Firefighters and Information Sharing:
Smart Practice or Bad Idea?¹

Bryan Heirston

While our information sharing capabilities have improved significantly, substantial obstacles remain. We must continue to break down information barriers among federal, state, local, and tribal partners and the private sector.
-2007 National Strategy for Homeland Security²

INTRODUCTION

The United States has over one million firefighters serving in over thirty thousand fire departments that respond to over twenty-four million emergencies annually.³ In their efforts to prevent and respond to life and property loss, firefighters enter homes, businesses, vehicles, and other assets, without a search warrant, thousands of times each day. This access has allowed firefighters to identify potential terrorist activities, oftentimes unexpectedly for both the firefighters and the potential terrorists. U.S. firefighters may be in a unique position to positively or negatively impact our current homeland security information-sharing efforts.

This article identifies smart practices, comparing and contrasting the information-sharing activities of the New York City Fire Department’s Terrorism and Disaster Preparedness Strategy (FDNY Strategy), the U.S. Fire Service Intelligence Enterprise draft concept plan (FSIE CONPLAN), the UK’s Civil Contingencies Act of 2004 (CCA) and current ad hoc U.S. fire service information-sharing activities. Matrixes contrast legal compliance, political acceptability, Target Capabilities List linkage, operational impact, and cost for the FDNY Strategy, FSIE CONPLAN, CCA, and current fire service information-sharing environment.⁴

Current U.S. Fire Service Information-Sharing Environment

Nationally, fire departments have impressive staffing and capabilities. According to the National Fire Protection Association, total employment in firefighting occupations was 1,141,900 in 2006, of which more than 823,950 were part-time or volunteers.⁵ Of the 30,635 fire departments in the United States, 4,052 are career departments, with the majority of departments (26,583) staffed by volunteers.⁶ Firefighters are often the first response personnel at the scene of emergency incidents, where they perform a myriad of critical life-saving and property-conservation functions. Fire departments and firefighters are located throughout the country, from densely populated urban environments, residential neighborhoods and airports, to chemical plants, oil refineries, wild lands, and large unincorporated areas.⁷

As few as fifteen of the thirty thousand U.S. fire departments formally use terrorism indicators and communicate the information gathered to the homeland security community.⁸ Despite the obvious potential benefit of thousands of firefighters as consumers and collectors of information, the current information-sharing environment is ad hoc at best and in many locales, non-existent. It appears few firefighters have received formal training in what terrorist indicators to look for or how to communicate or request information.
In late 2002 President Bush commissioned the National Commission on Terrorist Attacks upon the United States (also known as the 9/11 Commission). The 9/11 Commission’s Final Report included recommendations designed to guard against future attacks. One recommendation involved unity of effort. The following excerpt may have application to the fire service sharing information with the intelligence community:

> National intelligence is still organized around the collection disciplines of the home agencies, not the joint mission. The importance of integrated, all source analysis cannot be overstated. Without it, it is not possible to “connect the dots.” No one component holds all the relevant information.\(^9\)

An example of successful informal information sharing effort resulted from a DHS-sponsored New Mexico Technology course at the Energetic Materials Research and Testing Center (EMRTC). After a local fire department hazardous materials team member attended an EMRTC class, the local fire department responded to a “smoke condition” inside a building. During their check of the building for smoke, which proved to be negative, the firefighters came across fourteen one-gallon plastic containers filled with an unknown substance. The on-scene incident commander requested the Haz Mat unit, and upon their arrival, they determined the substance in the containers to be urine. The incident commander did not think anything of it, nor did the police supervisor at the scene. However, the member of the Haz Mat unit who had attended the EMRTC class indicated that the urine could be a component of a bomb, and because of this, the fire department contacted the FBI. Further searches of the house turned up an additional twenty empty containers and maps and train schedules of the New York metropolitan area. The FBI took the tenant of the apartment into custody. At the time of this writing, the FBI investigation continues.

Successful emergency prevention strategies have reduced fire loss in the U.S. through a unity of effort from a diversified cadre of citizens, federal, state, local, private, and public partners working together and sharing information to prevent life and property loss from fire and other emergencies. These fire prevention strategies may be useful in terrorism prevention efforts.\(^10\)

For years it has been a common practice in many U.S. fire departments to share information relating to potential illegal activities with the law enforcement community. For example, in Oklahoma City, if firefighters respond to a fire in the kitchen area, and while searching for victims or ventilating the structure notice a potential methamphetamine lab in the bedroom, the police department will be contacted. If children are present, the Department of Human Services will be notified. When domestic violence is suspected, the local law enforcement agency is notified. In these instances, the information is usually communicated by a radio call to the 911 dispatch center. This collaboration also occurs at non-emergency operations, such as fire code inspections, where firefighters sometimes report large quantities of explosives, chemicals, or firearms at businesses that typically do not handle those products.

On the other hand, this spirit of collaboration can lead to illegal collection plans. In 2007 a law enforcement representative approached an Oklahoma City firefighter and inquired if he would conduct a fire inspection at a local mosque in order to identify potential terrorist-related information. Fortunately, the firefighter’s supervisor realized the legal exposure associated with the plan and denied permission for the firefighter to participate. One aspect of determining whether information collected by a firefighter is
legal or “fruit of a poisonous tree” may lie in whether the firefighter identified potential terrorist-related items or information during the normal course of their duty or the firefighter was assigned to collect information on suspected terrorists.

National Strategy for the Fire Service Intelligence Enterprise Concept of Operations PLAN (FSIE CONPLAN)

The DHS Office of Intelligence and Analysis (DHS I&A)-coordinated FSIE initiative is a national strategic approach to information sharing between the U.S. fire service and homeland security community. Homeland security affiliates for the FSIE were identified within the FSIE framework as federal, state, local, tribal, and private sector “agencies or organizations that are stakeholders of FSIE initiatives, either as collaborators or customers” for the DHS. The FSIE CONPLAN appears to be a strategic extension and formal expansion of the current informal fire service information-sharing environment between the fire service and homeland security communities. The primary FSIE CONPLAN venues for sharing information are federal, state, and local fusion centers. Working within the Global Justice Information Sharing Initiative, fire service fusion center liaisons or representatives would act as nodes, and the fusion centers would act as hubs for receiving and disseminating relevant information in a timely and actionable manner.

