN THE POST- 9/11 ERA**

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Fire Captain, City of Orange Fire Department  
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Submitted in partial fulfillment of the  
requirements for the degree of

**MASTER OF ARTS IN SECURITY STUDIES  
(HOMELAND SECURITY AND DEFENSE)**

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**NAVAL POSTGRADUATE SCHOOL  
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## **ABSTRACT**

The fire service mission has changed since September 11, 2001, and the threat of terrorism is placing new demands on fire service leaders. Expectations of the community and a duty to maximize safety for fire service employees have created complex problems that will require unique and non-traditional solutions. The challenge for fire service leadership is how to best manage the contemporary threat of terrorism while maintaining its growing list of traditional mission-oriented requirements. This challenge is especially difficult given the low frequency but high risk and impact of terrorist incidents. As the nation moves farther away from 9/11, the easier it is to become complacent. Yet all accounts suggest that the threat is growing and another attack is inevitable. This thesis will outline and provide recommendations in four key areas the fire service must address if it is to be successful in meeting its current mission: intelligence, community engagement, response, and leadership. Although fire service agencies vary across the nation, the recommendations included herein are intended to be universal. Furthermore, this thesis seeks a viable balance between threat, impact, and sustainability.



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## I. INTRODUCTION

There is little doubt that the United States is settling in for a protracted campaign against Islamic extremism and terrorism as a whole. The enemy we face is determined to devastate our economy, drive western influence from the Middle East, destroy our public confidence in government, and expand Islamic influence around the world.<sup>1</sup> Although we have not seen another attack on the scale of 9/11, we should not fall into complacency and falsely believe that we are immune, or worse yet, victorious in our struggle to defeat terrorism. In fact, many would suggest that the threat continues to grow. During testimony before the Senate Foreign Relations Committee, terrorism expert Daniel Benjamin gave this sobering assessment:

Today, the United States faces an unnerving paradox. For all the tactical successes—the terrorists arrested, plots failed networks disrupted—that have been achieved, our strategic position continues to slip. The ideology of jihad is spreading. A new generation of terrorists is emerging with few ties to al Qaeda but a world-view soaked in Osama bin Laden’s hatred of the west, and new areas of the globe are increasingly falling under the shadow of this growing threat.<sup>2</sup>

The attacks in Bali, Madrid, London, Mumbai, Sharm al Sheikh, Amman, Algiers, and the continued attacks in Afghanistan and Iraq demonstrate that the jihadists continue to operate despite international law enforcement and military efforts to suppress their activities. Our enemies continue to not only carry out attacks around the globe but are effectively spreading radical ideology through the Internet and other forms of media. As they work to increase sympathy toward the Islamic struggle, they also seek to radicalize the margins and recruit others to join the fight. Even more distressing is evidence that the threat is becoming more decentralized, and that groups are forming and taking action independently. Bruce Hoffman, an internationally recognized terrorism expert who

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<sup>1</sup> Lowell E. Jacoby, “Five Years After 911: What Needs to be Done?” *E-Notes*, Foreign Policy Research Institute (February 2007), <http://www.fpri.org/enotes/200702.jacoby.fiveyearsafter911.html> [Accessed July 19, 2007].

<sup>2</sup> Daniel Benjamin (Senior Fellow, International Security Program, Center for Strategic and International Studies), “The Changing Face of Terror—A Post 9-11 Assessment,” testimony before the Senate Foreign Relations Committee, June 13, 2006, <http://www.senate.gov/~foreign/testimony/2006/BenjaminTestimony060613.pdf> [Accessed July 19, 2007].



testified before the House International Relations Committee, Subcommittee on International Terrorism and Nonproliferation, addressed the issue:

The requirement to engage in jihad is relentlessly expounded in both video and audio tapes of bin Laden and al-Zawahiri and other senior al Qaeda personalities on myriad jihadist web-sites, and by radical clerics, lay-preachers speaking in mosques or addressing informal circles of adherents in more private settings. The struggle is cast in narrow defensive terms: extolling the duty of the faithful to defend Islam by the sword.<sup>3</sup>

As we settle in for the long haul, the fire service will need to find new and innovative ways to meet its homeland security mission. It will not be easy, but the consequences are too great to not take the threat seriously. The global jihadist threat, personified by al Qaeda, has demonstrated that it is determined, unwavering, and patient. We are in a war of wills. The enemy will continue to fight, attempting to undermine our resolve, and seek to make our goal of national security too costly or simply unachievable.<sup>4</sup> We cannot be complacent and we cannot believe that the world is the same in the post-9/11 era. We must understand the new paradigm and we must prevail.

#### **A. PROBLEM STATEMENT**

In the post-9/11 era, the fire service has not developed a new strategy to meet its homeland security mission. Although there has been greater coordination by fire service agencies since 9/11 and much has been done, as a whole the fire service remains without a clear strategic vision or national standards to follow.

Within the realm of homeland security, fire service leaders have acknowledged that they must prepare for potential acts of terrorism. But rather than looking at what is needed to fulfill the mission and then developing a new strategy to meet those needs, pre-existing systems and pre-9/11 standards of practice have been used in an attempt to have something in place. This may have been appropriate immediately after 9/11, but now, six years later, those same outdated methods often remain. At its core, this process has a conceptual flaw. The utilization of conventional means and methods against an unconventional threat is akin to putting a square peg in a round hole; although it might

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<sup>3</sup> Bruce Hoffman, *Does Our Counterterrorism Strategy Match the Threat?* (Santa Monica, CA: RAND Corporation, 2005), 12.

<sup>4</sup> Jacoby, "Five Years After 911."

work in some circumstances, it is rarely a very good fit. This square-peg, round-hole idea exists because conventional practices were never developed with the flexibility, operational scope, and complexity required to manage the threat of terrorism. The current lack of a new, proactive, and comprehensive terrorism strategy equates to an inefficient response, which neither the public nor the fire service should accept.

Although additional capability has been realized by applying conventional means and methods, in many cases post-9/11 planning scenarios involve only one isolated incident, all resources available, and the capacity to respond within a matter of minutes. This is not the reality in day-to-day operations, and it will not be the reality during the next terror attack. Furthermore, what has generally been ignored is what actions will be needed in the event of multiple or concurrent attacks, or when specialized resources are not available for response. In highly urbanized areas, specialized resources could easily be unavailable or severely delayed in a well-timed attack, such as during rush hour traffic. Also, over-reliance on specialized resources has the potential to limit critical operations if they are not available.

There are a number of causes underlying the fire service's failure or reluctance to change: cultural issues, resistance to change, union issues, competing resources, budget, and a lack of vision by national organizations, including the National Fire Protection Association (NFPA), United States Fire Administration (USFA), International Association of Fire Chiefs (IAFC), and International Association of Firefighters (IAFF).

The adverse consequences of not having a clear vision and a nationally recognized strategy can be summed up as follows: First, many agencies are working to develop the ability to manage the threat of terrorism, but are doing so independently of one another. This means that the same mistakes are repeated over and over again, only by different agencies. This is inefficient. Second, terror events have the potential to kill large numbers of people, those within the community and first responders.<sup>5</sup> The fire service and community leaders should insist on the best possible response when lives are at stake.

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<sup>5</sup> *The 9/11 Commission Report: Final Report of the National Commission on Terrorist Attacks Upon the United States* (New York, NY: W.W. Norton & Co., n.d.), 323.

The system in place today will work. That is not in question. The question is whether it will work efficiently and effectively. This question underscores whether fire service agencies are providing appropriate levels of service to the community, and if appropriate safeguards are in place to protect fire service personnel from injury. The persistent problem that has faced fire service leadership has been the inability to critically assess response capabilities, manage risk, and find ways to change organizational culture.

## **B. ARGUMENT FOR CHANGE**

In the aftermath of 9/11, the fire service rushed to assemble a response capability for future terror incidents. In its haste, it looked for “off-the-shelf” solutions to manage chemical, biological, radiological, nuclear, and explosive (CBRNE) events. Because of the hazardous nature of CBRNE materials and because most urban areas had hazardous materials teams (hazmat) operating under a recognized and accepted response plan, the quick fix was to place the primary responsibility of terrorism response under existing hazmat protocol. This provided an immediate response capability that fire service managers could point to as protection for the community.

In the rush to expand fire service capability, the federal government, through the U.S. Department of Justice’s Office of Justice Programs (OJP was later incorporated into the Department Homeland Security) Homeland Security Grant Program (HSGP) and Urban Area Security Initiative (UASI) grants, as well as the Federal Emergency Management Agency’s (FEMA) Assistance to Firefighters Grant (AFG) program, allocated billions of dollars to purchase additional equipment. Although the fire service now has more “things” than it used to, its capability as a whole has not increased proportionally. As evidence of this claim, one has only to read through a random sampling of the myriad After Action Reports (AARs) before a common trait emerges. The same slow, methodical approach that hazmat teams have used to manage traditional industrial hazardous materials incidents is being used to manage a terror incident. In report after report, the evaluators criticize the length of time it takes hazmat teams to respond, classify the environment, and perform rescue.

The basis for this thesis is not one of arguing one operational modality over another, but one of an evolution in leadership and strategy. The response capability

immediately implemented after 9/11 was warranted, but does that capability represent the best choice or simply the best option at the time? The unanswered question is, if the fire service could start from scratch and build a comprehensive pre- and post-event capability for the threat of terrorism, what would that system look like? Furthermore, could a more effective system be built while maintaining a balance between homeland security and traditional fire service missions and values? These are the strategic challenges for fire service leadership today.

Although the challenges are significant, they are achievable. First, the fire service must change its culture to understand that the threat is real, that the fire service itself is a potential target, and that the ways in which it conducts business must change in order to meet the new threat of terrorism.

Second, fire service leadership must develop a common national strategy on how it intends to meet the threat of terrorism. It can no longer rely on traditional response methods that repeatedly prove themselves to be inefficient and ineffective. Fire service leadership, through the International Association of Fire Chiefs (IAFC), International Association of Firefighters (IAFF), National Fire Protection Association (NFPA), and the Department of Homeland Security (DHS) must promote a common, efficient, and effective response methodology.

Third, the starting point of a comprehensive fire service strategy should not begin at the moment of surprise—when the bell sounds and it is time to respond because an event has occurred. There are pre-event activities that the fire service must engage in if efficient and effective delivery of services to the community and the protection of personnel are to be realized.

At a minimum, there are four basic strategies that must be considered:

1. Engage in an information and intelligence sharing process with law enforcement
2. Engage with and gain the support of the public
3. Re-evaluate existing response methods
4. Change the leadership and the culture

## **1. Information and Intelligence**

The fire service must engage in and be a part of the information and intelligence sharing process. The primary reason for intelligence gathering and analysis by any discipline is to avoid strategic surprise. The fire service is no exception. Furthermore, information and intelligence should significantly drive planning, equipment acquisition, and training. Although engaging in information and intelligence activities constitutes a change in practice and culture, it is a transformation that must take place in order to protect personnel and provide the highest level of service to the community.

## **2. Engaging the Community**

Fire service leadership must find ways to interact more effectively with the community on terrorism-related issues. Generally speaking, the community has no idea what the fire department response capabilities are to a terrorist attack. Nor do many fire service leaders know what their community expects of them. There is no doubt that a gap exists between community expectations and fire service capabilities.<sup>6</sup> That gap should be minimized whenever possible.

As noted previously, numerous AARs are critical of current response methods. Fortunately, that information is not widely distributed to the public. However, when another attack occurs, and if the same response methods are used and lives are lost, those AARs might indicate to the public that problems were known yet little was done to correct them. There is ample evidence of public outrage to previous disaster response. Hurricane Katrina is a prime example. The fire service has a long history of integrity and unwavering public trust; neither should be placed at risk.

## **3. Response**

In the post-event realm, the fire service must work to adopt new response procedures for CBRNE events. The use of specialty teams (hazardous materials and bomb squads) absolutely has its place within the response structure. However, a response should not be paralyzed if those resources are not available or if they are slow to deploy.

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<sup>6</sup> U.S. Fire Administration, "Enhancing Risk Management Capabilities of Local Fire Departments," *Press Release*, June 7, 2005, <http://www.usfa.dhs.gov/media/press/2005releases/060705.shtm> [Accessed July 19, 2007].

An effective response cannot rely on a few critical individuals. There are new and emerging standards that significantly broaden response capabilities, and should be considered by fire service leaders.

#### **4. Leadership**

The fire service has built an outstanding reputation over the past 200 years, and is one of two public safety agencies responsible for saving lives and property. There is no expectation that fire service personnel should take unreasonable risks, but there should be an expectation that they will take a reasonable amount of risk in order to save lives. It is time to prove that the fire service is still deserving of its reputation. The fire service is engaged in a war. It is time to acknowledge that fact and to respond accordingly.

The fire service is by nature a conservative environment. Those who wander too far from traditional, accepted practice and enter into uncharted territory by proposing changes and unfamiliar concepts, are frequently dismissed and ostracized. Some fire service managers, who fear the unknown, will challenge any new concepts. There are, however, departments that are open to change. For example, the Fire Department of New York (FDNY) and the District of Columbia Fire Department (DCFD) in Washington D.C., both of which realize change must occur and are willing to try new methods. According to FDNY Deputy Chief Joseph Pfeifer, “After being attacked twice, we had little choice but to change our operations.”<sup>7</sup> The challenge for fire service leadership is to question the status quo in its approach to terrorism, to engage more effectively with its law enforcement counterparts, to engage in information and intelligence sharing, to reach out to its communities, to actively explore new response concepts, and to lead rather than be led.

### **C. LITERATURE REVIEW**

To meet the challenges of homeland security, the federal government began calling for changes within the fire service as early as 1997. Under an agreement with the Department of Defense, the Nunn-Lugar-Domenici Domestic Preparedness Program began delivering terrorism training to America’s fire service providers in the nation’s 120

<sup>7</sup> Joseph Pfeifer (Chief of Counterterrorism and Emergency Preparedness, Fire Department of New York), telephone interview by author, December 2, 2006.

largest cities. Correctly perceived as the front-line domestic forces that guard the nation against terrorist acts, firefighters and law enforcement figure into nearly every federal planning or strategy document. For example, the *National Strategy for Homeland Security* says, “America’s first line of defense in the aftermath of any terrorist attack is its first-responder community—police officers, firefighters, emergency medical providers, public works personnel, and emergency management officials.”<sup>8</sup> This concept of firefighters and others as America’s first line of defense stems from the reality that local resources are the first on scene and the last to leave, and that all disasters are ultimately local events.<sup>9</sup> *Securing the Homeland, Strengthening the Nation* sums up the concept well:

America’s first line of defense is the “first responder” community—local police, firefighters, and emergency medical professionals. Properly trained and equipped first responders have the greatest potential to save lives and limit casualties after a terrorist attack. Currently, our capabilities for responding to a terrorist attack vary greatly across the country. Many areas have little or no capability to respond to a terrorist attack using weapons of mass destruction. Even the best prepared states and localities do not possess adequate resources to respond to the full range of terrorist threats we face.<sup>10</sup>

Similar references can be found in such documents as the Homeland Security Presidential Directive 4,<sup>11</sup> the National Response Plan,<sup>12</sup> the 9/11 Commission Report,<sup>13</sup> and the Strategy for Homeland Defense and Civil Support.<sup>14</sup>

Although there has been much discussion from both within and outside the fire service on changing and strengthening the capabilities and response to terrorist events,

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<sup>8</sup> Department of Homeland Security, *National Strategy for Homeland Security* (Washington, DC: The White House, 2002), 41.

<sup>9</sup> *Ibid.*, viii.

<sup>10</sup> The White House, *Securing the Homeland, Strengthening the Nation* (Washington, DC: The White House, n.d.), 10.

<sup>11</sup> The White House, *National Strategy to Combat Weapons of Mass Destruction: HSPD-4* (Washington, DC: The White House, 2002), 5.

<sup>12</sup> Department of Homeland Security, *National Response Plan* (Washington, DC: Department of Homeland Security, 2004), 15.

<sup>13</sup> *The 9/11 Commission Report*, 323.

<sup>14</sup> Department of Defense, *Strategy for Homeland Defense and Civil Support* (Washington, DC: Department of Defense, 2005), 31.

little attention has been given to any strategy beyond the tactical and operational elements. Examples of this can be found in the various grants that have been awarded by the federal government. The most prominent of these grants are the HSGP and UASI grants, both of which mainly support equipment acquisition as the primary means to increase capability.<sup>15</sup> A similar example can be seen in the Target Capabilities List (TCL), which outlines the capabilities necessary to prevent, protect against, respond to, and recover from incidents of national significance. The TCL goes further in its discussion of strategic capabilities, but remains primarily operational in its focus.<sup>16</sup> While the ultimate measure of all of this will be how the fire service responds to the next attack, the acquisition of tools and equipment (things) seems to dominate much of the literature as the easiest way to increase capability. These “things” are, however, only a portion of the solution. The missing component, and frankly the most difficult, is the changes that need to take place in the traditional values, organizational culture, and leadership within the fire service. Fortunately, more emphasis within the literature is emerging that suggests these issues, along with equipment acquisitions, need to be considered to fully address the threat of terrorism to the community and to emergency response personnel.

Addressing the “non equipment” issues faced by the fire service, Captain Alicia Welch, of the Los Angeles City Fire Department, in her thesis *Terrorism Awareness and Education as a Preventative Strategy for First Responders* states, “If the fire service intends to be an effective component of the national effort to secure our communities from terrorism, then a complete revamping of existing policies, training and field duties must occur.”<sup>17</sup> This statement embodies a belief that fundamental changes must occur within the fire service, and the changes that are needed are more than purchasing equipment and conducting additional planning.

In the simplest context, the problem with buying more equipment and conducting more planning without changing traditional values, organizational culture, and policy is

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<sup>15</sup> Department of Homeland Security, “DHS Announces 1.7 Billion in Homeland Security Grants,” *Press Release*, [http://www.dhs.gov/xnews/releases/pr\\_1184781799950.shtm](http://www.dhs.gov/xnews/releases/pr_1184781799950.shtm) [Accessed August 18, 2007].

<sup>16</sup> Department of Homeland Security, *Target Capabilities List* (Washington, DC: Department of Homeland Security, 2006).

<sup>17</sup> Alicia Welch, “Terrorism Awareness and Education as a Preventative Strategy for First Responders” (Master’s Thesis, Naval Postgraduate School, 2006), 1.



that the fire service is preparing to fight a war using conventional means against an unconventional enemy that uses unconventional means. One of the best views on this issue comes from someone outside the fire service, Bruce Hoffman. In his book, *Inside Terrorism*, Hoffman offers the following:

In sum, the emergence of this new breed of terrorist adversary means that nothing less than a sea-change in our thinking and the policies required to counter it will be required. Too often in the past, we have lulled ourselves into believing that terrorism was among the least serious or complex of security issues. We cannot afford to go on making this mistake.<sup>18</sup>

The fire service has not been the only discipline that has had to manage change. In the war on terrorism, the military has also been forced to look at new and inventive ways to manage its operations in a 4<sup>th</sup> Generation war environment. John Arquilla has written several pieces of literature for the U.S. military on changing its management strategies and tactics. Arquilla advocates flattening the organizational structure, and giving smaller, more mobile units the ability to take action more efficiently and effectively.<sup>19</sup> Whether Arquilla's concepts will be applicable to the fire service has not yet been determined, but at least one, FDNY, has considered its merits.

When it comes to change in the fire service, Welch argues that for change to occur, the key will be to change the traditional values and organizational culture. However, she also admits that changing fire service culture is a challenging thing to do because "it is rarely initiated from within and frequently resisted from without."<sup>20</sup> Welch says the reason for this reluctance to change is an underlying belief that although a terrorist event could happen, it will probably not happen "here." Welch also cites the influence of strong cultural values built on two hundred years of tradition that view the fire service first and foremost as a reactionary force.<sup>21</sup>

The concept of change is even difficult among fire service leaders and their professional affiliations. A quote from the *NFPA Journal* following the 9/11 attacks

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<sup>18</sup> Bruce Hoffman, *Inside Terrorism* (New York, NY: Columbia University Press, 1998), 212.

<sup>19</sup> John Arquilla and David Ronfeldt, *Swarming and the Future of Conflict* (Santa Monica, CA: RAND Corporation, 2000), [http://www.rand.org/pubs/documented\\_briefings/2005/RAND\\_DB311.pdf](http://www.rand.org/pubs/documented_briefings/2005/RAND_DB311.pdf) [Accessed October 30, 2006], 4.

<sup>20</sup> Welch, *Terrorism Awareness and Education*, 6.

<sup>21</sup> Welch, *Terrorism Awareness and Education*, 1.

demonstrates the laissez-faire attitude and limited vision that continues to plague the fire service: “As with any disaster, NFPA will review its fire service codes and standards and make appropriate changes, if changes are necessary.”<sup>22</sup> From the other side of the issue, Chief Michael Burton, of the Grand Rapids, Michigan, Fire Department, argues that “NFPA should step into the terrorism world, if only to provide a good resource and yardstick to which fire departments can compare themselves.”<sup>23</sup> It is pertinent to note that the NFPA, the worldwide leader in establishing standards of practice for the fire service, has produced little guidance on the issue of terrorism beyond a few new standards for personnel protective equipment.

