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Identifying the Obstacles Which Hinder Emergency Preparedness

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CERTIFICATION STATEMENT

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

Signed: _____

Abstract

This study used descriptive methodology to identify the obstacles which were preventing critical revisions and additions to emergency preparedness within the City of Bend from being communicated, exercised, or evaluated by city staff. The research purpose incorporated literature review, interview, and questionnaire to identify these obstacles. The questions were what are the obstacles which are preventing critical revisions and additions to emergency preparedness within the City of Bend from being communicated to city staff; exercised by city staff; and, evaluated by city staff? The literature review explored the practice and discipline of emergency preparedness, and examined common obstacles to emergency preparedness. The interviews assisted with identifying the progress of emergency preparedness. The questionnaire was designed to reveal to what degree critical revisions and additions to emergency preparedness within the City of Bend have actually been effectively communicated, exercised, or evaluated by city staff. The questionnaire also solicited the opinions of city staff regarding possible internal obstacles to emergency preparedness. The questionnaire was distributed to 40 members of city staff. Results of this study reveal that five obstacles are hindering emergency preparedness in the city. The obstacles are - issue salience; coping with major city-wide challenges; a distracted emergency preparedness task force; not having a dedicated technical expert on staff; and, resources being diverted to projects of lower, equal, and greater priority. The author recommends that the city enlist a technical expert (volunteer or part-time) to coordinate and champion city-wide emergency preparedness; the city initiate a multi-pronged emergency preparedness public information campaign; and, the emergency preparedness task force develop and deliver a one-hour informational workshop to all city staff.

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Identifying the Obstacles Which Hinder Emergency Preparedness

From August 2006 to July 2008, all policy and reference material pertaining to emergency preparedness within the City of Bend, Oregon, underwent comprehensive review. The outcome of that review resulted in Bend's city council approving a complete rewrite and reorganization of emergency preparedness within the city. In March of 2008, the city council adopted the National Incident Management System (NIMS) and the Incident Command System (ICS) as the formal doctrines for preparation, response, and recovery to natural and man-made disasters (City of Bend, 2008). In July, the city council adopted a revised Emergency Management Policy which established the guiding principles for emergency management within the city (City of Bend, 2008). Also in July, the city council amended the emergency management section of the Bend Code to reflect the adoption of NIMS and ICS (City of Bend, 2008). The final action by the city council in July was to adopt the city's first comprehensive Emergency Operations Plan (City of Bend, 2008). As of January 2010, it appears that little success has been achieved with ensuring that these critical revisions and additions to emergency preparedness within the City of Bend have been effectively communicated, exercised, or evaluated by city staff.

The research problem is that the obstacles which are preventing critical revisions and additions to emergency preparedness within the City of Bend from being communicated, exercised, or evaluated by city staff have not been identified. The purpose of this research is to identify the obstacles which are preventing critical revisions and additions to emergency preparedness within the City of Bend from being communicated, exercised, or evaluated by city staff. The researcher will combine literature review and descriptive research methods (questionnaire and interview) to facilitate this research.

The research questions are: 1) What are the obstacles which are preventing critical revisions and additions to emergency preparedness within the City of Bend from being communicated to city staff; 2) What are the obstacles which are preventing critical revisions and additions to emergency preparedness within the City of Bend from being exercised by city staff; and, 3) What are the obstacles which are preventing critical revisions and additions to emergency preparedness within the City of Bend from being evaluated by city staff?

Background and Significance

Located on the eastern slopes of the Cascade Mountains near the geographic center of Oregon State, the City of Bend sits remote on the high desert region of Central Oregon. Often described as an urban center in a rural setting, Bend is the governmental seat of Deschutes County. Encompassing 32 square miles, Bend is the industrial, commercial, transportation, and medical hub for eastern Oregon. With a population of 82,280 citizens, Bend is Eastern Oregon's largest city and Oregon's seventh largest city (Portland State University, 2009).