The FSIE CONPLAN appears to represent a logical progression in maximizing the current homeland security information-sharing culture. Given the current and future threat environments in this long-term conflict (sometimes called the global war on terrorism), it might be careless or even negligent not to build on the FSIE CONPLAN to formally incorporate over one million firefighters into the information-sharing community.

New York City Fire Department Terrorism and Disaster Preparedness Strategy (FDNY Strategy)

According to the 9/11 Commission, the lack of information sharing on 9/11 may have resulted in unwarranted fatalities for civilians, firefighters, and other responders in New York City:

Just as in the North Tower, callers from below and above the impact zone were advised to remain where they were and wait for help. The operators were not given any information about the inability to conduct rooftop rescues and therefore could not advise callers that they had essentially been ruled out. This lack of information combined with the general advice to remain where they were, may have caused civilians above the impact not to attempt to descend, although stairwell A may have been passable.

Regarding information-sharing with the FDNY on 9/11, FDNY fire chiefs testified to the 9/11 Commission that the lack of information sharing, particularly between the fire command staff and other Emergency Services Sector agencies, adversely impacted operations.

As a direct result of 9/11, the FDNY released their comprehensive Terrorism and Disaster Preparedness FDNY Strategy (FDNY Strategy) in 2007. Based on my review of the FDNY Strategy, the fire department has taken administrative (but not necessarily
operational) steps to operate safely and effectively use information sharing in the post-9/11, multifaceted, all-hazards threat environment. The following statement in the FDNY Strategy indicates that the fire department is in a position to address a number of the information-sharing challenges within the homeland security community.

An examination of the events leading to 9/11 highlighted many gaps in information-gathering capabilities and information-sharing protocols within the homeland security community. The FDNY recognized that the Department could help to fill some of these gaps by contributing to local intelligence-gathering efforts. When routinely shared with intelligence and law enforcement agencies, the information gathered by FDNY personnel could make a significant contribution to existing intelligence and lead to the identification and disruption of terrorist activities. Terrorism-related information can be gathered by the FDNY in many ways. During the course of routine building inspections, arson investigations and response to fires and medical emergencies, FDNY personnel have unique access to homes and buildings that generally are concealed from outsiders.  

According to FDNY Commissioner Scoppetta and Fire Chief Cassano, the FDNY leadership employed the insight and skills from a cross section of FDNY’s considerable work force to develop the FDNY Strategy. The FDNY Strategy was designed to provide direction and unity toward enhanced preparedness.

The FDNY Strategy is organized around four articles. Article 1 (Strategy and Purpose) addresses the foundation of preparedness based on the current and future threat environment for man-made and natural disasters. Article 2 (mission and focus) examines the life-safety oriented work and focus of the FDNY, based on pre-determined significant issues that must be addressed to achieve the pre-identified levels of preparedness. Article 3 (Operational Readiness) describes how the FDNY ensures that firefighters have “the tools, training and support they need to do their job.” Article 3 also identifies a number of the National Preparedness Goal components to assist FDNY firefighters in achieving the evaluation points identified in Article 4 of the FDNY Strategy. The National Preparedness Goal components identified in the FDNY Strategy are “planning; organization and leadership; equipment and systems; training; exercises, evaluations and corrective actions; and personnel.” Article 4 (Coordination and Evaluation) is the final article of the FDNY Strategy and utilizes an “FDNY Strategy Cycle” to provide a systematic approach in identifying hazards, evaluating risks, implementing control measures and evaluating the FDNY Strategy.

United Kingdom Civil Contingencies Act of 2004 (CCA)

A review of the terrorism information-sharing systems in Canada, Australia, Israel, and the United Kingdom, as they relate to fire service and homeland security information sharing partnerships, resulted in the identification of one applicable information-sharing legislative action, the United Kingdom’s Civil Contingencies Act of 2004 (CCA). This article utilizes the sections of the CCA relevant to England exclusively and does not consider the other UK countries due to their relatively small and often administrative CCA variances. The CCA is the product of a legislative evolution that began with the United Kingdom’s Emergency Powers Act of 1920, continued with the 1948 Civil Protection Act, and later the foot-and-mouth outbreak, and World Trade Center attacks.
The CCA may be the most comprehensive single national fire service-related information-sharing document analyzed for this article. For example, in England, the fire service roles and responsibilities regarding information sharing are clearly identified in the CCA and in some cases the local fire brigade is mandated to play a lead role. In contrast, the National Information Sharing Strategy does not identify the U.S. fire service anywhere in its forty pages.¹⁹

The common law process used to adopt the CCA does not appear to be substantially different from the adoption of many post-9/11 homeland security-related U.S. guidelines, policies, strategies, presidential directives, and public laws relating to counterterrorism information sharing.²⁰ The difference is that the U.S. has chosen not to explicitly require information sharing between the fire service and the homeland security community, while England has. In both countries national crises occurred that necessitated change to lessen or eliminate future man-made and natural disasters. Both the United States and England analyzed the issues, sought input from the major stakeholders, developed wide-ranging policies, strategies, and laws, and instituted measures in an effort to lessen or eliminate future catastrophic events.

The result has been an informal information-sharing environment within the U.S. fire service that is often non-mandatory, casual, and limited in structure and scope. In England, the CCA requires fire brigades to participate in the Local Resilience Forums and to share information both informally and formally. The majority of the fifty-seven regulations in Part One of the CCA significantly enhance the probability of informal and formal information sharing with England’s fire service. In the United States, DHS funding – primarily in the form of grants to fusion centers and other information-sharing enterprises – has been the catalyst for fire service information sharing related to terrorism. Also in the United States, most firefighters may not know what terrorism indicators to look for, when to look for them, or how to share the information.