Chief Robin F. Paulsgrove, of the Arlington, Texas, Fire Department, has written extensively on fire service leadership and management practices. Weighing in on the ever-changing environment facing the fire service, Paulsgrove makes an interesting comparison regarding firefighters who wrongly assume that the skills which were expected of them at the time of employment would be the only ones needed throughout their careers.<sup>24</sup> Paulsgrove likens this mindset to a General Motors manufacturing plant; although the workers belong to a strong union with a reputation for preserving employee rights and benefits, they are no longer manufacturing the four-door Caprice. In short, change must occur with the changing environment, or there is a reduction in service and value to the community.<sup>25</sup> A similar view is offered by retired Captain Vincent Doherty, of the FDNY, who states, “The Fire Service is at an important crossroads in its history. The increasing threat of terrorism, along with the need for the Fire Service to make a major contribution to the Homeland Security effort, compels firefighters to expand upon their traditional mission requirements.”<sup>26</sup>

In the aftermath of 9/11, the FDNY commissioned the McKinsey & Company consultancy to review the events of 9/11 and make recommendations for change. After losing 343 of its personnel, FDNY wanted to ensure such a tragedy would never happen

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<sup>22</sup> John Nicholson, “Terrorism: Impetus For Change,” *NFPA Journal* 95, no. 6 (2001), 44.

<sup>23</sup> *Ibid.*, 44.

<sup>24</sup> Robin F. Paulsgrove, “Weighing a Department’s Mission,” *NFPA Journal* 26, no. 4 (2002), 36.

<sup>25</sup> *Ibid.*

<sup>26</sup> Vincent Doherty, *Metrics For Success* (master’s thesis, Naval Postgraduate School, 2004), V.

again.<sup>27</sup> The McKinsey report makes recommendations in operations, planning and management, communications and technology, and family and member support services. As the McKinsey report was being developed, the FDNY prepared to change its leadership and in turn its culture. One of the first things it did was to expand the number of staff chiefs, and instill a commitment to moving the organization forward in a unified, positive, and supportive manner.<sup>28</sup> It also expanded and reorganized its Planning Unit to make it more responsive to the needs of operational units.<sup>29</sup>

The traditional organizational chart for the fire service resembles a Christmas tree—small at the top and broad at the bottom in a cone configuration. Whether by design or by accident, the FDNY organizational chart now has a more flattened appearance. This model resembles the Netwar and swarming tactics proposed by Arquilla and Ronfeldt mentioned previously which gives smaller, more mobile units the ability to take action more efficiently and effectively.<sup>30</sup>

The FDNY is the largest fire department in the country, and in many ways sets the standard for others to follow. The innovative efforts by the FDNY in the post-9/11 environment are a good example of leadership by its executive staff to meet the needs of the community and the department. Although FDNY certainly had the necessary incentive to make changes (losing 343 of its personnel), at least one study suggests that the fire service at large is primed for change and transformational leadership. A study by Rajnandini Pillai and Ethlyn Williams concludes that change is not only possible in fire service organizations, but that these organizations are particularly well suited for change, especially in the post-9/11 era:

The study also shows that transformational leadership is effective in yet another setting, namely, a fire rescue organization, one that faces a constantly changing environment, especially in the post “11 September”

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<sup>27</sup> McKinsey & Company, “McKinsey Report—Increasing FDNY’s Preparedness,” [http://www.nyc.gov/html/fdny/html/mck\\_report/toc.html](http://www.nyc.gov/html/fdny/html/mck_report/toc.html) [Accessed October 26, 2006], 5.

<sup>28</sup> Ibid., 77.

<sup>29</sup> Ibid., 81.

<sup>30</sup> Arquilla and Ronfeldt, *Swarming*, 9.

world with heightened fears with respect to terrorism and requiring innovative responses, in which there is a great need for outstanding leadership.<sup>31</sup>

Pillai and Williams go on to say, “This setting is particularly suited to the emergence of transformational leadership and presents opportunities for responding to dynamic situations: leaders are called upon to role model heroic behaviors and build cohesive teams that are capable of responding in real time with innovative solutions to life threatening situations.”<sup>32</sup>

As the fire service continues its search for both leadership and operational capability in the post-9/11 era, one of the best measures of its advancement can be found in a variety of AARs. Like the references to change in the national strategy documents noted previously, there are numerous chemical, biological, radiological, nuclear, and explosive AARs from national events like the Top Officials (TOPOFF) exercise or from state, regional, or local exercises. A good source for these is the *Lessons Learned Information Sharing* Web site.<sup>33</sup> It provides ample examples and opinions of both successful and unsuccessful approaches to building a more effective fire service response to the terrorism problem.

In summary, the literature available on the fire service’s current state of terrorism preparedness, its culture, the need to change, organizational management structures, and past practices is significant because in its collective sense, it all points to the need to make changes. Whether considering the opinions of Alicia Welch, Bruce Hoffman, John Arquilla, Rajnandini Pillai and Ethlyn Williams, or the host of others who have produced literature on this subject, they all offer different perspectives but of the same problem, that the current system needs to change and improve. This thesis will build on the literature currently available, and add to the academic discussion on this topic.

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<sup>31</sup> Rajnandini Pillai and Ethlyn A. Williams, “Transformational Leadership, Self Efficacy, Group Cohesiveness, Commitment, and Performance,” *Journal of Organizational Change Management* 17, no. 2 (2004), 154.

<sup>32</sup> *Ibid.*, 156.

<sup>33</sup> Department of Homeland Security, Lessons Learned Information Sharing, <http://www.llis.dhs.gov> [Accessed November 26, 2006].

## **D. OVERVIEW**

This thesis will explore some of the strategic changes the fire service should consider in the post-9/11 era. It will remain at a strategic focus, and will not delve into tactical or operational issues except to provide examples of why one strategy should be changed or another adopted. Its central focus will remain on four assertions: the fire service must engage in the information and intelligence sharing process, the community must be re-engaged and leveraged in support of the fire service's homeland security mission, current methods of response must be re-evaluated, and fire service leadership must articulate a new and more progressive vision to meet the needs of the post-9/11 era.

Data collection for this thesis has come from continued research of existing fire service policy and procedure, surveys, and personal interviews with those individuals and organizations considered leaders within the fire service, and who have adopted progressive strategies and policies to meet contemporary needs. By engaging those recognized as progressive leaders, several things have been accomplished. First, and perhaps most important, a preliminary line in the sand has been established regarding how progressive this thesis can be without risk of being dismissed as radical. Second, profiling some of the policies and procedures that have been implemented by recognized leaders and that are working well establishes a best-practice base that adds greatly to the credibility of this thesis. Third, those who are "out front" addressing the fire service leadership end of terrorism have new ideas and strategies that should be considered.

Much of the content of this thesis challenges existing norms and the conservative management that exists within the fire service. The discussions and arguments reflect "new thinking," and use program evaluation methods engaging both summative (a quantitative measure of overall effectiveness), and formative (a qualitative measure of strengths and weaknesses) methods to reach its conclusions. This thesis concludes with strategic policy recommendations that advocate a direction for fire service leadership to meet the challenges of terrorism in the post-9/11 era.

## II. INTELLIGENCE

The fire service throughout its history has been a response-oriented discipline. Preparation and training has long been oriented toward traditional hazards, like fires and physical rescues, and more recently on providing emergency medical services, hazardous materials response, and various technical specialties like urban search and rescue, and swift-water rescue. Prior to 9/11, the fire service was in its comfort zone, managing its risks effectively and oriented toward response. Since 9/11, the rules have changed. The fire service has had to rapidly catch up to the threats it now faces. As it strives to move forward, it is no longer optimal to rely solely on a response-oriented posture. Like the lessons learned from fire prevention, in order to maximize effectiveness, the fire service needs to find ways to be innovative in its approach and open to change.

Prior to 9/11, few outside of law enforcement paid much attention to the intelligence community (IC). At the local level, intelligence was often oriented toward vice and narcotics trafficking. Since 9/11, the IC has been widely criticized for its stove-piped system and inability to share information. Furthermore, since 9/11 significant discussion has taken place regarding the need to increase homeland security information and intelligence sharing across disciplines and vertically within government. However, although there appears to be a desire to increase the sharing of information, a practical application to do so has not yet been widely developed.

The information and intelligence sharing process in the United States continues to come under criticism at virtually all levels of government. This is particularly true at the local level by those who are tasked with planning, training, and response. Since 9/11, numerous documents have advocated increased information and intelligence sharing, such as *The 9/11 Commission Report: Final Report of the National Commission on Terrorist Attacks Upon the United States*,<sup>34</sup> *The National Strategy for Homeland Security*,<sup>35</sup> and the *Intelligence Reform and Terrorism Prevention Act of 2004*.<sup>36</sup>

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<sup>34</sup> *The 9/11 Commission Report*, 417.

<sup>35</sup> Office of Homeland Security, *National Strategy*, 2.

<sup>36</sup> 108<sup>th</sup> U.S. Congress, *Intelligence Reform and Terrorism Prevention Act of 2004* (Washington, DC: U.S. Senate and House of Representatives, 2004), 29.

Although progress is being made, we have yet to realize a truly effective and workable system. Despite a will to create an environment that prioritizes the need to share over the need to protect, some remain convinced that little has changed. In a statement before the House Subcommittee on Intelligence, Ambassador Ted McNamara provided the following, “we lack a national unclassified control framework that enables the rapid and routine flow of information across Federal agencies and to and from our partners in the State, local, tribal and private sectors.”<sup>37</sup>

From a local government perspective, homeland security information and intelligence should take a prominent role in influencing planning, training, budgeting, and personnel safety through situational awareness. When trends and threats are not understood, planning, training, equipment acquisition, budgeting, and personnel safety decisions are managed blindly and from a position of having to prepare for every possible scenario. This is inefficient and ineffective. The mantra of “not if but when” the next attack occurs is heard throughout government. It is therefore highly important that local public safety agencies are properly prepared, trained, and equipped so they can manage any future attack as efficiently and effectively as possible.

Often the term “intelligence” is used interchangeably with the term “information,” and it should be pointed out that there is a difference. Intelligence is an amalgamated product produced by someone who has the expertise and background to collect various forms of information, synthesize that information, and then draw a conclusion as to what it all means.<sup>38</sup> By contrast, information is by its own definition just information. It is raw and unprocessed. Although this distinction exists, even governments do not always differentiate between the two, often collectively referring to both as simply intelligence. The purpose of this discussion is to not only acknowledge the difference, but also to point out that both have value to the first responder community.

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<sup>37</sup> Ted McNamara, (Ambassador, Program Manager, Information Sharing Environment), testimony before the U.S. House of Representative’s Committee on Homeland Security, Subcommittee on Intelligence, Information Sharing, and Terrorism Risk Assessment, April 26, 2007, <http://www.ise.gov/docs/HHSC-20070426-%20McNamara%20Testimony.pdf> [Accessed July 21, 2007].

<sup>38</sup> Lock K. Johnson and James J. Wirtz, *Strategic Intelligence: Windows Into a Secret World* (Los Angeles, CA: Roxbury Publishing Company, 2004), 2.

Commonly, intelligence is narrowly perceived to mean information associated with a current threat, and is therefore tied to a current investigation. That type of intelligence is often referred to as tactical intelligence.<sup>39</sup> Tactical intelligence is frequently the least accessible because American counterterrorism culture places convictions and disruption of the event at equal importance. In these cases, law enforcement typically holds the information close rather than share it and run of the risk of compromising an investigation. When tactical intelligence does become critical, it is often shared with other public safety agencies and with political leaders. While that action is appropriate, it does little for first responders other than place them in a defensive position, waiting for the worst to occur. Although this practice is understandable, it does nothing to facilitate proper planning, training, equipment, budgeting, and ultimately fire service response and protection of the community.

Besides tactical intelligence, there are two other types of intelligence that have significant, if not greater, value to the fire service: operational intelligence and strategic intelligence. Operational intelligence refers to an adversary's capabilities and what they might do in the future.<sup>40</sup> Strategic intelligence refers to an adversary's future desired capability.<sup>41</sup> Operational and strategic intelligence should be an important priority for the fire service. Although an event may have occurred in another part of the state, in another state, or on the other side of the world, it does not mean that the effects of the event will not influence the local community. If one knows what the enemy's current capabilities are and what future capabilities he or she desires, then planning, training, equipment acquisition, and budgeting can be coordinated to meet those capabilities. Perhaps most important, if current and future operational capabilities have been addressed then the impact of any current threat will be minimized.

As Mark Lowenthal, author of *Intelligence: From Secrets to Policy* notes, "The first purpose of intelligence is to avoid strategic surprise."<sup>42</sup> The fire service needs to

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<sup>39</sup> Department of Defense, "DOD Dictionary of Military Terms," <http://www.dtic.mil/doctrine/jel/doddict/data/t/index.html> [Accessed July 21, 2007].

<sup>40</sup> Ibid.

<sup>41</sup> Johnson and Wirtz, *Strategic Intelligence*, 2.

<sup>42</sup> Mark M. Lowenthal, *Intelligence: From Secrets to Policy*, 2 ed. (Washington, DC: CQ Press, 2003), 2.



begin to consider issues beyond immediate response. Effective planning, training, equipment acquisition, and budgeting, driven by tactical, operational, and strategic information and intelligence, will keep fire service personnel from being surprised.

An equally important concept for consideration is that the first priority of homeland security has been established as one of prevention.<sup>43</sup> Above all else, the *National Strategy for Homeland Security* seeks to prevent attacks on American soil, and calls on all disciplines to engage in a strategy of prevention. A recent article in *Fire Chief* addressed this issue, stating, “The best way to accomplish prevention is prediction, and the only way to predict terrorism is through active involvement with the intelligence community.”<sup>44</sup>

The role of law enforcement is paramount to the strategy of prevention, but the role of the fire service has not yet been clearly defined. This lack of definition for the fire service has resulted in a sort of organizational paralysis where many are not happy with the status quo, but have not been shown a direction in which to focus their efforts. There are, however, some key things the fire service can do to aid in the national effort to prevent attacks, and at the same time, further its engagement in the information and intelligence sharing community. One of those is the Terrorism Liaison Officer (TLO) program.

#### **A. TLO PROGRAM**

The TLO program concept was created by the Redondo Beach Police Department in Redondo Beach, California, as a means to share homeland security information.<sup>45</sup> Its basic premise is that both police officers and firefighters have uncommon access to individuals, businesses, and residences, and because of this access, they are in a prime position to observe people, their actions, and the local environment. With some very basic training, fire and law enforcement personnel may, through passive observation,

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<sup>43</sup> Office of Homeland Security, *National Strategy*, 41.

<sup>44</sup> Rick Salyers and Troy Lutrick, “Best Defense,” *Fire Chief* 51, no. 2 (2007), 50.

<sup>45</sup> Gregory C. Hill, “Best Practices: Redondo Beach Mobilizes After 9/11 For Possible Terrorist Threat,” U.S. Conference of Mayors, September 8, 2003, [http://www.usmayors.org/uscm/us\\_mayor\\_newspaper/documents/09\\_08\\_03/Redondo\\_BP.asp](http://www.usmayors.org/uscm/us_mayor_newspaper/documents/09_08_03/Redondo_BP.asp) [Accessed July 9, 2006].

detect activities or observe materials that raise suspicion. When these situations arise, they can then make the proper notification to a designated TLO within their organization who can process the information into a standardized format and send it to the proper authorities for follow-up investigation. In the Redondo Beach concept, ideally each fire department and each police department would have at least one TLO.

The TLO program represents the basic building block of an information-sharing network for local fire and police agencies as well as others involved in homeland security collaboration. The TLO program promotes the concept of formalized information pathways within organizations, and recommends defined points of contact where information should be directed. Furthermore, the TLO program promotes not only interdepartmental coordination, but advocates interjurisdictional coordination as well. Through the concept of a regionalized TLO program, fire, police, and other disciplines form both interdisciplinary and interagency networking capabilities where information and intelligence can be shared and disseminated horizontally and vertically within government.<sup>46</sup>

Each department TLO becomes the point of contact with the regional Terrorism Early Warning Group or fusion center facilitating the coordination of information. In this manner, as threats are received and vetted, the TLO functions as the point of contact for the agency affected, and significantly speeds the dissemination of appropriate threat information. Since the TLO program was first conceived in 2003, it has spread throughout Los Angeles County with tremendous success.<sup>47</sup> The TLO program is now being profiled as a model program throughout the country. During testimony before the U.S. House of Representatives Select Committee on Homeland Security in 2003, Captain Michael Grossman, of the Los Angeles County Sheriff's Department, summed up the TLO program this way:

The TLO program is based on a successful model implemented in the South Bay area of Los Angeles County, which has been expanded to the

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<sup>46</sup> Anthony Lukin, speaking at the Terrorism Liaison Officer Training Conference, Sacramento, CA, July 6, 2006.

<sup>47</sup> Office of the Mayor, City of Los Angeles, "City of Los Angeles Announces Homeland Security and Disaster Preparedness Initiative," *Press Release*, February 2, 2006, [http://www.lacity.org/mayor/myrhspold/mayormyrhsp246335313\\_02022006.pdf](http://www.lacity.org/mayor/myrhspold/mayormyrhsp246335313_02022006.pdf) [Accessed August 18, 2007].

entire Operational Area (County). Every Sheriff's station, law enforcement, fire, and health agency in the County has a liaison officer assigned to facilitate networking and information sharing within mutual aid areas in the county, and with the TEW. The Terrorism Liaison Officer program is also linked with the private sector through the Region I Homeland Security Advisory Council. The TLO concept is being replicated within Orange County and will further enhance the flow of information between the field to the TEWs.<sup>48</sup>

Los Angeles County Sheriff Lee Baca again mentioned the TLO program during his 2006 testimony before the Senate Committee on Homeland Security and Government Affairs:

One of the successful initiatives operating out of the JRIC is the Terrorism Liaison Officer (TLO) program. Originated shortly after 9/11, this program seeks to create a network of trusted agents within each law enforcement, fire and health agency in Los Angeles County that provides the vehicle to exchange valuable information to and from the JRIC. As a result, local police officers, firefighters and health professionals have generated numerous leads of "investigative interest." This level of intelligence-based connectivity between field personnel is unprecedented and has enhanced the level of situational awareness in the region. Information provided by the TLO network contributes to the development of intelligence that is disseminated weekly to the executive staff of participating agencies, field operators, and line personnel.<sup>49</sup>

The TLO program is a proven way that the fire service can engage in effective prevention efforts as advocated in the national strategy documents. Furthermore, and equally important is that the TLO program creates both a partnership and unity of effort at the local level, facilitating the exchange of homeland security-related information between local fire and police agencies.

Information sharing between law enforcement and other agencies has always been problematic due to agency culture and standards of practice established by the

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<sup>48</sup> Michael Grossman (Captain, Emergency Operations Bureau, Los Angeles County Sheriff's Department), "First Responders: How States, Localities and the Federal Government Are Working Together to Make America Safer," testimony before the U.S. House of Representatives, Select Committee on Homeland Security, July 17, 2003, [http://www.sheriffs.org/governmentaffairs/previous/captain\\_mishael\\_grossman\\_testimony\\_on\\_intelligence\\_sharing\\_with\\_federal\\_government.pdf](http://www.sheriffs.org/governmentaffairs/previous/captain_mishael_grossman_testimony_on_intelligence_sharing_with_federal_government.pdf) [Accessed April 28, 2007].

<sup>49</sup> Leroy D. Baca (Sheriff, Los Angeles County), testimony before the U.S. Senate Committee on Homeland Security and Governmental Affairs, September 12, 2006, <http://www.hsgac.senate.gov/files/091206Baca.pdf> [Accessed April 28, 2007].

Department of Justice. Although firefighters and law enforcement personnel have a close working relationship, neither can fully comprehend the other discipline's perspective and informational needs.<sup>50</sup> While the TLO program will facilitate a closer working relationship, it will not erase all of the boundaries that currently exist.

Law enforcement has typically relied upon the exemptions that are contained within the Freedom of Information Act (FOIA) to restrict information deemed sensitive.<sup>51</sup> While the FOIA does not prohibit the sharing of information, it does allow for certain information to be protected from public disclosure. There should never be a situation where information sharing or the protection of an investigation takes priority over the safety of fire or police personnel, but there is information that fire department and even police department personnel justifiably should not have. In cases where the information provided could compromise an ongoing investigation, discussion should take place between the police and fire department TLOs to determine whether the need to know outweighs the risk of not knowing, or whether the information could be repackaged and disseminated in a way that provides maximum situational awareness.

Law enforcement agencies will sometimes argue that the information they possess is classified and therefore cannot be shared. Information that is considered classified is available only to those who carry a "Secret" or "Top Secret" clearance from a federal agency authorized to classify such information. Information that is classified is protected from distribution under Executive Orders 12958<sup>52</sup> and 13292,<sup>53</sup> and cannot be shared unless the recipient has an equal or greater security clearance and a valid reason to have access to the information.

Stated more correctly, law enforcement-restricted information typically refers to non-classified "Law Enforcement Sensitive" (LES) and "For Official Use Only" (FOUO) labeled documents generated to comply with Department of Justice standards, the Privacy Act of 1974, and as described in the FOIA and its various addendums. Generally

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<sup>50</sup> Salyers and Lutrick, "Best Defense." 49.

<sup>51</sup> Department of Justice, *Freedom of Information Act Guide* (Washington, DC: Department of Justice, 2004), <http://www.usdoj.gov/oip/exemption7.htm> [Accessed July 19, 2006], Exemption 7.

<sup>52</sup> Executive Order 12958, *Federal Register* 60, no. 76 (April 17 1995), 19825.

<sup>53</sup> Executive Order 13292, *Federal Register* 68, no. 60 (March 28, 2003), 15315.

speaking, the Privacy Act requires that written authorization from the individual be obtained before information can be released, that there must be a “need” to know the information being requested, and that the privacy of the individual must be maintained within accordance of law. However, within the guidelines of the Privacy Act, there are exemptions. Taken directly from the document under section 1.5 U.S.C. § 552a (b) (1) (“need-to-know” within an agency), an exemption exists that allows information to be shared within an “agency” on a “need-to-know basis.” Furthermore, the definition of agency is given “its broadest statutory meaning,” which is how law enforcement agencies are able to share information across departmental and jurisdictional boundaries. In the context of homeland security, there is no question that the fire service qualifies as a member of the “agency,” has a vested interest, and a “need to know” regarding information associated with possible terrorist activity. In other words, the exclusion under law is permissible. Information can be shared, but professional norms and culture too often prevent it.

