

Establishment of an Incident Management Team for the  
Frederick County Division of Fire and Rescue Services

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CERTIFICATION STATEMENT

I hereby certify that this paper constitutes my own product, that where the language of others is set forth, quotation marks so indicate, and that appropriate credit is given where I have used the language, ideas, expressions, or writings of another.

Signed: \_\_\_\_\_

### Abstract

The problem was that the Frederick County Division of Fire and Rescue Services (FCDFRS) did not have an established Incident Management Team. The purpose of the research was to identify the advantages of having an Incident Management Team (IMT) for the FCDFRS. Descriptive methodology was used to guide the study in answering three research questions related to the advantages of an IMT. The following research questions were addressed: What are the criteria used by other Fire Departments to have an Incident Management Team? What is the National Standard for establishing an Incident Management Team? What are the potential outcomes of not having an Incident Management Team? Literature stressed that the criteria necessity for fire departments having an IMT is an efficient, effective and proactive preparedness for operations that will extend past the standard operational period of a fire department and the questionnaire results, along with the interviews confirmed this. The national standard that is recommended is National Incident Management System (NIMS). It is recommended that the FCDFRS train career staff, budget money and consider developing a Local IMT that includes representatives from public health, emergency preparedness, public works, state highway department, Maryland State police, sheriff department and city police. The advantages of having a Local IMT includes, however it is not limited to, the following: utilization of NIMS forms, utilization of NIMS terms, effective cost recovery, properly trained staff for the roles needed, and a good working relationship with all agencies involved.

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## Introduction

The fire service has taken on more than suppression activities in order to keep up with the demands from the customers it serves. Progressive departments take care of hazardous materials, trench collapse, confined space rescue, terrorism threats and swift water rescue incidents (Collins, 2005). Fire departments should be prepared and committed to providing a quality of service that includes proper equipment and personnel trained to mitigate all emergencies. It is also the responsibility of the jurisdictional fire department to have in place a means to be proactive in mitigation of large scale emergencies that will go beyond one or more operational periods (Collins, 2005). This leads to the research problem that will be addressed in this applied research project. The research problem is that the Frederick County Division of Fire and Rescue Services lacks an Incident Management Team (IMT).

The purpose of this research is to identify the advantages of having an Incident Management Team for the Frederick County Division of Fire and Rescue Services. Descriptive methodology was used to guide this research in answering the following research questions: What are the criteria used by other Fire Departments to have an Incident Management Team? What is the National Standard for establishing an Incident Management Team? What are the potential outcomes of not having an Incident Management Team?

## Background and Significance

The Frederick County Division of Fire and Rescue Services (FCDFRS) is comprised of 383 career staff that provides fire and emergency medical services, along with hazmat, confined space rescue, trench rescue and swift water rescue. The career staff supplements the 750 volunteers in 21 stations throughout the county. Frederick County encompasses 664 square miles and is the largest county landmass in the state of Maryland. Frederick County's population was

215,877 in 2005 (United States Census Bureau, 2001). A July 2008 estimate by the Frederick County planning and zoning has the population of Frederick County at 232, 706 (Frederick County, 2008) Frederick County is subjected to hurricanes, winter storms, flash flooding, and hot summers. There are 84,685 housing units and 5,825 business and retail establishments as of 2001. There are 35 elementary schools, 13 middle schools, and 10 high schools (United States Census Bureau, 2001).

Career firefighters and volunteer firefighters are dispatched to mitigate a large multitude of emergencies which are listed in Table A.

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Table A: Volume of emergency incidents from 2002 to 2008

2002	22,445
2003	23561
2004	24,669
2005	23,742
2006	24,342
2007	34,999
2008 (as of August 6, 2008)	22,717

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(William Adams, personal communication, August 6, 2008).

Currently there is not an IMT in place in FCDFRS to mitigate significant operations of these incidents beyond the standard operational period of 24 hours.

A major goal from the Executive Development (National Fire Academy [NFA], 2005) course was to focus attention of the executive fire officers as leaders in their departments to

address problems, not walk by them. An IMT would be one approach for the FCDFRS to solve a lack of preparedness in mitigation of large scale incidents that extend into extra operational periods. This directly relates to the United States Fire Administration (National Fire Academy, [NFA], 2005) Operational Objective number four, “to promote within communities a comprehensive, multi-hazard risk reduction plan led by the fire service organization” and (NFA, 2005) Operational Objective five, “appropriately respond in a timely manner to emergent issues” (p.3).

In summary, this research is significant because it could provide the Frederick County Division of Fire and Rescue Services with a guide, grounded in good research and literature appropriate to the subject. The following section begins this journey by reviewing literature reflection of the advantages of an Incident Management Team.

#### Literature Review

The literature review for this applied research began during the researcher’s participation in the Executive Analysis of Fire Service Operations in Emergency Management at the National Fire Academy in Emmitsburg, Maryland. The on-line card catalog was useful in locating books and journals on the subject of Incident Management Team. The Internet was used to do additional searches for IMT.

On February 28, 2003 President Bush signed Homeland Security Presidential Directive 5 (HSPD-5) National Incident Management System (NIMS) and the Incident Command System which requires the development of a National Response Framework (NRF) to manage all human made or natural disasters, including wildland fires (Buckman III, 2005). This HSPD-5 also requires all state, local and federal response agencies to become compliant with NIMS. The National Wildfire Coordinating Group (NWCG), which consists of the United States Forest

Service, the National Park Service, the Bureau of Land Management, and the Federal Emergency Management Agency, establishes minimum training requirements and procedures for deployment of IMTs (Buckman III, 2005). IMTs are identified by the following four categories: Type I, Type II, Type III and Local.