The CCA was designed to provide a single legislative point for wide-ranging protection of civilians and military from significant all-hazard disasters. Part One identifies and assigns local arrangements for information sharing and formally recognizes fire brigades as an integral part of England’s intelligence cycle. Part One also identifies the legal framework regarding the roles and responsibilities for local Level 1 and 2 responders. Level 1 responders are referred to as “core responders” and include emergency services such as police, fire, ambulance, and maritime and coastguard agencies, as well as other local authorities such as environmental and health care agencies.²¹ Category 2 responders or “co-operating responders” include utilities and transportation agencies.²²

Part Two of the CCA focuses on the emergency powers at the regional and national governmental levels and includes special legislative actions and authority at the policy level that may be needed to address the effects of significant events such as the London 7/7 subway bombings, or the foot-and-mouth disease outbreak. Part Three addresses the general, fiscal, and administrative issues relating to implementing and maintaining the CCA.²³
COMPARISON OF FOUR FIREFIGHTER-RELATED INFORMATION-SHARING SYSTEMS

There is nothing more difficult to take in hand, more perilous to conduct, or more uncertain in its success, than to take the lead in the introduction of a new order of things.

— Niccolò Machiavelli

The fundamental qualitative premise underlying this article is that there are lessons to be learned by the U.S. fire service and homeland security community from current information-sharing systems (New York City Fire Department Terrorism and Disaster Preparedness Strategy, current U.S. Fire Service information sharing, U.S. Fire Service Intelligence Enterprise, and England’s application of the U.K. Civil Contingencies Act of 2004). The following matrixes and related information compare the value of the four information-sharing systems relative to each other based on five criteria.

The five criteria (legal compliance, political acceptability, Target Capabilities List linkage, operational impact, and cost) are used with each of the four information-sharing systems (FDNY Strategy, FSIE CONPLAN, CCA and current ad hoc U.S. fire service information-sharing) to identify strengths and weaknesses applicable to improving information-sharing between the U.S. fire service and other homeland security partners.

Legal Compliance

Given that most firefighters are not actively aware of or engaged in reporting potential terrorist indicators, the fire service has not yet created any significant legal exposure or civil-liberties violations. Based on Todd Masse’s findings, the fire service has a legal responsibility to report suspicious activity.25 As a counter point to Masse’s findings, in December 2007 the ACLU raised questions regarding firefighters’ collecting and sharing potential terrorist information. The ACLU position indicated excessive potential loss of personal privacy rights would be the result of firefighters’ collecting and sharing information.26

With that said, the four information-sharing systems were evaluated for compliance with legal rulings as they relate to entry onto or into property by firefighters during emergency and non-emergency operations. The U.S. cases regarded as applicable for fire personnel collecting potential terrorist information were: Michigan v. Tyler, 436 U.S. 499 (1978); Michigan v. Clifford, 464 U.S. 287 (1984); and Camara v. Municipal Court of the City and County of San Francisco, 387 U.S. 523 (1967), as well as the Homeland Security Act 2002, Subtitle I “Information Sharing.”27

In the case of Camara the court indicated “The basic purpose of the Fourth Amendment, which is enforceable against the States through the Fourteenth, through its prohibition of ‘unreasonable’ searches and seizures is to safeguard the privacy and security of individuals against arbitrary invasions by governmental officials.” Firefighters in the performance of their emergency duties to save lives and property were not considered to be “arbitrary” or “unreasonable.”28

Relative to the Homeland Security Act of 2002, it appears the U.S. fire service and homeland security community have a duty to share information (at least unclassified), as exemplified by the following:
(1) Under procedures prescribed by the President, all appropriate agencies, including the intelligence community, shall, through information sharing systems, share homeland security information with Federal agencies and appropriate State and local personnel to the extent such information may be shared, as determined in accordance with subsection (a), together with assessments of the credibility of such information. (2) Each information sharing system through which information is shared under paragraph (1) shall—(A) have the capability to transmit unclassified or classified information, though the procedures and recipients for each capability may differ; (B) have the capability to restrict delivery of information to specified subgroups by geographic location, type of organization, position of a recipient within an organization, or a recipient’s need to know such information; (C) be configured to allow the efficient and effective sharing of information; and (D) be accessible to appropriate State and local personnel.  

The court rulings advocate firefighters entering homes, businesses, vehicles, and other assets without warrants to prevent and respond to potential life and property loss. The court rulings do not allow for “arbitrary invasions” or “unreasonable searches and seizures” by fire personnel. The Homeland Security Act of 2002 indicates local agencies have a legal responsibility to share potential terrorist-related information.

The following matrices and information-sharing criteria discussions are organized from highest to lowest for each measure. For example, the matrix for legal compliance is ordered beginning with the FDNY Strategy, FSIE, current U.S. fire service, and finally the CCA.

<table>
<thead>
<tr>
<th>Information-Sharing Option</th>
<th>Legal Compliance</th>
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<tbody>
<tr>
<td>FDNY Strategy</td>
<td>High</td>
</tr>
<tr>
<td>FSIE</td>
<td>High</td>
</tr>
<tr>
<td>Current U.S. Fire Service</td>
<td>Low/Average</td>
</tr>
<tr>
<td>CCA</td>
<td>Unknown</td>
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Figure 1. Legal Compliance

The FDNY Strategy received the highest value due to the use of accepted local, state, and federal strategies, laws, and guidelines. (At the time of this writing, the FDNY Strategy was the only completed U.S. fire service information-sharing document that had received and passed a legal review).

According to Keeley Townsend of the DHS I&A, “The FSIE is being designed in compliance with all federal laws and will be reviewed by DHS Privacy, Civil Rights/Civil Liberties, Security, and DHS OGC, as well as the DOJ Global Justice Information Sharing Initiative. We are also adhering to all criminal intelligence laws, when applicable.” Based on the review of current FSIE documents and Townsend’s previous
work with the FDNY Strategy, it is anticipated that the finished FSIE products will meet or exceed the established legal requirements.31

The legality of the current information-sharing environment is questionable, since most firefighters do not know what terrorism indicators to look for, when to look for them, or how to report them. Given that most firefighters are not actively aware of or engaged in reporting potential terrorist indicators, the fire service has not created any significant legal exposure or civil liberties violations. Based on Masse’s findings, the fire service has a legal responsibility to report suspicious activity.32

England’s CCA information collection and sharing structure was based on the United Kingdom’s system of government and did not address the legality of information collection. The CCA exceeded the three other information-sharing systems relating to legal information sharing of open-source, sensitive, and classified information between the core and cooperating responders.

