Determining the Appropriate Type of Incident Management Assistance Team for Gloucester

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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 the appropriate credit is given where I have used the language, ideas, expressions, or writings of another.

Signed:

Miles J. Schlichte- May 22, 2013

Abstract

The problem was that the City of Gloucester did not have any sort of incident management team. In the past this had led to inefficient management of incidents. The purpose of this Applied Research Project (ARP) was to research what, if any, type of incident management team could improve how the city manages significant incidents. Because this ARP described the way things were with the intention of improvement in the future, this ARP utilized the descriptive research method. Research was performed to determine what size and type of team was best, what the composition of the team should be, what the training standards should be, and what would trigger the team's activation. A literature review revealed that a large amount of material was available through the National Fire Academy (NFA), the United States Fire Administration (USFA), the Federal Emergency Management Agency (FEMA), the National Fire Protection Agency (NFPA) and previous Applied Research Projects (ARPs). Information was collected from a national learning conference and in articles found online. Additional procedures included an online survey emailed to all City of Gloucester department heads to gather internal data, and a questionnaire that was emailed to recognized subject matter experts (SME) followed up with phone interviews to gather external data. As a result of this research, it was determined that for extended incidents there were regional teams available but that a gap existed for management of events that were severe enough to overwhelm the on-scene incident commander(s) but that did not reach the level of need for regional incident management teams. Therefore, the recommendation was to establish a city Type IV Incident Management Assistance Team (IMAT) that could effectively manage local incidents until the incident rose to the level that required a regional Type III incident management assistance team to respond.

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Determining the Appropriate Type of Incident Management Assistance Team for Gloucester

Since the Loma Prieta earthquake of 1989, the World Trade Center attack of 2001, and Hurricane Katrina in 2005, the fire service across the country has undergone dramatic changes in how it manages large incidents or events. These incidents and other incidents of substantial magnitude have brought to the forefront the demands of the public for professional incident management and the challenges municipalities face in meeting these demands.

The first widely recognized attempt to efficiently manage large scale emergency events came as a result of the inefficient handling of large wild-land fires in southern California in the 1970s. **FI**refighting **RES**ources of **C**alifornia **O**rganized for **P**otential **E**mergencies (FIRESCOPE) originated in 1972 and is considered the origin of using incident management teams to efficiently handle large scale incidents (Firescope, nd). Due to the recognized success of FIRESCOPE in managing forest fires, the Incident Command System that FIRESCOPE instituted was revised to meet the objectives of the original National Interagency Incident Management System (NIIMS) in the early 1980s (Firescope, nd). In 1993 an Incident Management System (IMS) consortium completed a document titled the Model Procedures Guide for Structural Firefighting which dealt primarily with supporting the tactical operations at the fire-ground. The National Fire Academy (NFA) then incorporated this guide into its training curriculum (National Incident Management System Consortium [NIMSC],nd). In February 2003, in an ongoing effort to better coordinate emergency responses at the local, state and federal levels, President George W. Bush issued Homeland Security Presidential Directive number five (HSPD-5) which stated that the Secretary of Homeland Security is “to enhance the ability of the United States to manage domestic incidents by establishing a single, comprehensive national incident management system” (Department of Homeland Security, 2003). This system would

come to be known as the National Incident Management System (NIMS). An All Hazard Incident Management Team (AHIMT), an Incident Support Team (IST), or an Incident Management Assistance Team (IMAT) are all management entities created as a result of this presidential directive.

Almost all incidents are handled by a single jurisdiction with little or no secondary management assistance. However, when an incident exceeds the management ability or span of control of the local incident commander(s), incident management teams are the key to assisting the on-scene commanders. By having incident management teams respond with personnel who have expertise in the areas required of Command and General staff positions as outlined in the Incident Command System (ICS) much of the burden of managing a large or extended duration incident can be removed from the Incident Commander(s) which allows them to concentrate on the actual tactical needs of the incident. Incident management team command staff supports the incident commander(s) in the areas of Public Information, Liaison Officer and Safety. Incident management team general staff support the incident commander(s) in the areas of Logistics, Planning and Finance. When utilizing an IMT, Gene Mannelin pointed out it is extremely important to note that any Incident Management Team (IMT) is there only to support, not take command (Mannelin, 2006).

In 2002 a Memorandum of Understanding (MOU) was signed between the USFA, the International Association of Fire Chiefs, (IAFC), and the National Fire Protection Association (NFPA) to create regional IMTs to assist in major operations. However, in his article “Regional Response to All Hazard Events” Greg Noll emphasizes the point that there will often be a significant time delay between when an incident starts and when an incident management team can arrive to assist (Noll, 2007). It is precisely this identified shortfall between when the need for

an incident management team is identified and when an outside incident management team can arrive to begin assisting the incident commanders at an incident that this applied research project hopes to address.

The City of Gloucester is a seaport that is a forty-five minute drive north of Boston on an area known as Cape Ann. The City was first settled in 1623 to reap the harvest of the vast fishing stocks just off the shore. In the almost four hundred years since then, the city has always valued hard work, tradition, and the ability to independently solve its problems. While in many ways these are admirable traits, in today's complicated world this reluctance of city departments to ask for help during a local emergency could be negatively impacting how the city manages emergencies. In addition, this reluctance to ask for help may be negatively impacting the life safety of both the citizens and the responders.

The reluctance of City managers and department heads to use professional emergency management techniques during an emergency has directly impacted the ability to minimize property damage during such incidents and events. Several events over the last few years, including the 2013 coastal blizzard named NEMO that dropped two feet of snow on the city, have shown that the City of Gloucester could improve upon the management of large and or long term events. Although the City has attempted to staff an Emergency Operations Center with a very basic incident management team for several incidents, the EOC has always been staffed at the last minute with a varied assortment of persons, and many positions that one would expect to be filled have not been. While the city weathered these events with few management issues apparent to the public, it was apparent to this author that a more formalized incident management team would have improved the way in which these incidents were handled.

The problem is that the City of Gloucester does not have any sort of pre-established All Hazard Incident Management Team (AHIMT) to support the local Incident Commander(s) (IC/UC) during an incident or event. In the past, this missing management component has led to poor management of incidents and events with the resulting inefficient use of resources and an increased level of risk to responders and citizens.

The purpose of this Applied Research Project (ARP) is to research if a City All Hazard Incident Support Team (AHIST) or a City All Hazard Incident Management Team (AHIMT) can provide the City with better overall management of incidents, and if so, what size team is most appropriate.

Additionally, this ARP will research what the composition and training standards of such a team should be as well as what the triggers should be to activate such a team. By determining what sort of incident management team is best for the City, the public can be assured that the Incident Commander(s) or the Incident Management Team (IMT) at the scene of planned events and unplanned incidents are supported efficiently. Properly supporting the Incident Commanders at an incident will reduce the risk of injury or loss of life to firefighters as well as reduce the risk of property damage to businesses and homeowners.

Because this ARP will describe the way things are currently with the intention of improving the current status based on applied research, this ARP will utilize the descriptive research method. Research included identifying what incident management teams were already in existence in the area, what guidelines or standards there were in regards to incident management teams, and what level of training should be expected of members of an incident management team.

For this ARP the following research questions were asked.

- How does an All Hazard Incident Support Team (AHIST) compare to an All Hazard Incident Management Team (AHIMT) in regards to meeting the incident management needs of the City of Gloucester?
- What should be the composition of an AHIST/AHIMT as regards potential members experience, organizational position, or statutory authority within the City?
- What should the training standards be for AHIST/AHIMT members and who should set those standards?
- What should the triggering events be that would activate the AHIST/AHIMT and who would have the authority to approve any AHIST/AHIMT activation?

Background and Significance

The Gloucester Fire Department (GFD) is the only career fire/emergency department on Cape Ann. The smaller neighboring communities of Rockport and Essex have volunteer departments, and Manchester- By- The Sea has minimal (two persons) staffing supported by call personnel. Annually the GFD responds to 4,500 emergency calls and performs 1,100 in-service property inspections *(Run Book, 2011)*. The City has a property value estimated at close to seven billion dollars. This property is 91% residential, 5% commercial/retail, and 4% heavy industrial (City Data, 2011). These property values do not include any of the roughly 150 commercial fishing vessels working out of Gloucester harbor. Gloucester has the largest freezer capacity on the East Coast with over fifteen freezer facilities who all use ammonia for refrigerant. Unfortunately, the City has experienced three worker deaths due to ammonia releases since 1969. In recent years the port began seeing a significant increase in cruise ships with over 30 ships visiting in 2010 (Gaines, 2010). In 1992 the Mass Municipal Group conducted a study of

the City of Gloucester and identified the hazards that the community must deal with (Mass Municipal Association Consulting Group [MMACG] 1992). These hazards include structural fires with the potential for conflagration, explosions, hazardous chemical storage, hazardous chemical spills both on land and in the harbor, toxic and hazardous chemical transport, marine accidents, building collapses, (three have collapsed in the last 15 years including an unoccupied seasonal hotel that fell into the river while empty), radioactive material storage, and the likelihood of being impacted by an event by the Seabrook nuclear power plant close by in Seabrook N.H..

The MMA study identified over 70 special needs facilities including a hospital, nursing homes, schools, daycare facilities, and elderly housing projects. Other critical infrastructure as defined by FEMA for the City Comprehensive Emergency Management Plan includes a major seaport, a state highway system, a commuter rail line, several large reservoirs, a natural gas pipeline, and an oil terminal portside that supplies the fuel oil needs of the entire area (Miles, 2011).

With its heavy marine industrial base, aging commercial and residential properties, and antiquated infrastructure, the City of Gloucester suffers from significant emergency incidents on a regular basis. Fires of all sizes are common, but it was the Lorraine Apartment complex fire in December of 2007 that forced the City to take a deep look at how emergency incidents were being managed in the city. An After Action Report (AAR) performed by an outside consultant identified numerous flaws in how the city managed the incident. Many of the issues were related to there being no Incident Management Team (IMT) or Incident Support Team (IST) in place (Municipal Resources, Inc. [MMRI], 2009).

In addition to explosive ammonia leaks, building collapses and the catastrophic Lorraine Apartment Fire, in the last three years alone the city has suffered through a twenty-eight day Boil Water Order in August of 2009, a two day Boil Water Order in December of 2012 and a three day city-wide power outage in December of 2010. Along with these man-made events, the city endures sometimes brutal coastal weather. Some recent events were the windstorm in March of 2010 which caused great damage including blowing the roofs off of two seasonal hotels along the shore. The blizzards of December 2010 and January 2011 each brought more than a foot of snow in rapid succession which severely stressed the residents' ability to traverse the streets. Hurricane Sandy made landfall in October 2012 and most recently the blizzard Nemo dropped over two feet of snow in Gloucester in February 2013. NEMO ranked as one of the top five largest snowstorms to ever impact the city.

The City also has numerous large scale planned events that attract thousands of visitors to the city every year such as the annual week long St. Peter's Fiesta, the annual Triathlon, the annual Run Gloucester marathon, and the annual Jazz Festival. Any of these large planned events have the potential to become a mass casualty event. In addition to these large events there are many other events of all sizes that take place in the city almost every weekend from spring through late fall that would benefit from an incident management team.

Since the Lorraine Fire Report and the subsequent audit of the city's emergency services response in 2009, some headway has been made in improving the resources available and responses to an emergency incident scene. Multiple alarms and callback of personnel happens more quickly and regional Incident Management Teams are available through mutual aid to assist in the tactical handling of major incidents. However, the problem is that little to no progress has been made in having a pre-identified City All Hazard Incident Management Team

in place to respond to the city EOC in order to support the Incident Commander(s) at the scene of an incident or planned event.

The purpose of this research is to determine if a Gloucester All Hazard Incident Support Team (AHIST) or a Gloucester All Hazard Incident Management Team (AHIMT) would provide the City with better overall management of significant incidents. If it appears that an incident management team would be beneficial, the research would also need to determine the size, type, composition, training requirements and triggering events of such a team. If the research indicates that some sort of incident management team with the proper structure and training is appropriate for the community, the City would then be able lower the risk of injury or property damage to responders and citizens alike. Additionally, by determining which sort of incident management team would best work with the existing City EOC, this ARP will directly meet one of the terminal objectives as well as one of the enabling objectives of the Executive Analysis of Fire Service Operations in Emergency Management (EAFSOEM) course.