A Type I team has the ability to deploy anywhere in the nation, and will be able to manage all aspects of a major incident. On September 11, 2001 a Type I team was deployed to New York and the Pentagon. This team provides incident management to include the planning and coordination necessary for the transportation, housing, and operational needs of thousands of fire fighters and support personnel. Type I teams consist of 35 to 50 staff and they manage incidents that extend over many operational periods. They also involve Federal resources as stated in National Fire Protection Association (NFPA) Standard 1561 (NFPA 1561, 2008). Most Type I responses have an operational section of 500 per operational period and the total incident personnel may exceed 1000.

A Type II team can be deployed as a self sufficient management team for responses of multiple agencies crossing over political boundaries. Type II teams have between 20 and 35 members (NFPA 1561, 2008). They respond to incidents where operational section personnel reach 200 per operational period and total incident personnel approach 500.

The Type III team is a complete self sufficient organization that has the ability to manage an incident which requires coordination of local or regional agencies. This team is usually comprised of 10 to 20 trained personnel. Incidents a Type III team may handle include: floods, earthquakes, or planned mass gathering events.

A Local IMT is a single and or multi-agency team for expanded incidents, typically formed and managed at the city or county level or by a pre-determined regional entity. Local IMTs



consist of fire, emergency medical service, department of public works, public health and or police from a larger city or county. It can be activated to a complex incident such as a major structure fire or hazardous material spill. A local team can also activate for a local event. This team is usually comprised of seven to ten trained personnel who respond to incidents that are typically contained within one operational period. The team can also arrive on scene of a larger incident and set up operations prior to a Type I, II or III team arriving. The only way the incident command system and IMT can work and expand as needed is for the members to be trained and proficient in its use (Buckman III, 2005). To become proficient teams will need to participate in tabletop drills and use the system on a routine basis.

Table B lists the advantages of having an IMT.

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Table B: Advantages of an IMT

common terminology  
 management by objectives  
 reliance on an incident action plan  
 manageable span of control  
 pre-designated incident mobilization center locations and facilities  
 comprehensive resource management  
 integrated communications  
 chain of command and unity of command  
 accountability of resources and personnel deployment

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(NIMS, 2008)

According to NFPA 1561 an IMT should be capable of filling the command and general staff positions. The Authority Having Jurisdiction (AHJ) should develop qualifications of each position based on the roles and responsibilities identified in NFPA 1561. The local agency is responsible to provide training for the individuals that will fill the positions. IMT members need to be trained together with full scale exercises and simulations of sufficient number to develop their proficiency and maintain skills (NFPA 1561, 2008).

“One of the greatest strengths of the Incident Command System is the common planning process that is used to move an incident from an initial response to a proactive response” (Deal, T., de Bettencourt, M., Huyck, V., Merrick, G., Mills, C., (2006) p. xvii). Responders must continually assess the situation and adjust their strategies and tactics to match the reality of what is taking place in the field. IMT can assist the Incident Commander to effectively accomplish this task through the utilization of a unified command of many agencies. IMT’s can respond to support the local incident commander who is knowledgeable in the everyday use of ICS but may not have the experienced personnel to fill all the Command and General Staff functions needed at large complex incidents (Consortium Book 2, 2007).

Purpura (2007) states “management theory explains disasters as political and organizational problems” (p 247). He further states that vulnerability to the disasters can be reduced through effective leadership and improved planning. To accomplish this leaders have the responsibility to partner with a wide variety of players to reach objectives that reduce vulnerability. IMT can assist emergency management on preparation as well as coordination of response and resources during emergencies. Purpura (2007) states “that a national response plan is now in place to coordinate structures, roles and responsibilities among the federal, state and local levels of government for large incidents” (p. 248).

Each member of an IMT is highly trained and qualified in areas such as communications, safety, technology, tactics, operations, or command (Molino, 2006). Since the World Trade Center event it has become apparent that more incident management teams are needed in local and regional areas to affect an immediate response to incidents. This recommendation has been made by the Department of Homeland Security (DHS) and state and local governments. Incident management teams are welcomed by those who mitigate emergencies, especially those who stand to lose financially in an incident. IMT's can aid in the emergency management of the following: natural disasters, train derailments, airplane crashes, terrorist incidents as well as civil unrest situations. Utilizing IMT and unified command, where each participant must be committed to working together to solve a common problem, will enhance the job of the incident commander during large, complex and long duration incidents. The response will run more smoothly and lives will be saved. This proactive management control of hazards is essential for communitywide emergencies (Erickson, 2006). The IMT also works with the Emergency Operations Center (EOC) during these large incidents. The EOC handles the communitywide situations while the IMT takes care of a specific incident. An EOC can manage the complex, specialized and large scale support that will be utilized (Lindell, 2007)

The incident commander (IC) is in charge of the incident and is responsible for the completion of three strategic goals: life safety, incident stabilization and property conservation. An IC must also build a command structure that matches the organizational needs of the incident. The IC must also translate the strategic priorities into tactical objectives and assign the resources that are required to perform the tactical assignments. (NFPA, 2004) An IMT will report directly to the incident commander and will provide the needed resources to mitigate the emergency. The IMT also assists the incident commander with the span of control, which is best at three to

five staff reporting to him/her (Coleman, 2008). The operations section is responsible for managing the tactical operations at the incident site and is focused on reducing the immediate hazard, saving lives, and property, establishing situation control and restoring normal conditions. The operations chief and the primary leadership should be well informed regarding the logistics section, which acquires the needed resources. According to (Callsen, C., Christen, H., Cilluffo, F., Maniscalco, P., Miller, G., Walsh, D. 2005), “without a well organized flow of ground support, personnel, supplies and specialized equipment, the Operations section will quickly come to a standstill” (p. 34).