Political Acceptability

For this article, “political acceptability” refers to policy-level support. The decision makers generally considered were formal policy groups accountable for the strategy, concept of operations, or legislation. Examples could be local, state, or national governing bodies. In some circumstances consideration was given to labor representatives, such as the International Association of Firefighters or the American Civil Liberties Union, which might have significant influence and interest in the political acceptability of the strategy, act, or information-sharing arrangement.

<table>
<thead>
<tr>
<th>Information-Sharing Option</th>
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<tbody>
<tr>
<td>FDNY Strategy</td>
<td>High</td>
</tr>
<tr>
<td>CCA</td>
<td>Good</td>
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<tr>
<td>Current U.S. Fire Service</td>
<td>Average</td>
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<tr>
<td>FSIE</td>
<td>Unknown</td>
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Figure 2. Political Acceptability

The FDNY Strategy incorporates FDNY policy-level fire officers who use the requirements and guidelines of numerous accepted local, state, and federal documents. The CCA was the most politically comprehensive, single-source fire service information-sharing document analyzed for this article. As stated earlier, the U.S. National Information Sharing Strategy does not identify the fire service anywhere in the document.33 In England’s CCA, the fire service roles and responsibilities regarding information sharing are clearly defined at the national, regional, and local levels, and in the case of the London fire brigade, the fire service is mandated to take a lead role.
Applicability of the current fire service information-sharing environment to the U.S. public, policy groups, labor unions, governmental agencies, and other related organizations is in the early stages of development. At the national level, Department of Homeland Security Secretary Michael Chertoff advocated for the inclusion of firefighters in state and local fusion centers.34 Based on the December 2008 draft of the FSIE CONPLAN, the CONPLAN appears to be a more practical and robust direction for the U.S. fire service.

**Target Capabilities List Linkage**

In 2004, DHS released fifteen National Planning Scenarios.35 The National Planning Scenarios listed and explained the hazards and risks associated with high-impact events that would significantly affect local emergency-response capabilities. The capabilities identified in the planning scenarios resulted in thirty-six target capabilities within four mission areas (Prevention, Protection, Response, and Recovery). The criteria for this article relied on four of the nine “prevention target capabilities” listed in the *DHS National Preparedness Guidelines.*36 Four target capabilities were selected due to their correlation to information sharing.37

- Intelligence/information sharing and dissemination;
- CBRNE detection;
- Information gathering and recognition of indicators;
- Warnings, intelligence analysis, and production.

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<th>Information-Sharing Option</th>
<th>Target Capabilities List Linkage</th>
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<tbody>
<tr>
<td>FDNY Strategy</td>
<td>High</td>
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<tr>
<td>FSIE</td>
<td>Good</td>
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<tr>
<td>CCA</td>
<td>Average</td>
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<tr>
<td>Current U.S. Fire Service</td>
<td>Low</td>
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**Figure 3. Target Capabilities List Linkage**

The FDNY used the fifteen planning scenarios to enhance their protection and response missions and to compete for DHS grant funding. The FDNY Strategy exceeded the four information-sharing target capabilities criteria used for this article by identifying the role of the FDNY in all thirty-six target capabilities identified in the National Preparedness Guidelines.

The current FSIE CONPLAN does not specifically address target capabilities. The FSIE is given a “good” rating based on information received from the DHS I&A State and Local Program Office that indicated “national planning scenarios, attack timelines, and universal adversary profiles are being used to guide the information/intelligence...”
requirements identification, and the Target Capabilities List is being used to guide the mechanisms of identification, technical assistance, and training.”

Of the four information-sharing target capabilities selected for this project, the CCA addresses three of the four target capabilities fully, and the CBRNE capability partially.

Of the four information-sharing target capabilities selected for this project, the current fire service role in the homeland security information-sharing environment formally utilized only the CBRNE detection target capabilities component through the DHS FY 2003 State Homeland Security Grant Program (SHSGP).

**Operational Impact**

How the current ad hoc fire service information-sharing arrangements, strategy, or CCA would influence the operation of the homeland security information-sharing community was measured initially by collecting key indicators of success, such as those identified in the documents themselves and, in some cases post-product analysis.

<table>
<thead>
<tr>
<th>Information-Sharing Option</th>
<th>Operational Impact</th>
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<tbody>
<tr>
<td>CCA</td>
<td>Good</td>
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<tr>
<td>FDNY Strategy</td>
<td>Average</td>
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<tr>
<td>FSIE</td>
<td>Low</td>
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<tr>
<td>Current U.S. Fire Service</td>
<td>Unacceptable</td>
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**Figure 4.  Operational Impact**

In England, the 2006 National Capability Survey suggested that local responders have made good progress in enhancing the operational information-sharing impact of the Civil Contingencies Act. “The vast majority of Local Resilience Forums and supporting task groups are up and running and functioning effectively. Almost all local responders are happy that Local Resilience Forums are providing the right level of engagement to enable members to perform the tasks mandated by the Act.”

The FDNY Strategy may have relevance for increasing the U.S. fire service operational impact in the all-hazards information-sharing environment. For example, the FDNY Bureau of Investigation maintains numerous important connections with the homeland security community; they are implementing a network-centric, information-sharing-based command system that has the potential to significantly increase real-time information sharing among a myriad of local, state, and federal partners; and they communicate national and local information to tens of thousands of fire personal and homeland security partners through their weekly Watchline e-mail. What appears to make the Watchline unique is a fire service operational orientation and specific tactical comments on eight to ten all-hazard fire service related issues.

The FSIE CONPLAN contains specific accountability components for the management of the information-sharing tasks. If the current information-sharing gap is
the catalyst for increased information sharing with the homeland security community, then the current FSIE CONPLAN is moving towards enhancing the operational impact of information sharing.

The operational impact of the current information-sharing environment was difficult to quantify. The anecdotal successes associated with information sharing among homeland security and the fire service, combined with the recent emergence of strategies and technical assistance programs, suggests that there is a heightened awareness of the potential for firefighters as sensors of opportunity who identify potential terrorist activities and as consumers of information for specific terrorist targets. Considering that the U.S. is at war on two fronts and that domestic and international terrorists have sworn to cripple the United States through terrorism, the current organized information sharing between the fire service and homeland security community is unacceptable.