Bend's city charter mandates a strong city council form of government whereby a seven-person council sets policy and establishes goals for the city. An appointed city manager oversees the city's day-to-day business interests and activities (City of Bend, 1995). Through the efforts of ten city departments (administration, community development, urban renewal, transit, economic development, finance, human resources, police, fire, and public works) a wide array of services and programs are provided to the citizens of Bend.

Bend enjoys a vibrant cultural arts scene and has a diverse economic base comprised of healthcare, education, commercial, industrial, manufacturing, technology, transportation, and tourism. The historic downtown area and older neighborhoods reflect Bend's early decades as a prosperous mill town. New development varies from high density planned neighborhoods and

large multi-million dollar estates to multi-story mixed occupancy structures. In addition, Bend has numerous hotel and resort facilities to support a large year-round tourism base.

During the past fifteen years the city's population has increased 280%. In 1995, approximately twenty-nine thousand citizens resided in Bend. By 2009, slightly more than eighty-two thousand citizens call Bend home (Economic Development for Central Oregon; Portland State University, 2009). Once heralded as the 6th fastest growing city in the nation, Bend's economy has experienced a significant downturn in recent years (Mackun, 2005).

Due to shrinking general fund revenue, the City of Bend has gone thru five rounds of lay-offs, furloughing 59 full-time employees (FTE's) and leaving another 47 previously approved positions unfilled. In early 2007, there were 550 approved FTE's in the city. As of January 1, 2010, the city employs 444 FTE's (Andrews, 2009). The unemployment rate in Deschutes County has nearly tripled from a low of 4.6% in 2006 to 13.6% in October 2009 (Economic Development for Central Oregon, 2009).

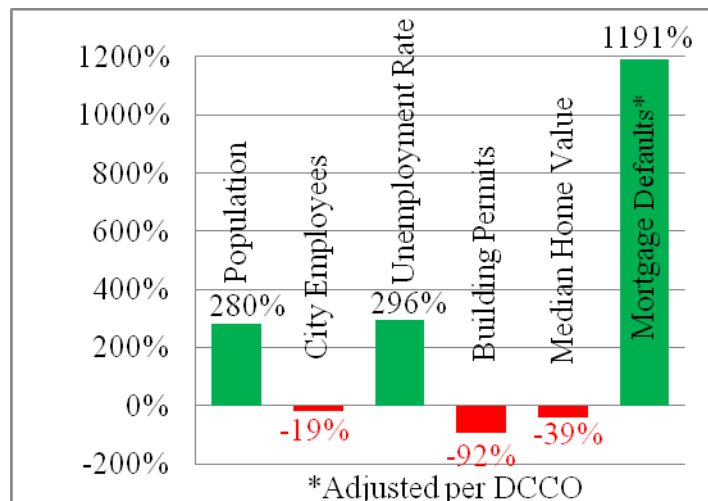


Table 1 - Bend Area Economic Statistics

Building permits in Bend are down from 2,143 in 2005 to 161 in 2009, a 92% decrease (Economic Development for Central Oregon, 2009; Paule, 2010). During the past two years

median home values in Bend have plummeted from a high of \$426,044 in 2007 to \$260,586 in the third quarter of 2009, a 38% decrease in value (Economic Development for Central Oregon, 2009). The final example demonstrating the area's economic downturn would be the 1191% increase in mortgage defaults in the past four years. In 2006, the Deschutes County Clerk's Office recorded 221 mortgage defaults. In 2009 there were 2633 recorded (Deschutes County Clerk's Office, 2010).

On August 24, 2006, the City of Bend contracted with retired Deputy Fire Chief Jenson, to review and update the state of emergency preparedness in the city. As part of the agreement Jenson was tasked with ensuring that revisions to the plan would be communicated to city staff; that staff would receive appropriate training; that tabletop and field exercises would be conducted; and, that staff would have an opportunity to evaluate the effectiveness of these efforts (City of Bend, 2006). For a period of eighteen months Jenson conducted a comprehensive review and re-write of all emergency preparedness policy and reference material.