A successfully managed multi agency incident will occur only when the participating agencies’ personnel have confidence in each other’s competencies, authorities, responsibilities, and limitations as they relate to the incident (Consortium Book 1, 2007). All the agencies that are mitigating the emergency must have a coordinated strategy, attitude of cooperation, and resource utilization which will bring control of the incident.

Telephone interviews were conducted to see what are the potential outcomes of not having an IMT in Frederick County as well as what the advantages would be. The following individuals of the FCDFRS, Chief Gene Mellin, Operations Chief Doug Brown, Battalion Chief Dennis Wenner, and Battalion Chief Tom Coe, were interviewed in person. These individuals were asked if they would be willing to have staff get training in IMT operations? The findings will be found in the Results section.

A questionnaire was developed to gain input for the research to help answer the three problem questions. The questionnaire was sent to the Metro Fire Chiefs across the nation. The findings of this questionnaire can be found in Appendix B.

The literature review provided a look at how one can see that it is important to utilize an IMT to lower the risk to firefighters as well as mitigate large incidents in a safe manner with the appropriate resources in a timely manner. The literature also identified the need for a proactive, efficient and effective county departmental IMT that will foster good will across all the departments that comprise the IMT. The following section presents the descriptive procedures used in searching for answers to the research questions are reviewed.

### Procedures

The procedures for the ARP started with finding out who are the leading authorities in incident management teams. This was accomplished by doing a search on the web of IMT. Books were read dealing with incident management teams. TRADENET, a training resource and data exchange program which is a regionally based network designed to foster the exchange of fire related training information and resources among federal, state and local governments, was utilized to try to determine fire departments that have IMT's in place. The questionnaire was developed to help answer the research problem questions. This questionnaire was developed based on information from reading National Fire Protection Association 1561 (NFPA, 2002) standard on emergency services incident management system, reading literature on IMT's gained in the literature review and from interviews. The cover letter for the questionnaire is in Appendix A and the questionnaire was to address research questions one and three. This was accomplished by mailing the letter in Appendix A with a link to the questionnaire displayed in Appendix B to them. The results of the questionnaire can be found in Appendix B. The departments that assisted in giving a reply to the questionnaire can be found in Appendix C. There was a 97% response from the 133 questionnaires sent to metro fire departments. The

metro fire department responses were utilized to assist in determining the advantages of an IMT through the responses of the potential outcomes of not having an IMT.

Telephone interviews were conducted with the following IMT authorities listed in Table C.

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Table C: Incident Management Authorities

Deputy Chief John Scholtz, of the Anne Arundel County Maryland Fire Department

Steve Foley, Program Manager for all hazard IMT (AHIMT) Technical Assistance program at the National Fire Academy

Phil McLaughlin, past Fire Commissioner of the Philadelphia Fire Department and professor at the National Fire Academy

Assistant Chief Daryl Louder, Fairfax County Virginia Fire and Rescue Department

Chief David Purchase, Norton Shores Michigan Fire Department

Chief Cindy Dick, Tallahassee Florida Fire Department

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They were found by doing web searches on the topic of IMT's and those whom replied would suggest others to contact, to see what are the criteria used by other fire departments to have an incident management team and what are the potential outcomes of not having an IMT.

Emergency Management Agencies representatives from various states across the nation were interviewed by phone to gain insight on advantages of IMT's to them. The following gave input; Charlie Bryant, Tennessee State level Assistant Director of Response, Harold Thiele, Miami Township Ohio Emergency Management, Al Brendt, Assistant Director of Nebraska Emergency Management Agency, and Kim Lee, Unit Chief of Emergency Management for

Wyoming, and Washington State Emergency Management Response Section Manager Paul McNeil.

Police departments were also analyzed to see how they utilize IMT's. They were asked to response to the same questions as the Metro Fire Chiefs. Table D list the police departments that supplied input through phone interviews:

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Table D: Police Department Input

Officer Mark Johnson, California Highway Patrol

Lieutenant Tony Gibson of the Scottsdale Arizona Police Department

Lieutenant Glenn Graviec of the San Bernardino California Police Department

Critical Incident Planner Trent Walker of the Greensboro North Carolina Police Department

Captain Naomi Broughton of the City of Charleston South Carolina Police Department

Patrol Officer Bill Muhlfeld of the City of Knoxville, Tennessee Police Department

Captain John Mahshie, Cape Coral Police Department

Public Information Officer Hugo Benettieri of the East Hartford Connecticut Police Department

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The following were interviewed from the Frederick County Division of Fire and Rescue Services; Chief Gene Mellin, Operations Chief Doug Brown, Battalion Chief Tom Coe, and Battalion Chief Dennis Wenner.

The interviews varied in time from twenty minutes to an hour. The interviews of FCDFRS personnel, National Fire Academy AHIMT program director Steve Foley and past Philadelphia Fire Commissioner and current instructor at the National Fire Academy Phil McLaughlin were done in person. Interviews of the following were done by telephone calls:

Deputy Chief John Scholtz, Anne Arundel County Maryland Fire Department, Assistant Chief Daryl Louder, Fairfax County Fire Department, Virginia, Fire Marshal Kevin Klein, from Colorado and Chief Cindy Dick, Tallahassee Florida Fire Department.

### *Limitations*

The researcher attempted to contact departments thought to have IMTs in place and serving a similar size population with similar needs as FCDFRS. It was difficult to determine prior to the questionnaires being sent out as to which departments met this criteria. Some fire departments that answered the questionnaire did not post their departments name and may not be reflected in the list of questionnaire participants. Also, some of the emergency management agencies and police departments did not return the researcher's phone calls.