Costs

The United States spends approximately $100 billion per year on homeland security.\textsuperscript{41} Homeland security expenses include federal, state, and local law enforcement, and emergency medical, public works, and fire services, but exclude most funding for the armed forces.\textsuperscript{42} Generally speaking, the national effort to enhance homeland security through information sharing with the fire service appears to involve a relatively small fiscal impact. Costs include the human resources the fire service and homeland security communities have committed specifically to information sharing. Most costs appeared to be “soft costs” absorbed by current fire and intelligence organizations responsible for the collection, analysis, and dissemination of information.

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<th>Costs</th>
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<td>FDNY Strategy</td>
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\textbf{Figure 5. Costs}

The cost of developing and implementing the FDNY Strategy appears to have been incorporated into the operating budget and supplemented with DHS grant funding for equipment. For example, the cost of producing and distributing the \textit{Watchline} as well as the proposed Network-Centric Command System appear to have been developed within the FDNY’s FY 2006-07 operating budget.

Data identifying costs were not available in the FSIE CONPLAN. Based on information within the CONPLAN framework, requirements, mechanisms, technical assistance, and training, the costs may be reasonable considering the DHS budget.
At the time of this writing a review of available literature indicated that the CCA has not been audited for cost in England. Scotland is auditing their version of the CCA, but the results were not available. The costs of implementation of the CCA may have been primarily soft costs incorporated into the current budgets for the public and private organizations that participated.

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<thead>
<tr>
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<tr>
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<td>High</td>
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**Figure 6. Information-Sharing Matrix**

**RECOMMENDATIONS**

The following recommendations consider existing programs, political concerns, and financial constraints associated with the four information-sharing systems.

**Current Fire Service Information-Sharing Recommendations**

Despite all our collective homeland security efforts since 9/11, it appears that the only emergency services sector homeland security partners with established access to information are those with law enforcement connections. If the fire service is to increase its use of all-hazards information in its decision cycles, then homeland security information-sharing partners may wish to open up the information-sharing system both culturally and politically. The best intelligence should be provided to the widest group of decision-makers, including (perhaps especially) those with no historical information-sharing relationships.

The four indicators listed below were common among the more than one hundred and fifty current homeland security terrorist-related indicators studied. The four common terrorist indicators could be printed on business cards with contact information of the local information-sharing partner (fire marshal, law enforcement, JTTF, fusion center) on the other side of the card. The cards could then be distributed through the representative organizations such as the International Association of Firefighters, International Association of Fire Chiefs, and the National Volunteer Fire Council.
1. **Suspicious Behavior:** Especially unusual nervousness for the situation and inappropriate or lack of eye contact.

2. **Unusual supplies for occupancy type (structure or vehicle):** Especially storing large amounts of chemicals, cash, electronics...

3. **Unusual documents for the occupancy type:** Especially maps, books, blueprints, literature... of critical infrastructures.

4. **Intelligence gathering:** Especially surveillance, taking pictures, video, notes, asking questions, attempting to gain access.

A second recommendation is to use local fire marshals as planning-and-logistics officers, specifically for fire personnel (and their families) during extended all-hazards responses lasting longer than two operational periods (typically twenty-four hours). This will enhance information sharing between families and response personnel. This recommendation may reduce anxiety for fire personnel and their families during high-profile heavily media-covered events.

**FSIE Recommendations**

Regarding the DHS I&A-sponsored FSIE, the FSIE CONPLAN recommendation of a national network of fire service and homeland security organizations that share all-hazard information and intelligence in a collaborative effort to enhance the national prevention, preparation, response, and recovery missions should be implemented. The FSIE should also continue to work within the Global Justice Information Sharing Initiative, the U.S. Fire Administration, National Fire Protection Association and others to ensure that fire service fusion center liaisons (or representatives) act as nodes and that the fusion centers (UASI and state) act as hubs for receiving and disseminating relevant information in a timely and actionable manner.

A final significant FSIE information-sharing recommendation is to increase the current level of information sharing across the fire service through social networking. At the time of this writing, the DHS I&A is designing a new version of the Homeland Security Information Network (HSIN) that includes fire service-wide dissemination of all locally- and federally-generated information and intelligence products that relate to the fire and emergency services. If the portal is user-friendly and the information is concise, informative, and pertinent to current fire service all-hazards missions, many fire personnel may use the information to augment their prevention, preparation, and response procedures. During a DHS I&A and U.S. Fire Administration-sponsored Emergency Services Sector Information Sharing Workshop held in April of 2009, it was determined U.S. firefighters, as consumers of intelligence products, did not need to know sources, suspect names, or other case-sensitive information, but fire fighters must have the following three pieces of information from national, state, or local intelligence sources to enhance their response missions and increase survivability for the public and emergency responders:

1. Threat Level
2. Target Hazard(s)
3. Attack Methodologies
FDNY Strategy Recommendations

Many of the strategies and tactics that FDNY developed for responding to, mitigating, and preventing all-hazard disasters can be leveraged by others in the emergency services sector, especially fire departments. The FDNY’s considerable human resources and other resources have allowed the FDNY to develop strategic approaches and operational practices in preparation, prevention, and response to all hazards. The FDNY Strategy identified numerous ways in which firefighters can produce and consume practical preparedness and response information. A number of the following FDNY strategic objectives may have application to fire departments throughout the United States.

One strategic objective involves the use of fire marshals as homeland security liaison officers with homeland security partners such as the JTTF, TWIG, FBI, or fusion centers. The fire marshals/security liaison officers would share information in preparation for generalized or non-specific terrorism threats and participate in the investigation of fire or explosion-related terrorism incidents. Fire marshals may be useful at potential terrorist emergency scenes to ensure the safety of workers relating to secondary devices and scene control.