In the midst of Bend's economic downturn Jenson's contract was modified. These modifications significantly reduced Jenson's scope of work. As a result, Jenson's contract with the City expired before revisions to the plan could be communicated to staff, before staff received appropriate training, before tabletop and field exercises were conducted, and before staff had an opportunity to evaluate and comment on elements of the new plan (D. Jenson, personal communications, November 16, 2009).

Although these critical tasks were not accomplished, Jenson was very successful with rewriting and reorganizing all policy and reference material pertaining to emergency preparedness in Bend. On March 5, 2008, the city council adopted Resolution No. 2680 which identified ICS and NIMS as the formal doctrines for preparation, response, and recovery to

natural and man-made disasters within the city. The resolution directed that "... a city-wide emergency management program that complies with State and Federal laws related to disaster preparation, response, and recovery ..." was to be implemented (City of Bend, 2008, p. 1). The resolution also included adoption of the NIMS Implementation Plan. The implementation plan identifies several training and exercise benchmarks that the city would need to achieve in order to demonstrate ongoing NIMS compliance.

On July 2, 2008, the city council approved Resolution No. 2707 which formally adopted an emergency management policy for the city. The primary purpose of the policy is to establish the guiding principles for emergency management, preparedness, and response within the city. The emergency management policy refers to Oregon Revised Statutes - Chapter 401, and local code and resolutions for assigning the authority and responsibility to prepare and respond to emergencies at the local level. In addition, the policy re-enforces that the emergency operations plan is the city's primary emergency response plan; that an emergency preparedness coordinator will be appointed to ensure continuity of effort; and, that the emergency preparedness coordinator will form an emergency preparedness task force to organize internal preparedness activities (City of Bend, 2008). On July 16, 2008, the city council approved Ordinance No. NS-2099 which amended the emergency management section of the Bend Code to reflect the adoption of NIMS and ICS as required by federal law and to clarify how, when, and who may declare a state of emergency within the city (City of Bend, 2008).

The final action by city council occurred on July 27, 2008. On this date the city council adopted Bend's first comprehensive Emergency Operations Plan. The Promulgation Letter contained in the introduction section of the plan clearly articulates the underlying purpose and ultimate goal of the plan.

"Government at all levels has the responsibility to plan and respond to emergencies resulting from hazards which are known to threaten the jurisdiction. In view of this fact, the City of Bend has developed this Emergency Operations Plan to provide overall planning and coordination for emergencies." (City of Bend, 2008, p. iii)

Containing 344 pages and 9 sections, the plan appears to be quite comprehensive. Each section (Introduction, Table of Contents, Policy and Authority, Hazard Analysis, Response Matrices, Position Checklists, Action Checklists, Hazard Checklists, and Appendices) is professionally formatted and clearly labeled for easy access and reference (City of Bend, 2008).

Although Jenson's contract with the city expired before critical revisions and additions to emergency preparedness were effectively communicated, exercised, or evaluated by city staff, the lack of progress over the past eighteen months to remedy the situation remains a curiosity. The overarching question that this research project proposes to answer is: What are the obstacles that are hindering emergency preparedness in Bend, Oregon?

The significance of this applied research project is driven by four observations. First, it is critical to the safety and welfare of those living in and visiting the region that the City of Bend has in place a reliable emergency preparedness plan. Because recent revisions and additions to emergency preparedness within the City of Bend have not been communicated, exercised, or evaluated by city staff, it is questionable if a reliable plan is in place.

Second, this research directly addresses several terminal objectives outlined in the Executive Fire Officer Program's - Executive Analysis of Fire Service Operations in Emergency Management (EAFSOEM) course. The terminal objective for *Unit 1: Introduction* speaks to analyzing a departments' level of preparedness. The terminal objective for *Unit 2: Incident Command System* addresses the effective application of ICS in major emergencies. The terminal

objective in *Unit 3: NIMS and NRP* highlights the importance of understanding individual roles and responsibilities when managing incidents (National Fire Academy, 2007).