### Results

The overall results of the research identified the criteria needed for an IMT. The research questions used to guide this study were: What are the criteria used by other Fire Departments to have an Incident Management Team? What is the National Standard for establishing an Incident Management Team? What are the potential outcomes of not having an Incident Management Team? However, FCDFRS does not have in place an IMT. The criteria needed to prepare the FCDFRS for implementing an IMT and the advantages an IMT can provide to the department were determined.

The first research question asked what are the criteria used by other Fire Departments to have an Incident Management Team? From the questionnaire results a criteria was determined that most departments utilize for their IMT. These results can be found in Appendix B.

Phil McLaughlin, past fire commissioner of the Philadelphia Fire Department and a current instructor of the Executive Analysis of Fire Service Operations in Emergency



Management at the National Fire Academy, was interviewed on August 7, 2008. During the interview Commissioner McLaughlin addressed the research questions of what criteria is used by other fire departments to have an incident management team, what is the National Standard for developing an incident management team and what are the potential outcomes of not having an incident management team. As for the criteria used by other departments, Commissioner McLaughlin stated (personal communication, August 7, 2008) that the incident commander (IC) must decentralize his/her responsibilities. No one can handle a large scale incident by themselves. Commissioner McLaughlin stated that (personal communication, August 7, 2008) the system utilized by the Fire Service for incident command is modeled after Fortune 500 companies and the military. It is important to establish good objectives and the functions of the strategies will work to meet those objectives that mandate the Incident Command System and National Incident Management System.

Stephan Foley, Program Manager for all hazard incident management teams assistance program at the National Fire Academy, was interviewed on August 7, 2008 in regards to the research questions of this paper. When asked what are the criteria used by other departments to have an incident management team Mr. Foley stated (personal communication, August 7, 2008) that it is important to educate the other disciplines that will be involved with the fire service at large incidents on how an IMT operates. This includes the police departments, public health, public works and emergency management agencies. It is also important to utilize IMT at planned events so that all the players get familiar with how to operate with one another.

Dennis Wenner, the Battalion Chief of Training, Safety and Special Operations for FCDFRS stated (personal interview, August 8, 2008) that the department has an obvious need for

an IMT. It will take support of the department along with a budget to make an IMT a reality. It will be important to have interoperability for state and national service.

Chief of Operations Doug Brown, for the FCDFRS, responded to the criteria used by other departments by stating (personal communication, August 8, 2008) that other departments obtain buy in from police, emergency management, public works, health department, sheriff department and state police. This assists in having enough staffing for the staff and general command positions. By doing this there is a coordinated effort from all parties involved.

Battalion Chief Tom Coe stated (personal communication, August 11, 2008) that any incident that goes past a work cycle of twelve hours should utilize an incident management team. He also believes that due to the size of the FCDFRS it should be a Local IMT and utilize the different agencies within the county to staff the positions. This joint effort will help all the players to get to know how each functions and build a good working relationship with all agencies involved.

Assistant Chief Daryl Louder (personal communication, August 11, 2008) stated that the criteria for having an incident management team are the potential for a large scale incident, the capacity to support the team with personnel and funding for training. Deputy Chief John Scholtz (personal communication, August 11, 2008) utilizes regional criteria for his team. This is due to the fact that one area may be overwhelmed by an incident and relies on another region to assist it. Chief Cindy Dick stated (personal communication, August 11, 2008) that NIMS is the criteria used to determine her IMT. Chief David Purchase (personal communication, August 13, 2008) stated that he has a regional Type III team, which is AHIMT, which consists of Fire Department, Public Health, Emergency Services, Emergency Management, and a partnership with the National Guard, Department of Homeland Security, and the Forrest Service.

The Tennessee Assistant Director of Response Charlie Bryant stated (personal communication, August 11, 2008) that his IMT is made up of different state emergency managers. They have NIMS training to level 400, they do an interface with the emergency operations center and they have representatives that have the ability to commit resources as needed. Ohio Emergency Manager Harold Thiele (personal communication, August 11, 2008) utilizes his own staff for an IMT. If he does not have enough people, he can do a recall of police and other agencies to fill those positions. In Nebraska, Al Berndt (personal communication, August 11, 2008) criteria for an IMT are from the local fire department. His staff can assist in writing an incident action plan for the incident. Kim Lee, Emergency Management Unit Chief in Wyoming (personal communication, August 11, 2008) stated that he uses Tribal resources, Department of Forestry and the fire department to have an IMT. Washington State Emergency Management Response Section Manager Paul McNeil stated (personal communication, August 12, 2008) that he coordinates command and general staff through a multi agency coordination center for the Washington State IMT. The agencies work well together and train every other month.

Colorado State Fire Marshall Kevin Klein stated (personal communication, August 12, 2008) that the criteria used in his state for an IMT is a Type III task book. Fire Marshall Klein's team makes sure each role on the team is at least three members deep. Patrol Officer Bill Muhlfeld, City of Knoxville Tennessee Police Department stated (personal communication, August 13, 2008) that the criteria for having an IMT is dependent of the type of incident. They utilize one team for special weapons and tactic calls, another for search and rescue and another for finding missing children. These teams train every month and the focus of the training is very specific. Captain John Mahshie shared that the Cape Coral Florida Police Department criteria

for an IMT is a police decision for police incidents, emergency management for natural disasters and the fire department for fire emergencies. Critical Incident Planner Trent Walker, Greensboro North Carolina Police Department, stated (personal communication, August 12, 2008) that their IMT coordinates through the emergency management agency and there are police officers who are sign off on task books for roles in logistics, planning, public information officer and incident commander.

Lieutenant Glen Gravic, San Bernardino California Police Department, stated (personal communication, August 12, 2008) that there are eighteen patrol stations that cover 20,000 square miles and these stations are to be able to have their IMT handle incidents in their respective area, if it is determined that they need assistance the station is to contact emergency management. This is done quite frequently on search and rescues. Lieutenant Troy Gibson, Scottsdale Arizona Police Department, stated (personal communication, August 12, 2008) that his IMT is in its infancy and is hosted by the Phoenix Fire Department. The department utilizes lieutenants and higher to supply command level IMT role personnel.