If successful in NYC, consideration should be given to incorporating the FDNY Network-Centric Command System into the national incident management system for use throughout the U.S. fire service to enhance real-time information sharing among multi-disciplinary operations within a large-scale command. Another recommendation – prompted by the idea of FDNY’s Network-Centric Command System – is to enhance information collection and sharing through the use of a diverse suite of small-unmanned aerial vehicles (UAVs) for reconnaissance and possibly intervention operations. The Naval War College’s Global Hawk or a similar less expensive system might be leveraged by the fire service and homeland security partners for real-time information sharing during pre-planning, response, and recovery missions on large scale, natural or man-made disasters.

Finally, with permission of the FDNY and working in conjunction with the DHS/FEMA Emergency Management and Response Information Sharing Analysis Center, the FDNY Watchline could be modified and distributed to the U.S. fire service. A national Watchline-type program, with state and regional sections, could be coordinated and managed through U.S. Fire Administration. Using the fusion centers as venues for a Watchline-type product might enhance relationship building between the fire service and the intelligence community working in the state and regional fusion centers.

CCA Recommendations

The primary recommendation derived from the CCA for this article was the modification of the current National Strategy for Information Sharing (NSIS) “Sharing Information with State, Local and Tribal Governments” section to include language extrapolated from the CCA Part One Regulations 55–57, “Role of London Fire and Emergency Planning Authority.” Modification of the NSIS may enhance information sharing through the establishment of formalized local and regional networks similar to those found in England. Unlike England, U.S. information sharing is currently not required among America’s core responders, which may increase the risk of terrorist attacks in the United States.
Other recommendations derived from the CCA involve the development of national U.S. guidance templates for formally requesting information after first leveraging the CCA three-step informal information-sharing method. When instances of formalized information sharing might be necessary between the U.S. fire service and its homeland security partners, templates similar to those required by the CCA may be useful.47

The international, national, and local comparisons and smart practices presented in this article may provide the catalyst for increased systematic, operational, and legal information sharing between the fire service and homeland security partners.

CONCLUSION

There is nothing permanent except change.—Heraclitus of Greece

Over eight years have passed since the release of the first National Strategy for Homeland Security, yet little progress has been made toward solving the Gordian knot of information sharing between the U.S. fire service’s million plus fire personnel and the homeland security community.49 Unfortunately, we cannot simply cleave the knot in two. We must rely on a variety of acumen ranging from strategic and policy expertise to the most fundamental tactical skills, in order to develop horizontally- and vertically-oriented policies, strategies, and tactics to identify and share potential terrorist-related information and intelligence.50

This article presents an analysis of four information-sharing systems relating to terrorism and all-hazard strategies, policies, and programs, in an attempt to identify if U.S. fire personnel should participate in terrorism-related information sharing and — if they should participate — to consider the legal, political, and operational boundaries.

The research for this article produced three universal or macro-level findings. The first indicates that U.S. firefighters have legal, moral, and ethical responsibilities to gather and share potential terrorist-related information that could assist the homeland security community in preventing and disrupting terrorist attacks. Second, these responsibilities must be conducted within the context of a 250-year U.S. fire service enterprise founded on saving lives and property while maintaining exemplary trustworthiness, reliability, and credibility with the public. The third inclusive finding was that legal and operational issues may be addressed by firefighters using standardized terrorist indicators while operating as sensors of opportunity during emergency and non-emergency operations, but fire personnel must not be specifically asked or assigned to gather information on suspected terrorists or terrorist activities.

A strategic recommendation is to modify the NSIS to include the local fire service as an information-sharing leader in some situations (see Appendix 2 for suggested NSIS language). For example, based on England’s CCA, a modified NSIS might enhance collaborative information-sharing through the creation and maintenance of formalized, fire department coordinated, local and regional information sharing plans. Also, for the purpose of ensuring that the information sharing plans are actionable and effective, the fire department would lead in the training and exercising of the plans. The training and exercises would include all public and private agencies identified in each area’s information sharing plan.
Suggested smart practices identified in this research range from four common terrorist indicators that every firefighter should know to the creation of national U.S. guidance templates (based on the CCA model) for formally and informally requesting classified information.

Possibly more important than all the findings, recommendations, plans, and smart practices identified in this article is the acknowledgment of who firefighters are and what they can do to prevent or disrupt terrorism through information sharing. Since before the time of Fire Chief Benjamin Franklin the fire service has been built on the legal, moral, and ethical commitment to protect U.S. citizens through prevention and response. For me, as a potential collector and consumer of potential terrorism (and all hazards) related information, the continued sporadic, unstructured, ad hoc information sharing system is unacceptable.

We are at war, and war calls for risks if we are to prevail. One of the risks of using fire personnel to collect information in plain sight is the tarnishing of our reputation or possible legal action. That risk is considerably less than dealing with the consequences of the attacks on the Murrah Building, the World Trade Center, or more horrendous acts of terrorism. We must continue to build on the U.S. fire service’s long and successful history of information sharing to prevent fires and other disasters; when these prevention efforts fail, our citizens and emergency responders deserve a solid information sharing response.

More than eight years ago the terrorist attacks of 9/11 became the catalyst for the U.S. expansion of information gathering and sharing with non-traditional partners such as the fire service. Now is the time for action. The significant value of fire personnel’s prevention of life and property loss from terrorism through the use of standardized terrorist indicators and formalized collaboration with the homeland security community should not be underestimated. The more than one million U.S. fire personnel serving in over 30,000 fire departments may be a phenomenal resource for our homeland security partners, and our homeland security partners could be a valuable resource for firefighters and other first responders. If the strategic and operational recommendations identified in this article are implemented by the nation’s fire personnel, the volume of suspicious-activity reporting should increase and with it the potential for preventing or disrupting future terrorism in the United States. Citizens will be safer and, in my opinion, will appreciate their firefighters stepping up, as they have historically done to prevent life and property loss in our country.