In an effort to look beyond the current paradigm of the United States’ system of information and intelligence sharing, a comparative policy analysis was completed to see if there are more effective systems in place in other countries, what makes them successful, and whether they could be applied in the United States. As a basis for this comparative analysis, three other Western-oriented liberal democracies were studied: Australia, Canada, and the United Kingdom. These countries were chosen primarily because they face similar threats to that of the United States, and because they are English speaking, which allowed for ease of finding information.

## **B. POLICY QUESTIONS**

1. What policies should be considered to increase the information and intelligence capabilities of the fire service in the homeland security (terrorism) domain?
2. Are there best practices being used in other countries that could be adapted to the U.S., and that would help facilitate increased information and intelligence sharing?
3. What limitations are in place within the U.S. that cannot be reconciled?

## C. SCOPE

The goal of this study was to conduct a comparative policy analysis to see if there is information and intelligence sharing best practices from other countries that could be applied to the United States. In consideration of the other countries studied, their merits and shortcomings must be weighed carefully, keeping in mind that each country has unique threats, legal systems, intelligence apparatus, and interdisciplinary/interagency professional norms. What works in one country may not work in another. Any recommendations will be tempered by the conditions that exist within the United States today.

This comparative policy analysis was designed to seek out best practices for possible application to the U.S. system. It was not intended to be a comprehensive study of each country's intelligence, legal, and political systems. Where a best practice was found, it was noted. When a roadblock was found, that was noted. Neither positive nor negative findings are intended to suggest that that is the exclusive practice throughout the country being discussed; there are always exceptions.

Much of the information provided discusses policy and standards of practice at the national level. It is included because those policies and standards of practice set the stage, and ultimately influence state and local government. Furthermore, this policy will not deal with information and intelligence that is classified as, Secret or Top Secret by the U.S. government. The scope of the discussion here will be limited to information and intelligence that is considered within the U.S. system as LES or FOUO.

Last, the focus of this discussion and ultimate policy recommendations have been developed for fire service use. However, its contents and implementation cannot be solely oriented toward the fire service. Consideration must also be given to the needs of local law enforcement. Any policy recommendation will require a fire/police partnership in order to be effective.

## D. COUNTRY PROFILES

### 1. Australia

The central, guiding counterterrorism document in Australia is the *National Counter-Terrorism Plan* (NCTP). Developed and updated every three years by the National Counter-Terrorism Committee (NCTC), the plan outlines the responsibilities, authorities, and the mechanisms to prevent, or if they occur, manage acts of terrorism and their consequences within Australia. According to the plan, “The Australian Government and State and Territory governments, departments and agencies acting to prevent, respond to, investigate or manage the consequences of terrorism in Australia will base their plans on the NCTP.”<sup>54</sup>

Although the NCTP does not specifically mention the fire service in any portion of the document, there are some references to information sharing that would clearly pertain to them. Included within the plan are statements such as, “maintain effective arrangements for sharing appropriate intelligence and information between all relevant agencies in all jurisdictions” and, “The Police Forward Commander will, in accordance with local procedures, exercise control over, and share information with, other responding services.”<sup>55</sup> Also contained within the plan are statements confirming information sharing between the Australian Security Intelligence Organisation (ASIO), Australian Federal Police (AFP), local police, and the private sector.

A companion document to the NCTP is the *National Counter-Terrorism Handbook* which is simply referred to as *The Handbook*. *The Handbook* serves as a bridge between policy and practice in the Australian system. *The Handbook* outlines roles and responsibilities, processes, and procedures to ensure that the Australian counterterrorism policy is implemented. Contained within *The Handbook* are numerous references to the fire service, information sharing, and the collaboration that must take place at the local level. (Note: *The Handbook* is a restricted document, therefore, excerpts will not be provided in this document)

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<sup>54</sup> National Counter-Terrorism Committee, *National Counter-Terrorism Plan* (Barton ACT: Commonwealth of Australia, 2005).

<sup>55</sup> *Ibid.*, 4, 13.

The lead intelligence agency in Australia is the ASIO. Its roles and responsibilities include both foreign and domestic intelligence collection and analysis, but its principal mission is to prevent terrorist attacks on Australian soil. As the primary counterterrorism advisory and investigative agency in Australia, most of the ASIO documents are classified. However, the organization does produce an annual report that discusses the previous year's activities, and there are references within the latest report regarding information sharing. Unfortunately, only one reference is made in the 2005-2006 report that would infer sharing with local government. The report contains the statement, "As a member of the NCTC, ASIO participates in the coordination of Australia's national counter-terrorism arrangements by contributing to strategic policy advice, development of an effective nation-wide counter-terrorism capability, and ensuring effective arrangements are in place for sharing relevant security intelligence between agencies and jurisdictions."<sup>56</sup> It is interesting to note that there are six references to information sharing within the plan, but none reference the fire service or local government, and the other five reference information sharing between the ASIO and the private sector.

As part of its duties, the ASIO also operates the National Threat Assessment Center (NTAC). The NTAC was formed as a coordinating body to consolidate threat information, and distribute that information to the various governmental bodies to ensure they take the appropriate steps to counter current threats. According to the *National Counter-Terrorism Plan*, information provided by the NTAC is to "insure that Jurisdictions use relevant intelligence information, the national counter-terrorism alert level and risk assessment to determine the appropriate security responses for specific sectors, events or individuals within their jurisdictions."<sup>57</sup>

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<sup>56</sup> Australian Secret Intelligence Organisation, *Report to Parliament 2005-2006* (Canberra, AU: Commonwealth of Australia, 2006)  
[http://www.asio.gov.au/Publications/Content/AnnualReport05\\_06/pdf/ASIO%20annual%20Report%20to%20Parliament%2005-06.pdf](http://www.asio.gov.au/Publications/Content/AnnualReport05_06/pdf/ASIO%20annual%20Report%20to%20Parliament%2005-06.pdf) [Accessed March 8, 2007], 51.

<sup>57</sup> National Counter-Terrorism Committee, *National Counter-Terrorism Plan*, 2<sup>nd</sup> ed. (Barton ACT, AU: Commonwealth of Australia, 2005)  
[http://www.familyrelationships.gov.au/agd/WWW/rwpattach.nsf/VAP/\(5738DF09EBC4B7EAE52BF217B46ED3DA\)~NCTP\\_Sept\\_2005.pdf/\\$file/NCTP\\_Sept\\_2005.pdf](http://www.familyrelationships.gov.au/agd/WWW/rwpattach.nsf/VAP/(5738DF09EBC4B7EAE52BF217B46ED3DA)~NCTP_Sept_2005.pdf/$file/NCTP_Sept_2005.pdf) [Accessed March 8, 2007], 6.



The AFP is also engaged in counterterrorism activities within Australia. The ASIO does not have the powers of arrest, and so it works closely with the AFP, which provides enforcement and the powers of arrest. The AFP also produces an annual report that discusses the previous year's activities. Although there are 19 references to information sharing contained within the AFP's 2005-2006 annual report, none refer to or even infer that the fire service is included. Most references to information sharing refer to law enforcement agencies or to the private sector.

In Australia, the fire service and police are organized on a statewide basis. In New South Wales (NSW), the largest state in Australia, the New South Wales Fire Brigades (NSWFB) and the New South Wales Police Force (NSWPF) have developed a strong working relationship. Although there is no mention of information sharing or collaboration with the fire service on the NSW police Web portal, there is significant information sharing that takes place. According to Superintendent Steven Baker, manager of counterterrorism and aviation for the NSWFB, the police, fire, and health departments collaborate fully. Baker, who is embedded with the police, said, "We work closely together because that is what needs to be done. Information from the police is forwarded on a need-to-know basis, and this arrangement works effectively."<sup>58</sup> Baker stated that there currently are no local policies on how information and intelligence is being shared, but that he is currently writing a position description for that purpose. The document was not ready for release at the time of this writing.

From a law enforcement perspective, the system is working well. According to Inspector John Stapleton of the New South Wales Police Counter Terrorism and Special Tactics Command, the information he receives through the various governmental portals is sufficient for his needs. Stapleton stated that, "working with fire and ambulance representatives is not a problem" and that "overall the system works quite well."<sup>59</sup> Stapleton attributes the effectiveness of the Australian system to smaller government overall, and a realization that each discipline has a need to participate.

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<sup>58</sup> Steven Baker (Superintendent, Counterterrorism/Aviation, New South Wales Fire Brigades), telephone interview by author, March 8, 2007.

<sup>59</sup> John Stapleton (Inspector, New South Wales Police Counter Terrorism and Special Tactics Command), telephone interview by author, March 18, 2007.

In sum, there is a lack of reference in any policy documents that relate the need to share information with the fire service. In fact, there is no mention of the fire service at all. Although there is apparent intent at the federal level to include local fire service authorities, there is a noticeable policy void within the ASIO, NTAC, and AFP to acknowledge the need for the fire service to be included within the information and intelligence stream. However, despite the void and perhaps because of *The Handbook*, at least in New South Wales, that collaboration is taking place and is working well.

## 2. Canada

The central, guiding counterterrorism document in Canada is *Securing an Open Society: Canada's National Security Policy*.<sup>60</sup> *Securing an Open Society* is the first document developed that articulates the current Canadian policy on terrorism, and provides a vision of how it will evolve in the future. Contained within the plan are numerous references to information and intelligence sharing. Most references point to the Canadian Security Intelligence Service (CSIS), or to law enforcement. Again, there is no reference to the fire service anywhere in the document. However, there are references to public safety, and broader statements like the one below that would surely include the fire service.

The evolving threat to Canadians requires a fully integrated government approach that ensures that issues and information do not fall between the different parts of our security system. This system needs to be fully connected to key partners—provinces, territories, communities, first line responders, the private sector and Canadians.<sup>61</sup>

The lead intelligence agency in Canada is the CSIS. Similar to the ASIO, the roles and responsibilities of the CSIS include both foreign and domestic intelligence collection and analysis, but its principle mission is to prevent terrorist attacks on Canadian soil. According to the CSIS Web site “Sharing intelligence and cooperation, both at the national and international levels, is essential to effectively gauge current and future

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<sup>60</sup> Canadian Privy Council Office, *Securing an Open Society: Canada's National Security Policy* (Ottawa: National Library of Canada, 2004).

<sup>61</sup> *Ibid.*, 9.

threats to the security of Canada and to analyze terrorist trends.”<sup>62</sup> To facilitate that process, the CSIS conducts threat assessments, and distributes that information through its Government Liaison Unit and through the Integrated Threat Assessment Center (ITAC).<sup>63</sup> Most processed intelligence products are distributed through the ITAC. According to the ITAC Web page, “ITAC produces threat assessments for the Government of Canada, which are distributed within the intelligence community and to relevant first responders, such as law enforcement.”<sup>64</sup> Again there is no direct, reference or recommendation to include the fire service.

Because the CSIS does not have the powers of arrest, it maintains a close relationship with the Royal Canadian Mounted Police (RCMP). The RCMP is a federalized police force throughout Canada, and engages heavily in domestic counterterrorism intelligence. The RCMP and local police provide the power of arrest for the CSIS. The RCMP produces an annual performance report that discusses its operations and defines the work plan for the coming year. Included with the most current report are numerous references to information and intelligence sharing. The RCMP philosophy and policy is summed up well by the following excerpt. “It is critical that the RCMP be able to share relevant and timely information with its domestic and international partners including: Canadian police agencies; Law enforcement and security agencies; International agencies; Canadian Justice Community and Public sectors.”<sup>65</sup> This concept is further expanded under its Strategies and Plans Section, which states one of the work plans for the coming year is to “Expand the collection and sharing of information and intelligence.”<sup>66</sup>

The RCMP report also contains a self-assessment report on its information and intelligence sharing process. Included within the latest report is a separate report titled,

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<sup>62</sup> Canadian Security Intelligence Service, “Sharing Intelligence,” [http://www.csis-scrc.gc.ca/en/about\\_us/sharing.asp](http://www.csis-scrc.gc.ca/en/about_us/sharing.asp) [Accessed March 13, 2007].

<sup>63</sup> Canadian Security Intelligence Service, “The Integrated Threat Assessment Centre,” <http://www.csis-scrc.gc.ca/en/newsroom/backgrounders/backgroundunder13.asp> [Accessed March 13, 2007].

<sup>64</sup> Canadian Security Intelligence Service, “Welcome to the ITAC,” <http://www.csis-scrc.gc.ca/en/itac/itac.asp> [Accessed March 13, 2007].

<sup>65</sup> Canadian Ministry of Public Safety, *Royal Canadian Mounted Police Department Performance Report for Period Ending March 31, 2006* (Ottawa: Minister of Public Safety, 2006), 109.

<sup>66</sup> *Ibid.*, 61.

“Key Performance Results on Terrorism–Survey Results concerning the RCMP’s Information and Intelligence.” The report is a measure of how outside agencies rate the information and intelligence sharing process by the RCMP. The results include the following:<sup>67</sup>

Agree it was comprehensive:

2005 – 59%

2006 – 58%

Agree it was accurate:

2005 – 66%

2006 – 62%

Agree it was timely:

2005 – 57%

2006 – 53%

Although the RCMP report indicates a strong commitment to information and intelligence sharing, its self-assessment tool is meagerly hovering around the 60 percent satisfaction rate. Additionally, it is not clear exactly who was included in the survey, but there is no mention of the fire service in any portion of the report.

The Canadian provinces are set up similarly to the states in the U.S., and within each province there are individual fire and police service providers. The measure of the Canadian system must in part be determined by its end users—the local fire and police agencies. According to Deputy Chief Bob Smith of the Vancouver Fire Department, “nothing comes from the feds.”<sup>68</sup> Smith went on to explain that the only information received by his department comes from informal relationships with the RCMP, which is representative of all fire service agencies across Canada.<sup>69</sup>

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<sup>67</sup> Canadian Minister of Public Safety, *Performance Report*, 66.

<sup>68</sup> Bob Smith (Deputy Chief, Vancouver British Columbia Fire Department), telephone interview by author, March 14, 2007.

<sup>69</sup> Smith interview, March 14, 2007.

In sum, there is a lack of reference in any Canadian policy documents that articulate the need to share information with the fire service. In fact, there is a lack of mention of the fire service at all. Although there is apparent intent at the federal level to include local fire service authorities, there is a noticeable policy void within the CSIS, ITAC, and RCMP to acknowledge the need for the fire service to be included in the information and intelligence stream. This void is highlighted by the remarks of the Vancouver British Columbia Fire Administration, that despite references in many of the national documents, a desire for more information remains at the local level.

### 3. United Kingdom

In the United Kingdom (UK) the overarching counterterrorism strategy can be found in a document titled *Countering International Terrorism: The United Kingdom's Strategy*.<sup>70</sup> Dated July 2006, this is the most current open-source document available that defines the UK approach to terrorism. Unlike the Australian and Canadian documents, the UK gives little mention to information sharing. In all, there are only two references to sharing information and intelligence within the UK documented strategy. The first references a desire to improve intelligence sharing in support of border operations.<sup>71</sup> The second reference acknowledges a need to share intelligence with other governments.<sup>72</sup>

The role of domestic intelligence collection and analysis within the UK falls on the Security Service, also known as MI5. The roles and responsibilities of MI5 are defined in the Security Service Act of 1989. In brief, MI5's functions are "to protect national security against the threat of terrorism, to safeguard the economic well-being of the UK, and to act in support of police and other law enforcement agencies."<sup>73</sup> A search of the open-source documents and laws that regulate MI5 did not reveal any references to information or intelligence.<sup>74</sup> A request was made through the public access portal of

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<sup>70</sup> Her Majesty's Government, *Countering International Terrorism: The United Kingdom's Strategy* (London: Prime Minister and Secretary of State for the Home Department, 2006).

<sup>71</sup> *Ibid.*, 23.

<sup>72</sup> *Ibid.*, 29.

<sup>73</sup> United Kingdom Intelligence Community Online, "Security Service," <http://www.intelligence.gov.uk/agencies/mi5.asp> [Accessed March 14, 2007].

<sup>74</sup> MI5, "Proliferation of WMD," <http://www.mi5.gov.uk/output/Page21.html> [Accessed March 14, 2007].

MI5 to speak with a public information officer or government liaison officer. The request was denied. Instead an email was returned that directed all open-source document, policy, and intergovernmental-related questions to the MI5 Web site. However, no policy or reference documents are contained there.

Like Australia and Canada, the UK also operates a multidisciplinary, all-source threat information center called the Joint Terrorism Analysis Center (JTAC). According to a document titled *National Intelligence Machinery*, the “JTAC sets threat levels and issues timely threat warnings as well as more in-depth reports on trends, terrorist networks and capabilities for a wide range of customers. JIC (Joint Intelligence Committee) assessments of terrorism are more strategic and place JTAC assessments in a broader geopolitical context for Ministers and senior officials.”<sup>75</sup> The threat levels and warnings that the JTAC establishes are very similar to the color-coded Homeland Security Advisory System used in the U.S. However, the warnings are designed to target the public, not the response community. Furthermore, the reference of JTAC assessments being used in a broader geopolitical context for ministers and senior officials suggests that local authorities would not be included.

As with the other countries, the ultimate assessment of information and intelligence sharing must be gauged by the end user. As a means to determine whether the UK fire services actually do receive the information and intelligence they need, the London Metropolitan Police and London Fire Brigades were contacted. According to Counterterrorism Security Advisor Nick Goldby, of the New Scotland Yard, “a senior member of the London Fire Brigade is embedded with the Metropolitan Police Counterterrorism Unit and he has access to all of the systems.”<sup>76</sup> That assessment was validated by Peter Simpson of the London Fire Brigade. According to Simpson, who is

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<sup>75</sup> The Stationery Office, *National Intelligence Machinery* (London: Her Majesty’s Stationery Office, 2000), 17.

<sup>76</sup> Nick Goldby (Counterterrorism Security Advisor, London Metropolitan Police), telephone interview by author, March 19, 2007.

the United Kingdom's fire representative for the Counterterrorist Command and who is embedded with Goldby at the New Scotland Yard, "everything that the police get, I get also."<sup>77</sup>

Further discussion with Simpson revealed that in the years immediately after 9/11, the UK suffered from many of the same inadequate information and intelligence sharing problems seen in the U.S., that is stove-piped systems and cultural differences prohibited information sharing. To correct the problems in the UK, Parliament passed the Civil Contingencies Act of 2004, which carries the force of law and mandates that agencies share information. Contained within the Act is an entire chapter (Chapter 3) that describes exactly how information is to be shared, and how sensitive information must be protected. Chapter 3 begins with the phrase "Under the Civil Contingencies Act, Category 1 and 2 responders have a duty to share information with other Category 1 and 2 responders."

In sum, open-source policies and documents in the United Kingdom are limited. At the strategic level, there is little reference to information sharing, and that holds true throughout the government in the UK. However, despite the void that exists in the open-source policy documents, the Civil Contingencies Act of 2004 corrects that oversight, and requires that information and intelligence be shared vertically and horizontally within the UK system.

#### **4. United States**

The U.S. strategy on terrorism is incorporated into several documents, but the overarching strategy is *The National Strategy for Homeland Security*.<sup>78</sup> The commitment to information sharing is repeated throughout the document in such phrases as, "The federal government must seek to utilize state and local knowledge about their communities and then share relevant information with the state and local entities positioned to act on it."<sup>79</sup> There is also the acknowledgement that information sharing is

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<sup>77</sup> Peter Simpson (Counterterrorism Liaison Officer, London Fire Brigades), telephone interview by author, March 26, 2007.

<sup>78</sup> Office of Homeland Security, *National Strategy*, vii.

<sup>79</sup> Office of Homeland Security, *National Strategy*, 12.

less than optimal at the state and federal levels. The U.S. national strategy states that “Information-sharing capabilities are similarly deficient at the state and local levels.”<sup>80</sup> Likewise, it also begins the process of remedying the situation by stating, “The 2003 budget proposed an increase in spending of \$722 million on programs that will use information technology to more effectively share information and intelligence horizontally (between federal agencies) and vertically (between federal, state, and local governments).”<sup>81</sup>

The U.S. national strategy is clearly devoted to sharing information and intelligence vertically and horizontally within government. Yet there is one element of concern. The fire service is only mentioned one time in the entire national strategy.<sup>82</sup> Given that the fire service will likely be the lead response agency in nine of the fifteen National Planning Scenarios, this is distressing.

In 2004, Congress passed the Intelligence Reform and Terrorism Prevention Act. This act reaffirms the federal government’s desire to maximize its information and intelligence information sharing capabilities. In the section titled Information Sharing, the following statement is made, “The President shall, through the structures described in subparagraphs (B) and (C) of paragraph (1), ensure that the ISE (information sharing environment) provides and facilitates the means for sharing terrorism information among all appropriate Federal, State, local, and tribal entities.”<sup>83</sup> Within the U.S., it seems clear that information and intelligence sharing is desired, and that the current state of capability has not reached an optimal level.

The responsibility for domestic intelligence activities are, for the most part, shared by the Federal Bureau of Investigation (FBI) and DHS. Since the attacks of 9/11, the FBI has committed itself to a much more open posture. Numerous references are made in open-source FBI documents and policies to increased information sharing and collaboration. Statements such as, “Consistent with the protection of sensitive sources

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<sup>80</sup> Office of Homeland Security, *National Strategy*, 56.

<sup>81</sup> *Ibid.*, 58.