The second research question asked what is the National Standard for establishing an Incident Management Team? The national standard for IMT is NFPA 1561(NFPA, 2002) in conjunction with the national incident management system (NIMS, 2008). Commissioner McLaughlin stated (personal communication, August 7, 2008) that the Firescope California Field Operations Guide, ICS 420-1(firescope, 2004), incident command system publication must be utilized for developing an IMT. It is fundamental to the incident command system and to an IMT at incidents. It can be modified to particular incidents to meet objectives, strategies and tactics. One must build tactics to meet the strategy, along with checks and balances, and have an established measurable time frame. It is also important to have a trigger as to when to dispatch

an IMT to an incident. Commissioner McLaughlin suggested that a good trigger is when a second alarm is dispatched to an incident. The earlier the IMT is activated the better. There is a trend not to overkill an incident and reluctance to get command staff involved.

In regards to the national standard for developing an IMT, Mr. Foley stated that the National Wildfire Coordinating Group and the National Fire Academy are establishing standards to be followed by IMT. It is important for each state to have at least one Type III team. IMT members should be qualified and credentialed. There are task books that team members can follow, along with being mentored, to become functional in a particular role. Once the person completes a functional capacity at a large scale incident involving an IMT and receives a good evaluation, an IMT leader can sign that member off to function in the capacity alone.

Chief of Operations Doug Brown stated (personal communication, August 8, 2008) that the IMT typing standard of the National Fire Academy would be utilized as a standard for development of a local team in Frederick County. Battalion Chief Tom Coe stated (personal communication, August 11, 2008) that following NIMS and NFPA 1561 would be utilized as a standard for development of a Local IMT for Frederick County.

Deputy Chief Scholtz, from Anne Arundel County Maryland, looks for succession planning for his IMT. Succession planning permits members to become trained in many roles so that when other members drop from the team, there are knowledgeable people to fill the spot. He also wants to have established an all hazard command and general staff for the IMT.

Assistant Chief Louder stated (personal communication, August 11, 2008) that the standard for developing the IMT should be a community decision, keeping in mind the size and type of team best suited for your department. Chief Shores utilizes FEMA guidelines as the national standard for developing an IMT.

Captain John Mahshie, Cape Coral Florida Police Department, stated (personal communication, August 13, 2008) that his department follows the NIMS guidelines as the National Standard for developing his incident management team. Patrol Officer Bill Muhlfeld, City of Knoxville Police Department, utilizes NIMS guidelines and incident command system forms. The Greensboro Police Department utilizes federal emergency management and all hazard incident management team for standards for an IMT.

Emergency Management Assistant Charlie Bryant stated (personal communication, August 11, 2008) that the national standard is based on resource typing. Ohio and Nebraska utilizes NIMS as the national standard for developing an IMT. According to Fire Marshall Klein (personal communication, August 12, 2008) Colorado utilizes NWCG, task books from FEMA and National Park Service task books as the standard for their IMT.

The San Bernardino Police Department utilizes NIMS and ICS as the national standard for developing an IMT. Lieutenant Troy Gibson (personal communication, August 12, 2008) stated that the Scottsdale Police Department follows FEMA, NIMS, DHS and NFA guidelines as its national standard for developing an IMT.

The third research question asked what are the potential outcomes of not having an Incident Management Team? Commissioner McLaughlin stated (personal communication, August 7, 2008) that if you do not utilize an IMT, the incident will manage you. By not having an IMT the department will not be ready to deal with the consequences from the incident. A department will lack the credibility to implement contractual agreements to meet emergencies and it is setting up the department for failure. By not having an IMT Commissioner McLaughlin stated (personal communication, August 7, 2008) that fire departments must get away from the Fire God having to okay every move on the fire scene. This approach stifles initiative to move

forward to perform roles and responsibilities. Many after action reports have shown that large incidents without an IMT are managed by the incident itself.

Mr. Foley stated (personal communication, August 7, 2008) that a potential outcome of not having an IMT is impact on responder safety. Other outcomes from not having an IMT include: redundancy of service, no financial control, no planning, and chaos. Mr. Foley shared (personal communication, August 7, 2008) that when the Oklahoma City bombing took place there was a call sent out for 5,000 Tyvek suites. A company in Texas sent them by truck. Come to find out there were 10,000 Tyvek suites in Oklahoma City!

Battalion Chief Dennis Wenner stated (personal communication, August 8, 2008) that potential outcomes of not having an IMT include not having optimal resources for the stable mitigation of an incident. FCDFRS Chief of Operations Doug Brown stated (personal communication, August 8, 2008) that some potential outcomes of not having an IMT includes being disjointed in efforts, an uncoordinated effort and no true unity of command. Also, you are not prepared to handle your own emergencies and the department never performs as well as it could with other players, such as public works, police and emergency management. If you do not have at least a local team you will not know when to call out a type III team. Battalion Chief Tom Coe (personal communication, August 11, 2008) believes that a potential outcome of not having an IMT is that you will be depending too much on outside resources and it is difficult for the IC on a large scale incident to stay focused on all the goals and strategies at a large scale incident.

Assistant Chief Daryl Louder stated (personal communication, August 11, 2008) that the incident commander has to delegate their responsibilities to the Command and General staff of an IMT or the IC will be overwhelmed. Deputy Chief Scholtz (personal communication, August

11, 2008) sees the IMT as an efficient and effective tool to mitigate a large incident. Chief Dick (personal communication, August 11, 2008) believes that a large scale incident will have a catastrophic result and will not be able to handle resource problems without an IMT. Chief Shores (personal communication, August 11, 2008) believes that if you do not have an IMT deployment of personnel who are trained at upper management the operation will be ineffective.