- Terminal Objective: “Students will be able to analyze their department’s level of preparedness” and students will “be able to analyze how the Emergency Operations Center (EOC) policy, coordination, resources and Operation Groups will increase response and recovery readiness using risk assessment, capability assessment, and resource agreements” (Federal Emergency Management Agency, National Fire Academy [FEMA,NFA], 2012, ch.5, p. 2).
- Enabling Objective: “Students will understand the relationship of the EOC to the Incident Management Team (IMT)” (FEMA,NFA, 2012, ch.5, p. 2).

In addition to meeting the goals of the National Fire Academy Executive Fire Officer Program, this ARP also directly addresses several of the five United States Fire Administration

(USFA) Operation Goals and Objectives as outlined in the 2010-2014 Strategic Plan. However, the USFA Operational Goal and Objective that is most directly addressed by this ARP is to "Improve the fire and emergency services' capability for response to and recovery from all hazards" (Federal Emergency Management Agency, United States Fire Administration [FEMA,USFA], 2010, p. 13).

In recent years the City of Gloucester has made progress in how it approaches the management of emergencies within the City from an Incident Command or tactical point of view. The next logical step is to continue this improvement by addressing how the City approaches supporting the on-scene incident management through resource management and policy and procedure oversight as provided through an Incident Management Team.

Literature Review

A literature review was conducted to research the existing body of knowledge on incident management teams in general. A large amount of material is available through the National Fire Academy (NFA), the United States Fire Administration (USFA), the Federal Emergency Management Agency (FEMA), the National Fire Protection Agency (NFPA) and previous Applied Research Projects (ARPs) from other Executive Fire Officer (EFO) candidates. Additional material on the topic at hand was found via the works of a national learning conference held in 2008 called *AHIMT Training and Education Conference* and in numerous articles found online.

At the *AHIMT Training and Education Conference* (http://www.ahimt.net/archive.html) held at Northern Illinois University, the issues that attendees identified as most crucial for incident management team success was, a set of standards, equipment, ongoing training and consistent funding. Many teams had been funded through Homeland Security grant programs but

that funding is steadily being reduced. More and more of a team's costs are now being borne by the sponsoring agency or community. On the positive side, quite often when an event is of the size that requires an incident management team there is shortly thereafter a disaster declaration that will provide funding reimbursement for much of the team's cost (Mannelin, 2006).

During the conference several characteristics of successful incident management teams were discussed. These were positive team dynamics, flexibility with a problem solving orientation, interagency and interdepartmental cooperation, and a clear and delegated authority from the sponsoring agency or agencies (Donahue, 2003).

The conference also suggested establishing a national standard for incident management teams that would outline minimum standards of training, knowledge and experience for all of the positions on an IMT. This would closely parallel what is currently the accepted practice in the wildfire service accomplished through the use of Task Books. Task Books are how a member tracks their experience and qualifications. These accomplishments are then signed off on by a supervisor. Such a Task Book has not yet been created for incident management teams.

In the absence of a formal and recognized certification program for incident management team members it appears that it is up to the local jurisdiction to determine what will be the accepted level of training and certification. This would be the position of EFO candidate M.G. Lusk (Lusk, 2006) as well as the NFPA standard 1561. NFPA 1561 is the Standard on Emergency Services Incident Management (National Fire Protection Association [NFPA], 2008).

For a Type V or Type IV team The USFA Technical Assistance Program (2007) suggests that the Command and General Staff members take the online self study courses Intro to Command and General Staff and Intro to Unified Command for Multi-Agency and Catastrophic Incidents along with the six-day classroom delivery of Command and General Staff Functions in

the Incident Command System course. For any team from a Type V up through a Type I the NIMS basic courses of ICS100, 200, 300, and 400 as well as IS700 and 800 need to be completed.

An agreement was reached that Type III teams would follow the National Wildfire Coordinating Group (NWCG) ICS training program. The NWCG recommends that Type III members take the Introduction to Command and General Staff as well as the All Hazards IMT course (http://training.nwcg.gov/sect_allhazard.htm). The AHIMT course is an extensive fifty hour on-site course arranged with the USFA's AHIMT Technical Assistance Program Response section. Following completion of this course additional ICS position specific professional development is required. These position specific courses have been developed by the USFA (http://training.fema.gov/AllHazards/). In addition to the eight command and general staff courses, there are eight specific unit leader courses.

Type I and Type II team training is much more coordinated and is credentialed by the USFA AHIMT Technical Assistance Program Response Section. The Type I and Type II team qualifications are also based on the NWGG Wild-land Fire Qualification Guide (National Wildfire Coordination Group [NWCG], 2012). Additionally, any person participating on either a Type One or a Type Two team in Command or General Staff positions must complete the advanced Incident Management or Complex Incident management courses. Extensive documented experience is also required. Ongoing team training is strongly suggested; NFPA 1561states that refresher training shall be provided annually (NFPA, 2008). Many teams participate in at least one full scale exercise each year such as this author does with FEMA's Urban Search And Rescue (USAR) mobilization exercises (MOBEX).

One of the research questions for this ARP asked about team member qualifications, organizational position and statutory authority. Several previous EFOP candidates had common sense answers to this question. D.W. Nichols stated that being a team member required a commitment to being able to work staff positions based on training and qualifications instead of department rank (Nichols, 2005). Nichols also wrote about the importance of a mentoring program to be able to continue to bring fresh members to the team.

G.R. West wrote about how important it is to install candor between team members. "Lack of candor blocks smart ideas, fast action, and prevents good people from contributing"(West, 2006, p. 15). West also discussed the political realities that will come with forming a multi department or multi agency team and he stated that these political realities must be addressed while the team is in the formative stages.

Another EFO candidate D. W. Litton wrote that developing an incident management team required strong commitment from the sponsoring agency and that a team must include departments or agencies from outside of the fire department to be able to provide for technical expertise that is not normally part of a fire department (Litton, 2003).

Finally, EFO candidate L.A. Bedrich commented that in addition to selecting team members based on experience and intuition perhaps personality testing might be considered. In Bedrich's ARP he discussed using the Myers-Briggs Type Index as a good tool to assess potential team members. In his ARP, Bedrich reported on a definite link between desired personality traits and specific IMT positions (Bedrich, 2006).

For a more formal discussion of team composition, organizational policies and procedures as well as team protocols, the most in-depth information comes from the United

States Fire Administration (USFA) (http://www.usfa.fema.gov/fireservice/ops_tactics/type3_imt/index.shtm).

The USFA recommends that the first step in creating an incident management team is to establish an Agency or Interagency Oversight Committee. This committee would then be responsible for the development of team policies, delegations of authority, certification requirements, deployment triggers, fiscal policies and spending constraints long before any activation of the team can occur. A manual should be created regarding team policies and procedures to provide guidance to team members. Once the team is established members can be credentialed in accordance with the guidelines provided by the NIMS Integration Center (http://eprna.org/credent_faq.pdf).

The National Fire Protection Agency (NFPA) also weighs in on the topic of incident management teams with NFPA 1600, The Standard on Disaster/Emergency Management and Business Continuity Programs section 5.9.1 which states entities "shall develop an incident management system to direct, control, and coordinate response and recovery operations" (National Fire Protection Association [NFPA], 2007, p. 10). NFPA 1600 section 5.6.3 also calls for objectives to be established regarding incident support teams personnel, equipment, training, facilities, funding, expert knowledge, technology, and the time frame in which these resources will be needed (NFPA, 2007).

An article published by the International Association of Fire Chiefs (IAFC) summed incident management teams up by saying, "The operations of IMT's are highly dependent on the local community needs, available resources and the level of training/experience." "Many times, smaller jurisdictions have training in incident management systems/incident command systems but do not have the necessary resources to effectively manage long-term or major incidents."

said Charlie Dickinson, Deputy U.S. Fire Administrator and former chief of the Pittsburgh Bureau of Fire. “Local jurisdictions may establish, train, and control IMTs at their respective levels” (Dickinson, 2004, p. 1).

In the report titled *Responding to Incidents of National Consequence*, a number of recommendations are made that applies not only to incidents of national significance but to any incident of significance on the federal, state or local level. The report states that a capacity to sustain an elevated response to incidents be established through mutual aid agreements and that consideration should be given to establishing a local support structure that can be immediately established to support the operation for at least the first twenty four to seventy two hours until additional incident management help can arrive (United States Fire Administration [USFA], 2004).

In the report titled *From Forest Fires to Hurricane Katrina; Case Studies of Incident Command Systems* Moynihan looks at successful and unsuccessful examples of the Incident Command System (ICS) application and particularly the interaction with incident support teams (Moynihan, 2008). Moynihan points out that although the fire service is comfortable with a hierarchy of command and control, an incident management team is actually a hierarchy network whose success is dependent upon a network of resources from multiple departments or agencies. Limitations within such a network may prevent a positive outcome. Moynihan contends that personal trust and relationships are as important as formal training and that the most effective incident management teams are community based. “Where working relations and trust were lacking, we see coordination problems and a weak network” (Moynihan, 2008, p. 30).

In the article *On Call Assists* Rubin illustrates the advantages of having a local incident management team. Rubin perceives the ever present political front as a positive because the

teams are comprised of local responders of allied or associated agencies which present a unified front before the constituency of each agency involved in the decision making process. These local relationships are further cemented through the use of exercises and planned events. Unfortunately, political influences may also negatively impact a local incident management team due to political factors beyond the control of the team members. Sometimes the concept of multi-agency or multi-jurisdictional operations is not something the community fully grasps. To assist in educating public administrators on the subject of NIMS, the National Association of Counties (NACO) has published the National Incident Management System (NIMS) Guide for County Officials which was first published in 2006 (National Association of Counties [NACO], 2006).

In a white paper written for *All Hands Net* Zuber agrees with Rubin in the advantages that a local incident management team can bring to the incident (Zuber, 2008). According to Zuber, local teams can respond faster, have local contacts and have relationships that prove beneficial to building trust and confidence. Zuber maintains that this sort of local involvement reaps large benefits for the community when it comes to information sharing, transitioning back to normal operations, and documenting the event.

A stated goal of this ARP is to determine what type of incident management team would best suit the City of Gloucester. To be able to determine what that might be, one needs to know what types of incident management teams there are. The most widely accepted document on incident management team composition is the United States Fire Administration IMT Roadmap (http://www.usfa.fema.gov/fireservice/ops_tactics/type3_imt/index.shtm). The USFA describes the five types of IMT's in the following manner.

A Type V team is the smallest and least complex. A Type V team is generally considered adequate for a small community of the village or township size. Usually the IMT is a pool of

primarily fire officers who are trained in the command and general staff positions and respond early on in an incident. Team members are not usually pre-designated. Routine mutual aid of surrounding community officers to an incident could be considered a Type V team. Generally a Type V team consists of five or fewer members.

A Type IV team is generally utilized for incidents involving a City, Fire District or possibly a County. The team is usually has pre-designated members and consists of Fire, EMS, Law Enforcement, and possibly other departments. The team is activated when necessary to manage a major or complex incident early on and may transition to a Type III team if the incident increases in scope and complexity. Usually there are five to ten individuals representing different agencies and or departments within a single city or district.

A Type III team is generally a standing team of more highly trained individuals from multiple departments, organizations, agencies or communities within a state or region. They are activated when operations are expected to extend beyond one operational period. A Type III team is available to respond throughout the State or large portions of a State depending upon state laws and policies. A Type III team usually consists of ten to twenty personnel and they can either assist an existing Incident Command (preferred) or a Type III team can assume command of an incident if requested to do so.

A Type II team is a National or State level standing team that is state or federally certified but that is not as robust as a Type I team. Type II teams are deployed and operate through interagency agreements and respond with twenty to thirty five people to incidents of regional significance.

A Type I team is a National or State level team that is certified in the same manner as a Type II team but it is more robust and team members generally have more training and

experience. These teams also operate through interagency agreements and respond with thirty five to fifty people to incidents of national significance.

In 2012 there were sixteen Type I Federal teams and roughly forty Type II State teams across the country (http://sw1.imtcenter.net/main/Index.aspx). However, no matter what the size of the incident management team, incidents are intended to be handled at the lowest possible geographical, organizational, and jurisdictional level (Donahue, 2003).