The third observation supporting the significance of this topic as credible research can be found in the 2009 United States Fire Administration's (USFA) Goals and Objectives. *Objective 1.1* encourages all local entities to adopt effective mitigation strategies. *Objectives 2.1* and *2.3* speak to increasing fire service participation in local planning and preparedness, and of the need to enhance fire and emergency services' performance while mitigating hazards. *Objectives 3.1* and *3.3* identify the importance of improving decision-making skills, and expanding local use of the National Response Framework and NIMS. *Objective 4.1* promotes a national multi-discipline approach to policy development, planning, and preparedness (United States Fire Administration, 2009)

A final observation is that although the Learning Resource Center (LRC) at the National Emergency Training Center is replete with periodicals, books, and applied research projects exploring the topic of emergency preparedness, the narrowed focus of this applied research project - identifying the obstacles which hinder emergency preparedness - will undoubtedly contribute to the body of fire service literature.

Literature Review

The literature review will examine the topic of emergency preparedness in the United States from two perspectives. First, the author will briefly explore the practice and discipline of emergency preparedness and how mitigation, preparedness, training and exercises, response, and recovery efforts have become an essential mission of local, state, and federal governments. Second, the author will examine common obstacles to emergency preparedness and identify possible strategies to overcome such obstacles.

Physical hazards such as flood, drought, hurricane, earthquake, wildfire, volcano, tornado, and other environmental hazards have plagued planet earth for eons. However, it was not until mankind began populating this planet that the adverse affects associated with these hazards had an opportunity to intrude upon man's well-being. By definition when an environmental hazard creates an adverse affect to mankind's existence; the event and ensuing aftermath is deemed a natural disaster. A similar analogy holds true for man-made disasters. When a man-made hazard such as war, urban/interface fire, hazardous chemical spill, biological contamination, or terrorist attack creates an adverse affect to mankind's existence; mankind experiences a man-made disaster (Coppola, 2007).

Without question disasters have challenged mankind for centuries. In the past 800 years an estimated 31 million lives have been lost as a result of natural disasters. During this same period the loss of life attributable to war and other man-made disasters is incalculable. Archeological evidence suggests that from prehistoric time mankind has strived to prepare for and manage the adverse affects of natural and man-made disasters. From such primitive beginnings mankind's emergency preparedness efforts have significantly improved (Coppola, 2007).

In recent decades, the field of emergency preparedness has evolved into a disciplined profession. Emergency preparedness managers and other key support personnel rely upon science, technology, planning, and management techniques to minimize the adverse affects of a natural or man-made hazard. In many communities the emergency preparedness manager and emergency support service positions are often filled by professional public works, community affairs, finance, legal, community development, fire, and law enforcement employees. Their primary mission is to develop mitigation, preparation, training and exercises, response, and

recovery techniques that will reduce human pain and suffering, diminish property loss, preserve the environment, and re-establish a sense of normalcy in the community (Sylves, 2008).

Prior to the mid 1940's, emergency preparedness was not viewed as a federal responsibility or concern by the United States government. From our nation's earliest days disasters were often viewed as a local issue. Communities and states were expected to address the impacts of a disaster as they did other societal issues such as crime, poverty, hunger, and homelessness. As a result, the rendering of disaster aid was often left to churches, charities, local governments, and the American National Red Cross (Sylves, 2008).

During this era, the decision whether or not a community received federal assistance was often a political decision. The magnitude of political pressure generated in the wake of a disaster was what usually prompted the President and/or Congress to act. Because federal assistance was often random, arbitrary, and deployed without any attempt to complement existing relief efforts; federal assistance would routinely add to the chaos surrounding the event (Rubin, 2007; Butler, 2007).