The emergency management agencies replies to the potential outcomes of not having an IMT include the following: hope what is happening will work, one does not know the capabilities of the staff on the location, it becomes a downward spiraling event, lack command and control, over and under use of resources, safety issues, cost control, poor communication and self dispatch.

The California Highway Patrol, according to Officer Mark Johnson (personal communication, August 11, 2008) believes that the potential outcomes of not having an IMT will cause an incident to not run smoothly and be less effective. Colorado has found that there is not cost efficiency at incidents that do not have an IMT. The Cape Coral, Florida police department sees the potential outcome of not having an IMT as ineffective mitigation of emergency situations. The City of Knoxville sees potential outcomes of not having an IMT as taking longer for a chaotic situation to be restored to order. Critical Incident Planner Trent Walker, Greensboro North Carolina Police Department, stated (personal communication, August 12, 2008) that a potential outcome of not having an IMT is detrimental to the citizens they serve and the incident would not run smoothly. Mr. Walker sees the benefits currently at the PGA tournament in Greensboro where the emergency medical services, fire department, police department, and golf club security are developing one incident action plan. All the agencies involved are working well together and are on the same page.



Lieutenant Glen Gravic (personal communication, August 12, 2008) of the San Bernardino Police Department sees potential outcomes of not having an IMT as loss of control, lack of coordination of resources and no way to track expenditures for an incident. Scottsdale Police Department Lieutenant Tony Gibson stated (personal communication, August 12, 2008) that potential outcomes of not having an IMT as being behind the curve of a critical incident that will possibly go several operational periods. Lieutenant Gibson sees another outcome of not having an IMT is losing out on important training and grant opportunities.

Captain Naomi Broughton of the Charleston, South Carolina Police Department stated (personal communication, August 12, 2008) that she did not know what an IMT was and her department does not have one. Public Information Officer Hugo Benettieri, of the East Hartford Connecticut Police Department, stated (personal communication, August 12, 2008) that his department does not take part in IMT.

From the replies to the questionnaire the following were determined to be the potential outcomes of not having an incident management team. There would be poor management of a high risk, low volume event. A lack of inter agency coordination; not being able to know what is being requested can cause duplication of efforts. There is a higher likelihood of firefighter injuries. Not having these teams would be devastating to the ability to manage major incidents. It becomes more difficult to manage incidents beyond the original operational period. There is also poor accountability of personnel.

The questionnaire (Appendix B) sent out to the Metro Chiefs provided emergent trends that suggest the importance placed in IMT to improve the safety, health and survival of firefighters and of those whom they serve.

## Discussion

The criteria used by other Fire Departments to have an Incident Management Team and the National Standard for establishing an Incident Management Team were demonstrated through the questionnaire results (Appendix B). The Metro Fire Chiefs questionnaire showed an emergent response that they are concerned with infrastructure, life safety 101, target hazards and transportation incidents that would require an IMT. Seven percent of the metro departments are serving the same size population as Frederick County. Forty four percent of the respondents have an IMT. These IMT's receive the majority of their training from state agencies, local training academies and from the National Fire Academy. Their IMT's consisted of officers above the rank of captain. Ninety percent of the metro chief's IMT's are able to handle all hazard incidents. Most of the teams are comprised of at least 12 people. Ninety eight percent of the metro chiefs that responded stated that the IMT is beneficial to their department. The majority of the IMT are utilized about five times a year. Seventy two percent drill at least three times a year. Fifty five percent of the metro chiefs departments have a local IMT. Most of the metro chief IMT consist of fire department, emergency management, police and public works staff. For those departments that do not have their own team a regional team is utilized. These departments are demonstrating the importance of the advantages of having an IMT.

The following advantages of an IMT are shown in literature . According to Deal et al. (2006) "One of the greatest strengths of the Incident Command System is the common planning process that is used to move an incident from an initial response to a proactive response" (p.xvii). According to Callsen et al. (2005), "without a well organized flow of ground support, personnel, supplies and specialized equipment, the Operations section will quickly come to a standstill" (p. 34). A successfully managed multi agency incident will occur only when the participating

agencies' personnel have confidence in each other's competencies, authorities, responsibilities, and limitations as they relate to the incident (Consortium Book 1, 2007).

What are the potential outcomes of not having an Incident Management Team? The questionnaire responses had a trend of responses to include: safety issues, not utilizing resources effectively, uncertainty of outcomes, lack of confidence in personnel, failure to manage critical incidents, lack of command, inability to adequately plan for extended operations, loss of accountability, and unable to handle emergencies in a timely fashion.

How would an IMT become part of the day- to- day activities of the Frederick County Division of Fire and Rescue Services? Chief Mellin stated (personal communication, August 14, 2008) that FCDFRS does have an adequate number of staff to fill the roles of an all hazard incident management team, however the staff would require training and the team would have to include different agencies to make it an efficient team. Members would have to include the following: County Manager, Finance Department, Sheriff Department, State Police, City Police, Emergency Preparedness, Public Works, State Road Department, Public Health and other key agencies. Chief Mellin feels that an AHIMT will be very beneficial to the department. He would support training of staff and he has seen several incidents in the past that could have utilized a Local IMT. A criterion for developing an IMT for FCDFRS would be hurricanes, severe winter storms and large scale emergency incidents. Chief Mellin would have the IMT follow FEMA guidelines and NIMS as the standard. Potential outcomes of not having an IMT according to Chief Mellin (personal communication, August 14, 2008) includes an uncoordinated effort, agencies not getting along at incidents, and inefficient use of resources as well as a lack of cost recovery. Chief Mellin wants FCDFRS to be efficient, effective and proactive in the mitigation of emergencies and this can be accomplished at major incidents with the aid of an IMT. This

change in management of large incidents will take understanding on the parts of all agencies involved. Heifetz and Linsky (2002) suggest the following:

“Leaders must also remember that “to lead is to live dangerously because when leadership counts, when you lead people through difficult change, you challenge what people hold dear, their daily habits, tools, loyalties and ways of thinking with nothing more to offer perhaps than a possibility” (p.2).