<sup>82</sup> Office of Homeland Security, *National Strategy*, 56

<sup>83</sup> U.S. Congress, *Intelligence Reform and Terrorism Prevention Act of 2004* (Washington, DC: Government Printing Office, 2004), 29.



and methods and the protection of privacy rights, we now share as a rule, and withhold by exception.”<sup>84</sup> In another example, the statement, “Understanding that we cannot defeat terrorism without strong partnerships, we have enhanced the level of coordination and information sharing with state and municipal law enforcement personnel” articulates the commitment.<sup>85</sup>

The Department of Homeland Security seems equally committed to the practice of information and intelligence sharing. Taken from its Web site is the following:

Department of Homeland Security is responsible for assessing the nation’s vulnerabilities. It takes the lead in evaluating vulnerabilities and coordinating with other federal, state, local, and private entities to ensure the most effective response. The collection, protection, evaluation and dissemination of information to the American public, state and local governments and the private sector is central to this task.<sup>86</sup>

What is absent from these documents is a mechanism for information and intelligence sharing to take place. In the FBI and DHS documents numerous references are made regarding information sharing and the fire service, but those two terms are never found conjointly. Like the Australian, Canadian, and British governments, the U.S. also operates a national fusion center—the National Counterterrorism Center (NCTC). The mission of the NCTC is to serve as a collection and analysis point for all counterterrorism intelligence efforts. Its principal purpose is to “serve as the central and shared knowledge bank on terrorism information.”<sup>87</sup> The NCTC also “provides all-source intelligence support to government-wide counterterrorism activities.”<sup>88</sup> What the NCTC does not do is mention anything specific about supporting local government. In a self-assessment document titled *NCTC and Information Sharing: Five Years Since 9/11, A Progressive Report*, a reference to the challenges of information sharing is made regarding access to information by state, local, and tribal governments. The reference states, “methods for

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<sup>84</sup> Department of Justice, *The FBI’s Counterterrorism Program Since September 2001* (Washington, DC: Department of Justice, 2004), 46.

<sup>85</sup> *Ibid.*, 2.

<sup>86</sup> Department of Homeland Security, “Information Sharing & Analysis,” <http://www.dhs.gov/xinfoshare/> [Accessed March 18, 2007].

<sup>87</sup> National Counterterrorism Center, “What We Do,” [http://www.nctc.gov/about\\_us/what\\_we\\_do.html](http://www.nctc.gov/about_us/what_we_do.html) [Accessed March 18, 2007].

<sup>88</sup> *Ibid.*

ensuring that homeland security and terrorism information is shared among non-Federal government entities and the Federal government remains inadequate.”<sup>89</sup>

## **E. SUMMARY ASSESSMENT**

With the exception of the United Kingdom, each of the countries cited advocates information sharing in its federal policy documents. Regardless of what appears to be a desire to share information among disciplines and vertically within government, there is still a lack of acknowledgement in these documents that information should also be shared with the fire service.

The Australian, Canadian, and United Kingdom operate under a different information and intelligence collection process than the U.S. The ASIO, CSIS, and MI5 all function as pure intelligence agencies without the power of arrest. Instead, they rely on a federal law enforcement agency to enforce the law and exercise the powers of arrest. In the United States, both functions are incorporated within the FBI. Although there are different systems in place, there is no obvious reason that information and intelligence sharing would be affected either positively or negatively. In the Australian and UK systems, there is an absence of policy or documentation referencing information sharing. In the Canadian and U.S. systems, there are numerous assertions of information sharing. But in all cases, reference to the fire service is missing.

Each of the three countries operates an information and intelligence fusion center similar to the NCTC in the U.S. Although each of the fusion centers advocates information sharing in one way or another, the fire service is not mentioned in any of the information stream references.

As stated previously, the ultimate barometer is whether those at the local level receive the information they need. Of the three countries studied, only Australia and the United Kingdom indicated that they were wholly satisfied with the end result. Within the Australian and the UK systems there are differences worth noting. First, the Australian system of local fire and police agencies is aligned with the state system, as compared to the Canadian and the UK systems, which are oriented locally. Even though the fire

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<sup>89</sup> National Counterterrorism Center, *NCTC and Information Sharing: Five Years Since 9/11, A Progress Report* (McLean, VA: National Counterterrorism Center, 2006), 10.

department in the UK is a federalized system, it is for the most part locally governed. The Canadian system is much like the U.S., in that its public safety organizations are under municipal control. The result is that there is less government to get in the way, particularly in the Australian system. That is not to suggest that whatever makes the Australian system work effectively should be implemented by one or all of the other countries, only that there are fewer layers to organize.

The second and perhaps most important difference found in the Australian and United Kingdom systems is that they have developed other means to serve as a guide to define how policy will be implemented at the local level. In Australia, *The Handbook* converts policy into practice, something none of the other countries have. In the UK, the Civil Contingencies Act of 2004 mandates with the force of law that response agencies will share and have access to information and intelligence. This is significant, especially in the U.S. and Canadian systems, where there is a great deal of discussion on the importance of information sharing, but no national architecture to make it happen.

Table 1. Country / Policy Comparison Graphic

Country	Policy	National Policy Advocates Information Sharing	Fire Service Referenced in National Policy Documents	Legislation or Document Bridge Between Policy and Practice	Federal Law Enforcement Advocates Information Sharing	Fire Service Referenced in Federal Law Enforcement Policy Documents	National Information and Intelligence Fusion Center	Fire Service Referenced in National Fusion Center Policy	End User Satisfied with Information and Intelligence Received
Australia	YES	NO	YES	YES	NO	YES	NO	YES	
Canada	YES	NO	NO	YES	NO	YES	NO	NO	
United Kingdom	NO	NO	YES	NO	NO	YES	NO	YES	
United States	YES	NO	NO	YES	NO	YES	NO	NO	

## **F. COMPARATIVE POLICY ANALYSIS CONCLUSIONS AND BASIS FOR RECOMMENDATIONS**

There is a defined lack of reference to the fire service in any of the strategic policies in the countries studied, including the United States. If the fire service is to be considered an equal partner in the fight against terrorism, it must be recognized as such. Formally identifying the fire service in key U.S. strategic national policies must occur.

Although the U.S. and Canadian policies have the most references to information and intelligence sharing, the fire services in both countries are the least likely of all countries studied to receive information. This represents not a failure of intent, but demonstrates a failure of will over culture and practice. The fire service must search for ways to join in the information and intelligence sharing process, and should use the information it receives to influence planning, training, budgeting, and personnel safety through situational awareness.

The United States, with sixteen officially recognized members of its intelligence community, will always have a stove-piped system to some extent. Even with the numerous documents produced since 9/11 advocating the sharing of information, local fire and police services will never have access to the same information that federal authorities have. Much of the information at the federal level remains classified, which falls outside of the scope of this analysis, and although some may argue that information at the federal level often remains classified unnecessarily, that reality will not change. However, there are processes available for fire service personnel to obtain Secret and Top Secret clearances if agencies so chose. Although there are some things that will not change, significant improvements can be made. And if desired, an information and intelligence sharing system similar to that of Australia or the United Kingdom could be implemented in the U.S.

The Australian and UK models vary in approach. In Australia, further definition of how the policy should be implemented is accepted and is working effectively. In the UK, it took the force of law to implement a system that works. Given the need and slow transformation of the U.S. information and intelligence sharing practices, further definition of policy through use of a “bridge” document should be the first step to define

how information and intelligence should be shared with the fire service. Lobbying for legal mandates is always an option if policy reform is not effective. It should not, however, be the first course of action.

Including the fire service in the information and intelligence sharing process will be a monumental task. Although it will yield significant benefits, it will be met with heavy resistance from the law enforcement community and the IC. As with most things in government, small incremental advances often reach the finish line ahead of grander plans. That said, the following policy recommendations are submitted for consideration.

## **G. POLICY RECOMMENDATIONS**

### **1. Develop and Promulgate a New National Vision for the Fire Service that Places More Emphasis on Pre-Event Terror Planning**

The United States fire service needs to first and foremost move away from its traditional response-oriented posture. It needs to embrace the concept that in order for it to maximize its efficiency and effectiveness, it will need to engage more significantly in understanding the threats it faces, and develop more effective planning, training, equipment, and budgeting. This is a central concept in the Australian and United Kingdom fire services, and one that justifies the need for greater information and intelligence access. Since integrating into the information and intelligence structure, fire service representatives in both countries indicate that their pre-event terror planning is more effective.

### **2. Convince National Leadership to Specifically Include the Fire Service in Public Policy Documents, Policies, and Strategies**

The lack of reference to the fire service in the public policies, strategies, and documents must be changed. The fire service will likely be the initial lead agency in nine of the fifteen National Planning Scenarios, yet there is little reference to the fire service in any of the national strategies. The same lack of reference was noted in all of the countries studied, and was identified as being problematic by those interviewed. Although the issue has subsided to some degree in Australia and the United Kingdom due to the directives contained in *The Handbook* and the Civil Contingencies Act, it has been a central point of discussion among fire service leaders.

### **3. Advocate Engaging the Fire Service in the Information and Intelligence Process**

If the fire service is going to maximize its efficiency and effectiveness, provide the highest level of service to the community, and provide the greatest degree of safety for its personnel, it must embrace the advantages of participating in tactical, operational, and strategic information and intelligence. This concept was not only noted but was expanded upon by the Australian and United Kingdom governments, which moved to embed fire service managers with local police.

### **4. Lobby for and Help Facilitate Legislation that Defines How Information and Intelligence Affecting the Fire Service will be Shared**

Within the U.S., the desire is clear to maximize homeland security efforts through an integrated systems approach. Although the national leadership seems committed to this process, a void exists on how it should be implemented. A policy document clearly articulating how information will be shared should be developed, and the fire service should take an active part in its creation. This concept was discussed at length during the interview with Superintendent Simpson of the London Fire Brigade, who said that prior to the Civil Contingencies Act, the UK fire services suffered from many of the same information and intelligence barriers that are endemic within the United States today. Although it took legislative action to facilitate the required change, the London Fire Brigade now receives the information it needs.

## **H. SUMMARY**

The fire service must engage in, and be a part of, the information and intelligence sharing process. The primary reason for intelligence gathering and analysis by any discipline is to avoid strategic surprise; the fire service is no exception. Furthermore, information and intelligence should significantly drive planning, equipment acquisition, and training. Although engaging in information and intelligence activities by the fire service constitutes a change in practice and culture, it is a transformation that must take place in order to protect personnel and provide the highest level of service to the community.

Resistance is going to be encountered from some members of the law enforcement community, who see information and intelligence as proprietary to law enforcement.<sup>90</sup> Those individuals and agencies may argue that the fire service has no business having access to homeland security information and intelligence because it could compromise an investigation. They might also argue, albeit falsely, that they are legally prohibited from sharing information.

The question of sharing information and intelligence is a cultural issue, not a legal one. The fire service is as much, if not more, of a target for secondary attacks as law enforcement, and there is too much risk to delegate personnel safety to a discipline whose primary focus is to protect its investigation and pre-9/11 culture. Information and intelligence sharing is a major component of the fire service's ability to protect its personnel and the community. This challenge is one of leadership. Fire service leaders must recognize the importance of information and intelligence, and begin a dialog with their counterparts in law enforcement to make this change occur.

According to the International Chiefs of Police (IACP), intelligence sharing is "critical to law enforcement and other emergency agencies capacities to better protect the American public", and should be a top priority.<sup>91</sup> The need for timely and accurate information is essential, and should be viewed as a critical mission for the fire service. It is the best way to manage our homeland security threats.

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<sup>90</sup> Lowenthal, *Intelligence: From Secrets to Policy*, 6.

<sup>91</sup> International Association of Chiefs of Police, *Criminal Intelligence Sharing: A National Plan For Intelligence-Led Policing at the Local, State, and Federal Levels* (Washington, DC: Department of Justice, 2002), <http://www.theiacp.org/documents/pdfs/Publications/intelsharingreport.pdf> [Accessed July 15, 2006] i.

### III. COMMUNITY ENGAGEMENT

In 1971, America realized it had a serious problem; too many people were threatened by the catastrophic effects of fire. President Nixon and Congress created the National Commission on Fire Prevention and Control to conduct a study and to make recommendations to reduce the risk. That study, *America Burning*, was published in 1973.<sup>92</sup> Two of the most strongly emphasized and frequently reiterated recommendations included in the report were to inform the community about the nature of the threat, and to engage them in planning to meet current and future needs.<sup>93</sup>

Today, America faces a new kind of threat: terrorism, and in the broader sense, all of the man-made and natural threats that are associated within the domain of homeland security. Ironically, many of the core issues identified in the *America Burning* report are not dissimilar to the contemporary disasters we face with terrorism, i.e., a feeling that although there is a threat, “for most Americans it is a remote danger that justifies indifference,” that “tensions arise when public expectations exceed what the fire department is delivering,” that there is no “purely government solution for every problem”, that “because fire departments exist in a real world where a variety of purposes must be served with a limited amount of money, it is important that every dollar be invested for maximum payoff”, and that “planning should set goals and priorities for the fire department to meet the changing needs of the community.”<sup>94</sup> Because of the similarities of the issues that exist in these two time periods, two logical questions arise: Will the same approach be effective? Will a partnership between the fire service and the community it serves enable the fire service to meet current and future demands?

The concept of partnering with the community has been around for some time. For many years much of the accepted fire service management principle has existed in the book *Managing Fire Services*,<sup>95</sup> written by Ronny Coleman and John Granito. As

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<sup>92</sup> National Commission on Fire Prevention and Control, *America Burning* (Washington, DC: U.S. Government Printing Office, 1973).

<sup>93</sup> *Ibid.*, 105, 156.

<sup>94</sup> *Ibid.*, 2, 25, 29, 34, 147, 156.

<sup>95</sup> Ronny J. Coleman and John A. Granito, *Managing Fire Services* 2<sup>nd</sup> ed. (Washington, DC: International City/County Management Association, 1988), 31.



early as 1988, Coleman and Granito stated, “It is important to remember that the local fire department operates first and foremost within the local community and must be responsive to its needs.” Although not specifically stated, the inference is that a public/community partnership must exist if current and future demands are to be met.

In the wake of the 9/11 attacks, emergency managers at all levels of government emphasized the need for greater community preparedness. One of the most significant events that impacted that effort was the State of the Union Address delivered by President Bush on January 29, 2002, during which he called for all Americans to “serve their nation for the equivalent of two years (4,000 hours) over their lifetimes” by serving in the newly created USA Freedom Corps.<sup>96</sup> The USA Freedom Corps is made up of several national service programs, one of which is Citizen Corps.<sup>97</sup> The creation of the Citizen Corps program called for individuals to engage directly through volunteerism to improve homeland security within their communities.<sup>98</sup> Within the Citizens Corps, five programs were created: Community Emergency Response Teams (CERT), Fire Corps, Neighborhood Watch Program (NWP), Medical Reserve Corps (MRC), and Volunteers in Police Service (VIPS).

The largest of the Citizen Corps programs is CERT. CERT was conceived and implemented by the Los Angeles Fire Department (LAFD) in 1985. The basic concepts of CERT, as designed by the LAFD, are to train individuals to first take care of themselves, their families, their neighbors, and finally their community.<sup>99</sup> The Los Angeles CERT curriculum includes basic disaster assessment, turning off utilities when warranted, extinguishment of small fires, basic first aid, basic search and rescue, organization of CERT members and other convergent volunteers during disasters, and collection of disaster intelligence that will support first-responder efforts.

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<sup>96</sup> The White House, “President to Discuss New Citizen Corps Initiative,” *Press Release*, January 30, 2002, <http://www.whitehouse.gov/news/releases/2002/01/20020130.html> [Accessed December 29, 2006].

<sup>97</sup> USA Freedom Corps, [http://www.usafreedomcorps.gov/about\\_usafc/programs/index.asp](http://www.usafreedomcorps.gov/about_usafc/programs/index.asp) [Accessed December 29, 2006].

<sup>98</sup> Citizen Corps, “Programs and Partners,” <http://www.citizen corps.gov/programs/> [Accessed December 29, 2006].

<sup>99</sup> CERT Los Angeles, “Home Page,” <http://www.cert-la.com/index.shtml> [Accessed January 4, 2007].

Since 1988, the LAFD has trained over 40,000 individuals within the city of Los Angeles. Each time another disaster strikes, the fire department receives more requests from the community for additional classes, and the program grows even larger.<sup>100</sup> The LAFD conducts approximately 200 CERT academies a year in various areas of the city. In addition, it hosts two refresher courses each year, with an average attendance of four hundred people per course. CERT members are coordinated through a system of CERT Councils that are aligned with the various city council districts.<sup>101</sup>

The alignment of CERT within the political subdivisions of Los Angeles is not happenstance. The CERT program has created strong bonds between the political leadership of Los Angeles and their respective constituencies. According to Battalion Chief Edward Bushman, of the Los Angeles Fire Department, CERT is one of the highest profile programs within the city, and significantly raises the fire department profile in a positive manner.<sup>102</sup> The link that exists between the community, the fire department, and the city is so strong that the mere mention of reducing its funding creates outrage in the community. The continued success of the LAFD CERT program demonstrates its benefit, not only to the community, but also the fire department and its political leaders.<sup>103</sup>

In the wake of 9/11 and the president's call for activism, CERT found its niche and went national. In January 2002, there were 170 CERT programs across the country. As of January 2007, that number has expanded to 2,646.<sup>104</sup> The growth in CERT is evidence that individuals do want to increase their preparedness, and are concerned about homeland security within their communities.

Programs such as CERT have proven themselves to be good mechanisms to begin creating the kinds of partnerships that are needed in the post-9/11 environment. According to CERT Coordinator Bob Jacobsen, of Whatcom County, Washington, "If I

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<sup>100</sup> Ramone Willis (CERT Training Coordinator, Los Angeles City Fire Department), telephone interview by author, January 4, 2007.

<sup>101</sup> Ibid.

<sup>102</sup> Edward Bushman (Battalion Chief, Los Angeles City Fire Department), telephone interview by author, May 18, 2007.

<sup>103</sup> Ibid.

<sup>104</sup> Rachel Jacky (CERT Program Director, Office of Citizen Corps, National Preparedness Directorate/FEMA), email received by author, May 8, 2007.

could train all 170,000 of my residents in basic CERT skills, our community resiliency against natural and man-made disasters would skyrocket.”<sup>105</sup> Jacobsen’s comment represents the potential successes and the remaining challenges faced by emergency managers as they implement and expand CERT programs.

A key concept of CERT is that a better prepared community will be more resistant to disasters, and rely less on scarce public safety services.<sup>106</sup> For the most part, CERT remains an accepted program that focuses on the personal preparedness of individuals and families at their home or workplace.<sup>107</sup> However, the degree to which a community should train and rely on its volunteers is not without its controversy. The larger discussion of utilizing volunteers in times of disaster and managing their activities in the pre-event, event, and post-event scenarios is both complicated and to some degree contentious. The core of the controversy seems to be whether citizen groups actually have the ability to conduct emergency operations that will ultimately be a benefit to the community as a whole. Russell Dynes, noted disaster researcher, writes that traditional public safety managers have historically believed that communities are fragile entities that collapse in times in disaster, necessitating strong guidance and direction through official “command and control” mechanisms that have been stood up by recognized public officials in order to restore order from chaos.<sup>108</sup> More recent studies have suggested that communities are much more resilient than previously believed, and that individual and group behavior will be predictable and effective.<sup>109</sup> One common precept that emerges from Dynes’ studies is that individuals within the impacted area will inevitably join together and engage in rescue activities, fire suppression, care for those who have been injured, and provide shelter and other logistical support in times of

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<sup>105</sup> Bob Jacobsen (CERT Coordinator, Whatcom County, Washington), telephone interview by author, May 17, 2007.

<sup>106</sup> Federal Emergency Management Agency, *Community Emergency Response Team Participation Manual (SM-317)* (Washington, DC: Department of Homeland Security, 2003).

<sup>107</sup> Citizens Corp, “CERT-Frequently Asked Questions,” <http://www.citizencorps.gov/cert/faq.shtml> [Accessed May 12, 2007].

<sup>108</sup> Russell Dynes, “Social Capital: Dealing with Community Emergencies,” *Homeland Security Affairs Journal* 2, no. 2 (2006), <http://www.hsaj.org/pages/volume2/issue2/pdfs/2.2.5.pdf> [Accessed April 3, 2007], 13.

<sup>109</sup> *Ibid.*, 20.

disaster.<sup>110</sup> Acknowledging this, the challenge for fire service leaders is to develop effective ways to leverage community volunteers to support the mission of the fire service.

When President Bush constructed the Citizens Corps initiative in 2002, one of the cornerstones of his vision was to create a “culture of preparedness” among the American public. The term “culture of preparedness” seemed innocuous enough, and most people within and outside of government took the statement at face value: Be prepared. But as the term spread and was used by other members of the Bush administration, namely Undersecretary of Preparedness at DHS George W. Foresman and Assistant to the President for Homeland Security and Counterterrorism Frances Townsend, the focus narrowed. The question that emerged was, “What does creating a culture of preparedness really mean?”

In response, both Foresman and Townsend attempted to define the concept. During a September 2006 appearance before the Senate Subcommittee on Homeland Security, Foresman spoke extensively about the progress of creating a culture of preparedness, noting that, “A better prepared America will be achieved when government, the private sector, and the American people each do their part” and that “we recognize that our nation’s preparedness is a shared national responsibility.”<sup>111</sup> This same notion of culture and partnership was noted by Frances Townsend in the *Katrina: Lessons Learned* report. Townsend’s discussion of creating a culture of preparedness says, “A new preparedness culture must emphasize that the entire Nation—Federal, State, and local governments; the private sector; communities; and individual citizens—shares common goals and responsibilities for homeland security. In other words, our homeland security is built on a foundation of partnerships.”<sup>112</sup> It is clear by the statements of

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Russell Dynes, “Social Capital: Dealing with Community Emergencies,” *Homeland Security Affairs Journal* 2, no. 2 (2006), <http://www.hsaj.org/pages/volume2/issue2/pdfs/2.2.5.pdf> [Accessed April 3, 2007], 7.