From the end of World War II to present day the responsibility of emergency preparedness and disaster relief has slowly and haphazardly evolved into an essential mission for local, state, and federal governments. As in the decades prior, the pace and manner in which this evolution took place was driven by two issues - swelling criticism among constituencies that local, state, and federal disaster assistance was ineffective and piecemeal; and, a gradual philosophical change among federal lawmakers that effective mitigation, preparation, training and exercises, response, and recovery efforts did indeed impact national security. Debate on the topic began in the latter 1940's and culminated in a rather impressive fashion in the early 1950's. Within one year Congress passed two legislative acts, each designed to heighten national

preparedness. The first act addressed disaster relief; the second, civil defense (Bea, 2007; Homeland Security National Preparedness Task Force, 2007).

In an effort to create an enduring congressional policy regarding national emergency preparedness and federal disaster relief, Congress approved the Disaster Relief Act of 1950. The act delegated specific disaster relief authority and responsibilities to the President. The act also authorized federal agencies to exercise disaster aid and relief by providing equipment, supplies, and personnel; donating surplus federal property; performing preservation of life and property activities; and, providing grants to state and local entities. Congress was careful to insert language within the act which held that local and state governments, not the federal government, were responsible for disaster relief and that any federal aid was limited and temporary (Hogue & Bea, 2006; Bea, 2007).

The second act came into effect primarily due to eroding relations with the Soviet Union and the start of the Korean War. The Civil Defense Act of 1950 was enacted to foster and build individual preparedness. Although the federal government was charged with policy and oversight responsibilities, the act transferred the burden of civil defense efforts to the states. Modeled after the British civil defense successes in World War II, the act promoted the doctrine of self-help and encouraged each state to adopt a decentralized, locally controlled, volunteer-based effort. The act also set into action a national effort to coordinate state and federal activities, build shelters and early warning systems, stockpile food and supplies, and deliver community education (Kreps, 1990; Sylves, 2008).

During the next twenty-five years (1950-1975) presidents and/or Congress would initiate several dozen revisions to the Nation's emergency preparedness and disaster relief efforts. A majority of these revisions simply shuffled authority and duties back and forth between federal

agencies, departments, and the President's office. Some of the revisions would address ongoing bureaucratic inefficiencies and disaster relief miss-steps, but three of the revisions would significantly broaden and improve national emergency preparedness and disaster relief efforts (Hogue & Bea, 2006).

The first such revision was the Disaster Relief Act of 1966. This act was instrumental in expanding financial aid to unincorporated communities, providing disaster loans at below-market rates, and extending assistance to public colleges and universities. The act also allowed the dual use of civil defense early warning systems to alert citizens of a pending natural threat (Bea, 2007; Sylves, 2008).

The next revision to national emergency preparedness would replace the original 1950 disaster relief statute with a more complex and robust system. With a renewed focus on individual aid, the Disaster Relief Act of 1970 was designed to be a policy and administrative powerhouse. Keeping many of the policies from the 1950 statute, the new act recognized the value of deploying a federal coordinating officer during major disasters, acknowledged the role of nongovernmental organizations, expanded federal grant support and mitigation efforts, and approved the concept of dual-use preparedness planning efforts for disasters and nuclear attack (Bea, 2007; Homeland Security National Preparedness Task Force, 2007).

The last major revision during this era was the Disaster Relief Act of 1974. This act would further expand the government's preparedness and disaster efforts by defining the process by which presidential disaster declarations would be made, and granting the President the authority to build a federal disaster preparedness communications system. The act also extended limited assistance to individuals and families, assisted communities with rebuilding public facilities, provided matching funds for state and local entities to conduct all-hazard mitigation

and preparedness activities, and reinforced the stance that federal aid was intended to supplement, not replace, local and state efforts (Bea, 2007; Homeland Security National Preparedness Task Force, 2007).

By design, the nation's emergency preparedness and disaster relief efforts had become exceedingly decentralized. More than 100 federal agencies, scattered between five departments, were involved in mitigation, preparedness, training and exercises, response, and recovery efforts. In addition, many federal programs and policies were duplicated at the state and local level. The bureaucracy was such that it added to the chaos of current emergency preparedness and relief efforts (Federal Emergency Management Agency, 2009).