### Recommendations

After utilizing descriptive methodology to guide my research through reading reference books, conducting interviews and viewing feedback from a questionnaire the results identified the criteria needed for the Frederick County Division of Fire and Rescue Services Local Incident Management Team and demonstrated the advantages this team would bring to the department. A multi agency Local IMT can aid mitigation of an emergency through a proactive, efficient and effective use of fire department resources during large scale incidents in the community. All of the potential outcomes of not having an incident management team are dispelled. Chief Gene Mellin, Frederick County Division of Fire and Rescue Services, stated that the FCDFRS currently does not have an IMT established in the department (personal communication, August 12, 2008). The research also answered how a Local IMT will become part of the day- to- day activities of the FCDFRS through Chief Mellin and his administration making a Local IMT part of mitigating incidents that warrant its use. The FCDFRS incident management team can be established through the following: adopt NFPA Standard 1561 (NFPA, 2002) for IMT, train staff in how to perform all the roles of a Local IMT, budget for the materials and possible overtime, and consider developing standard operating procedures.

Also, based on the research questionnaire and personal communications it is in the publics and the department's best interest to take on a proactive role as a leader in providing the best emergency mitigation through the establishment of a Local IMT in the FCDFRS.

A specific manner for the IMT to evolve would be to send personnel to the National Fire Academy in Emmitsburg, supported in Appendix B, to attend the executive analysis of fire service operations in emergency management. After completion of this class, the personnel would be assigned a mentor from an established IMT to assist them at a real incident. Once the person has participated in an emergency setting in an IMT role, completed the task book for that specific role and after a good evaluation the mentor can sign off on the person. After the sign off the person will be able to actively take a lead role in the approved position of the IMT team. This would take place for each role on the IMT that the person would like to be capable of functioning as. The personnel that would receive this training would be from the rank of lieutenant to chief of the department. FCDFRS does not have any captains, so we would have to start with the rank of lieutenant in order to have sufficient staffing for a Local IMT. This is based on the results in Appendix B.

The results showed that following this recommendation the firefighters will be adding value to the lives of the public that they serve as well as increasing their likelihood of everyone goes home safely.

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Appendix A

Metro Chief Letter

To the Chief of the Fire Department;

I am a student at the National Fire Academy in the Executive Fire Officer Program. I have just finished my third class out of four. At this time I am doing my applied research paper on the development of an Incident Management Team for the Frederick County, Maryland, Division of Fire and Rescue Services. It would be greatly appreciated if you could please take time to answer the questions on the questionnaire at the link [www.surveymonkey.com/EAFSOEM](http://www.surveymonkey.com/EAFSOEM) . You can enter this link into the address bar of Internet Explorer, hit the enter button and the questionnaire will appear. Please complete this questionnaire by September 28, 2008.

I would like to have your email address for future questionnaires if you would like to assist me in my research. Please send your email address to [gtiv@comcast.net](mailto:gtiv@comcast.net) .

If I can be of further assistance please feel free to email me or call 301-748-2875. I will be on a 12 day hiking and backpacking trek at Philmont Boy Scout Ranch with my son from July 17 to July 31, 2008. I will answer your questions after I return.

Thanks in advance for your time and assistance,

Lieutenant George L. Thomas IV  
Safety/Special Operations  
Frederick County Division of Fire and Rescue Services  
2502 Underwood Lane  
Adamstown, Maryland 21710



Appendix B

Questionnaire Results

1. Please list your Department's name. Your input will be kept confidential. Thanks for your time and assistance with this questionnaire!

133 departments answered the questionnaire. The list is in appendix C.

2. Which of the following is your department type?

Combination	31%
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Career	69%
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3. How many career staff does your department have?

0 to 60	31%
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61 – 120	7%
----------	----

121 – 180	3%
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181 – 240	7%
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241 – 300	7%
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301 – 360	5%
-----------	----

361 – 420	4%
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421 – 480	8%
-----------	----

481 – 540	8%
-----------	----

541 – 600	2%
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Over 600	21%
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4. Which of the following do you have in your community? Mark all that apply.

Infrastructure concerns	85%
Life Safety 101 concerns	87%
Target Hazard concerns	92%
Transportation concerns	87%

5. What is the size of the population that is served by your department?

Below 50,000	27%
50,001 – 100,000	11%
101,000 – 150,000	8%
151,000 – 200,000	4%
201,000 – 250,000	6%
251,000 – 300,000	7%
301,000 – 350,000	6%
Over 350,000	31%

6. Does your department have an incident management team (IMT)? If you mark Yes continue with the questionnaire. If you mark No please go directly to question 18.