To assist in determining what size Incident Management Team might be required, FEMA identifies the incidents themselves in the following manner.

Type Five: One or two single resources with up to six personnel engaged. The incident is handled within the first operational period usually within a few hours.

Type Four: Activate only the positions in the Command and General Staff that are needed. One to several single resources may be needed. The incident is limited to one operational period.

Type Three: Most if not all of the Command and General Staff positions are filled as well as Division/Group Supervisor and/or Unit Leader positions as needed. The incident may exceed one operational period.

Type Two: Regional and or National resources are being activated to assist in managing the incident. All Command and Staff positions are filled. Operational personnel are between 200 and 500 people per operational period. The incident is going into multiple operational periods and an Incident Action Plan (IAP) is required for each operational period.

Type One: National resources are being activated to assist in managing the incident. All Command and Staff positions are filled. Operational personnel may exceed 500 people per operational period. The incident is expected to run for multiple operational periods and a written

IAP is required for each operational period. (http://www.usfa.fema.gov/fireservice/ops_tactics/type3_imt/index.shtm)

In addition to the information sources already referenced in this Literature review, there are several other sites dedicated to incident management teams..

- There is a site dedicated to Incident Management Teams which is basically a blog for incident management teams. It can be found at: http://imtcenter.net
- The USFA ICS Resource Center which is full of documents, training materials, reference documents and ICS job aids. It can be found at: www.training.fema.gov/emiweb/IS/ICSResource/index.htm
- The USFA All Hazard IMT Technical Assistance Program. It can be found at: www.usfa.dhs.gov/ahimt

In summary, the vast majority of incidents are managed at the local level by local dispatchers utilizing local resources and no additional management assistance is required. However, upon occasion, communities are overwhelmed by either the size or complexity of an incident. It is for this reason incident management teams exist and are scaled to fit the right size management team to the incident. These incident management teams arrive to support the local operations with a highly motivated group of people who are skilled in the less often used management functions that are necessary to handle large scale incidents.

While reviewing the literature it was noted that the reference material is somewhat scattered about between FEMA, the USFA, the NFA, and the NFPA. However, there is consistency among these agencies regarding overall responsibilities of these teams and the suggested qualifications of team members. Any agency attempting to put together an incident management team will have no trouble in finding adequate guidance to do so.

Procedures

Because this ARP will describe the way things currently are with the intention of improving the current status based on research, this ARP utilized the descriptive research method. The desired outcome is to determine which sort of incident management team is the best fit for the City of Gloucester, what the composition of that team should be, what the training standards should be and what the triggering events would be that would activate the team.

Research for this Applied Research Project (ARP) started in December of 2012 at the National Fire Academy Learning Resource Center (LRC) while the author was on campus for the Executive Analysis of Fire Service Operations in Emergency Management (EAFSOEM). EAFSOEM is the third year of the four year Executive Fire Officer (EFO) program. Much of the Literature Review for this ARP was performed while on campus first in December of 2012 and shortly thereafter in February of 2013 while the author was instructing at the Emergency Management Institute. After instructing during the day the author was able to perform research for this ARP at the LRC during the evenings. While on campus for the EAFSOEM course and for several weeks afterwards several ARP proposals and research questions were emailed back and forth between this author and the evaluator assigned to this author. These correspondences and one phone call greatly assisted the author in fine tuning the proposed topic and the research questions. The assigned evaluator approved the ARP proposal on January 22, 2013.

In addition to the research of previous EFO candidates at the LRC, much information was available through internet searches which produced numerous articles, white pages, and incident management team websites that provided a wealth of information on incident management teams.

After completing the research of currently published works for the Literature Review, a survey was created utilizing the online survey service called “Survey Monkey.” The author had utilized this service on previous ARP’s and it had proven to be a successful tool. Since much of the requested data needed to be gathered from City of Gloucester department heads regarding a proposed city incident support team, the survey was electronically sent to all Gloucester department heads who could potentially be involved in an incident management team via the City of Gloucester email system. Before utilizing the city email system, permission was requested from and granted by the city administration to use city email for this purpose. In addition, all survey questions were submitted to the administration for review prior to emailing them to department heads.

Since it was going to take significant time to create, send and interpret the data generated from this survey, getting the survey out to the potential respondents was the first step to be taken for this project. In particular, information derived from a survey would be instrumental in answering research questions number two and four. These questions were: a) What should the composition of an AHIST/AHIMT be as regards a potential member’s experience, organizational position or statutory authority within the City? and b) What should the triggering events be that would activate the AHIST/AHIMT along with who would have the authority to approve any AHIST/AHIMT activation?

Procedurally, the survey itself was broken down into two main sections. First, how was the survey developed? And second, how was the survey distributed?

Developing this survey was started by looking at previous surveys on Incident Support or Incident Management teams that were available as part of other ARP’s on file at the National Fire Academy. There were several recent ARPs dealing with incident management teams and the

questions that these earlier ARP's asked provided a core of questions to start from (Varnell, 2006) (Webb, 2009)(Doherty, 2012). These questions were first edited and then additional questions added in order to be able to better represent the information being sought from the City of Gloucester managers. The list of city managers and subject matter experts (SMEs) contacted for this ARP is included as Appendix "A". By using the templates and guidance provided by Survey Monkey a survey was created and emailed to every City of Gloucester department head. This survey is included as Appendix "B", Gloucester City Managers Survey.

Before distribution to the target audience of city managers two draft versions were tested on persons who have nothing to do with public safety and were not familiar with incident management teams. This was to ensure that the questions could be understood by any person reading them no matter what their professional background was. Based on the responses received from these draft surveys, some questions needed to be rewritten to improve their clarity. In order to prevent any sort of bias or leading questions, only closed ended or forced choice questions were used. Although only two specific research questions needed to be addressed, thirty one questions were asked of the managers. Since the managers were being asked to answer a survey anyways, additional questions related to incident management were asked that could be of use to the city in the future. The full listing of all the questions asked is included in Appendix "B".

To ensure that the survey would be completed fully with all questions answered an answer had to be selected for each question before the respondent could move to the next question. If an individual exited the survey without answering all the questions that survey result was automatically discarded and not tabulated by the software program. In order to attempt to convince city managers to complete the requested survey as soon as they got it, the contact email stated that a second request would follow if the initial request went unanswered and that this

survey request had been approved by the Mayor. Managers were also informed that the survey results and the completed Applied Research Project would be available to any manager that completed the survey. The survey can be viewed at https://www.surveymonkey.com/MySurvey_EditorFull.aspx?sm=2wioQyW5hQcr5pz1F2KnHcXleJW36H9MhnbCPrUSpS4%3d.

Of the nineteen city managers who were sent an initial request only three responded within ten working days. Therefore, as promised, a second request was sent to the sixteen managers who had not responded. Three more responded within the next ten business days allocated as the response period. Due to the still poor response, a third and final request was made ten business days later of the thirteen managers who had not responded to the first two requests. After this third request, an additional three responses were collected for a total of ten responses submitted by the nineteen city managers asked three times for input over a one month time frame. The survey findings are presented in the results section and this author's interpretation of those findings discussed in the discussion section of this ARP.

While waiting for the results of the manager's survey, the author continued with the literature review started at the LRC. The literature review examined works published by the Federal Emergency Management Agency (FEMA), the United States Fire Administration (USFA), the National Fire Academy (NFA), professional trade journals, and published reports from several different communities from across the country. FEMA's USFA website was probably the greatest resource through the IMT Technical Assistance Program and the IMT Roadmap pages. The information gathered from these sources will be discussed in the results section.

The next procedural step was to answer the research questions that needed to be answered through a questionnaire and interviews with recognized subject matter experts (SMEs). The research questions to be answered through this questionnaire and interview process were:

- How does an AHIST compare to an AHIMT in regards to meeting the incident management needs of the City of Gloucester?
- What should the training standards be for AHIST/AHIMT members and who should set those standards?

Interviews were conducted by first emailing the questions to the selected SMEs. The selected SMEs were all recognized as experienced and current incident management team members who were in senior management positions within their respective teams. The names of these SME's are included as Appendix "A", List of City Managers and SMEs. Sending the SMEs the questions by email allowed them to type in their responses at their convenience and simply reply to the email. The questions asked of these SME's are included as Appendix "C", Introductory Email and Interview Questions of Subject Matter Experts. As part of the email, the SMEs were asked for their contact information and a good time to contact them by telephone for a brief follow-up discussion. Fortunately for this author three of the SME's were involved in the same FEMA All Hazards Operations Section Chief training course as the author the week of March 4-8, 2013. A group interview was scheduled with these three SME's immediately after class ended for the day on March 7, 2013. Follow-up emails were sent the following week to two other SME's who had acknowledged receipt of the emailed questionnaire but who stated they would respond later. One did respond to the questionnaire later and one did not. Of the eight SMEs contacted, six responded in one manner or another. The results of these questionnaires,

interviews and the information acquired through the Literature Review are included in the Results and Discussion sections of this ARP along with the appropriate citations and references.

It should be noted here that some limitations to the research was noticed. As the results of the online survey was gathered and filtered, it became apparent that many of the city department heads had a very limited understanding of emergency management in general and incident management teams in particular. This limited understanding is probably because much of the body of knowledge related to emergency management and incident management teams is written for and by emergency services organizations; primarily the fire service. Therefore, it should not be a surprise that non public safety agencies are not as familiar with emergency management as members of the public safety agencies.

Another possible limitation was the relatively small amount of persons who were sent the survey. A solution to this in the future might be to submit the survey request to the persons listed on the City electronic community emergency management plan (eCEMP) as the second and third persons in line when department heads are unavailable. This would increase the number of survey participants threefold and might possibly reach more junior personnel who might be more in tune with emerging emergency management practices.

A third limitation was that it was assumed that all respondents would answer the survey questions honestly. Due to some ongoing political undercurrents regarding the current state of emergency management within the City, it is possible that some respondents may have been not entirely truthful. It is also possible that some respondents did not want to expose their limited knowledge of emergency management practices and risk potential embarrassment so they may not have been completely honest either.

Results

For this ARP the results were derived from an in-depth review of the available literature both written and retrieved from the internet, an external questionnaire emailed to incident management team Subject Matter Experts (SMEs) which was followed up with personal interviews, and an internal survey of Gloucester city managers regarding incident management.

Before addressing the actual research questions, it is worth mentioning some background the author encountered before formally beginning the research for this ARP. During the December 2012 EAFSOEM class a survey was taken three times during the week regarding the Emergency Management Profile of the communities represented by the twenty four Executive Fire Officer (EFO) candidates in the class. The purpose of the survey was to determine what these EFO candidates viewed as Emergency Management deficiencies in their communities. This survey was taken pre-course to identify deficiencies, during the course to reinforce key learning points, and post course to identify if any of the students had selected one of the identified weaknesses in their community as the topic for an ARP. Of particular importance to this ARP was the reporting of fifteen of the twenty four EFO candidates that their communities had a deficiency in Emergency Operations Center (EOC) and Incident Management Team (IMT) interface training. This deficiency identified by 63% of the class confirmed this author's belief that many communities would benefit from a better understanding of incident management teams. The complete 2012 survey results from this EAFSOEM class are included with this ARP as appendix "D".

In addition to the 2012 EAFSOEM survey, a second document relevant to this research as an overview was provided to the author by Mr. Travis Hengen. Mr. Hengen is the State Exercise Officer for the Massachusetts Emergency Management Agency (MEMA). While this author was

discussing this ARP with other MEMA instructors at meeting on February 13, 2013 Mr. Hengen produced a summary of the results from the 2012 MEMA community training needs assessment as requested by the communities in Massachusetts (T. Hengen, personal communication, February 13, 2013).

By far the most requested training from the Massachusetts communities was EOC management and IMT interface training. The summary of information derived from the 2012 Massachusetts Training Survey is included with this ARP as appendix "E". Further indication of the timeliness of this ARP is the communication this author had with Gloucester Fire Department Emergency Medical Services Coordinator Mr. Sander Schultz on March 18, 2013 (S. Schultz, personal communication, March 18, 2013). Unaware that this author was in the process of researching incident management teams, Mr. Schultz asked for language on incident management teams as the city was in the process of creating an application packet to be required of entities wanting to have large planned events in the city. EMS Coordinator Schultz's role in this project was to assist with the creation of a city based management team for these planned events. A copy of the email exchange is included as appendix "F". With this background knowledge that there seemed to be an identified need for incident management, this author directed his attention towards the research questions for this ARP.