<sup>111</sup> George Foresman (Under Secretary for Preparedness, Department of Homeland Security), testimony before the U.S. Senate Subcommittee on Homeland Security, Committee on Appropriations, September 7, 2006, [http://www.dhs.gov/xnews/testimony/testimony\\_1158346377425.shtm](http://www.dhs.gov/xnews/testimony/testimony_1158346377425.shtm) [Accessed May 13, 2007].

<sup>112</sup> The White House, *The Federal Response to Hurricane Katrina: Lessons Learned* (Washington, DC: The White House, 2006).

Foresman and Townsend that they view creating government/citizen partnerships as being the key ingredient to creating a culture of preparedness.

Both Foresman and Townsend advocate re-energizing the concept of a government/community partnership based on the understanding that neither can do it alone. The ideas of Foresman and Townsend represent a loftier view, that a shared responsibility must be imbued within the American culture if the United States is going to maximize its homeland security efforts.

From the citizen's point of view, there is evidence that these government/community partnerships are just what communities have been looking for. In late 2003, the Council for Excellence in Government, in collaboration with the Department of Homeland Security, undertook an ambitious task: to facilitate a dialog between citizens and government leaders on homeland security. The project visited seven major cities across the country, and engaged citizens and government leaders through a series of town hall meetings. The meetings were also broadcast live on local radio and television stations, allowing those at home to participate through an interactive polling mechanism. The town meetings were moderated but not restricted in subject matter. Numerous homeland security issues were brought up, discussed, and debated.

At the conclusion of the meetings, both the citizenry and government leaders understood that there was much work to be done. To assist in sorting through the many concerns and suggestions received during the town hall meetings, working groups were convened consisting of leaders from the public, private, and non-profit sectors to begin the distillation process.<sup>113</sup>

The final report titled *We the People: Homeland Security from the Citizens' Perspective* was published in May 2004. It profiled many views of community participants and offered numerous recommendations for implementation. One of the cornerstone statements in the report was that, "The greatest resource the United States has for enhancing homeland security—which has been largely untapped thus far—is the American people."<sup>114</sup> The report immediately goes on to say, "Making the most of this

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<sup>113</sup> The Council for Excellence in Government, *We the People: Homeland Security from the Citizens' Perspective* (Washington, DC: Council for Excellence in Government, 2004).

<sup>114</sup> *Ibid.*, 17.

requires a change in outlook as well as public policies; in short, it demands a deliberate effort to construct a culture of preparedness that emphasizes an all-hazards approach to public safety.”<sup>115</sup>

To communicate the participating community’s desired end state, the report outlines the following fundamental values and vision:

The American people’s vision of homeland security is a dynamic picture of safety, freedom, and trust. Imagine people going about their everyday lives—enjoying their families and friends, engaging in productive pursuits in thriving communities, traveling to and from home, school and work—with the self-assurance that stems from being informed, alert, and aware of their surroundings. The threat of a terrorist attack does not deter us from living life to the fullest because:

- We know that well-rehearsed and connected emergency plans are in place for schools, workplaces, communities, states, and the nation.
- We know where to get the information we need—radio, television, the Internet, telephone—from trusted sources.
- We have confidence that first responders and trained volunteers are communicating and working together to protect the public’s health and safety.
- We have confidence that information is being shared, analyzed, and used strategically by officials in law enforcement, emergency response, and public health across the nation and even the world.
- We have confidence that private information about ourselves and others is being collected and used strategically and appropriately in a fair and accountable process.

This vision recognizes the “can-do” American spirit that meets challenges with optimism and pragmatic solutions. In such a society, our precious freedom is intact, accompanied by a sense of safety and recognition that security underwrites that freedom. How do we achieve this vision?

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<sup>115</sup> The Council for Excellence in Government, *We the People: Homeland Security from the Citizens’ Perspective* (Washington, DC: Council for Excellence in Government, 2004), 17.

The answer is a dynamic leadership and collaborative action from citizens, communities, businesses, and government at all levels. Getting this right will not only increase our security. It will also strengthen our communities.<sup>116</sup>

The report also proposes precisely how this end state should be achieved by outlining the following guiding principles:

The homeland security enterprise should be:

**Citizen Focused**—engaging citizens to set priorities, develop plans, participate as volunteers, and demand accountability in their role as owners of our government.

**Collaborative**—requiring leaders throughout the enterprise to work together as never before to achieve results that transcend organizational boundaries and individual egos.

**Strategic**—articulating clear goals and measures, based on an analysis of threats and vulnerabilities; creating coordinated action plans; employing pilot programs and rigorous evaluations to identify, refine, replicate, and share best practices.

**Innovative**—pioneering new approaches, unusual partnerships, state of the art technology, and creative thinking.

**Trustworthy**—assuring appropriate degrees of balance, transparency, limits, and openness to build public trust in the homeland security enterprise.

**Accountable**—setting clear performance measures against which leaders at all levels can be held publicly accountable for specific results in specific timeframes.<sup>117</sup>

Although each of the guiding principles is unique in its own way, the core elements suggest that communities desire a partnership with government, want to be included in the planning activities, believe there is value in innovation and creative thinking, and are willing to take responsibility for their actions. Furthermore, these core principles seem well aligned with the concept of creating a “culture of preparedness” that Bush, Foresman, and Townsend have so often mentioned. However, the vision that Bush

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<sup>116</sup> Council for Excellence in Government, *We the People*, 9.

<sup>117</sup> *Ibid.*.

created has little chance of succeeding if local public safety officials do not take advantage of the opportunity and move forward with engaging the community and creating public safety/community partnerships.

Some communities, however, have taken a progressive approach to engaging the public in planning activities. In King County, Washington, the King County Office of Emergency Management needed to update its Regional Disaster Plan. Rather than just meet with other governmental bodies, county officials decided to include members of the public, tribal entities, and non-profit groups in the planning process. The final document became a comprehensive, all-risk plan that included sections on training and exercise, transportation, telecommunications and warnings, mass-care, housing and human services, public health and medical services, public information, and finally a terrorism annex. As the executive summary of the plan points out, the plan details “who is going to do what among all public and private organizations.”<sup>118</sup>

The King County Disaster Plan is one of the few plans that represent the interests of the public and private sectors, tribal entities, and non-profit organizations. According to Katherine Howard, emergency manager, King County uses a “command and coordinate” approach rather than the traditional “command and control” approach referenced previously in Dynes’ work.<sup>119</sup> As a result of this collaborated approach, King County received the 2005 Achievement Award from the National Association of Counties for its regional approach to homeland security.<sup>120</sup>

The concept of creating government/community partnerships has another component that should not be ignored. An article by Archon Fung, professor of public engagement and democracy at the John F. Kennedy School of Government at Harvard University, states that, “competent administration is only one part of dealing effectively

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<sup>118</sup> King County Office of Emergency Management, *Regional Disaster Plan for Public & Private Organizations in King County, Washington* (Renton, WA: King County Office of Emergency Management, 2006), 1.

<sup>119</sup> Katherine Howard (Emergency Manager, King County Office of Emergency Management), telephone interview by author, May 15, 2007.

<sup>120</sup> National Association of Counties, “Achievement Award: A Regional Approach to Homeland Security,” [http://www.naco.org/Template.cfm?Section=Achievement\\_Awards&Template=/cfiles/awards/program.cfm&SEARCHID=2005emer41](http://www.naco.org/Template.cfm?Section=Achievement_Awards&Template=/cfiles/awards/program.cfm&SEARCHID=2005emer41) [Accessed May 15, 2007].



with shocks like hurricanes and terrorist attacks.”<sup>121</sup> Fung finishes the thought by saying, “The other crucial ingredient is society itself. Families, houses of worship, community organizations, and other social networks form the fabric of support—what some political scientists and sociologists call social capital—that enables people to be resilient in the face of terrible stress.”<sup>122</sup> Much has been written regarding the concept of social capital and especially so since the release of the book *Bowling Alone*, by Robert Putnam.<sup>123</sup> Putnam discusses in depth the historical decline of social networks and disenfranchisement of the democratic process in the United States since the early 1960s.<sup>124</sup> On government, Putnam bluntly states, “In the 1990s roughly three in four Americans didn’t trust the government to do what is right most of the time.”<sup>125</sup>

Putnam and others have gone on the offensive to re-engage the community, and rebuild the social capital and trust in government they perceive is lacking in American society. Efforts such as the Saguaro Seminar, hosted by Harvard University, which brought together “33 thinkers and doers, including articulate leaders from all parts of the country—from coast to coast, from small town and suburb to the inner city—and from all walks of life—from government officials to religious leaders, from labor union activists to high-tech and business executives, from elected officials to street workers. All participants demonstrate a deep commitment to improving the infrastructure of national civic life.”<sup>126</sup>

A product of the Saguaro Seminar was the creation of the *Better Together* report.<sup>127</sup> The report discusses many issues, but two are particularly worth mentioning

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<sup>121</sup> Archon Fung, “Coming to the Rescue,” *The Boston Globe*, October 2, 2005, [http://www.boston.com/news/globe/magazine/articles/2005/10/02/coming\\_to\\_the\\_rescue/](http://www.boston.com/news/globe/magazine/articles/2005/10/02/coming_to_the_rescue/) [Accessed May 17, 2007].

<sup>122</sup> Ibid.

<sup>123</sup> Robert D. Putnam, *Bowling Alone* (New York, NY: Simon and Schuster Paperbacks, 2000).

<sup>124</sup> Ibid., 31.

<sup>125</sup> Ibid., 47.

<sup>126</sup> Saguaro Seminar: Civic Engagement in America, John F. Kennedy School of Government, Harvard University, <http://www.ksg.harvard.edu/saguaro/executivesummary.htm> [Accessed May 18, 2007].

<sup>127</sup> Saguaro Seminar: Civic Engagement in America, John F. Kennedy School of Government, Harvard University, *Better Together: Restoring the American Community* (New York, NY: Simon & Schuster, 2003), 1.

here. The first is an assessment by Daniel Patrick Moynihan, who in discussing the “expectations gap” referenced a quote by political scientist Aaron Wildavsky: “A recipe for violence: Promise a lot; deliver a little. Lead people to believe they will be much better off but let there be no dramatic improvement.”<sup>128</sup> Placed in present day, Wildavsky’s assessment perfectly fits the nation’s preparedness efforts following the 9/11 attacks, and then the subsequent problems of the Katrina response.

Another product of the *Better Together* report was a consensus that “Government, the output side of democracy is composed of the institutions that are supposed to carry out our collective wishes.”<sup>129</sup> Yet without engaging the community on homeland security issues, how should the residents of a community determine what their level of service should be? Although terrorist acts are low-probability, high-impact events, the public outcry in the aftermath of Hurricane Katrina should serve as appropriate warning that the community will not tolerate inefficient and ineffective response, regardless of the scale or probability of the incident. Both of these statements, when contrasted to the public’s desire to be involved in the protection of its communities, should be a very clear message to local government leadership.

Rebuilding social capital that has been destroyed by unmet expectations has tremendous implications, and will take time and nurturing on the part of government. At a basic level it will require rebuilding social trust in not only government, but also between individuals and communities. This will be no easy task. As Putnam’s book clearly describes, the public’s mistrust and disengagement from government is endemic at all levels. It is not just a federal issue, it is one that crosses all government boundaries, whether federal, state, or local.

Although the concept of a culture of preparedness originated within the federal government, the purveyors of that legacy must be local government leaders because that is where the greatest interaction exists between government and community. It is where the rubber meets the road. Regardless of federal ideas, plans, and programs, all of them must ultimately be implemented at the local level if they are to be successful. Because of

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<sup>128</sup> Saguaro Seminar, *Better Together*, 63.

<sup>129</sup> *Ibid.*, 57.

this, local government must function as both the ambassadors for the federal system as well as the local experts in implementing policy.

A survey of fire chiefs within the nation's top 250 cities shows that they are somewhat reluctant to completely agree that a gap exists between their own homeland security response capability and what the community expects. Scoring a mean of 3.61 on a five-point scale with three being "neutral" and four representing "agree," suggests that although they tend to agree, they are not yet strongly convinced that the community expects more from them than they can deliver. This is in contrast to such reports as *We the People* and *Hurricane Katrina: Lessons Learned*.

That same survey, however, demonstrates that chiefs believe identifying and remedying capability gaps is important. Scoring 4.3 with four representing "agree" and five representing "strongly agree," the chiefs believe that gaps between fire service capabilities and community expectations should be minimized whenever possible.

It is unrealistic to suggest that the expectation gap can be reduced to zero within any community. There will always be some gap that exists because that is the nature of government/community relations. And, although community partnerships and communication appear to be the best possible solution to minimizing that gap, even the best of partnerships will have its limitations. As fire departments across the nation work diligently to provide the highest level of services to their communities, there will also be limits. Fire departments often struggle to meet daily demands, and fall short in times of exigent circumstance. This has long been a problem for public safety leaders, and was appropriately noted in the *America Burning* report.<sup>130</sup> In other words, staffing was a problem then, much as it is now.

Fifteen years after *America Burning* was published, the fire service returned to the report and attempted to evaluate its progress. The updated report, *America Burning Revisited*, found that staffing and resources remained virtually unchanged.<sup>131</sup> Under the heading of critical issues, the *America Burning Revisited* report noted that, "Another failure in the area of lobbying is that the fire service has not worked with such other

<sup>130</sup> National Commission on Fire Prevention and Control, *America Burning*, 31.

<sup>131</sup> Federal Emergency Management Agency, *America Burning Revisited* (Washington, DC: U.S. Government Printing Office, 1987), 99.

parties as community service organizations and industry with whom they might productively form partnerships to bring greater influence to bear on public officials. Unless this problem is solved, adequate resources will never become available.”<sup>132</sup>

The fire service in general is recognized for its planning activities. Tactical, operational, and strategic plans exist in nearly every agency. As a part of this planning culture, the U.S. Fire Administration has for many years advocated that fire service providers engage in the master planning process.<sup>133</sup> More recently, the IAFC in cooperation with the Commission on Fire Accreditation International (CFAI, now known as the Center for Public Safety Excellence, or CPSE) has endorsed the accreditation process.<sup>134</sup> Both the master planning and accreditation processes are used as tools to determine levels of service and capability. More important, both of these planning methods rely on community representation as an integral part of the process. Although master planning and accreditation are fundamentally more global in scope, the idea of using similar processes that are more narrowly focused on homeland security issues raises interesting possibilities for local fire service leaders.

In the context of terrorism, many agencies continue to plan for one event, assuming that all resources will be available, and there will be a rapid response. What is not planned for is the possibility of concurrent or sustained events, or an event that occurs when resources are limited. In short, this is a recipe for failure. Most homeland security planning has been done without public participation. But as the *We the People* report clearly advocates, the public is ready, willing, and able to be a part of that process.<sup>135</sup> Returning again to the survey of fire chiefs, when asked whether positive benefits could be realized by including community stakeholders in a homeland security planning process similar to that of master planning, there was consistent agreement that it would be beneficial. Overall the chiefs’ response had a mean score of 4.06 with four being “agree” and five being “strongly agree.”

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<sup>132</sup> Federal Emergency Management Agency, *America Burning Revisited*, 52.

<sup>133</sup> U.S. Fire Administration, *Fire Prevention Organization and Management* (Emmitsburg, MD: National Emergency Training Center, 2002), 8-2.

<sup>134</sup> Center for Public Safety Excellence, “Accreditation,” <http://publicsafetyexcellence.org/Accreditation/tabid/54/Default.aspx> [Accessed July 21, 2007].

<sup>135</sup> Council for Excellence in Government, *We the People*, 9.

There are many potential benefits to including community stakeholders in a planning process for homeland security. First, the public's desire to be engaged in and improve homeland security within their communities would be increased. Second, the re-engagement of the community would begin to build lost social capital at the local level. Third, the formation of government/community planning partnerships would re-energize the democratic process. Fourth, the expectation gap that exists within communities would be minimized. And last, the planning process could result in increased community lobbying of political leaders to appropriately fund and staff fire departments in support of their homeland security mission.

Community engagement should be viewed as a critical issue for the fire service. Since 9/11, the fire service has done a great deal in preparing for acts of terrorism. Equipment has been purchased, personnel have been trained, local agencies have collaborated and coordinated with each other, and emergency operations plans have been rewritten. But the one critical issue that has been missed, and which deserves further consideration, is the engagement of the community.

This will not be an easy task for many agencies. Nor should it occur in a vacuum. Homeland security is at its core a local issue and should involve all appropriate parties. Most certainly at the local level, the public safety agencies, police and fire should be standing side by side, delivering the same message. Engagement of the community and unity of effort between the police/fire mission on homeland security will help to facilitate preparedness efforts more than any federal idea, plan, or program.

## IV. RESPONSE

In the aftermath of 9/11, the fire service rushed to assemble a response capability for future terror incidents. Although terrorism was not a foreign concept to the fire service before 9/11, few would argue against the idea that September 11, 2001 brought the focus and threat to center stage. In order to rapidly develop a response capability, the fire service looked for “off-the-shelf” solutions to manage chemical, biological, radiological, nuclear, and explosive (CBRNE) events. Because of the hazardous nature of CBRNE materials, and because most urban areas had hazardous materials (hazmat) teams operating under a recognized and accepted response plan, the quick fix was to place the primary responsibility of terrorism under existing hazmat protocol. This provided an immediate and appropriate response capability that fire service managers could point to as evidence that they had something in place to protect the community.

In support of the fire service, and seeing the need to rapidly expand response capability, the federal government, through its Office of Justice Program grants, Homeland Security Grant Program (HSGP), FEMA’s Assistance to Firefighters Grant (AFG) program, and Urban Area Security Initiative (UASI) grants, allocated billions of dollars to purchase additional equipment. In 2005 alone, the HSGP and UASI grants totaled more than 2.5 billion dollars.<sup>136</sup> Today, the fire service has a lot more “things” than it did before 9/11, but an argument could be made that the overall capability has not increased proportionally. As evidence of this claim, one has only to read through a random sampling of the myriad After Action Reports (AARs) before a common trait emerges: the same slow, methodical approach that hazmat teams have used to manage traditional industrial hazardous materials incidents is being used to manage a terror incident. In report after report, the evaluators criticize the length of time it takes hazmat teams to respond, classify the environment, and perform rescue. It is not uncommon to find reports with such statements as, “the first non-ambulatory patient was not

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<sup>136</sup> Department of Homeland Security, “List of UASI and Homeland Security Grant Program Recipients: Appendix A,” [http://www.dhs.gov/xlibrary/assets/Grants\\_Recipients\\_FY05.pdf](http://www.dhs.gov/xlibrary/assets/Grants_Recipients_FY05.pdf) [Accessed June 3, 2007].

transported to the warm zone for more than two hours after the incident began.”<sup>137</sup> This same report goes on to say, “The incident team did not have enough personnel to effectively extricate all patients from the incident area.”<sup>138</sup>

The consequences of 9/11 and the rush to stand up some kind of response capability was warranted, without question. But now that the fire service is several years out from that event, a question could be asked regarding whether the response capability that currently exists is the best possible or simply the quickest fix that was put in place to solve the immediate need at the time. Furthermore, what would the answer be if fire service leaders took pause and asked the question: If a fire service-based terrorism response system were to be built today, from the ground up, while continuing to fulfill traditional needs, would it look the same as what is currently in place?

In a survey of fire chiefs and commissioners, undertaken in support of this thesis, several questions were asked regarding terrorism response. The results suggest that fire service leaders are somewhat conflicted on the issues. When asked if the same response methods employed for a hazmat incident are appropriate for chemical, biological, radiological, nuclear, and explosive incidents, there was little conviction in their response. Scoring a lackluster mean of 3.06 (neutral) suggests that fire service leaders are not yet wholly convinced that the current path of terrorism response is effective. Perhaps more clearly, when asked if a hazmat incident and a terrorism incident are the same, with the terrorism incident just being on a grander scale, their opinion was more negative. Scoring a mean of 2.53 (disagree) suggests they view terrorism incidents differently than traditional hazmat incidents. This difference in concept explains the lack of conviction in the first answer, given that most urban fire service agencies are following a hazmat response methodology for terrorism.<sup>139</sup>

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<sup>137</sup> Lessons Learned: Information Sharing, “After Action Report CWFSE060,” <https://www.llis.dhs.gov/member/secure/getfile.cfm?id=7844> (restricted Web site), [Accessed June 3, 2007], 18.

<sup>138</sup> Ibid., 18.

<sup>139</sup> Office For Domestic Preparedness and International Association of Firefighters, *Emergency Response to Terrorism: Operations, A Safe Response for Public Safety Personnel* (Washington, DC: Department of Homeland Security, 2004), SM-3.

Additional examples from the survey provide more focus on this issue. When asked whether a tiered response including operations level, technician level, and specialist level trained personnel is appropriate for homeland security missions, there was greater consensus and positive affirmation. Scoring a mean of 4.15 (agree), fire service leaders confirm that a tiered response capability is what most find appropriate. However, the answer to this question seems in conflict with why a pure hazmat approach is not readily accepted, especially given that traditional hazmat response doctrine contains all of the elements of a tiered response. The answer may be in the last question that was posed in the survey: Do new standards, such as the National Fire Protection Association Standard 472, *Operations Plus*, have applicability to the fire service?<sup>140</sup> Scoring a mean of 3.65 (neutral/agree) fire service leaders tend to agree that an expanded scope for fire service personnel in dealing with hazardous substances is warranted. When the same question was asked of the leaders of the nation's top 10 jurisdictions (based on population), the mean was significantly raised to 4.10 (agree].

A conclusion can be made based upon the survey results and the AARs previously discussed that although traditional hazmat response has a place in terrorism response, its current configuration is viewed as less than effective. Furthermore, fire service leaders see value in expanding the scope and capability of first responders to meet the threat of terrorism.