Bryan Heirston recently retired as a deputy fire chief for the Oklahoma City Fire Department with more than twenty-five years of fire service. During the course of his career, he served as incident commander, section chief, hazardous materials specialist, water rescue diver, peer counselor, firefighter, and in other positions at scores of events including the 1995 Murrah Building bombing, 2001 World Trade Center bombing, and hurricane Katrina in 2005. Mr. Heirston is a graduate of the National Fire Academy’s four-year Executive Fire Officer Program and holds a master’s degree from the Naval Postgraduate School. He may be contacted as bch1@cfl.rr.com.
APPENDIX 1

Suggested Language for the National Strategy for Information Sharing
“Sharing Information” Section

The current National Strategy for Information Sharing (NSIS) “Sharing Information with State, Local and Tribal Governments” section could be modified to include the language shown below (extrapolated from the CCA Part One Regulations 55-57, “Role of London Fire and Emergency Planning Authority”). A new open-source information-sharing plan involving local fire departments may improve formal and informal information sharing between the U.S. fire service and other homeland security partners and may potentially prevent or disrupt terrorism.

Current NSIS Language: To implement recommendations developed pursuant to Guideline 2 of the President’s Guidelines, and as key participants in the information-sharing mission, State, local, and tribal entities are encouraged to undertake the following activities, in appropriate consultation and coordination with Federal departments and agencies.

Recommended NSIS Language

A. Role of local or regional fire service authority
In communities with established fire service, it shall be the responsibility of fire chief of the fire service to:

(1) Ensure that a collaborative open-source information-sharing plan is created and maintained. The fire chief shall be responsible for ensuring that all agencies, public and private, associated with the area homeland security, emergency services, and critical infrastructure sectors identified in the National Response Framework participate. The information-sharing plan will include informal and formal information-sharing systems or processes associated with potential man-made or natural disasters, including terrorist attacks for the pre-defined area, urban area, state homeland security region, or other mutually accepted area(s).

(2) On behalf of all relevant homeland security, emergency services, and critical infrastructure sector participants who have functions that are exercisable in the identified area, the fire department will be the authority having jurisdiction and will take the lead responsibility for exercising the information-sharing plan in relation to area-wide emergencies in accordance with the Homeland Security Exercise and Evaluation Program; and

(3) At the request of relevant homeland security, emergency services, or critical infrastructure sector partners who have functions that are exercisable in the area, assist sector and private partners in:

   (i) carrying out exercises for the purpose of ensuring that the information-sharing plan maintained by that relevant sector or partner is appropriate for the risk(s);
   (ii) the inter-sector training of responders or other persons for the purposes of ensuring that the plan is actionable and effective.
B. Role of other homeland security, emergency services, and critical infrastructure sector partners

Homeland security, emergency services, and critical infrastructure sector partners who have functions that are exercisable in the pre-determined area, shall cooperate with the fire service authority having jurisdiction in connection with the performance by that authority of its functions under paragraph A(1).
APPENDIX 2

CCA Information Request Process

Below is the CCA guidance document template for formally requesting information.

<table>
<thead>
<tr>
<th>Requesting organisation(s)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Information-holding organisation(s)</td>
<td></td>
</tr>
<tr>
<td>Information requested</td>
<td></td>
</tr>
<tr>
<td>Reason why the information is required in connection with the Act or other civil protection duties (and how the information is likely to be used)</td>
<td></td>
</tr>
<tr>
<td>Date of request</td>
<td></td>
</tr>
<tr>
<td>Date by which information is required</td>
<td></td>
</tr>
<tr>
<td>Form in which information is required</td>
<td></td>
</tr>
<tr>
<td>Place to which information should be sent</td>
<td></td>
</tr>
<tr>
<td>Contact details</td>
<td></td>
</tr>
</tbody>
</table>

Once a formal request has been made, a formal response is required. Below is the CCA guidance document template for response to a formal request for information.
Response to information request under the Civil Contingencies Act 2004

<table>
<thead>
<tr>
<th>Requesting organisation(s)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Information-holding organisation(s)</td>
<td></td>
</tr>
<tr>
<td>Date of request</td>
<td></td>
</tr>
<tr>
<td>Information requested</td>
<td></td>
</tr>
<tr>
<td>Request accepted?</td>
<td>Yes/no</td>
</tr>
<tr>
<td>If no, please set out the exceptions on which you are relying</td>
<td></td>
</tr>
<tr>
<td>If yes, please set out any sensitivities or further background information which might be necessary to ensure the information is properly understood and properly protected</td>
<td></td>
</tr>
<tr>
<td>Date information supplied</td>
<td></td>
</tr>
<tr>
<td>Contact details</td>
<td></td>
</tr>
</tbody>
</table>
Editor’s Note: This article draws on research conducted in 2008.


3 For the purpose of this article, the terms “homeland security community” or “homeland security partners” are based on definitions in the Office of the Director of National Intelligence (DNI), Information Sharing Environment Information Sharing Plan (November 2006), 10, http://www.ise.gov/docs/reports/ise-impplan-200611.pdf. “Information sharing,” is based on the Homeland Security Act of 2002. “Fire personnel,” “firefighter” or “fire service” are based on the U.S. Department of Homeland Security Office of Intelligence and Analysis, State and Local Program Office (DHS I&A), “Fire Service Intelligence Enterprise – Executive Briefing” (November 2008, contact author for copy); and the U.S. Homeland Security Presidential Directive HSPD-8 (Washington, DC: The White House, December 2003), 1, is used to define “All-hazards.” The following bulleted points provide more detail regarding the terms and their use in the context of this article.

- U.S. Office of the Director of National Intelligence, Information Sharing: “For the purposes of the ISE IP, the term “homeland security community” includes the Department of Homeland Security and those agencies with public health and welfare, emergency response, transportation, fire, and emergency management.” It should be noted that the only reference to “fire” or “homeland security community” in the 123-page document is a footnote on page 10.

- U.S. Homeland Security Act 2002, (f) – Definitions. “Any information possessed by a federal, state, or local agency that (a) related to the threat of terrorist activity, (b) relates to the ability to prevent, interdict or disrupt terrorist activity, (c) would improve the identification or investigation of a suspected terrorist or terrorist organization; or (d) would improve the response to a terrorist act.”

- U.S. Department of Homeland Security, Office of Intelligence and Analysis, State and Local Program Office, “Fire Service Intelligence Enterprise Definitions.” The terms “fire personnel, firefighter or fire service” include the functions of “firefighting, emergency medical services, technical rescue, hazardous materials operations, aviation operations, marine operations, fire prevention activities, fire inspections, fire investigations and fire communications.”