The first research question was: How does an All Hazard Incident Support Team (AHIST) compare to an All Hazard Incident Management Team (AHIMT) in regards to meeting the incident management needs of the City of Gloucester? Of the eight SME's contacted for their external views on this topic, six responded in one manner or another. On February 22, 2013 Mr. Chuck Flanagan of the Federal Emergency Management Agency Urban Search and Rescue program (FEMA/USAR) was the first to respond to the survey emailed to the selected SME's for

this project. Chuck Flanagan is a Captain with the Winthrop Massachusetts fire department, a twenty five year member of the Massachusetts Urban Search and Rescue Team (MATF-01) and a fifteen year member of FEMA/USAR Red Incident Support Team (IST). The red IST is the incident management component which oversees several USAR teams when multiple teams are deployed into the same geographic area.

> The IST moniker is peculiar to FEMA U.S.&R. I would consider following a NIMS type E.O.C. Org chart configuration keeping in mind that being a smaller city you may have staffing shortfalls which may require you to make your team smaller versus larger. I have seen communities that reach out to all departments within government to find the individual skill sets to fill various roles. This becomes important when technology, documentation and finance come in to play. The names IMAT or IMT and IST are really more semantics. I think the decision can be better made when you look at your jurisdictional chain of command and whom the Mayor is most comfortable delegating authority to and who would work best with them. (C. Flanagan, personal communication, February 22, 2013)

On February 27, 2013 Mr. Tim Moore responded to the survey. Mr. Moore is a consultant hired to assist the Metropolitan Area Planning Council (MAPC). The MAPC acts as the statewide fiduciary for the Western, Central, Southeast, and Northeast Massachusetts Homeland Security Planning Councils. In addition, MAPC provides planning, facilitation, and project management support to the North East Homeland Security Regional Advisory Council (NERAC). NERAC is currently in the process of forming of a Type III Incident Management Assistance Team (IMAT) for the greater Boston area. Once this team is formed and trained it

will be a resource for the one hundred and one cities and towns that are considered Metropolitan Boston.

Mr. Moore had the following advice regarding meeting the city's incident management needs.

> It seems that given the financial constraints faced by every city and town in the current environment, a Type IV IMT would be the most cost effective answer for a single jurisdiction. I think that any specific incident support needs that you have identified for the City of Gloucester could be built into an IMT. As far as gaining buy-in to the all-hazards concept for the NERAC team, we are focusing on building a team that is balanced by discipline. All disciplines concern themselves with different hazards, so it is our hope that getting a good balance of people from each relevant discipline into the room to train and work together will naturally create an all-hazards approach.
>
> To build and maintain a team like this, buy-in from each department head in the city would be very important. If it can be demonstrated to them that the team is a beneficial resource to their department, they should be much more willing to commit the personnel/time to support it. (T. Moore, personal communication, February 27, 2013)

Also responding on February 27th was retired State Police Officer Robert Martucelli. Officer Martucelli recently retired from the Massachusetts State Police where he was a member of the State Police Incident Management Team for ten years. Officer Martucelli now works as an independent consultant developing IMT's, Emergency Operations Plans and teaching Incident Command. Officer Martucelli is also currently a member of the Barnstable County Massachusetts Type III IMT and he is involved in the formation of the NERAC IMAT team.

Officer Martucelli responded with the following:

> The terms All Hazard Incident Support Team (IST) and All Hazard Incident Management Team (IMT) actually refer to the same functional make up and purpose of an Incident Management Team. The newest term that seems to be finding favor is All Hazards Incident Management Assistance Team (IMAT). A Type IV team is designed to manage/support incidents and planned events within their own community. A Type III Team is designed to manage/support incidents and planned events locally, regionally or nationally. Some teams prefer using the "Incident Support Team" term to promote the fact that they are here to "support" the current incident management organization and not "take over "managing the incident. It's good politics and helps gain acceptance into the community. (R. Martucelli, personal communication, February 27, 2013)

Officer Martucelli also provided a summary of what incident management teams in Massachusetts were either active or currently in the process of forming a team. Officer Martucelli mentioned that in addition to the Barnstable County Type III team and the forming NERAC Type III team, there was a Franklin County Type III team active in western Massachusetts, a Type III team in development by the North East Metropolitan Law Enforcement Council (NEMLEC) (providing primarily law enforcement support when area SWAT teams are activated), and that the Massachusetts Emergency Management Agency (MEMA) was in the early stages of forming a statewide Type III team. Later in the week Deputy Chief Mark Foley of Eastham Massachusetts confirmed Officer Martucelli's assessment of the status of Type III teams in Massachusetts.

From March 4th through March 7th this author attended Operations Section Chief training for the Massachusetts USAR team. One of the two instructors was Deputy Fire Chief Mark Foley

from Eastham Massachusetts. In addition to being a Deputy Fire Chief, Chief Foley is the Deputy Director at the Barnstable County Fire Academy in Barnstable MA and the Coordinator of the Barnstable County Type III Incident Management Team. Chief Foley has been the Barnstable County incident management team leader since the team formed in 2005.

The other instructor for this course was retired Battalion Chief Rich Olson from a county fire department north of Los Angeles California. Chief Olson was an Operations Section Chief for a Type I Federal Incident Management Team for over twenty years with extensive experience in western wild-land fires. Chief Olson retired from the Type I team he was on in 2008 and is currently teaching across the country. In addition to his extensive wild-fire experience, Chief Olson responded as part of an incident management team to the Space Shuttle Columbia crash in 2003 and to Hurricane Katrina in 2004 as an advisor to the Environmental Protection Agency (EPA). A side note of interest to professional fire and emergency management personnel is that Chief Olson is easily recognized for his playing the role of the Operations Section Chief in DHS/FEMA's video series on incident management.

On March 6, 2013 this author interviewed Chief Foley and Chief Olson simultaneously after class had finished for the day. The discussion centered on the information that this author had already received via email from Flanagan, Moore, and Martucelli. Both Chief Foley and Chief Olson were in agreement with the assessments given by Flanagan, Moore and Martucelli and were comfortable voicing their support of those responses.

During this interview Chief Olson stated that teams on the West Coast and through the middle of the country are also starting to use the term IMAT to clarify their roles and responsibilities during a response (R. Olson, personal communication, March 6, 2013). Chief Foley added that his experience had been that local administrators were slow to call in incident

management teams (IMTs) for political and jurisdictional reasons and that he supported standardization of the term IMAT. Chief Foley also stated that the Type I level federal teams preferred IMATs (M. Foley, personal communication, March 6, 2013).

The second research question was: What should be the composition of an AHIST/AHIMT as regards potential members experience, organizational position, or statutory authority within the City? This question was asked via an electronic survey of the city managers as internal stakeholders and via the emailed questionnaire sent to the aforementioned SME's as external advisors. While allowing the city managers time to respond to their survey, the responses of the contacted SME's was compiled.

Mr. Moore from the MAPC stated that "One issue we've discussed with the NERAC team is that in many cases the ideal team members are going to be senior officers, Deputy Chiefs, shift commanders, foremen, etc. Department heads may have other responsibilities that limit their ability to participate in events that span multiple operational periods" (T. Moore, personal communication, February 27, 2013).

Officer Martucelli commented that:

> The fact remains that members of an AHIST or an AHIMT placed either in support or a command and management role are still held responsible for their actions and could face liability issues down the road if something goes wrong. The only defense they have is their policy and procedures and their training that complies with the USFA's AHIMT Technical Assistance Program. Team members should be individuals who are fairly high up in their organizations with the appropriate delegated authority to make decisions on their own. (R. Martucelli, personal communication, February 27, 2013)

Officer Martucelli also thought that a team is best served by having individuals from across a broad spectrum of disciplines and jurisdictions including public safety departments, public works, public health and general administration. His position is that anyone who has met the prerequisites as outlined in the chart Officer Martucelli provided should be eligible to join an incident management team.

Chief Olson agreed with Officer Martucelli and Mr. Moore regarding suggested experience and authority for members of larger teams but Chief Olson thought that Type IV and Type V teams should have more flexibility:

> It has been my experience that at least with the wildfire incident management teams, those members with extensive wild land fire experience should be used if at all possible. However, the experience and organizational position of a member of a Type I incident management team is not the standard that one should expect of a local Type IV or Type V team. The level of expectation of knowledge skills and abilities for a local team should be left up to local discretion assuming that they follow nationally accepted practices for their training (R. Olson, personal communication, March 6, 2013).

The result of the same question asked of city managers is illustrated on Table 1. While enough responses were collected to have some statistical value, only nine of nineteen senior city managers responded to the three separate requests for input.

Table 1

What Attributes or Qualifications should be required of an IMT Member?

30. What other attributes or qualifications do you think should be required or sought after in a member of a Gloucester All Hazards Incident Support Team member? Please check all that apply.

	Response Percent	Response Count
Experienced	83.3%	5
All management level personnel	33.3%	2
Successful passing of entrance interview with team leaders.	50.0%	3
Basic ICS training in a primary position and cross training in a secondary position	**100.0%**	**6**
Successful completion of a probationary period	83.3%	5
Job responsibilities that allow them to deploy rapidly when needed	66.7%	4
Support from their bosses	83.3%	5
Willing to work where needed and qualified, not necessarily where their day job title indicates	**100.0%**	**6**
Recommended by an existing team member	16.7%	1
A solid desire to be a team player and support the process where asked	83.3%	5
Minimum of ten years supervisory experience	16.7%	1
None, willingness to participate when called is all	0.0%	0
	Other (please specify)	1
	answered question	**6**

In spite of the limited response, it appears that the city managers were willing to substitute being a team player for experience as 100% of the managers selected “willing to work where needed and qualified, not necessarily where their day title indicates” as their number one choice for team member attributes. The city managers did agree with the external SMEs’ as recognizing basic ICS training as of primary importance with 100% of managers identifying that as a primary need. However, once this initial ICS training was identified as a need, the city managers continued down the path of personality traits with “a solid desire to be a team player” and “successful completion of a probationary period” as the next most selected answers chosen by 77.8% of the respondents.

An interesting item of data was the response to the question “What organizations or departments do you think should be represented in a Gloucester All Hazards Incident Support Team?” Table 2 (next page) indicates an almost one hundred percent willingness of all the departments who responded to work with other city departments as well as volunteer agencies. This willingness to include many city departments not normally thought of for incident management as well as some agencies outside of the city sphere of control is encouraging. Unfortunately, only about half or 55.6% expressed a willingness to have the private sector represented as part of an incident management team. That low percentage seems to indicate an area that still needs some work.

Table 2

Organizations or Departments that Should be Represented on an IMAT

24. What organizations or departments do you think should be represented in a Gloucester All Hazards Incident Support Team? Please check all that apply.

	Response Percent	Response Count
Fire	**100.0%**	**6**
Police	**100.0%**	**6**
Emergency Management	**100.0%**	**6**
City Administration	**100.0%**	**6**
City Emergency Medical Services	**100.0%**	**6**
Private Emergency Medical Services	66.7%	4
Hospital	**100.0%**	**6**
Public Works	**100.0%**	**6**
Public Health	**100.0%**	**6**
School Department	50.0%	3
Coast Guard	**100.0%**	**6**
Harbormaster	83.3%	5
Private Sector	50.0%	3
Volunteer Agencies (CERT, CAARA)	83.3%	5
Other (please specify)		0
answered question		**6**
skipped question		**0**

The third research question was: What should the training standards be for AHIST/AHIMT members and who should set those standards? The most widely accepted document on incident management team composition is the United States Fire Administration IMT Roadmap (http://www.usfa.fema.gov/fireservice/ops_tactics/type3_imt/index.shtm). The USFA describes the five types of IMT's in detail. However, for the purposes of this ARP, based on the comments already received, it is becoming apparent that this researcher need look no further than a Type IV team activated for incidents within the city.

According to the USFA, a Type IV team is generally utilized for incidents involving a City, Fire District or possibly a County. The team usually has five to ten pre-designated members representing different agencies and or departments within a single city or district and only activates the positions in the Command and General Staff that are needed. The team is activated when necessary to manage a major or complex incident early on and may transition to a Type III team if the incident increases in scope and complexity.