Recently the Fire Department of New York (FDNY) released its *Terrorism and Disaster Preparedness Strategy*. Contained within its strategy, the FDNY hinges its response concepts on four key elements: capability (what the FDNY can do), capacity (how much of it can be done), proficiency (how well can the FDNY do it), and deployment (how rapidly can it be done).<sup>141</sup> According to the FDNY's Chief of Counterterrorism and Emergency Preparedness Joseph Pfeifer, of the four elements contained within the FDNY strategy, most fire departments, including the FDNY do capability, capacity, and proficiency well. What is often failing is the fourth component,

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<sup>140</sup> National Fire Protection Association, *Standard 472-Standard for Professional Competence of Responders to Hazardous Materials Incidents* (Quincy, MA: National Fire Protection Association, 2002).

<sup>141</sup> Michael Bloomberg, Nicholas Scoppetta, and Salvatore J. Cassano, *Fire Department City of New York, Terrorism and Disaster Preparedness Strategy* (New York, NY: New York City Fire Department, 2007), 11.



deployment.<sup>142</sup> Regardless of the capability, capacity, and proficiency a fire department may possess, if it cannot deliver those functions rapidly, they are of little value. Pfeifer's explanation provides validation to the criticism contained in the AARs mentioned previously. When placed in the context that the fire service is first and foremost a public safety organization whose primary responsibility is saving lives, the fourth element, deployment, is critical.

Underlying the concept of deployment is a fundamental flaw that often exists in local agency planning scenarios, which is the belief that there will be one attack, that all resources will be available, and those resources will respond in a timely manner. This issue is addressed by Townsend in the *Hurricane Katrina: Lessons Learned* report. Townsend writes, "the scenario does not anticipate one of the most demanding characteristics of past al-Qaida operations: multiple, simultaneous attacks. How much more taxing would it be to respond to multiple and simultaneous nuclear, chemical, or biological incidents?"<sup>143</sup> When considering the possibility of multiple or simultaneous attacks, those agencies that rely solely on a traditional hazmat response posture, one that firmly enforces the policy that operations-level personnel only engage in "defensive operations," demonstrate a failure of imagination, and places both the public and their own personnel at increased and unnecessary risk.<sup>144</sup>

There are two fundamental problems with this mindset. First, a choke point effect is created. Although there may be hundreds of firefighters responding to an incident, if operations-level personnel are restricted in their ability to engage in critical activities like rescue and basic monitoring because they must wait for a special resource (hazmat) to arrive, then capacity is diminished. Additionally, this flaw in operational concept can easily be exploited simply by timing the attack during rush hour traffic. In highly urbanized areas, a resource just a few miles away could have significant delays simply because of traffic conditions.

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<sup>142</sup> Joseph Pfeifer (Chief of Counterterrorism and Emergency Preparedness, New York City Fire Department), telephone interview by author, May 25, 2007.

<sup>143</sup> The White House, *Federal Response to Hurricane Katrina*, 76.

<sup>144</sup> Occupational Safety and Health Administration, *Hazardous Waste Operations and Emergency Response 1910.120* (Washington, DC: Department of Labor, n.d.), [http://www.osha.gov/pls/oshaweb/owadisp.show\\_document?p\\_table=standards&p\\_id=9765](http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=standards&p_id=9765) [Accessed May 30, 2007], (q) (6) (ii).

Second, when considering multiple-attack scenarios, the potential exists that there will be no specialized resources available, or they may be severely delayed because they are committed to another incident. In this scenario, the remaining non-specialized response personnel are left with few choices. Either take action for which they are neither properly trained nor equipped, or wait for resources that are already committed to break away from other incidents and respond. In this scenario, capability, capacity, proficiency, and deployment are all compromised. These lessons should have been learned during the scourge of “white powder” calls that occurred across the country in 2001 and 2002. Resources were often committed to other incidents, resulting in a delayed response or in no response at all.

When considering response to incidents that involve dangerous hazardous substances, deliberation must be given to the regulatory environment. Since 9/11, a great deal of discussion has taken place on this issue. As a central point of reference, the fire service has looked to the *Code of Federal Regulations* under title 29, part 1910 *Occupational Health and Safety Standards*, section 120 *Hazardous Waste Operations and Emergency Response* (commonly referred to as 29CFR1910.120 or HAZWOPER), and to the local branch of the Occupational Safety and Health Administration (OSHA) as the enforcement arm of that standard. Too often, fire service agencies interpret the standard at face value and apply it as an unwavering edict to all situations. In truth, the standard contains flexibility, especially in how personnel are trained. It should not be forgotten that the standard applies to all employers, not just the fire service. Because of the variety of situations that might be encountered throughout the spectrum of the public and private sectors, agencies, and missions, training must be provided in support of the anticipated tasks expected by the employer. The requirements for training are set forth under section 1910.120 (q) (6), “training shall be based upon the duties and function to be performed by each responder of an emergency response organization.”<sup>145</sup>

Historically ingrained within hazmat culture has been the idea that operations-level personnel are restricted to engaging in defensive operations only. However, under the HAZWOPER standard, the concept of defensive operations is to “respond in a

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<sup>145</sup> Occupational Safety and Health Administration, *Hazardous Waste Operations*, 1910.120 (q) (6).

defensive fashion without actually trying to stop the release.”<sup>146</sup> More specifically, the standard mandates that “individuals who respond to releases or potential releases for the purpose of stopping the release” meet the requirements for hazardous materials technician.<sup>147</sup> Furthermore, “they assume a more aggressive role than a first responder at the operations level in that they will approach the point of release in order to plug, patch, or otherwise stop the release of a hazardous substance.”<sup>148</sup> In short, there is nothing contained within the OSHA regulation that would prohibit operations-level personnel from providing a supportive role (such as rescue or environmental monitoring) in a hostile environment, provided they are appropriately trained and equipped, and they do not respond with the intent of plugging, patching, or otherwise stopping the release of a hazardous substance.

This assessment is specifically defined within the context of terrorism response in one of OSHA’s standard interpretations published on its Web site. Dated November 24, 2003, and titled “Application of HAZWOPER (1910.120) to terrorist and weapons of mass destruction incident responses” OSHA states, “Training requirements for all classifications of emergency responders are based on the duties and functions to be performed by each responder and are found at §1910.120(q)(6)(i)-(v).”<sup>149</sup> The intent of this response was further clarified by Jack Oudiz, senior safety engineer for the California Department of Occupational Safety and Health Administration. According to Oudiz, “Employers have the right to determine how their employees will respond to incidents involving hazardous substances,” and “As long as there is training and equipment provided to support that response, and employers develop guidelines for their employees to follow regulating the response, they are meeting the intent of the standard.”<sup>150</sup> As with any regulation it is important to understand the intent, not simply the text.

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<sup>146</sup> Occupational Safety and Health Administration, *Hazardous Waste Operations*, 1910.120, (q) (6) (ii).

<sup>147</sup> *Ibid.*, (q) (6) (iii).

<sup>148</sup> *Ibid.*

<sup>149</sup> Occupational Safety and Health Administration, “11/24/03-Application of HAZWOPER (1910.120) to terrorist and weapons of mass destruction incidents,” [http://www.osha.gov/pls/oshaweb/owadisp.show\\_document?p\\_table=INTERPRETATIONS&p\\_id=24731](http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=INTERPRETATIONS&p_id=24731) [Accessed May 30, 2007].

<sup>150</sup> Jack Oudiz (Senior Safety Engineer, California Department of Occupational Safety and Health Administration), telephone interview by author, May 29, 2007.

OSHA has provided even more flexibility to public safety agencies during a terror-related event. Understanding that life safety considerations for both rescuer and the public must be considered, OSHA is positioned to act as an advisory body rather than an enforcement agency. Contained within the same letter of interpretation referenced above is the following clarification:

With regard to terrorist events, OSHA's role will be guided by comprehensive national policies contained in the Federal Response Plan (FRP), the National Response Plan (NRP), and other legal authorities. OSHA may not be exercising enforcement authority if this is not the role given the agency by the FRP or NRP. Under the Occupational Safety and Health Act, OSHA's primary duty is to ensure that employers are taking necessary actions to protect workers from hazards on the job; enforcement of standards is only one of the means provided by the law to achieve this end and will not always be appropriate. While 29 CFR 1910.120 provides important information on protecting workers, OSHA's task in conveying these protections through employer actions may most effectively be served following a terrorist incident through technical assistance rather than enforcement activity.

When actions under the National Response Plan (NRP) are terminated by the Lead Federal Agency (LFA), or the response period evolves into a clean-up period where a terrorist event has occurred and there are known exposures to hazardous materials, OSHA can and will then take any action, including the enforcement of 29 CFR 1910.120 and all other appropriate standards and regulations, as necessary to ensure that employees are properly protected.<sup>151</sup>

The interpretations provided above do not release employers from providing the appropriate safeguards for their employees, but do decisively confirm that in the post-9/11 era, there is a need for flexibility in order for fire service agencies to protect the public and carry out missions involving terrorist events. This issue was also discussed with Oudiz, who pointed to the events of 9/11. According to Oudiz, "The problems with the response to the World Trade Center were not that the FDNY did not meet the strict compliance of the OSHA standard during the initial response phase, it was they did not take the necessary steps to protect their individuals in the days and weeks following the event."<sup>152</sup>

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<sup>151</sup> Occupational Safety and Health Administration, 11/24/03-Application of HAZWOPER.

<sup>152</sup> Oudiz interview, May 29, 2007.

Given the need by fire service agencies for increased flexibility and response capability, some agencies are developing and expanding their own protocols. Cities like Los Angeles are now providing all personnel with higher levels of personnel protective equipment (PPE) and basic monitoring capability, and have developed standard operating procedures for all companies that allow the immediate rescue of victims in a terror event.<sup>153</sup> In Huntsville, Alabama, all district chiefs carry monitors that give them the ability to preliminarily assess the environment long before the first hazmat unit arrives, and have pre-positioned PPE at area hospitals to support decontamination operations.<sup>154</sup> The city of Chicago has taken an even more aggressive approach, and has entered into a cooperative agreement with the firefighters union and the IAFF to provide its 4,200 fire suppression personnel with the requisite training to meet the standard for hazardous materials technician certification.<sup>155</sup> According to Hazardous Materials Chief Daniel O'Connell, of the Chicago Fire Department, "Terrorism is hazmat with an attitude and we need to ensure that our people can function effectively in that environment."<sup>156</sup> Regardless of the jurisdiction, the need to expand capability, capacity, proficiency, and deployment is evident.

Although some might argue that the fire service cannot prepare for every possible scenario nor do they have the financial means to be as aggressive as Los Angeles or Chicago, an opposing and perhaps more justifiable argument could be made that tremendous increases in capability, capacity, proficiency, and deployment could be realized with relatively little cost by simply broadening the base of operations. This is what drove the ideology behind the Huntsville Fire Department's concept of operations. By providing advanced training to non-specialized fire department resources, especially in the areas of PPE and basic monitoring, organizations can go a long way toward extending their operational base.

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<sup>153</sup> Jaime Lesinski (Captain, City of Los Angeles Fire Department), telephone interview by author, May 31, 2007.

<sup>154</sup> Howard McFarland (Assistant Chief of Operations, Huntsville, Alabama, Fire Department), telephone interview by author, May 24, 2007.

<sup>155</sup> Daniel O'Connell (Hazardous Materials Chief, Chicago Fire Department), telephone interview by author, May 27, 2007.

<sup>156</sup> O'Connell interview, May 27, 2007.

In the spirit of broadening the base of operations as a result of seeing the need and realizing the limitations that the current traditional hazardous materials culture has on terrorism response, the NFPA's committee on hazardous materials sought to expand the traditional roles of operational-level personnel. In doing so, it created its *Operations Plus* Standard. *Operations Plus* establishes a set of core competencies for operations-level personnel to function in the CBRNE environment. Although not technician-level training, this standard does provide for basic response to those events where increased levels of protection are warranted, environmental monitoring is necessary, entry into the Hot (exclusion) Zone to conduct rescue is needed, and decontamination is required.

According to Greg G. Noll, chairman of the NFPA 472 committee, a working group was formed in 2005 to review the 2002 standard to determine how it could better meet traditional hazmat response issues and the new terrorism/criminal use of hazardous materials.<sup>157</sup> According to Noll, one of the main goals was to combine hazmat and WMD competencies into one single document.<sup>158</sup> Furthermore, identifying the need to expand the base of operations, the committee relied heavily on the flexibility contained within the HAZWOPER standard that allows the authority having jurisdiction to meet OSHA 1910.120 (q) (6): "Training shall be based upon the duties and function to be performed by each responder of an emergency response organization."<sup>159</sup>

The new *Operations Plus* standard contains all of the core competencies from the 2002 standard, including PPE, emergency decontamination, and product control, and is expanded to also include air monitoring and sampling, victim rescue and removal, evidence preservation, and illicit laboratory response.<sup>160</sup> According to Noll, "1910.120 was first implemented 21 years ago. The world was a lot different then. The new 472 standard is much more appropriate for contemporary times."<sup>161</sup>

Although the new NFPA standard will officially carry a 2008 date stamp, it was presented to the NFPA Standards Council for approval at the June 24, 2007 annual

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<sup>157</sup> Greg G. Noll (Chairman, NFPA 472 Committee), email received by author, May 30, 2007.

<sup>158</sup> Noll email, May 20, 2007.

<sup>159</sup> Occupational Safety and Health Administration, *Hazardous Waste Operations*, 1910.120 (q) (6).

<sup>160</sup> Ibid.

<sup>161</sup> Greg G. Noll (Chairman, NFPA 472 Committee), telephone interview by author, May 31, 2007.

meeting, and has an effective implementation date of June 24, 2007. Although there is nothing binding about any of the NFPA standards, they are widely accepted as consensus standards and establish professional conduct and competencies for the fire service.

## V. LEADERSHIP

In many ways the American fire service has not changed much since its beginning, when Benjamin Franklin created the Union Fire Company in Philadelphia, Pennsylvania, in 1736.<sup>162</sup> The fire service continues to deliver its services through a series of decentralized fire stations and personnel that converge into a single unified combat force directed by a single commander through a hierarchal, top-down command system. Since its earliest days, this decentralized and distributed network has woven itself into the community in ways that no other organization has been able to do. This is, perhaps, its greatest success. Although individual firefighters are not often personally known, they represent a national symbol and an instrument of a community's inherent safety.<sup>163</sup> Few would argue that for more than 200 years, communities have relied heavily on the services provided by the fire service.

The fire service has expanded its delivery of services significantly since the days of Ben Franklin, particularly over the last fifty years. Although the fire service began as a narrowly focused discipline created to protect communities from the adverse effects of fire, its expansion of services now includes firefighting, physical rescue, fire prevention, emergency medical services, hazardous materials response, urban search and rescue, swift-water rescue, public safety education, and most recently, protection against terrorism. By far, the American fire service delivers a more diverse group of services to the communities it serves than any other governmental agency. Although the American fire service has retained its namesake, its evolution into an "all-risk" service cannot be denied.<sup>164</sup> Regardless of what emergent need an individual or community has, it will most likely be the fire service that responds and remedies the problem.

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<sup>162</sup> Wikipedia, "Benjamin Franklin," [http://en.wikipedia.org/wiki/Benjamin\\_Franklin](http://en.wikipedia.org/wiki/Benjamin_Franklin) (Accessed June 14, 2007).

<sup>163</sup> Dan M. Haverty, "The Mask of Public Leadership: Form, Growth and Use" (paper prepared for the 16th Annual Public Administration Theory Network Conference, Anchorage, Alaska, June 19-21, 2003), 24.

<sup>164</sup> Randy R. Bruegman (President, International Association of Fire Chiefs), testimony before the U.S. Senate Committee on Commerce, Science and Transportation, April 30, 2003, [http://commerce.senate.gov/hearings/testimony.cfm?id=742&wit\\_id=2002](http://commerce.senate.gov/hearings/testimony.cfm?id=742&wit_id=2002) [Accessed June 4, 2007].



The transition to this all-risk posture has not come without its challenges. Fire service agencies are expected to provide an increasingly wider scope of services to the communities they serve, often without additional funding or staffing.<sup>165</sup> Furthermore, because of the community's expectation to provide more, fire departments and fire service leaders are being thrust into the public spotlight, where they are increasingly subject to scrutiny.<sup>166</sup> This increased exposure cuts across the grain of fire service culture, which, as a discipline, has opted to quietly fulfill its mission and remain out of the public eye for the past two hundred-plus years. Even when faced with the current threat of terrorism, the fire service tradition and culture remain intact.

In the aftermath of Hurricane Katrina, Townsend noted that "the culture of our response community has a fundamental bias towards reaction rather than initiative."<sup>167</sup> Townsend's reference to initiative would suggest, at least in her view, that fire service leaders should be looking for new and innovative ways to meet contemporary demands. The statement suggests that Townsend is looking for leadership from the fire service.

Returning once again to the survey conducted in support of this thesis, Townsend's remarks are not necessarily foreign concepts to fire service leaders across the country. When asked if the traditional response-oriented posture that has historically dominated the fire service was appropriate in the post 9/11 era, there was indecisiveness in the response. Answering with a score of 3.17 (largely neutral), there was not a great deal of confidence either way. However, when the response was narrowed to the metro chiefs, although the difference was slight, there was perhaps a trend beginning to emerge. The metro chiefs responded with a score of 2.73, indicating skepticism that a response posture alone would meet the current demand. This question of fundamental orientation also had one of the highest standard deviations found in the survey (1.14), suggesting that there are many differing opinions on this issue.

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<sup>165</sup> International City/County Management Association, "Comparative Performance Measurement: FY 1998 Data Report" (Washington, DC: ICMA Center for Performance Management, 1999) cited in Haverty, "The Mask of Public Leadership," 3.

<sup>166</sup> Haverty, "The Mask of Public Leadership," 27.

<sup>167</sup>The White House, *Federal Response to Hurricane Katrina*, 79.

Perhaps one of the reasons fire service leaders have differing opinions on homeland security issues lies in the structure of the fire service. Although the American fire service has an amazingly similar culture from coast to coast and from border to border, it is fundamentally a patchwork of independently operating agencies functioning under local control. As homogenous as the American fire service culture is, agencies vary widely as do the services they provide to the communities they serve.

This patchwork of agencies often finds common ground among the issues they face. However, because cities and agencies vary so greatly, what might be an important issue to one agency may not be important to another. There are roughly 30,000 individual fire service agencies in the United States, and each is influenced by the local political, budgetary, and community-based realities that each leader must face on any given day. As retired Fire Chief Alan Brunacini, from the Phoenix, Arizona, Fire Department, notes “there is no national focus to the American fire service.”<sup>168</sup> Given this reality, attempting to bring together a group as large and complex as the American fire service is, to say the least, a daunting leadership challenge.

The importance of a national focus carries much more significance today than it did prior to 9/11, when the changes that occurred within the fire service could be fairly easily incorporated into the existing structure, while maintaining local control and traditional values. Since 9/11, the rules and mission have changed dramatically. The threat of terrorism presents a far greater potential risk to the community and to fire service personnel than anything it has had to manage in its history. Although most agencies are attempting to meet the threat, there are no standards to follow, and most agencies are left to develop methods they perceive as right for their local jurisdiction. This lack of unity and national focus was noted by Townsend in the *Katrina: Lessons Learned* report, which says “our states and territories have developed fifty-six unique homeland security strategies, as have fifty high-threat, high-density urban areas.”<sup>169</sup>

Given the unique threat of terrorism, most agencies will have to rely on automatic and mutual aid assistance. As seen on 9/11, even the FDNY, the largest fire department in

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<sup>168</sup> Alan Brunacini (Fire Chief [retired], Phoenix Fire Department), telephone interview by author, June 11, 2007.

<sup>169</sup> The White House, *Hurricane Katrina: Lessons Learned*, 67.

the country, required assistance from outside agencies. According to Jim Broman, chief of the Lacey Fire Department in Lacey, Washington, the fire service needs to work on greater standardization so that there is better “plug and play” capability.<sup>170</sup> However, nearly six years after 9/11 there remains no national fire service strategy on terrorism or even a collective vision of what is needed. According to Broman, many of the problems the fire service currently faces can be traced to one central issue—“that there is not a singular voice that speaks for the American fire service.”<sup>171</sup>

The fire service is principally comprised of two professional organizations: the International Association of Fire Chiefs (IAFC) and the International Association of Fire Fighters (IAFF). The IAFC membership is made up of fire chiefs and other executive officers. The IAFF membership is made up of rank-and-file members. Both organizations are very active, and influence the fire service on many issues. However, because the chiefs are the ones who must be accountable to the political body and to the community, and because they are the recognized leaders of individual agencies, it is the IAFC that is best suited for assuming the leadership role on the issue of terrorism. According to Chief John Buckman, past president of the IAFC (2001-2002), “we are the association that will determine the future of the American fire service”.<sup>172</sup> Buckman appropriately notes that even the fire chiefs understand that they, through the IAFC, will determine the future success of the fire service.

The IAFC has not been idle on the issue of terrorism. In 2005, the Metropolitan Fire Chiefs (Metro Section of the IAFC) developed a strategic plan containing six goals. Although not exclusive to homeland security, several of the goals and strategies had a homeland security focus, and addressed some of the salient issues. The strategic plan included such statements as, “develop a clear definition of the fire services’ role in homeland security,” “increase visibility and role of the fire service within the Department of Homeland Security,” and “develop political strategies that include providing allies in Congress with specific and clear recommendations for the level of participation of the

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<sup>170</sup> Jim Broman (Chief, Lacey, Washington, Fire Department), telephone interview by author, June 8, 2007.

<sup>171</sup> Ibid.

<sup>172</sup> John Buckman, interviewed by Ronny Coleman, “Succession Training: Making the Quantum Leap,” *Command Transfer*, Fire and Emergency Television Network, Carrollton, TX, 2002.