6 Ibid.


10 John Whitely and Gerald Yonas, “The War on Terrorism and What We Can Learn from the War on Fire” (Albuquerque, NM: Sandia National Laboratories, July 2002), 3-9. In their paper, John Whitely and Gerald Yonas state, “Prevention is the holy grail of our terrorism protection plan just as prevention is the key to our fire protection plan…we have created a multi-pronged approach to fire protection that involves both government and individuals in the prevention, mitigation, and response to fires.” Historically major
fires throughout have destroyed whole cities and caused massive loss of life and property. Fire prevention solutions that involved information sharing were devised and have gradually, over several hundred years, reduced the danger through the use of engineering controls, public education and code enforcement. In the case of fire prevention in the United States, the time period has been hundreds of years. Unfortunately, in the current terrorism environment we do not have the luxury of decades or centuries to build the coalitions necessary to create the preferred future, so we must leverage all our assets now to lessen or prevent the terrorist threat. As a Deputy Fire Chief and the Oklahoma City Fire Marshal responsible for fire prevention services and the Local Planning and Preparedness Council, I believe that a fire vehicle leaving the station in response to an emergency call reveals a gap in our prevention efforts.


Ibid., 6.


Ibid., 321. “Information that was critical to informed decision making was not shared among agencies. FDNY Chiefs in leadership roles that morning have told us their decision making capability was hampered by lack of information from NYPD aviation.”


Ibid.

Ibid.

14 Ibid.

15 Fire Service Intelligence Enterprise—Executive Briefing, 4.

16 Ibid., 6.

17 Ibid.

18 Ibid.

19 National Security Council, National Strategy for Information Sharing (Washington, DC: White House, 2003), 17, http://www.whitehouse.gov/ncsc/infosharing/NSIS_book.pdf. “While State and local officials work to prevent future terrorist attacks, they still must arrest criminals, put out fires, respond to traffic accidents, and deal with a host of public health and safety issues. Success in these endeavors depends on a strong partnership with the public, built on a foundation of communication and trust between local officials and the members of their community. These same partnerships will be used to protect these communities from future attacks by terrorists.”


22 Ibid.


25 Todd Masse, “Homeland Security Intelligence: Perceptions, Statutory Definitions, and Approaches,” Congressional Research Service Report for Congress. (Washington, DC, Library of Congress, August 18, 2006), 12, https://www.hsdl.org/?search=&offset=0&submitted=Search&publisher=&format=&language=&collection=&all=*Homeland+Security+Intelligence%3A+Perceptions%2C+Statutory&searchfield=title&placeholder=&submitted=Search. The primary statutory definition that applies is that which appears in the Homeland Security Act of 2002, which defines homeland security information as any information possessed by a federal, state, or local agency that (a) related to the threat of terrorist activity, (b) relates to the ability to prevent, interdict or disrupt terrorist activity, (c) would improve the identification or
investigation of a suspected terrorist or terrorist organization; or (d) would improve the response to a terrorist act.

26 Keith Olberman, “Interview with Mike German on MSNBC’s Countdown,” November 28, 2007, http://rawstory.com/news/2007/Homeland_Security_turns_firefighters_into_domestic_1129.html. Keith Olberman’s interview with Mike German on MSNBC’s Countdown, is one example. Mike German, a former FBI agent who was the national security policy counsel to the ACLU, indicated that the traditional role of firefighters is for life safety and property conservation—not intelligence collection for the homeland security community. See also National Terror Alert Response Center, Firefighters to Help In Fight Against Terrorism; Miller, More Media Reaction to FIRE-INT (Intel gathered by Fire/Rescue) thread.


31 See note 1.


37 Ibid.

38 Townsend, personal communication with author, December 16, 2008.


40 Ibid.


42 Ibid.

43 Townsend, personal communication with author, December 16, 2008.

44 Fire Department City of New York, Terrorism and Disaster Response Strategy, 19.

45 Fire Department City of New York, 2007 Annual Report of the FDNY, www.nyc.gov/html/fdny/pdf/publications/annual_reports/2007/2007_annu ... - 2008-07-31. There are 11,356 Firefighters and Fire Officers, 2714 EMTs and Paramedics, 134 Fire Marshals, 241 Fire Inspectors, 460 Dispatchers (Fire = 182; EMS = 278), 451 Trades Persons, 442 Administrative, Managerial & Support Personnel. The following are the statistics for the FDNY work force: 1,034,153 Fire Apparatus Responses (Runs); 497,679 Fires, Non-Medical Emergencies and Medical Calls (Incidents); 48,520 Fires Extinguished; 1,356,100 EMS Unit Responses (Runs); 1,179,075 Medical Emergencies (Incidents); 5971 Fires Investigated; 222,721 Fire Code Regulatory Inspections Conducted; 48,540 Fire Inspections by Firefighter Field Force.
England’s informal information sharing involves completion of a three-step process prior to formally requesting information from another entity. For example, the fire brigade requesting the information must first “be satisfied that it does not already hold the information, either by virtue of a previous request or because of informal information exchange.” Second, the fire brigade must ensure that the information is not available through common open-source information networks. Third, the fire brigade must attempt to exhaust all informal networks and agreements already established. In the United States this process would require the requesting fire department to think in terms of its needs based on risk assessments or other local planning efforts (LRFs and RRs in England) or in other words, to be a knowledgeable consumer before requesting information to assist it in meeting specific terrorist-prevention goals or objectives that might not be readily available through established informal relationships. In England, if the local fire brigade is not able to obtain the information needed by conducting the steps above, CCA Regulations 47, 48, and 50 describe the formal request procedures. When instances of formalized information sharing might be necessary between the U.S. fire service and its homeland security partners, a template similar to the CCA examples in Appendix 2 might be useful. Formal requests between the U.S. fire service and the U.S. information-sharing network may be a good alternative to informal information sharing after every effort has been made to obtain the information through informal networks, processes, or associations.


Director of National Intelligence, Information Sharing Environment, 10. It should be noted that the only reference to “fire” or “homeland security community” in the 123-page document is a footnote on page 10.