The SME's who responded to this question were unanimous in their agreement that any new team should base the team training standards on the USFA IMT Roadmap. In addition they had the following comments.

Mr. Tim Moore (MAPC):

> I would be interested to hear what other feedback you get regarding team guidelines and certification. I have done some research on this topic for the NERAC team, and I have found little other than that all team members should have ICS-100/200/300/400, and IS-700/800. Additionally, I would suggest that the IS-305 All-Hazards IMT Course would be ideal for all team members to take together upon creation of the team, but inevitably there will be turnover and new members will be added to the team that did not go through

> the course with the others. Given the cost of this course and the likely frequency of new members needing to take it, there seems to be a need for some type of shorter, low-cost alternative to use to assimilate new members and be used as a refresher for existing members. For a Type IV IMT, I would consider position specific training to be something that is great to have if available, but not something that could be reasonably expected of all team members. I think in a single jurisdiction, building relationships between departments and getting expertise about the capabilities of each department should be a higher priority than high-level ICS position training. (T. Moore, personal communication, February 27, 2013)

Officer Martucelli: "I recommend a Type IV Team be developed if it is to be dedicated to the city of Gloucester. However, it should train and follow the same USFA guidelines as if you were forming a Type III Team" (R. Martucelli, personal communication, February 27, 2013). Officer Martucelli also stated that the All Hazards IMT Technical Assistance program from FEMA should be the recommended standard and emailed this author a copy of the publication as part of his response. Because of his recommendation to create a Type IV team but train to the standard of a Type III team, Officer Martucelli was good enough to also provide information on what he felt should be required of members of a Type III IMT. Officer Martucelli's suggested training standards for members of a Type III team are outlined in Table 3.

Table 3
Suggested Incident Management Team Training Standards

Prerequisite Training for AHIMT Membership	***Training After Joining AHIMT***	***Suggested Command and General Staff/Unit Leaders for a Type 3or 4 IMT***	***Unit Leader Positions that should be considered***
NIMS ICS-100	*USFA IMT Management Team Course 0305*	*Incident Commander*	*Resource Unit Leader*
NIMS ICS-200	*ICS Position Specific Training*	*Liaison Officer*	*Situation Unit Leader*
NIMS ICS-300	*Shadowing of established Type I/II Teams*	*Safety Officer*	*Communications Unit Leader*
NIMS ICS-400	*Completion of Position Task Books*	*Operations Section Chief*	*Medical Unit Leader*
NIMS IS-700		*Logistics Section Chief*	*Food Unit Leader*
NIMS IS-800		*Planning Section Chief*	*Supply Unit Leader*
		Finance Section Chief	*Div/Grp Supervisor*

Training requirements are based on U.S. Department of Homeland Security, Federal Emergency Management Agency, U.S. Fire Administration, Type 3 incident Management Team (IMT) Program guidelines. Robert Martucelli February 2013

Chief Olson and Chief Foley agreed with Officer Martucelli and Mr. Moore regarding suggested training requirements but suggested the addition of an EOC/IMT Interface course for team members and the taking of the I-402 Incident Command System Course for Executives by all city administrators and department heads.

The fourth research question actually consisted of two parts and was: What should the triggering events be that would activate the AHIST/AHIMT and who would have the authority to approve any AHIST/AHIMT activation? The responses of city managers regarding what the triggering events should be are provided on Table 4.

Table 4
Triggering Events to Activate an Incident Management Team

City Department	Suggested Triggering Event
Auditor's Office	Blizzard, State of Emergency Declared by the Governor, Hurricane, Earthquake
Building Department	any predicted incident that may involve the damage to buildings and/or structures
Council on Aging	any incident that could impede safety and health matters of community members
Emergency Management	Severe weather events such as Foot or more of snow predicted or Hurricane warnings, Pandemic, building evacuation, any mass casualty event, any planned or unplanned event that will extend over multi operating periods.
Fire Department	Blizzard of at least 12" of snow, hurricane, major transportation disaster, major hazmat release, major widespread medical event such as pandemic flu, building collapse with a USAR response required, 4/5 alarm or higher fire event
Personnel Department	adverse weather conditions such as forecasts of heavy snow or rain
Police Department	depends
Public Health Department	a communication from the EMD that a storm warning had been issued, a HHAN Alert, Governor or Mayor announcing something either local or statewide, the change in the threat level for mosquitoes this past summer was an example of a local incident that was prolonged and called for certain precautions to be implemented.
Public Works Department	An event that spans time not typical of our daily activities that have public safety or health ramifications

Table four somewhat matches an earlier attempt to create pre-established triggers to determine when the City EOC should open. This earlier Excel spread sheet identifying triggers selected by the city managers in 2011 is included as Appendix "G". The second part of the fourth research question asked who the city managers felt should have the authority to activate a city incident management team. Their responses are shown on Table 5.

Table 5

Who Should Have the Authority to Activate an Incident Management Team?

32. Who do you think should have the authority to approve an activation of the Gloucester All Hazards Incident Support Team? Check all that you feel apply.

	Response Percent	Response Count
Mayor	**66.7%**	**4**
Mayor, only after consulting with department heads.	16.7%	1
City Council President	0.0%	0
Emergency Management Director	50.0%	3
Emergency Management Director, only after consulting with department heads and Mayor.	33.3%	2
Fire Chief	33.3%	2
Police Chief	33.3%	2
Public Works Director	0.0%	0
Public Health Director	0.0%	0
Superintendent of Schools	0.0%	0
Consensus decision after department heads meeting or conference call.	16.7%	1
	Other (please specify)	2
	answered question	**6**
	skipped question	**0**

As one can see from the table, most respondents (66.7%) felt that the authority to activate an incident management team should rest with the mayor. This was followed closely by the number two response which was that the Emergency Management Director should have the authority to approve an activation with 50% of the respondents feeling that was appropriate. The number three choice was a three way tie with 33.3% of the respondents feeling that the emergency management director, the fire chief, or the police chief should be able to activate an incident management team.

Discussion

The first research question asked: How does an All Hazard Incident Support Team (AHIST) compare to an All Hazard Incident Management Team (AHIMT) in regards to meeting the incident management needs of the City of Gloucester)

It seems apparent from the results of the research that no matter what the team is called, (AHIST, AHIMT, or IMAT), an incident management team would benefit the city of Gloucester. As Captain Chuck Flanagan noted, “The names IMAT, IMT and IST are really just semantics” (C. Flanagan, personal communication, February 22, 2013). Chief Olson also noted that the existing teams in the middle of the country and on the west coast are shifting to the term IMAT (R. Olson, personal communication, March 6, 2013). In the interest of being consistent with the rest of the country, this author recommends using the term Incident Management Assistance Team or IMAT. Use of common terminology is one of the most basic objectives of the National Incident Management System (NIMS) and the Incident Command System (ICS).

The questionnaire and interviews with SME’s along with the survey of city managers all indicate that when major incidents or events occur the city would benefit from a formal incident management team. Although there appears to be sufficient regional incident management teams

already in existence or starting to form to support incidents requiring Type III or greater IMAT teams (R. Martucelli, personal communication, February 27, 2013), there is little to no existing management support for incidents that are severe enough to overwhelm local resources but that do not rise to a level needing a Type III or greater IMAT.

As discussed during the literature review, a Type IV team is generally utilized for incidents involving a City, Fire District or possibly a County. The team usually has pre-designated members and consists of Fire, EMS, Law Enforcement, and possibly other departments. The team is activated when necessary to manage a major or complex incident early on and may transition to a Type III team if the incident increases in scope and complexity. Usually there are five to ten individuals representing different agencies and or departments within a single city or district. A Type IV team activates only the positions in the Command and General Staff that are needed and the incident is usually limited to one operational period (http://www.usfa.fema.gov/fireservice/ops_tactics/type3_imt/index.shtm).

With the fiscal constraints that local communities are facing and the difficulties that would be faced if an attempt was made to provide an IMAT for multiple operational periods, Mr. Moore from the MAPC suggests that a Type IV IMAT "would be the most cost effective answer for a single jurisdiction" (T. Moore, personal communication, February 27, 2013).

It is apparent to this author that a Gloucester Type IV IMAT team would be the answer to bridging the gap between having no incident management assistance and the arrival of one of the existing regional Type III teams.

The second research question was: What should be the composition of an AHIST/AHIMT be as regards potential members experience, organizational position, or statutory authority within the City? The responses to this question basically fell into two categories.

While experienced IMAT team members and city public safety department heads stressed experience and training as highly desirable, many authors referenced in the literature review agreed with the city managers who selected personality traits and team dynamics as of significant importance when discussing team composition.

Mr. Moore, Chief Olson, Chief Foley, and Officer Martucelli all highly stressed the importance of having real world experience in large events as a key factor in being able to manage significant local events. To achieve this field experience they personally sought out positions on Type III or greater IMAT teams and suggested that any local Type IV team member do the same. It was interesting to note that in response to their survey, the city managers selected willingness to work where needed and a solid desire to be a team player as important as emergency response experience. It could be that city managers whose daily duties fall outside of emergency response don't have a true appreciation of how important experience is in regards to emergency management. To assist in getting past this, Chief Foley suggests that public administrators be educated by referring them to the NIMS Guide for County Officials (NACO, 2006).

In his case studies on Incident Command Systems Moynihan stated that the fire service is comfortable with a hierarchy of command and control, yet an incident management team is dependent upon a network of resources from multiple departments or agencies (Moynihan, 2008). Perhaps the fire service needs to realize that for administrators to understand and buy in to the concept of IMAT the fire service needs to spend some time educating the administrators.

In discussing personality traits and team dynamics as regards team composition Zuber emphasized in his white paper "All Hands Net" that local teams have an advantage over regional teams due to local knowledge, understanding local politics and policies as well as knowing the

local responders (Zuber, 2008). Nichols noted that team dynamics were as important as experience and training (Nichols, 2005), and Bedrich went so far as to suggest using a personality assessment tool such as Myers-Briggs to select team members with desirable personality traits (Bedrich, 2006). While this researcher agrees with these authors and the city managers about the importance of "being a team player," perhaps formal personality assessments for potential team members carries this desire a bit too far.

Regardless of how the team composition is arrived at, there should be a process to get there. In the literature review it was noted that the United States Fire Administration (USFA) strongly suggested that any community or region discussing the creation of an IMAT first establish an agency or oversight committee to develop team policies, delegations of authority, certification requirements, deployment triggers, fiscal policies and spending constraints long before any team activation (http://www.usfa.fema.gov/fireservice/ops_tactics/type3_imt/index.shtm). West also addressed the political realities when discussing team composition that must be addressed while in the formative stage (West, 2006).

Of all the research questions, the discussion of what the composition of a city incident management team should be is probably the most difficult to come to a consensus on. Subject matter experts with decades of experience stress the need for real world experience while administrators and non public safety people seem to feel that personality traits are just as important as experience. The task will be arriving at a balance that works for both while also working within existing political realities.

The third research question was: What should the training standards be for AHIST/AHIMT members and who should set those standards?

While performing the literature review it was noted that reference material related to suggested training for incident management teams is somewhat scattered about between FEMA, the USFA, and the NFPA. However, there is consistency among these agencies regarding overall responsibilities of these teams and the suggested qualifications of team members. The most widely accepted document on incident management team composition is the United States Fire Administration IMT Roadmap (Dickinson, 2004). The USFA describes the five types of IMT's in detail. However, based on the comments of the SMEs consulted and the city managers surveyed, it is apparent to this researcher that the city need look no further than to train a Type IV team for local responses.

For a Type IV team The USFA All Hazards Technical Assistance Program (http://www.usfa.fema.gov/fireservice/ops_tactics/type3_imt/index.shtm) suggests that the Command and General Staff members take the online self study courses Intro to Command and General Staff and Intro to Unified Command for Multi-Agency and Catastrophic Incidents. The USFA also recommends taking the six day classroom delivery of Command and General Staff Functions in the Incident Command System. For any team from a Type V up through a Type I the NIMS basic courses of ICS100, 200, 300, and 400 along with the IS700 and 800 needs to be completed.