Fire Service in Homeland Security.”<sup>173</sup> Unfortunately, the document is more of a plan to plan, and falls short of establishing a true vision or strategy. According to Keith Richter, chief of the Contra Costa County Fire Department in California, current president of the Metro Section, and member of the IAFC Terrorism Subcommittee, the document remains in its original form, and although it is more than two years old, it has not been updated.<sup>174</sup>

Another effort of the IAFC has been to host a yearly conference to discuss homeland security issues. This effort has been underway for the past three years, and includes both fire service and non-fire service participants. From the 2006 conference, the IAFC produced a report titled *National Conference on Strengthening the Public Safety Response to Terrorism and other Hazards: Report of Findings*.<sup>175</sup> Within the document are the goals and objectives:

- Build understanding of and consensus on common preparedness and response priorities in the public safety community.
- For the state and local public safety community to self-identify and articulate a common vision of preparedness efforts, particularly as they relate to HSPD-5 and HSPD-8. The vision should take into account which steps have been effective, what courses of action need to be redirected and what actions should be considered next.
- Examine interoperability (and its relation to operability) in the context of critical preparedness and response issues.
- Support the “all-hazards” approach by engaging the issues in a mix of contexts including malicious and non-malicious man-made incidents, natural disasters, and daily operations.
- Support a “bottom-up” methodology to national preparedness efforts.<sup>176</sup>

Not unlike the strategic plan developed by the Metro Section, there appears to be several issues in the *National Conference on Strengthening the Public Safety Response to Terrorism and other Hazards: Report of Findings* document which suggest that the path for the fire service in homeland security is not yet determined. More important, these two

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<sup>173</sup> International Association of Fire Chiefs, Metropolitan Fire Chiefs Section, *Strategic Plan and Implementation Strategies* (Washington, DC: International Association of Fire Chiefs, 2005), 2-3.

<sup>174</sup> Keith Richter (Chief, Contra Costa County, California, Fire Department), telephone interview by author, June 12, 2007.

<sup>175</sup> International Association of Fire Chiefs, *3<sup>rd</sup> National Conference on Strengthening the Public Safety Response to Terrorism and Other Hazards: Report on Findings* (Washington, DC: International Association of Fire Chiefs, 2007).

<sup>176</sup> *Ibid.*, 1.

documents suggest that there is a fundamental problem in approach. The IAFC and individual agencies are searching for consensus on which direction to take. But that is not what is most important. What is critically important and fundamentally necessary is to have a destination. No one has established that for the fire service. From a leadership perspective, a homeland security vision for the fire service must be established because it provides the basis for all that follows. Without a clear vision, how can effective strategies be developed if the end point has not been established? As noted leadership author Steven Covey would say, start with the end in mind. This concept by Covey is a vital component of leadership; “To begin with the end in mind means to start with a clear understanding of your destination.”<sup>177</sup> Covey’s quote reaffirms the idea that it is impossible to pick the right path if the destination is unknown.

As with any issue, it is always easier to find the problem than the solution. In the case of the IAFC, many people are working diligently to find those solutions. But in a system that might best be described as a complex network of networks that exist as a set of multifunctional groups or teams, finding solutions is going to be even more challenging given the current approach.

As previously stated, the fire service is trying to manage a more demanding and dynamic environment than anytime in its history. Yet fundamentally, the fire service remains entrenched in its traditional firefighting-oriented culture rather than fully embrace its evolution into the all-hazards discipline that it has become. Evidence of this has already been discussed in various forms in the preceding chapters of this thesis, and will not be repeated here. However, given the changing environment, the ongoing threat, the current status of the fire service, and the years that have elapsed since 9/11, it might be suggested that traditional leadership practices are not meeting the current demand. The essence of this argument is that the fire service as a discipline must learn to be more adaptive to the changing environment. As a fundamental concept in organizational theory, organizations must evolve or risk being left behind to wither and eventually

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<sup>177</sup> Stephen R. Covey, *The Seven Habits of Highly Effective People* (New York, NY: Simon and Schuster, 1989), 98.

die.<sup>178</sup> Although there is little risk that the fire service will wither and die, it reinforces the often-forgotten importance that external influences have on organizations.

In support of this thesis, several fire chiefs were contacted and interviewed regarding leadership. The consensus was that the focus must change from a localized view to one that encompasses the broader perspective. According to IAFC Executive Director Mark Light, “Whenever possible, the fire chiefs need to look beyond their own agencies and work at the macro level.”<sup>179</sup> Reinforcing this concept and speaking directly to the issue of leadership was Chief Brunacini, who opined, “The leadership challenge is to find a way to bring resources to bear and coalesce in a common vision.”<sup>180</sup> The idea of a creating a broader perspective and coalescing in a common vision has found its beginnings in a small self-initiated committee of the IAFC.

Confronting the leadership challenge head-on is a small ad hoc committee of fire chiefs headed by Chief Jim Broman. The committee Broman chairs is working to establish a doctrine for the fire service that first challenges its very existence, defines its mission, and finally establishes its vision for the future. The idea was borrowed from the military, and answers the fundamental question, “Why do we exist?” Although the doctrine is all encompassing to the fire service mission, at least part of that doctrine will begin to establish a vision for the fire service’s role in homeland security.

Broman and the others are diverging from traditional leadership methods and using the concepts of transformational leadership to challenge the status quo and establish a clearly defined path for the fire service, all the while identifying and promoting the vision from the onset. The five proven practices of leadership—challenge the process, inspire a shared vision, enable others to act, model the way, and encourage the heart—are being combined with transformational leadership to transcend individual interests for those of the greater good.<sup>181</sup> In essence, this approach constitutes inspiration, renewal,

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<sup>178</sup> Steven Kelman, *Unleashing Change: A Study of Organizational Renewal in Government* (Washington, DC: Brookings Institution Press, 2005), 21.

<sup>179</sup> Mark Light (Executive Director, International Association of Fire Chiefs), telephone interview by author, June 19, 2007.

<sup>180</sup> Brunacini interview, June 11, 2007.

<sup>181</sup> James M. Kouzes and Barry Z. Posner, *The Leadership Challenge* (San Francisco, CA: Jossey-Bass Publishers, 1990), 8.

and an internalized sense of mission. The strength in transformational leadership is “the movement away from being over-managed and under-led, to an environment where employees pull together in pursuit of a collective purpose through shared governance, semi-autonomous work units, and leadership that focuses on facilitation rather than control.”<sup>182</sup> As noted leadership author John Gardner states, “No individual has all of the skills—and certainly not all of the time—to carry out all of the complex tasks of contemporary leadership.”<sup>183</sup> Transformational management revels in a sense of collectivism, but not the pitfalls of “group think.”

The idea of transformational leadership was originally conceived by James MacGregor Burns. Burns stipulates that leadership can be divided into two fundamentally different types. The first type is *transactional leadership*, where Burns argues that its basis is founded on an exchange of valued things.<sup>184</sup> This form of leadership is often practiced in fire service agencies and is most evident in the precept of management by exception (MBE). In MBE, individuals, groups, and agencies have little contact with leaders as long as they remain within established expectations of performance. Those who don't follow the established rules are corrected. Fundamentally, transactional leadership is a barter system that establishes a relationship based upon the idea of, if you do this for me, I will do that for you. In the public sector, the reward may be promotion, reassignment, or some form of acknowledgement.

In describing transactional leadership, Burns identifies its limited value because it does not extend beyond the bargaining process, and that once the exchange of “valued goods” has taken place, there is nothing that binds the parties together.<sup>185</sup> More pointedly, “transactional leadership alone has been identified as a leadership style that promotes mediocrity because of its contractual focus on minimum acceptable

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<sup>182</sup> Steven Baker, “Managing the Internal Environment” (paper prepared for the Australian Institute of Police Management, Executive Development Program, 2007), 8.

<sup>183</sup> John W. Gardner, *On Leadership* (New York, NY: The Free Press, 1990), 10.

<sup>184</sup> James Macgregor Burns, *Leadership* (New York, NY: Harper & Row, 1979), 19.

<sup>185</sup> Burns, *Leadership*, 20.

performance and its inherent focus on areas of failure or potential failure.”<sup>186</sup> One could easily argue that the transactional methodology is more of a management tool than true leadership.

Within the fire service and other emergency services, transactional leadership is common.<sup>187</sup> In emergency situations, transactional leadership is suitable because outcomes are based on agreed-upon expected levels of performance (the exchange of valued goods) in order to meet operational goals.<sup>188</sup> However, an argument can also be made that transactional leadership is best suited at the tactical level involving teams or groups, and may not be the best choice at the non-emergent strategic level of mid- and upper-management, where complex problems need to be debated and solutions developed. In the document *Challenges for Homeland Security and Emergency Management: California’s Experience*, the authors describe a transactional form of leadership during the Katrina disaster, stating there were many “bureaupathologies” that came to light in “organizations with multiple organizational layers which stress hierarchy, and close adherence to the chain of command.”<sup>189</sup> This discussion goes on to say,

[M]any individuals are locked into an enduring “mindset”, the structural frame, that has its roots in the early 20th century in the writings of Henri Fayol, Frederick Taylor, Luther Gulick, and other seminal figures in the study of organizations. The language, concepts and premises of the structural frame are limiting, but they constitute “accepted wisdom” for many participants in the dialog on organization and reorganization. Indeed this accepted wisdom is habitually ritualistically recited as a litany in most organizational analyses of public organizations.<sup>190</sup>

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<sup>186</sup> Baker, “Managing the Internal Environment,” 5.

<sup>187</sup> Julian Yates, “Leadership in Emergency Services,” *Australian Journal of Emergency Management* (1999), [http://clrc.gov.au/agd/EMA/rwpattach.nsf/viewasattachmentpersonal/\(C86520E41F5EA5C8AAB6E66B851038D8\)~Leadership\\_in\\_emergency\\_services.pdf/\\$file/Leadership\\_in\\_emergency\\_services.pdf](http://clrc.gov.au/agd/EMA/rwpattach.nsf/viewasattachmentpersonal/(C86520E41F5EA5C8AAB6E66B851038D8)~Leadership_in_emergency_services.pdf/$file/Leadership_in_emergency_services.pdf) [Accessed May 3, 2007], cited in Baker, “Managing the Internal Environment” (Australian Institute of Police Management, 2007), 5.

<sup>188</sup> Baker, “Managing the Internal Environment,” 5.

<sup>189</sup> Richard Callahan, Dan M. Haverty, and Ross Clayton, *Challenges for Homeland Security and Emergency Management: California’s Experience* (Los Angeles, CA: IBM Center for the Business of Government, 2007), 11.

<sup>190</sup> *Ibid.*, 13.



The authors conclude that “a more comprehensive set of organizational/management frameworks and language is essential to achieving effective collaborative behaviors.”<sup>191</sup> Stated another way, current leadership models need to be transformed.

Most individuals in the fire service who have reached the mid- and upper-management level and are responsible for leading and managing fire service organizations are familiar with the works of Fayol, Taylor, and Gulick. More specifically, much of the training that continues to be offered to individuals promoting through the ranks is based on the works of these authors. Their work is geared toward the tactical level, is transactional in nature, and represents management, not leadership. A study conducted in 1995 by Richard Gist and S. Joseph Woodall concluded that “Effective leadership in any hierarchical organization contributes significantly to organizational success. Yet most professional fire service officers in the United States have received little formal management training.”<sup>192</sup> Those organizations and leaders who do not move beyond these basic teachings will likely find themselves and their organization limited in effectiveness. A study conducted in 1989 by Bernard M. Bass and Bruce J. Avolio concluded that, “If leaders were only transactional, the organizations were seen as less effective.”<sup>193</sup>

The second form of leadership defined by Burns is *transformational leadership*. Burns defines this style of leadership as “a relationship of mutual stimulation and elevation that converts followers to leaders and may convert leaders to moral agents.”<sup>194</sup> More specifically, “The transformational leader asks followers to transcend their own

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<sup>191</sup> Richard Callahan, Dan M. Haverty, and Ross Clayton, *Challenges for Homeland Security and Emergency Management: California's Experience* (Los Angeles, CA: IBM Center for the Business of Government, 2007), 13.

<sup>192</sup> Richard Gist and S. Joseph Woodall, “Occupational Stress in Contemporary Fire Service,” *Occupational Medicine: State of the Art Reviews* 10, cited in Randal Beaton et al., “Outcomes of a Leadership Intervention for a Metropolitan Fire Department,” *Psychological Reports* 88, no. 3 Pt 2 (2001), 1049.

<sup>193</sup> Bernard M. Bass and Bruce J. Avolio, *The Multi-factor Leadership Questionnaire* (Palo Alto, CA: Consulting Psychologists Press, 1989), cited in Bernard M. Bass, *Bass and Stogdill's Handbook on Leadership* (New York, NY: Free Press, 1990), 218.

<sup>194</sup> Burns, *Leadership*, 4.

self-interests for the good of the group, organization, or society; to consider their longer-term needs to develop themselves, rather than their needs of the moment, and to become aware of what is really important.”<sup>195</sup>

The concepts of transformational leadership ultimately boil down to renewal of the heart, and the elevation of purpose to a greater cause. Transformational leadership is couched within the “Four I’s”: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. Idealized influence means transformational leaders behave in ways that make them role models for those they manage. Inspirational motivation means transformational leaders behave in ways that motivate and inspire those around them by providing meaning and challenge to their work. Intellectual stimulation means transformational leaders approach situations in new ways. Individualized consideration means transformational leaders pay attention to individual needs, and achieve growth by acting as a coach and mentor.<sup>196</sup>

Much of the study on transformational leadership has come from the military. Given the complexity and changing environment of the threats faced, the military has been forced to look for new and innovative ways to manage and lead its resources. In one report, the conclusions were clear, “transformational leadership and subordinate use of a rational approach were the influencing behaviors most strongly associated with higher levels of leader effectiveness and subordinate satisfaction with the leader.”<sup>197</sup> Given the fire service’s need for higher levels of effectiveness, an approach based on transformational leadership seems well suited.

According to U.S. Army doctrine, “leadership is the most essential component of combat power or the ability to fight and win.”<sup>198</sup> The applicability of transformational leadership in military settings has been called “especially effective in situations where followers and members of units must work together to coordinate their activities to take

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<sup>195</sup> Bass, *Bass and Stogdill’s Handbook on Leadership*, 53.

<sup>196</sup> Bernard M. Bass and Bruce J. Avolio, *Improving Organizational Effectiveness Through Transformational Leadership* (Thousand Oaks, CA: Sage Publications, 1994), 3.

<sup>197</sup> Ronald J. Deluga, “The Relationship of Leader and Subordinate Influencing Activity in Naval Environments,” *Military Psychology* 3, no. 1 (1991), 25.

<sup>198</sup> Thomas D. Kane and Truman R. Tremble, “Transformational Leadership Effects at Different Levels of the Army,” *Military Psychology* 12, no. 2 (2000), 137.

on challenging, high-risk, and difficult task assignments, such as those characterizing the U.S. Army today.”<sup>199</sup> This conclusion is based on the applicability of transformational leadership to “confront the vast array of new challenges already identified and those still yet to be determined.”<sup>200</sup> Furthermore, transformational leadership is positively linked to the vision, mission, and culture of the organization.<sup>201</sup> Although the above references are to the military, an uncanny resemblance to the fire service and the current challenges it faces cannot be denied.

Given the challenges that lay ahead, the question may not be whether a new style of leadership for the fire service is applicable as much as whether the fire service can afford to reject new ways of thinking, managing, and leading. An article in *Management Services* offers some perspective on this issue. “The fire service is facing fundamental change over the next few years. Although it has experienced much incremental change in recent years, it may not be sufficiently adaptive to cope effectively with the radical nature of changes it now faces.”<sup>202</sup> As Will Rogers once said, “Even if you are on the right track, you’ll get run over if you just sit there.”<sup>203</sup> By applying transformational leadership principles, the status quo is challenged and an organized search for change, systematic analysis, and the capacity to transform organizations is realized.<sup>204</sup> As affirmation of this concept, a study of 110 fire chiefs concluded that those who practiced transformational leadership were found to have higher degrees of effectiveness.<sup>205</sup>

Understanding the need to develop new leadership within the fire service, Deputy Chief Kevin Brame, from the North Las Vegas Fire Department, and a small group of progressive fire service leaders formed the International Public Safety Leadership and

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<sup>199</sup> Rajanadini Pillai, Susan Stites-Doe, and Bernard M. Bass, *Teaching Leadership: Innovative Approaches for the 21<sup>st</sup> Century* (Greenwich, CT: Information Age Publishing, 2003), 160.

<sup>200</sup> *Ibid.*, 160.

<sup>201</sup> Boas Shamir, Robert J. House, and Michael B. Arthur, “The Motivational Effects of Charismatic Leadership: A Self-Concept Based Theory,” *Organizational Science* 4, (1993), cited in Pillai, Stites-Doe, and Bass, *Teaching Leadership*, 159.

<sup>202</sup> Paul Sheldrick and Chris Ripley, “Modern Management in the Fire Service,” *Management Services* 45, no. 6 (2001), 14.

<sup>203</sup> Will Rogers, [http://www.quotationspage.com/quotes/Will\\_Rogers](http://www.quotationspage.com/quotes/Will_Rogers) [Accessed August 19, 2007].

<sup>204</sup> Bass, *Bass and Stogdill’s Handbook on Leadership*, 53.

<sup>205</sup> *Ibid.*, 219.

Ethics Institute (IPSLEI) in 2006.<sup>206</sup> The vision of the IPSLEI membership was to begin development of leadership qualities in individuals early in their careers, rather than wait until a person was promoted and then hope the person develops the required leadership skills. An added benefit to the IPSLEI philosophy is that by targeting individuals early, leaders are created at all levels of an organization. This concept fits well with transformational leadership practices. The IPSLEI members also believe the key to effectively managing the fast-paced contemporary challenges of public safety organizations lies predominately in leadership, not in tools and technology.<sup>207</sup> The IPSLEI vision is to build the leadership necessary to meet that challenge. IPSLEI is currently being piloted by the California Community College system, and is expanding to other states. It is also being considered by DHS as a model for a national public safety leadership program.<sup>208</sup>

The fire service has not challenged itself by asking the hard question: Given the threats we face, are we trying to make the asymmetric threat of terrorism, and in the larger sense homeland security, fit into the mold of the American fire service, or does the fire service need to change in order to meet the contemporary need? The argument here is not one of one modality over another, but of method, leadership, and challenging the current paradigm. The concept of an all-risk environment cannot be overstated, and the current paradigm of the traditional leadership approach has not proven itself responsive enough to meet the current demand. A report by the Century Foundation, which conducts public policy research and analyses of economic, social, and foreign policy issues, found that there is “little evidence that states and localities had significantly improved protections for their residents.”<sup>209</sup> Relying on the premise that the public will always be willing to fund a fire service whose leadership and tradition has an unbalanced focus on fire suppression—a core mission which no longer represents the majority of its activities and is being diluted by all of the other needs of the community—is a risky position.

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<sup>206</sup> International Public Safety Leadership and Ethics Institute, *Personal Leadership Development Journal and Assessment* (Jackson, MS: Phi Theta Cappa International Honors Society, 2007).

<sup>207</sup> Kevin Brame (Deputy Chief, City of North Las Vegas, Nevada, Fire Department), telephone interview by author, July 24, 2007.

<sup>208</sup> Brame interview, July 24, 2007.

<sup>209</sup> Donald F. Kettl, *The States and Homeland Security: Building the Missing Link* (New York, NY: The Century Foundation, 2003), 4.

Furthermore, the fallout from the Katrina response clearly shows that the public will not stand for anything less than an effective, efficient, and timely response to whatever the next disaster is, be it man-made or a naturally occurring event.

In order to meet the contemporary need, today's emergency service agencies must constantly re-evaluate and be ready to change management systems and leadership styles.<sup>210</sup> Additionally, those changes must take place with relative speed and should not be bogged down in individualism and bureaucracy. Bass writes, "Conservative leaders tend to maintain existing political institutions and policies, reformist leaders promote moderate changes in institutions and policies, and revolutionary leaders strive for fundamental changes in institutions and policies."<sup>211</sup> The fire service is on the precipice of significant change. In order to meet that challenge, revolutionary leadership will be required. It will be up to existing leaders and the leaders of tomorrow to effectively manage that change, to meet the public demand, and to determine whether the fire service will continue in its proud and honorable role as a national symbol and the primary instrument of a community's safety. And, at least for today, the concepts of transformational leadership are the best way to facilitate change quickly and effectively in order to meet the needs of the changing environment.

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<sup>210</sup> Baker, "Managing the Internal Environment," 4.

<sup>211</sup> Bass, *Bass and Stogdill's Handbook on Leadership*, 23.

## **VI. CONCLUSIONS**

The fire service is living in a new paradigm of terrorism and homeland security. Now, more than any time in its history, it is faced with dynamic and changing mission requirements that represent profound threats to the community, and to fire service personnel. Although much has been done to meet the threat, there remains much to do. In the days, weeks, and now years following 9/11, the fire service has scrambled to build capability as rapidly as possible, and capability has been increased. But in its rush to meet the threat, it has not paused to critically ask the question: If the fire service could start from scratch and build a comprehensive pre- and post-event capability for the threat of terrorism, what would that system look like? This thesis has attempted to find the answer to that question, and has identified four critical areas that deserve consideration: to become integrated in the information/intelligence process, to engage the community, to reconsider response methods, and to promote leadership.

### **A. INFORMATION AND INTELLIGENCE**

The fire service must engage in the information and intelligence process if it is going to maximize its service to the community and protect its personnel. Through effective information and intelligence management, situational awareness is maximized and strategic surprise is minimized. This involvement should include all forms of the information and intelligence processes, i.e., tactical, operational, and strategic. Furthermore, information and intelligence should be leveraged to support an agency's planning, training, and equipment acquisition.