Yes	44%
No	56 %

7. How do the IMT members receive their training? Check all that apply.

From the National Fire Academy	63%
From local training academies	69%
From emergency management	47%
From state agencies	71%
From police department	7%
From forestry department	7%
From other IMT's	29%

8. Which of the choices below is your IMT comprised of? Mark all that apply.

Firefighters	38%
Lieutenants	37%
Captains	79%
Safety Officer	68%
Battalion Chief	79%
Assistant Chief	67%
Deputy Chief	79%
Chief	65%

9. Is your department's IMT an all hazard team?

Yes	90%
No	10%

10. How many members is your IMT comprised of?

0 -12	40%
13 – 24	19%
25 – 36	10%
37 – 48	7%
49 – 60	7%
Over 60	18%

11. Is your IMT beneficial to your department?

Yes	98%
No	2%

12. How many incidents a year is the IMT utilized?

0 – 5	68%
6 – 10	16%
11 – 15	5%
Over 15	11%

13. How often does your IMT drill during the year?

0 to 3 times	71%
4 to 6 times	21%
Over 6 times	8%

14. What is the type of your IMT?

Type I	6%
Type II	18%
Type III	21%
Local	56%

15. Is overtime for the IMT a budget item?

Yes	26%
No	74%

16. What are the potential outcomes of not having an IMT?

Numerous replies. Summarized in the discussion section.

17. Which of the following are members of your IMT from outside the fire department?

Check all that apply.

Emergency Management	59%
Police	59%
Public Works	42%
Forestry	15%
None	31%

18. If your department does not have an IMT, which of the following do you utilize? Check all that apply.

Police IMT	0%
Emergency Management IMT	48%
Regional IMT	58%

Appendix C

Metro Departments that Responded to Questionnaire

Burlington Fire Department

New York State Office of Fire Prevention and Control

Wauconda Fire District

Brookhaven National Lab

Allegany County

City of White Plains Fire Dept. – New York

Prospect Heights Fire District – Illinois

Loudoun County Fire and Rescue – Virginia

Frederick County Division of Fire and Rescue – Maryland

Hiawatha Fire Department

Santa Cruz Fire Department – California

Haddon Heights Fire Department – New Jersey

Kent Fire Department

Fort Worth Fire Department

Clearbrook Fire Department

Horry County Fire Department

City of Topeka Fire Department

City of Palm Beach Gardens Fire Rescue

Mulvane Emergency Services

Rural Metro Fire Department – Oregon

North Star Volunteer Fire Department – Alaska

Park Forest Fire Department – Illinois

San Francisco Fire Department – California

Largo Fire Department – Florida

Berwick Fire Department

Coon Rapids Fire Department – Minnesota

Fargo Fire Department

Wellfleet Fire Department

Mid-Columbia Fire and Rescue

Baltimore County Fire Department – Maryland

Bedford Heights Fire Department

Northwest Fire Rescue District

Irving Fire Department

Salem Fire Department

West Harford Fire Department

Durango Fire and Rescue Authority

Dover Fire Department

Fire Department of New York

Westlake Fire Department – Ohio

Copperas Cove Fire Department – Texas

California Department of Forestry and Fire Protection – California

Lake Zurich Fire and Rescue Department – Illinois

Eagle Fire Company

Tiverton Fire Department

Whetstone Fire District

Washington Township Fire Department – Ohio

Lincoln Fire and Rescue

Washington Fire Department and Rescue Squad, Incorporated

Suffolk Department of Fire and Rescue

Greensboro Fire Department

Mount Vernon Fire Department – Ohio

City of Cincinnati – Ohio

Hampden Township Volunteer Fire Company – Pennsylvania

Grand Prairie Fire Department – Texas

Miami Township Fire Department

Hampton Fire and Rescue Division

Newport Fire Department – Kentucky

Ashtabula Division of Fire

Cunningham Fire Protection District

City of Casa Grande Fire Department – Arizona

City of Orange – Texas

Moline Fire Department – Illinois

Copley Fire Department

Scottsdale Fire – Arizona

City of Monterey – California

Erie Fire Department – Pennsylvania

Fishers Volunteer Fire Department – New York



Fort Lauderdale Fire Department – Florida

Montgomery County Fire and Rescue Service – Maryland

East Naples Fire Department – Florida

Tucson Fire Department

Loudoun County Department of Fire and Rescue – Virginia

Columbus Fire Department – Ohio

Henrico Division of Fire

Broward Sheriffs Office- Department of Fire Rescue

Aurora Fire Department

Ventura Fire Department

West Metro Fire Protection District

Sacramento Fire Department – California

Lincoln Fire and Rescue – Nebraska

Norfolk Fire and Rescue – Virginia

Oklahoma City Fire Department – Oklahoma

Bakersfield Fire Department – California

Baltimore County Fire Department – Maryland

Chesterfield County Fire and Emergency Medical Services – Virginia

City of Johnstown

Colorado Springs Fire Department - Colorado

Fresno Fire Department – California

Alexandria Fire Department – Virginia

Garland Fire Department – Texas

City of Tucson Fire Department

Palm Beach County Fire Rescue

Cheney Fire Department – Washington

Columbia Fire Department

Greensboro Fire Department

Santa Ana Fire Department

Virginia Beach Fire Department – Virginia

Manchester Fire Department – New Hampshire

Kern County Fire Department

City of Wichita Fire Department – Kansas

Nashville Fire Department

Unified Fire Authority

Louisville Division of Fire

Fire Department of New York

Tallahassee Fire Department – Florida

Stockton Fire Department

Los Angeles Fire Department

City of Saint Louis Fire Department

Rivers Pointe Fire Protection District

Denver Fire Department - Colorado

City of Anaheim – California

Cincinnati Fire Department – Ohio

Charlotte Fire Department

Syracuse Fire Department

Saint Paul Fire Department

Anchorage Fire Department – Alaska

Prince William County Department of Fire and Rescue – Virginia

Phoenix Fire Department – Arizona

City of Oakland Fire Department

Milwaukee Fire Department

Greensboro – North Carolina

Orange County – Florida

City of Henderson Fire Department

Hialeah Fire Department

Alameda County Fire Department

El Paso Fire Department – Texas

City of Tulare Fire Department

Midwest City Fire Department – Oklahoma

Portland Fire and Rescue – Oregon

Austin Fire Department Austin - Texas