Other referenced training documents mentioned in the literature review are published by the National Fire Protection Agency (NFPA). NFPA 1600 is the Standard on Disaster/Emergency Management and Business Continuity Programs. Section 5.9 states that entities shall develop an incident management system to direct, control, and coordinate response and recovery operations. Additionally, section 5.6.3 calls for objectives to be established regarding incident support teams personnel, equipment, training, facilities, funding, expert

knowledge, technology, and the time frame in which these resources will be needed (NFPA, 2007). NFPA 1561 is the Standard on Emergency Services Incident Management and 1561 states that Incident Management Team refresher training should take place annually (NFPA, 2008).

Even though there is no mandated training requirement for an IMAT, all of the SME's interviewed for this ARP were in agreement that the USFA IMT Roadmap should be utilized as the default training guiding document. Utilizing the roadmap appears to be the best way to ensure a standardized approach to IMAT training that will be recognized as appropriate training if a legal challenge should surface in regards to team member's qualifications.

> The fact remains that members of an IMAT placed either in support or a command and management role are still held responsible for their actions and could face liability issues down the road if something goes wrong. The only defense they have is their policy and procedures and their training that complies with the USFA's AMIMT Technical Assistance Program. (R. Martucelli, personal communication, February 27, 2013)

While compiling the literature review it was found that EFO candidate M.G. Lusk advocates for beginning a local incident management team at the Type IV level and then training the team to the Type III level (Lusk, 2006). Officer Martucelli agrees with M.G Lusk. This author would disagree with Officer Martucelli and Mr. Lusk on this point. While forming a Type IV team and training it to a Type III level may be best for the Grand Traverse Fire department in Michigan or for the Massachusetts State Police, this author feels that would not be the best practice for the City of Gloucester. This author feels that at present it will be difficult enough to train members to a Type IV level and with the availability of several Type III teams in the state another Type III team could prove counterproductive both politically and practically.

The fourth research question actually consisted of two parts: What should the triggering events be that would activate the AHIST/AHIMT and who would have the authority to approve any AHIST/AHIMT activation?

In the literature review the USFA was referenced as an authority that recognized establishing triggers for team activation as part of the duties of an oversight committee (http://www.usfa.fema.gov/fireservice/ops_tactics/type3_imt/index.shtm). In the hope of establishing some linkage to that authority, the same question regarding triggering events was asked of the city managers as part of their survey. Unfortunately, the answers received were more generic in nature than this author would have liked. To assist in creating some substance to this question, the author retrieved a document that the author had created as the City Emergency Management Director in 2011 which asked the same question. By combining the survey results with this earlier document a reasonable outline for triggering events can be created and used as a guide in the future should an IMAT be created for the city. The results of the survey asking about triggering events are included as Table 4 in the results section of this ARP and the earlier document regarding triggering events is included as Appendix “G”.

The second part of this research question on who would have the authority to approve an IMAT activation was also somewhat limited by the light response of city managers. The data for this question may also be somewhat skewed as 50% of the respondents were associated with public safety departments as opposed to administrative department heads. The recommendation of this author would be that an IMAT be activated by the Emergency Management Director after consulting with the major department heads and the Mayor. This possible choice was only selected by 33.3 % of the respondents. This author feels that in the same manner as a Unified

Command in the Incident Command System, the decision to activate an incident management team is best reached by a consensus of the major players.

It is apparent from the information presented in the results and discussion sections that there are significant implications to the city regarding its use or non use of an Incident Management Assistance Team (IMAT). Currently the City appears to be at a crossroads regarding how it will handle significant incidents or events in the future. While some progress has been made since the 2009 audits of the public safety departments, those gains have stalled and may be lost if those gains are allowed to slip away. Currently the position of Emergency Management Director has been left unfilled since July of 2012 and the Emergency Operations Center is currently not operational due to the city shuttering the building it is housed in. Both the police and fire departments have new chiefs from outside the community and they have significant challenges simply coming up to speed with their new roles. Planning beyond the day to day and routine operations of their departments may not be on their radars. While it is apparent from the responses of both the city department heads and the outside SME's contacted for this ARP that an IMAT would be beneficial to the city, attempting to create an IMAT without support from these department heads and the administration would certainly lead to its failure.

Outside of the city the Massachusetts Emergency Management Agency (MEMA) and the North East Region Advisory Council (NERAC) have both realized the value of incident management assistance and are moving forward with creating Type III IMAT teams. This is a good thing for the region and for the City. However, having regional Type III teams available will do little to assist the City in managing a major incident that has not yet risen to a Type III level. The City would be well advised to plan on managing large events with its own Type IV IMAT until assistance can arrive from elsewhere. The City has had numerous events over the

years that have needed management assistance beyond that of the on duty staffing. Less than adequate management of those incidents was what led to accusations and audits. It would be unwise to forget those incidents or not believe that the next incident that will demand a formal incident management assistance team (IMAT) is not just around the corner.

Recommendations

The City of Gloucester has had some success in improving how it handles emergencies and large events. Over the last few years progress has been made in getting tactical resources to the scene more quickly. A location for an Emergency Operations Center has been determined and made operational although it is currently inoperable. In addition, several times incidents have been managed to the best of their ability by an informal sort of incident management team. Therefore, the next logical step is to formalize the membership of such a city incident management assistance team (IMAT). The primary recommendation is made for a Type IV (single city) team to be established consisting of persons from city departments and local volunteer groups. In order to do this an oversight committee first needs to be created to determine the organizational structure of the team and create the necessary guiding documents such as policies, procedures and standing operating guidelines (SOGs).

A supporting recommendation would be to implement a formal training program of team members. This training should be consistent with the level of training that is expected of other Type IV incident management teams from across the country and in accordance with that which was outlined earlier in this ARP. As part of the training plan, the team should attempt to train people three deep at each primary position to allow for when the primary personnel are not available. It is strongly recommended that Task Books become an integral part of documenting this training and any team member’s response experience so that a documented record of the

team's capability is created over time. Task books are also the primary means of documenting that an incident management team member is qualified and authorized to work in a particular role which then allows team members to become credentialed. As part of the training program the city incident management team should be utilized at all major city planned events so as to be able to improve the team's skills in a non-emergency environment.

Due to the availability of regional Type III teams and the state and federal availability of Type II and Type I teams, it is recommended that any City of Gloucester IMAT team concentrate its efforts on being a very capable Type IV team and not plan on transiting into a Type III team.

If a Type III team or greater is needed for an incident the city should utilize the existing regional Type III teams and the city Type IV team should then provide guidance and act as the liaison between the incident commander(s) and the incoming regional incident management team.

As a means to assist the city Type IV team to become very capable, it is recommended that a formal After Action Report (AAR) be mandatory after every incident for every person who participated as part of the city IMAT. AAR's have been proven to be invaluable in capturing the perspectives of all team members after an incident and not just those of the team managers. Consistent use of AARs as a tool for identifying areas of needed improvement as well as identifying areas that are performing well is a well documented method of assisting teams to steadily improve.

The final recommendation is to establish a timeline to reach certain benchmarks. Since the city has had some exposure to an informal incident management system, creating a more formal team where the team members are identified in advance should not take that long. However, position specific training will take a substantial amount of time to complete for all

members. The recommendation would be to establish the team within six months and plan on having key team members completely trained within two years. In the interim while the team is completing formal position specific training the team should still be activated when necessary with the expectation that the team perform to the level of its training and call for assistance if needed. One way to speed up the process of bringing team members up to speed is to either send the team members as a group to the Emergency Management Institute (EMI) to attend a community specific Integrated Emergency Management Course (IEMC) or arrange to have EMI bring an IEMC course to the city.

The creation of a well run Type IV IMAT team for the City of Gloucester would represent a significant step forward for the city and continue the process started after a painful AAR and audit that followed the Lorraine Fire incident in 2007. That incident proved to be the tipping point after which the City started the slow process of addressing how it handles major incidents in the community. It has not been an easy road, but creation of a Gloucester IMAT would be another positive step towards improving how the City manages significant scheduled events and major unscheduled incidents.

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APPENDIX A

List of City Managers and Subject Matter Experts (SMEs) Contacted

Mayor Kirk	ckirk@gloucester-ma.gov
Chief Administrative Officer Jim Duggan	jduggan@gloucester-ma.gov
Department of Public Works Director Mike Hale	mhale@gloucester-ma.gov
Department of Public Health Director Noreen Burke	nburke@gloucester-ma.gov
Building Inspector Bill Sanborn	wsanborn@gloucester-ma.gov
Director of Information Technology John Blanchard	jblanchard@gloucester-ma.gov
Community Development Tom Daniel	tdaniel@gloucester-ma;gov
City Auditor Kenney Costa	kcosta@gloucester-ma.gov
City Treasurer Jeff Towne	jtowne@gloucester-ma.gov
City Attorney Suzanne Egan	segan@gloucester-ma.gov
City Clerk Linda Lowe	llowe@gloucester-ma.gov
Personnel Director Sally Polzin	spolzin@gloucester-ma.gov
City Assessor Nancy Pappows	npappows@gloucester-ma.gov
City Harbormaster Jim Caulkette	jcaulkette@gloucester-ma.gov
Council on Aging Director Lucy Sheehan	lsheehan@gloucester-ma.gov
Superintendant of Schools Richard Safier	rsafier@gloucester.k12.ma.us
Police Chief Lenny Campanello	lcampanello@gloucester-ma.gov
Library Director Carol Grey	cgrey@gloucester-ma.gov
Fire Chief Eric Smith	esmith@gloucester-ma.gov
Asst. Emergency Management Director Carol McMahon	carol.mcmahon@comcast.net

IMT/IST Subject Matter Experts (SMEs) Questionnaire Sent To

Dean Scott-FEMA USAR IST	Dean.Scott@FEMA.DHS.GOV
Chuck Flanagan-FEMA USAR IST	Flanres@aol.com
Franco Barberio-FEMA USAR IST	Franco.barberio@nypd.org
Mark Rudolph-MBR Consulting, NEMLEC IMT	MBRconsulting@mac.com
Tim Moore-NERAC IMT	TMoore@MAPC.org
Bob Martucelli-NERAC IMT	RLMartucelli@comcast.net
Mark Foley-Barnstable County, Massachusetts IMT	MFoley@eastham-ma.gov
Richard Olson-CA County IMT	ROlson2@BAK.RR.com

APPENDIX B

Gloucester City Managers Survey

Gloucester All Hazards Incident Management Team Survey

SurveyMonkey

1. Please enter your Name, Department, Rank or Position and contact phone number below.

	Response Percent	Response Count
Name:	100.0%	9
Department:	100.0%	9
Rank or Position:	100.0%	9
Contact phone number:	100.0%	9
answered question		9
skipped question		1

2. Do you know what the National Incident Management System (NIMS) is?

	Response Percent	Response Count
Yes	100.0%	9
No	0.0%	0
answered question		9
skipped question		1

3. Are you familiar with the Incident Support Team (IST) concept?

	Response Percent	Response Count
Yes	100.0%	9
No	0.0%	0
answered question		9
skipped question		1

4. Do you know what an All Hazards Incident Support Team (AHIST) Is?

	Response Percent	Response Count
Yes	88.9%	8
No	11.1%	1
answered question		9
skipped question		1

5. In your opinion, what are the benefits of an All Hazards Incident Support Team?

	Response Percent	Response Count
Reduce workload of Incident Commanders at the scene.	44.4%	4
Provide staff for non-tactical needs such as logistics, planning and finance.	77.8%	7
Create a common operating picture.	66.7%	6
Ensure efficient use of resources.	**88.9%**	**8**
Ensure documentation is properly completed.	66.7%	6
Track expenses to allow for full reimbursement.	55.6%	5
I don't see any benefit to an All Hazard Incident Support Team	0.0%	0
Other (please specify)		1
answered question		**9**
skipped question		**1**

6. Would you support the formation of an All Hazard Incident Support Team for Gloucester?

	Response Percent	Response Count
Yes	**77.8%**	**7**
No	0.0%	0
Not Sure	22.2%	2
answered question		**9**
skipped question		**1**

7. Would your department or agency be willing to provide personnel for training to be a member of a Gloucester All Hazard Incident Support Team (AHIST)?

	Response Percent	Response Count
Yes	77.8%	7
No	22.2%	2
Other (please specify)		2
answered question		9
skipped question		1

8. Would you support the use of grant funding to create and sustain a Gloucester All Hazard Incident Support Team?

	Response Percent	Response Count
Yes	100.0%	9
No	0.0%	0
Not sure	0.0%	0
answered question		9
skipped question		1

9. If no grant funding were available would you support the creation of a Gloucester All Hazard Incident Support Team using your department or agency funds to train your members?