There will be challenges to fire service agencies that engage in information and intelligence activities. Most of those challenges will come from law enforcement personnel, who falsely believe that this is strictly a law enforcement function. And, there will be claims that information and intelligence cannot be shared because of the legal restrictions that regulate that process. However, as discussed in Chapter II, those claims are largely false; the process of compartmentalizing information is one of culture not of legality.

Fire service leaders should not be lulled into complacency hoping their law enforcement counterparts will eventually see the need, and begin to share information and intelligence. It will take a determined effort by fire chiefs and other fire service leaders to make it happen. Settling for anything less compromises the protection of the community and the fire service personnel, who must provide protection against the threat of terrorism.

Understanding that protection from terrorism and the development of true homeland security goes beyond information and intelligence sharing, fire service organizations should strive to form strong relationships and effective partnerships with not only their law enforcement counterparts but with other local government agencies and the private sector. All agencies need to understand that this is not one discipline's problem. Terrorism, and in the broader sense of homeland security, must be approached from an interdisciplinary perspective with overlapping levels of responsibility and support. It must be viewed as a continuum rather than a process that starts and stops within agencies.

The fire service, as well as other agencies and disciplines at the local level, should give serious consideration to implementing model programs like the Terrorism Liaison Officer (TLO) program to maximize information and intelligence sharing. The TLO program benefits agencies by defining designated points of contact within organizations and information pathways so that when information is received, it is processed accordingly, and the right people have the right information at the right time. For those agencies that have a need for increased levels of information and intelligence, individuals can apply for security clearances and participate in Terrorism Early Warning Groups or fusion centers.

Regardless of the level of security access needed, fire service providers can realize significant increases in situational awareness, planning, budgeting, training, personnel safety, and ultimately, increased protection for the community. This can be achieved with a relatively small amount of effort by engaging in the information and intelligence process.

## **B. COMMUNITY ENGAGEMENT**

Leveraging community support for homeland security has been one of the most underutilized assets available to the fire service. For reasons that cannot be explained here, much of the community enthusiasm for engagement has been ignored by fire service providers. Although management theory has long held that where there is interest on the part of the community, budget support typically follows, this has not been routinely exploited by fire service providers, particularly within the domain of terrorism preparedness.

This thesis highlights the CERT program as one way to engage the community. However, CERT is just a stepping stone that allows interaction to take place. The goal is to create a partnership between the fire service and the communities it serves. Through collaboration and team work, communities can better understand the risk they face, reduce the gap that inherently exists between what is expected of fire service providers and what they can truly deliver, and allows the community to determine the level of service it should receive. Furthermore, as the example of CERT pointed out in Chapter III, the political benefits of community partnerships should not be underestimated.

The thought of being more transparent about the level of service an agency can provide, and engaging community members in activities like planning may seem risky to some. However, it is important to remember that history has proven communities will routinely demand a greater delivery of services, not less. In the case of terrorism and homeland security, the benefits of community partnerships far outweigh the risk. Those who discard the notion of engaging the community fail to understand both the value and risk that external influences potentially have on an organization.

## **C. RESPONSE**

The fire service has made significant progress in its preparation for terrorism response since 9/11. However, there remains much more to do, and funding is never guaranteed. The continued demand to expand service delivery for terrorism response will,



for the foreseeable future, require fire service providers to look for new and innovative ways of providing that service without substantial increases in numbers of personnel or budget.

The need to do more without corresponding increases in personnel and budgetary resources means the fire service must re-evaluate how it deploys the resources it has. Fundamentally, the only way to substantially increase response capability is to expand the base of operations and require the resources it currently has to do more. Programs such as the *National Fire Protection Association (NFPA) Standard 472, Operations Plus* is one program that embodies this concept, and that should be seriously considered.

To meet current and future demands, the FDNY distilled its evaluation of service into four simple categories: capability (what it can do), capacity (how much it can do), proficiency (how well can it be done), and deployment (how fast can resources arrive on scene to do what needs to be done). In search of new and innovative approaches to terrorism response, fire service providers need to also consider the possibility of multiple or simultaneous attacks. When considering these scenarios, the four-step FDNY methodology can provide invaluable insight on what will be required. This simple evaluation tool can be used in every agency across the country.

Fire service providers need to better understand the regulatory environment as it pertains to terrorism. Although there are restrictions and rules to follow, there is also flexibility. Fire service providers are allowed to determine how personnel will respond, and what capabilities they will have. It is the agency that determines the capability, not the regulation. Those who follow tradition and culture because “that’s the way we’ve always done it” don’t appreciate the new paradigm of the post-9/11 environment.

#### **D. LEADERSHIP**

Whether we like it or not, the mission requirements changed significantly for the American fire service on 9/11. The fire service is in the most dynamic period of its history. Yet there remains no clear vision of what that mission will fully entail or how to develop the strategies necessary to meet the challenges that lie ahead. To be fully effective, the fire service must find a way to coalesce around a common vision, and begin

to speak with a common voice. To achieve those goals, new and dynamic leadership will be required. That is not to suggest that those currently in leadership positions should be replaced, only that new ideas and priorities need to be considered.

As a lead agency, the International Association of Fire Chiefs is the best organization to meet the challenges of the future. Furthermore, it is vital that fire service leaders look beyond their own organizations, and purposefully attempt to work at the macro level. One of the best ways to break out of the “bureaupathology” that exists and to accomplish the changes in mission and culture that are needed, is to apply the four Is of transformational leadership. As the Army doctrine states, “Leadership is the most essential component of combat power or the ability to fight and win.”<sup>212</sup>

## **E. THE WAY AHEAD**

As stated in the first chapter, this thesis is not about arguing one modality over another. It is about leadership and exploring new ways to meet the challenges of the post-9/11 era. It challenges the status quo and the resistance to change based on the traditional wisdom of “that’s the way we’ve always done it.” Although there is comfort in viewing the future through the same lens that reflects the past, it is a dangerous position to take in a dynamic world.

From a leadership perspective, maintaining the status quo means we are going nowhere. Status quo means there is no renewal, no vitality, and no greater hope for the future than was realized yesterday, last week, or last year. The fire service is rich in pride and tradition. It should never settle for compromise or complacency. This is the leadership challenge.

The way ahead is not linear. It is chaotic, disorganized, and tumultuous, and there is no cookie-cutter recipe for success. It begins with challenging the status quo, and contemplating new ways to improve operations and the delivery of fire services. Individually, fire service leaders need to think globally and act locally.<sup>213</sup> The current and most prevalent organizational model, that of a silo, must be dismantled, and replaced with

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<sup>212</sup> Kane and Tremble, “Transformational Leadership,” 137.

<sup>213</sup> Wikipedia, “Think Globally, Act Locally,” [http://en.wikipedia.org/wiki/Frank\\_Feather](http://en.wikipedia.org/wiki/Frank_Feather) [Accessed July 17, 2007].

an adaptive and cooperative approach built on the understanding that the fire service is a complex network of networks. That means that both interagency and interdisciplinary cooperation must be fostered and maximized.

Because the path ahead is not clear, fire service leaders should first look inward by engaging all levels of their respective organizations in active discussion and debate. Even individually, organizations need a vision before strategic planning can take place. This is how transformational leadership begins.

Beyond individual agencies, the discussion should continue. Whether at the local, regional, or national level, fire service leaders need to critically evaluate their current service delivery system, and be capable of defending it or finding new and innovative ways to meet community and organizational demands. This will bring about dissent, which should be embraced, not squashed.

I have argued in this thesis that the International Association of Fire Chiefs is the best association to provide leadership and a collective voice for the fire service. It is vitally important that those within the IAFC leadership understand that they are the ones who must promote progress. Both the executive director and IAFC president must accept the responsibility and articulate the importance of establishing a vision and a national strategy for homeland security to the IAFC membership. Once the significance of the issue has been elevated, they should collaborate and appoint a working group to begin the conceptual development of the vision. Whether that action is tasked to the executive development committee, an existing committee, a new ad hoc committee, or tasked to the IAFC's newly formed International Fire Service Research Center and Policy Institute, it must start somewhere. Furthermore, those who are involved must be willing to take some risk and consider all options, not just those that are politically safe.

Understanding that it is sometimes difficult to gain perspective when dealing with change, the International Association of Fire Chiefs should consider partnering with an outside organization, such as a university or the military. Institutions like the John F. Kennedy School of Government at Harvard University, the Naval Postgraduate School, or U.S. Military Academy at West Point all have experience in studying and implementing change. The added benefit to partnering with an external organization is

that those from outside of the fire service will not have the same pre-existing biases that exist within the discipline. The absence of those biases may bring new perspectives.

## **F. CONCLUSION**

It is clear that the nation has not yet achieved its desired level of protection against terrorism, nor met its goal of homeland security. The same can be said about the fire service. If the fire service is going to maximize its delivery of services, meet the increasing expectations of the communities it serves, and provide for the safety of its personnel, fire service leadership must confront the status quo and reconsider its approach to terrorism. The way forward is to be actively involved in information and intelligence sharing, partnering with the community, vigorously exploring new response concepts, and leading, rather than being led. The world changed on 9/11, and the fire service needs to keep pace. As Chief Paulsgrove states, “We no longer make the four-door Caprice.”<sup>214</sup>

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<sup>214</sup> Paulsgrove, “Weighing a Department’s Mission,” 36.

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## APPENDIX. HOMELAND SECURITY SURVEY

In support of this thesis, a survey was conducted of the largest 250 municipal fire departments in the country to determine baseline views on homeland security.<sup>215</sup> The determining factor for city selection was based upon census statistics; the largest cities in the country arguably have the greatest exposure to the threats and consequences of terrorism. By constructing the survey in this manner, all cities with a population base of 100,631 and greater were given the opportunity to participate.

In all, 246 agencies were contacted (some represent more than one city), and asked to participate in the survey. The survey was sent to the fire chief or commissioner of each agency, and asked to comment on four homeland security related topics: intelligence, community engagement, response, and leadership. Each topic area contained five statements. The respondents were asked to select the most appropriate answer that expressed how they felt about each of the statements. They could choose from five possible answers for each statement: strongly disagree, disagree, neutral, agree, and strongly agree. In order to preserve anonymity for the respondents, the surveys contained a control number precluding anyone outside of the survey to identify the participating agencies.

On receipt of the completed surveys, the answers were scored using a five-point scale as follows: strongly disagree (1), disagree (2), neutral (3), agree (4), and strongly agree (5). For purposes of comparison, the survey results were further segregated into the top 250, top 50, and top 10. The survey was mailed on April 9, 2007, and was closed when the last survey was received on May 26, 2007.

### *Survey Response*

A total of 246 surveys were sent, and 208 (84 percent) were returned. In addition to the results of the survey itself, the fact that so many chiefs and commissioners took the time to complete and return the survey indicates that there remains a strong interest in terrorism and homeland security.

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<sup>215</sup> U.S. Census Bureau, "2005 Population Estimates," <http://www.census.gov/popest/cities/tables/SUB-EST2005-01.csv> [Accessed January 6, 2007].

This survey was tabulated by determining the mean and standard deviation for all questions. Standard deviations greater than 1 (>1) were considered outside of the norm. The responses for each question are as follows:

*Survey questions-*

Intelligence

1. The primary purpose of intelligence is to avoid strategic surprise.
 

<b>Top 250:</b>	<b>Number of responses: 206</b>	<b>Mean: 4.18</b>	<b>Standard Deviation: .74</b>
<b>Top 50:</b>	<b>Number of responses: 41</b>	<b>Mean: 4.32</b>	<b>Standard Deviation: .52</b>
<b>Top 10:</b>	<b>Number of responses: 10</b>	<b>Mean: 4.40</b>	<b>Standard Deviation: .52</b>
  
2. There is a definite link between intelligence and how the fire service should prepare (plan, budget, purchase equipment, and train) for homeland security.
 

<b>Top 250:</b>	<b>Number of responses: 208</b>	<b>Mean: 4.20</b>	<b>Standard Deviation: .68</b>
<b>Top 50:</b>	<b>Number of responses: 41</b>	<b>Mean: 4.27</b>	<b>Standard Deviation: .50</b>
<b>Top 10:</b>	<b>Number of responses: 10</b>	<b>Mean: 4.40</b>	<b>Standard Deviation: .52</b>
  
3. In the post-9/11 era, it is important that the fire service be included in the information and intelligence sharing process.
 

<b>Top 250:</b>	<b>Number of responses: 207</b>	<b>Mean: 4.61</b>	<b>Standard Deviation: .59</b>
<b>Top 50:</b>	<b>Number of responses: 41</b>	<b>Mean: 4.76</b>	<b>Standard Deviation: .43</b>
<b>Top 10:</b>	<b>Number of responses: 10</b>	<b>Mean: 4.90</b>	<b>Standard Deviation: .32</b>
  
4. There are significant legal issues that prohibit the fire service from having access to the same homeland security information that law enforcement routinely has access to.
 

<b>Top 250:</b>	<b>Number of responses: 206</b>	<b>Mean: 3.24</b>	<b>Standard Deviation: 1.10</b>
<b>Top 50:</b>	<b>Number of responses: 41</b>	<b>Mean: 3.17</b>	<b>Standard Deviation: 1.22</b>
<b>Top 10:</b>	<b>Number of responses: 10</b>	<b>Mean: 2.90</b>	<b>Standard Deviation: .99</b>
  
5. Although most intelligence is not tactical (immediate action required) in nature, threat information and intelligence can help the fire service manage the safety of its employees.

<b>Top 250:</b>	<b>Number of responses: 208</b>	<b>Mean: 4.48</b>	<b>Standard Deviation: .52</b>
<b>Top 50:</b>	<b>Number of responses: 41</b>	<b>Mean: 4.51</b>	<b>Standard Deviation: .55</b>
<b>Top 10:</b>	<b>Number of responses: 10</b>	<b>Mean: 4.80</b>	<b>Standard Deviation: .42</b>

### Community Engagement

1. A significant void exists between what homeland security response capability the fire service is able to provide and what the community expects.

<b>Top 250:</b>	<b>Number of responses: 206</b>	<b>Mean: 3.80</b>	<b>Standard Deviation: .93</b>
<b>Top 50:</b>	<b>Number of responses: 39</b>	<b>Mean: 3.67</b>	<b>Standard Deviation: .93</b>
<b>Top 10:</b>	<b>Number of responses: 10</b>	<b>Mean: 3.60</b>	<b>Standard Deviation: .84</b>

2. The void that exists between fire service capability and community expectations should be minimized wherever possible.

<b>Top 250:</b>	<b>Number of responses: 207</b>	<b>Mean: 4.32</b>	<b>Standard Deviation: .63</b>
<b>Top 50:</b>	<b>Number of responses: 40</b>	<b>Mean: 4.48</b>	<b>Standard Deviation: .51</b>
<b>Top 10:</b>	<b>Number of responses: 10</b>	<b>Mean: 4.60</b>	<b>Standard Deviation: .52</b>

3. The preservation of life and property is one of the most basic and yet most crucial expectations that citizens have of their government.

<b>Top 250:</b>	<b>Number of responses: 204</b>	<b>Mean: 4.76</b>	<b>Standard Deviation: .51</b>
<b>Top 50:</b>	<b>Number of responses: 39</b>	<b>Mean: 4.85</b>	<b>Standard Deviation: .37</b>
<b>Top 10:</b>	<b>Number of responses: 10</b>	<b>Mean: 5.00</b>	<b>Standard Deviation: 0</b>

4. Similar to the master planning process, positive benefits could be realized by including community stakeholders in homeland security planning.

<b>Top 250:</b>	<b>Number of responses: 203</b>	<b>Mean: 4.06</b>	<b>Standard Deviation: .70</b>
<b>Top 50:</b>	<b>Number of responses: 38</b>	<b>Mean: 3.95</b>	<b>Standard Deviation: .80</b>
<b>Top 10:</b>	<b>Number of responses: 10</b>	<b>Mean: 4.10</b>	<b>Standard Deviation: .57</b>

5. Maximizing community preparedness has the potential to significantly reduce dependence on emergency services during a naturally occurring or man made emergency.

<b>Top 250:</b>	<b>Number of responses: 204</b>	<b>Mean: 4.16</b>	<b>Standard Deviation: .89</b>
<b>Top 50:</b>	<b>Number of responses: 39</b>	<b>Mean: 4.18</b>	<b>Standard Deviation: .97</b>
<b>Top 10:</b>	<b>Number of responses: 10</b>	<b>Mean: 4.20</b>	<b>Standard Deviation: .42</b>



## Response

1. A tiered response that includes operations level, technician level, and specialist level personnel is appropriate for homeland security missions.

<b>Top 250:</b>	<b>Number of responses: 204</b>	<b>Mean: 4.15</b>	<b>Standard Deviation: .65</b>
<b>Top 50:</b>	<b>Number of responses: 39</b>	<b>Mean: 4.21</b>	<b>Standard Deviation: .57</b>
<b>Top 10:</b>	<b>Number of responses: 10</b>	<b>Mean: 4.50</b>	<b>Standard Deviation: .53</b>

2. Hazardous materials response doctrine is primarily environmentally focused and not life safety focused

<b>Top 250:</b>	<b>Number of responses: 203</b>	<b>Mean: 2.42</b>	<b>Standard Deviation: 1.10</b>
<b>Top 50:</b>	<b>Number of responses: 39</b>	<b>Mean: 2.62</b>	<b>Standard Deviation: 1.25</b>
<b>Top 10:</b>	<b>Number of responses: 10</b>	<b>Mean: 2.60</b>	<b>Standard Deviation: 1.26</b>

3. The same response methods employed for a hazardous materials incident are appropriate for chemical, biological, radiological, nuclear, and explosive incidents.

<b>Top 250:</b>	<b>Number of responses: 203</b>	<b>Mean: 3.06</b>	<b>Standard Deviation: 1.18</b>
<b>Top 50:</b>	<b>Number of responses: 39</b>	<b>Mean: 3.21</b>	<b>Standard Deviation: 1.22</b>
<b>Top 10:</b>	<b>Number of responses: 10</b>	<b>Mean: 3.40</b>	<b>Standard Deviation: .97</b>

4. A hazardous materials incident and a terrorism incident are essentially the same, just on a grander scale.

<b>Top 250:</b>	<b>Number of responses: 204</b>	<b>Mean: 2.53</b>	<b>Standard Deviation: 1.09</b>
<b>Top 50:</b>	<b>Number of responses: 39</b>	<b>Mean: 2.74</b>	<b>Standard Deviation: 1.14</b>
<b>Top 10:</b>	<b>Number of responses: 10</b>	<b>Mean: 2.90</b>	<b>Standard Deviation: 1.20</b>

5. New standards such as the National Fire Protections Association Standard 472 *Operations Plus* have applicability to the fire service.

<b>Top 250:</b>	<b>Number of responses: 196</b>	<b>Mean: 3.65</b>	<b>Standard Deviation: .68</b>
<b>Top 50:</b>	<b>Number of responses: 38</b>	<b>Mean: 3.87</b>	<b>Standard Deviation: .74</b>
<b>Top 10:</b>	<b>Number of responses: 10</b>	<b>Mean: 4.10</b>	<b>Standard Deviation: .88</b>

## Management/Leadership

1. A high priority should be given to developing a national fire service strategy on terrorism.

<b>Top 250:</b>	<b>Number of responses: 201</b>	<b>Mean: 4.31</b>	<b>Standard Deviation: .63</b>
<b>Top 50:</b>	<b>Number of responses: 40</b>	<b>Mean: 4.35</b>	<b>Standard Deviation: .53</b>
<b>Top 10:</b>	<b>Number of responses: 10</b>	<b>Mean: 4.30</b>	<b>Standard Deviation: .67</b>

2. Fire service managers and leaders are under enormous pressure to meet the service delivery demands created by 9/11.

<b>Top 250:</b>	<b>Number of responses: 200</b>	<b>Mean: 4.07</b>	<b>Standard Deviation: .84</b>
<b>Top 50:</b>	<b>Number of responses: 40</b>	<b>Mean: 4.15</b>	<b>Standard Deviation: .95</b>
<b>Top 10:</b>	<b>Number of responses: 10</b>	<b>Mean: 4.50</b>	<b>Standard Deviation: .71</b>

3. Public, private, and military leadership methods are wholly unique to their respective disciplines.

<b>Top 250:</b>	<b>Number of responses: 201</b>	<b>Mean: 2.90</b>	<b>Standard Deviation: 1.08</b>
<b>Top 50:</b>	<b>Number of responses: 40</b>	<b>Mean: 2.83</b>	<b>Standard Deviation: 1.13</b>
<b>Top 10:</b>	<b>Number of responses: 10</b>	<b>Mean: 3.30</b>	<b>Standard Deviation: 1.25</b>

4. The fire service has historically been oriented as a response agency and that orientation is appropriate in the post 9/11 era.

<b>Top 250:</b>	<b>Number of responses: 201</b>	<b>Mean: 3.17</b>	<b>Standard Deviation: 1.15</b>
<b>Top 50:</b>	<b>Number of responses: 40</b>	<b>Mean: 2.83</b>	<b>Standard Deviation: 1.13</b>
<b>Top 10:</b>	<b>Number of responses: 10</b>	<b>Mean: 3.20</b>	<b>Standard Deviation: 1.48</b>

5. Additional innovation and leadership will be required by the fire service in order to meet the demands of the 9/11 era.

<b>Top 250:</b>	<b>Number of responses: 201</b>	<b>Mean: 4.37</b>	<b>Standard Deviation: .63</b>
<b>Top 50:</b>	<b>Number of responses: 40</b>	<b>Mean: 4.38</b>	<b>Standard Deviation: .84</b>
<b>Top 10:</b>	<b>Number of responses: 10</b>	<b>Mean: 4.80</b>	<b>Standard Deviation: .42</b>

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