	Response Percent	Response Count
Yes	44.4%	4
No	**55.6%**	**5**
Other (please specify)		3
answered question		**9**
skipped question		**1**

10. Please indicate the size of your department or agency.

	Response Percent	Response Count
00-10 members	**55.6%**	**5**
11-25 members	11.1%	1
26-75 members	22.2%	2
greater than 75 members	11.1%	1
answered question		**9**
skipped question		**1**

11. Is your department or agency National Incident Management System (NIMS) compliant?

	Response Percent	Response Count
Yes	**44.4%**	**4**
No	33.3%	3
Not Sure	22.2%	2
	answered question	**9**
	skipped question	**1**

12. Please indicate the minimum level of NIMS/ICS training that your average employee has. Check all that apply.

	Response Percent	Response Count
ICS 100	**66.7%**	**6**
ICS 200	33.3%	3
ICS 300	0.0%	0
ICS 400	22.2%	2
NIMS 700	22.2%	2
NIMS 800	11.1%	1
Don't know	11.1%	1
	Other (please specify)	2
	answered question	**9**
	skipped question	**1**

13. Please indicate the minimum level of NIMS/ICS training that your average manager has. Check all that apply.

	Response Percent	Response Count
ICS 100	**55.6%**	**5**
ICS 200	22.2%	2
ICS 300	22.2%	2
ICS 400	22.2%	2
NIMS 700	33.3%	3
NIMS 800	11.1%	1
Don't know	0.0%	0
	Other (please specify)	1
	answered question	**9**
	skipped question	**1**

14. Does your department or agency currently have staff qualified to fill Command and/or General Staff positions in accordance with the position descriptions as written in the National Incident Managment System (NIMS)?

	Response Percent	Response Count
Yes	44.4%	4
No	**55.6%**	**5**
	Other (please specify)	3
	answered question	**9**
	skipped question	**1**

15. Do you feel that you currently have personnel on your agency or department who are qualified/certified to fill roles on an Incident Support Team?

	Response Percent	Response Count
Yes	55.6%	5
No	44.4%	4
Other (please specify)		2
answered question		9
skipped question		1

16. Do you feel that you have people on your department or agency that would be willing to become qualified/certified to fill roles on a Gloucester All Hazard Incident Support Team?

	Response Percent	Response Count
Yes	77.8%	7
No	22.2%	2
Other (please specify)		1
answered question		9
skipped question		1

17. How many people within your organization do you think would be interested in participating on a formal Gloucester All Hazard Incident Support Team (AHIST)?

	Response Percent	Response Count
zero	11.1%	1
1-5	**66.7%**	**6**
6-10	22.2%	2
greater than 10	0.0%	0
	answered question	**9**
	skipped question	**1**

18. In the last five years has your department or agency been involved in any incident that exceeded a 24hr period?

	Response Percent	Response Count
Yes	**66.7%**	**6**
No	33.3%	3
	answered question	**9**
	skipped question	**1**

19. In the last five years has your department or agency experienced an incident where you feel that a structured All Hazard Incident Support Team was or would have been helpful?

	Response Percent	Response Count
Yes	66.7%	6
No	0.0%	0
Not Sure	33.3%	3
answered question		9
skipped question		1

20. In the last five years has your agency or department participated in any sort of team based management of an incident in Gloucester?

	Response Percent	Response Count
Yes	66.7%	6
No	11.1%	1
Don't know	0.0%	0
Other (please specify)	22.2%	2
answered question		9
skipped question		1

21. If your answer to question 20 was yes, do you feel that having the team based incident management was helpful during the incident?

	Response Percent	Response Count
Yes	88.9%	8
No	11.1%	1
Other (please specify)		1
answered question		9
skipped question		1

22. Does your department currently have enough resources and staffing available internally to effectively manage a large incident on your own for multiple operational periods?

	Response Percent	Response Count
Yes	11.1%	1
No	88.9%	8
Other (please specify)		1
answered question		9
skipped question		1

23. What type of incident was your department or agency involved in that exceeded a 24hr period? Please check all that apply.

	Response Percent	Response Count
Tornado	0.0%	0
Ice or Snow Storm	**66.7%**	**6**
Hurricane	44.4%	4
Flooding	0.0%	0
Earthquake	0.0%	0
School shooting or other event requiring drawn weapons	0.0%	0
Missing person search	0.0%	0
Water Rescue	0.0%	0
Large Fire	0.0%	0
Public Health Emergency	33.3%	3
Community Events	22.2%	2
Newsworthy events of State or National Interest	22.2%	2
	Other (please specify)	2
	answered question	**9**
	skipped question	**1**

24. What organizations or departments do you think should be represented in a Gloucester All Hazards Incident Support Team? Please check all that apply.

	Response Percent	Response Count
Fire	**100.0%**	**9**
Police	**100.0%**	**9**
Emergency Management	**100.0%**	**9**
City Administration	**100.0%**	**9**
City Emergency Medical Services	**100.0%**	**9**
Private Emergency Medical Services	66.7%	6
Hospital	88.9%	8
Public Works	**100.0%**	**9**
Public Health	**100.0%**	**9**
School Department	66.7%	6
Coast Guard	**100.0%**	**9**
Harbormaster	88.9%	8
Private Sector	55.6%	5
Volunteer Agencies (CERT, CAARA)	88.9%	8
Other (please specify)		2
answered question		**9**
skipped question		**1**

25. What organizations should/could team members for a Gloucester All Hazard Incident Support Team be drawn from? Please check all that apply.

	Response Percent	Response Count
Fire	**100.0%**	**9**
Law Enforcement	**100.0%**	**9**
Public Works	**100.0%**	**9**
Public Health	**100.0%**	**9**
Emergency Management	**100.0%**	**9**
City Administration	**100.0%**	**9**
City Emergency Medical Services	88.9%	8
Private Emergency Medical Services	66.7%	6
Hospital	77.8%	7
Coast Guard	**100.0%**	**9**
Harbormaster	77.8%	7
School Department	66.7%	6
Private Sector	55.6%	5
Volunteer Organizations (CERT, CAARA)	88.9%	8
Other (please specify)		2
answered question		**9**
skipped question		**1**

26. In your opinion, how would a Gloucester All Hazard Incident Support Team relate to the Incident Commander(s) at the scene?

	Response Percent	Response Count
Do not know	11.1%	1
An Incident Support Team responds to the scene and runs the incident.	0.0%	0
An Incident Support Team responds to the scene and assists the Incident Commander(s).	11.1%	1
An Incident Support Team supports the Incident Commander(s) needs away from the scene.	**77.8%**	**7**
An Incident Support Team is redundant and not needed.	0.0%	0
Other (please specify)		1
answered question		**9**
skipped question		**1**

27. In your opinion, where should a Gloucester All Hazard Incident Support Team operate from?

	Response Percent	Response Count
At the incident.	0.0%	0
From a staging area away from but close to the incident.	22.2%	2
From an Emergency Operations Center (EOC) someplace in the city away from the scene.	**77.8%**	**7**
Other (please specify)		1
answered question		**9**
skipped question		**1**

28. What formal training do you think should be required of members of a Gloucester All Hazard Incident Support Team? Check all that apply.

	Response Percent	Response Count
ICS 100	**77.8%**	**7**
ICS 200	55.6%	5
ICS 300	66.7%	6
ICS 400	44.4%	4
IS 700	44.4%	4
IS 800	44.4%	4
EOC/IMT Interface course	33.3%	3
EOC Operations course	44.4%	4
All Hazards Incident Managment Team Training Course	66.7%	6
Position Specific Training for the positions members will be expected to fill (PIO, Liasion, etc.)	33.3%	3
Periodic Exercises and Drills at the Emergency Operations Center.	44.4%	4
Other (please specify)		3
answered question		**9**
skipped question		**1**

29. What real world incident or event experience should be required of members of a Gloucester All Hazards Incident Support Team?

	Response Percent	Response Count
Documented time in an Incident Command level position.	**44.4%**	**4**
Documented number of incident or event responses.	**44.4%**	**4**
Shadowing of other Incident Management or Support Teams	11.1%	1
Not required of IST members who will not be in Command Staff positions.	**44.4%**	**4**
Not required of anyone.	11.1%	1
Other (please specify)		1
answered question		**9**
skipped question		**1**

30. What other attributes or qualifications do you think should be required or sought after in a member of a Gloucester All Hazards Incident Support Team member? Please check all that apply.

	Response Percent	Response Count
Experienced	77.8%	7
All management level personnel	44.4%	4
Successful passing of entrance interview with team leaders.	44.4%	4
Basic ICS training in a primary position and cross training in a secondary position	**100.0%**	**9**
Successful completion of a probationary period	77.8%	7
Job responsibilities that allow them to deploy rapidly when needed	66.7%	6
Support from their bosses	88.9%	8
Willing to work where needed and qualified, not necessarily where their day job title indicates	**100.0%**	**9**
Recommended by an existing team member	22.2%	2
A solid desire to be a team player and support the process where asked	77.8%	7
Minimum of ten years supervisory experience	22.2%	2
None, willingness to participate when called is all	0.0%	0
	Other (please specify)	2
	answered question	**9**

skipped question	1

31. For your department or agency, what would you consider a trigger or triggers that would warrant activation of the Gloucester All Hazard Incident Support Team? (Example: expected forecast of a foot or more of snow)

	Response Count
	9
answered question	9
skipped question	1

32. Who do you think should have the authority to approve an activation of the Gloucester All Hazards Incident Support Team? Check all that you feel apply.

	Response Percent	Response Count
Mayor	**55.6%**	**5**
Mayor, only after consulting with department heads.	11.1%	1
City Council President	0.0%	0
Emergency Management Director	44.4%	4
Emergency Management Director, only after consulting with department heads and Mayor.	33.3%	3
Fire Chief	22.2%	2
Police Chief	22.2%	2
Public Works Director	0.0%	0
Public Health Director	0.0%	0
Superintendent of Schools	0.0%	0
Consensus decision after department heads meeting or conference call.	11.1%	1
	Other (please specify)	4
	answered question	**9**
	skipped question	**1**

33. Do you have any additional questions, comments or concerns regarding a Gloucester All Hazards Incident Management Team? Thank you for taking this survey. Deputy Chief Miles Schlichte

	Response Count
	3
answered question	3
skipped question	7

APPENDIX C

Emailed Introduction and Interview Questionnaire sent to Subject Matter Experts (SMEs)

From: "MilesSchlichte" <milesschlichte@comcast.net>
To: "NYPD/USAR Franco Barberio" <franco.barberio@nypd.org>, "Mark Foley Barnstable" <mfoley@eastham-ma.gov>, "MATF Chuck Flanagan" <flanres@aol.com>, "Mark Rudolph" <mbrconsulting@mac.com>, "Dean Scott" <Dean.Scott@fema.dhs.gov>, TMoore@mapc.org

Sent: Friday, February 22, 2013 3:08:33 PM
Subject: Request from Miles Schlichte to answer some IST questions for EFO research project

An All Hazard Incident Support Team versus an All Hazard Incident Management Team

Gentlemen,

I am conducting research as part of the Executive Fire Officer Program at the National Fire Academy. I am researching what might be the most appropriate type of incident management team for the City of Gloucester.

I am reaching out to all of you as persons of knowledge and experience as regards both Incident Management Teams (IMT) and Incident Support Teams (IST). In order to be most efficient with all of our time, could you please type your answers/comments right into this document underneath the questions and then email this document back to me? I might then contact you about setting up a time for a brief follow up interview by phone if necessary.

If I could get your comments back as soon as possible I would appreciate it so I will have time for any follow up calls if necessary.

I greatly appreciate your assistance and time with this Applied Research Project and the completed project will be available by August 1, 2013 if you should like to see the finished project.

thanks,

Miles

I'm looking to answer two of my four actual research questions for this project through this interview process with you gentlemen. Two additional research questions that are more community specific are being asked of City managers via an online survey company.

The two research questions that I would appreciate your input on are:

1. "How does an All Hazard Incident Support Team (AHIST) compare to an All Hazard Incident Management Team (AHIMT) in regards to meeting the incident management needs of the City of Gloucester?" In other words, based on your knowledge of what is available across the region, what should the City be looking to create on its own versus

what the City should expect to be able to get from outside the City? In summary, what type of IST/IMT team would you recommend for the City of Gloucester?
As part of a little background, since the Lorraine Fire and audit of 2007, the City has been better at getting tactical resources (including the DFS support unit) to the scene quicker although this resource request tends to only be for large fires. The City is still hesitant to embrace the All Hazards concept and utilize management teams for varied challenges outside of fires.

2. "What should the training standards be for AHIST/AHIMT members and who should set those standards?" In addition, in your opinion, what should the composition of an incident management team be as regards member's formal training, experience, organizational position or statutory authority within the City?
I have included some prompts that you may find useful.
IST vs. IMT:
Type I-V teams, availability of teams from outside the city, current teams and teams in the making, where are the holes, how are IST/IMT teams certified, what guidelines are there for teams to follow, how do you keep members focused/interested, startup costs/funding. Use of IMT/IST for roles other than incident support/management
Training Standards:
Field experience, ICS training, position specific training, personnel recommendations, supervisory experience, team players, shadowing of existing teams, support from administration, team SOGs, where should team members come from, how are members selected, multi disciplinary, public and private sector, different city departments, county resources, state resources, cross training, NIMS compliance,
These are just prompts as they popped into my head in no particular order. Please feel free to add anything you feel would be helpful.
Also: Would you mind providing a little about your professional background as it applies to IST/IMT teams.
Name: Association: Phone Number:
1. Please describe your background as it relates to IST/IMTs
2. How long have you been involved with IST/IMTs?
3. What IMT/IST teams are you currently involved in and what type are they?
4. Anything else that I should have on your bio for this paper as a SME?
Thanks again for your time; I realize how scarce it is.

Miles

Deputy Fire Chief Miles Schlichte
MSEM,CEM®,MA-CEM,CFO,MIFireE
Gloucester MA Fire Department
FEMA MATF-01 Safety Officer
cell (978)836-8016

APPENDIX D

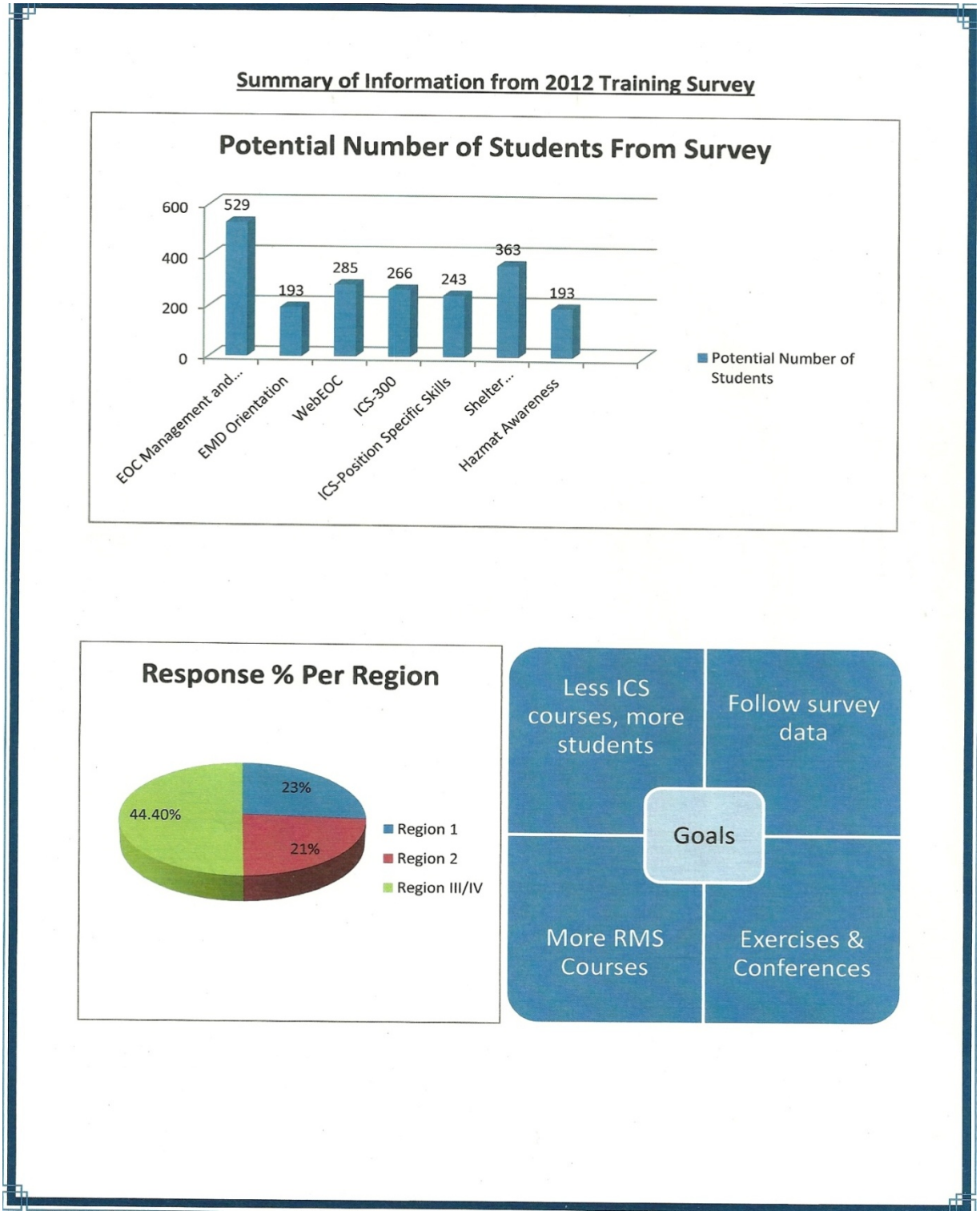
EAFSOEM SURVEY CLASS 12/10/ - 12/21/2012 24 Communities Represented

EMERGENCY MANAGEMENT PREPAREDNESS PROFILE RESULTS

Pre-Course **Emergency Management Preparedness** **Deficiency Profile (12 Categories).** **Each Student Selected Top Three Weaknesses From Emergency Management Profile.** ***(Weaknesses Combined)***	**During-Course** **Emergency Management** **Key Learning Points Reinforced.** **Each Student Selected Top Three Learning Points From Course Delivery.** ***(Learning Points Combined)***	**Post-Course** **Executive Officer Program.** **(EFO – 3rd Year)** **Each Student Selected Applied Research Paper Topic.**
Cher-Cap – CIKR Chart Preparation (15)	**Cher-Cap Process - CIKR Chart Preparation (20)**	**Risk Assessment-Cher-Cap CIKR Map Process (10)**
EOC-IMT Interface Training (15)	**Damage Assessment Procedures (11)**	**Damage Assessment Procedures (3)**
Emergency Management SOPs (11)	**IMT Interface Operations (11)**	**Incident Management Team Training (2) (Type 4)**
Damage Assessment Procedures (9)	**EOC Roles & Responsibilities (8)**	**Incident Action Planning (1)**
IMT Development (8)	**Emergency Management Practices (7)**	**IAP – MCI Incident (1)**
Incident Action Plan Development (6)	**Interagency Communication-Coordination-Collaboration (6)**	**Emergency Communications with the Deaf (1)**
Unified Command (5)	**Documentation-FEMA-State-Local (5)**	**GPS Mapping – Community Risks (1)**
Consideration for Cascade Effects (2)	**All-Hazard - All Agency Planning (4)**	**Nursing Home Evacuations (1)**
Incident Documentation (1)		**Undetermined (4)**
72 EM Weaknesses Identified	**72 EM Learning Points Identified**	**20 ARP Topics Identified**

APPENDIX E

Massachusetts Emergency Management Agency (MEMA) Training Survey



APPENDIX F

EMS Coordinator Email Exchange

From: "Miles Schlichte" <MSchlichte@gloucester-ma.gov>
To: "Sander Schultz" <SSchultz@gloucester-ma.gov>
Cc: "Eric Smith" <ESmith@gloucester-ma.gov>, "Miles Schlitche" <milesschlichte@comcast.net>
Sent: Monday, March 18, 2013 5:44:05 PM
Subject: RE: Incident Management Assistance Team

Hi Sander,

Perfect timing. I am currently researching what would be an appropriate incident management team for the City of Gloucester. I have attached the research project proposal I submitted in January for my National Fire Academy Applied Research Project. The completed project will be available sometime late this summer.
You will notice that my proposal references both Incident Management Teams (IMTs) and Incident Support Teams (ISTs). That is because my experience had been in management teams using those terms and I wrote the proposal before starting any research.
As part of my early research I have learned a couple of things.
As I suspected, the term Incident Management Team (IMT) gives the impression of a group of people that are running an incident tactically. Across the nation, teams are moving away from that term as it is proving difficult to educate communities that an IMT is not there to take over tactical command and control of an incident or event.
To try to soften the term Incident Management Team , FEMA Urban Search and Rescue uses the term Incident Support Team (IST). That term is USAR specific and may be going away in favor of what I'll describe below.
Incident Management Assistance Team or IMAT is currently the preferred term for a management team being used to provide overall guidance and support but not be involved in TACTICAL OPERATIONS at an incident. It is easy to say and sends the message that the group of individuals is only there to assist in the management of an incident from a level above tactics. IMAT members primarily concentrate on planning, logistics, finance, and other support roles where needed such as communications. The team size is scalable and only provides the amount of personnel needed to fill whatever function needs assistance. Team size could be anything from a single person monitoring communications to a full team covering everything needed to completely support the operations in the field.
I will be reworking my research proposal to incorporate the term IMAT in my research of what would describe an appropriate management team for the city of Gloucester.
On a related note, NERAC is currently in the process of forming a regional incident management team and the term they are using is IMAT.

Lastly, any incident support team comes in different sizes no matter what you call it. An IMAT team is no different.
A Type IV team would be appropriate for a single small town such as those that are around us.
A Type III team would be appropriate for a city like Gloucester or a small rural county.
A Type II team is considered a team suitable for larger cities or as mutual aid for instates response to other communities in need.
A Type I team is a team that responds across state boundaries for very large events. All Type I teams are Federal.
So, as far as Gloucester goes, I would suggest that we incorporate the term IMAT in or planning jargon and size any incident management appropriately to provide the correct level of management for events that we can expect to encounter on a regular basis. Anything beyond that we should be looking at bringing in the existing teams that are trained and staffed at a Type II level. (Fire Chiefs Assoc, MA Fire Academy, Barnstable County, NERAC IMAT)
As an aside, as part of my research, I will be looking into how to staff a Type III team using existing pre-identified city employees including those outside of public safety agencies to assist with the management major events and incidents. I currently have a survey out to all City Managers to assist in answering that part of the research.
I hope this is helpful.
Deputy Fire Chief Miles Schlichte
MSEM,CEM®,MA-CEM,CFO,MIFireE
FEMA-MATF1 Safety Officer
(978) 836-8016 cell
MSchlichte@gloucester-ma.gov
http://tinyurl.com/ChiefMiles

From: Sander Schultz
Sent: Monday, March 18, 2013 4:26 PM
To: Miles Schlichte
Subject: Incident Management Assistance Team
Hi Miles,
Can you please give me the easy version description of an IMAT?
Thank you,
Cheers, Sander

APPENDIX G

2011 Triggering Events Request from City Managers at that time

Department	Triggers	notify EMD	Open EOC
		☐	
DPW	Hurricane	✓	✓
	Major water break	✓	✓
	boil water order	✓	✓
	snowfall predicted to be a foot or greater	✓	✓
	flooding that impacts access of vehicles	✓	
	major malfunction at sewer or water plants	✓	
	extended power outage (over ? Hours)	✓	
Health	Boil Water Order	✓	✓
	major disease outbreak	✓	☐
	pandemic	✓	✓
Police	any unplanned event that necessitates bringing outside resources into the city		
	ex: missing person	✓	
	ex: hostage situation	✓	
	ex: explosive device	✓	
	planned public events for over 500 people	✓	
Fire	Major fire, notify at third alarm	✓	
	need to open shelter	✓	✓
	evacuation of a significant residence or area	✓	✓
	hazmat incident requiring outside resources	X	as necessary
Building	building collapse	✓	

Administration