Over the next thirty years (1975-2005) presidents and lawmakers would come to recognize the growing need for a less bureaucratic more centralized federal effort; with an even greater emphasis on mitigation, preparedness, training and exercises, response, and recovery. Although the federal effort would expand over the ensuing years, the primary responsibility for emergency preparedness would remain at the local and state level. During this era, as with previous eras, ineffective and inefficient emergency preparedness and disaster relief efforts would continue to receive blistering criticism from lawmakers and the American public (Hogue & Bea, 2006; Homeland Security National Preparedness Task Force, 2007).

On March 31, 1979, President Carter (1977-1981) issued an executive order establishing the Federal Emergency Management Agency (FEMA). By August 1979, programs such as fire prevention and control, flood insurance, civil defense, disaster assistance, disaster preparedness, earthquake hazard reduction, emergency broadcast, and others were under the FEMA umbrella. When initially established, FEMA represented the single largest consolidation of emergency preparedness efforts in the Nation's history. With a sustained emphasis on mitigation,

preparedness, training and exercises, response, and recovery FEMA continued to evolve as an all hazard, independent federal agency that was becoming good at meeting the nation's unpredictable disaster relief needs (Sylves R. T., 2008; Hogue & Bea, 2006).

On November 23, 1988, the Disaster Relief Act of 1974 was amended by the Stafford Act (Disaster Relief and Emergency Assistance Act of 1988). This act bolstered and clarified FEMA's role in emergency management and preparedness, further defined the disaster declaration process, and provided the federal government the statutory authority to render assistance during a disaster. Considered by many as the beginning of modern-era national emergency management, preparedness, and relief efforts, the act would profoundly influence how local, state, and federal emergency managers and response personnel executed their roles and responsibilities (Homeland Security National Preparedness Task Force, 2007; Sylves, 2008).

Six years later on October 5, 1994, Congress directed that all remaining authority of the Civil Defense Act of 1950 be merged into the Stafford Act. In repealing the civil defense act Congress transferred all remaining civil defense initiatives, priorities, and funding into FEMA; including the statutory responsibility for coordinating a comprehensive, national emergency preparedness system. This action removed all remaining civil defense restrictions that prohibited the use of federal assets and programs in parallel, dual-use preparedness and response programs, and was instrumental in solidifying a nationwide all-hazards approach to emergency preparedness (Homeland Security National Preparedness Task Force, 2007; Sylves, 2008)

The terrorist attacks of September 11, 2001, and the chaos surrounding Hurricane Katrina in late August 2005, would become the two focus events of this era. Both events presented enormous challenges for emergency managers and response personnel. The attacks of 9/11 revealed the Nation's ability to adequately cope with simultaneous, complex disasters and

validated FEMA's doctrine of an all-hazards approach to emergency preparedness. The successful unified command and control structure at each site confirmed that emergency preparedness and initial response capabilities must originate at the local and state level. In stark contrast, the dismal local, state, and federal response to Katrina would vividly expose how a shift in priorities from national preparedness to national security would erode the Nation's emergency preparedness and disaster relief capabilities (Harrald, 2007).

In November 2002, Congress passed the Homeland Security Act. Within months the Department of Homeland Security (DHS) was operational. The new department was assigned the task of addressing several immediate priorities - aviation security, port security, border security, citizen (self-help) preparedness, and protection from domestic terrorism. The creation of DHS was the largest federal re-organization in fifty-five years. Nearly 200,000 employees from twenty-two federal agencies and forty different federal entities would be integrated into DHS. The reorganization merged numerous agencies with differing cultures, missions, organizational structures, and ideas regarding emergency preparedness and national security. FEMA would encounter diminished operational strength, decreasing prestige, and increased competition for funding as a result of the merger (Harrald, 2007; Sylves R. T., 2008).

In 2003, President Bush (2001-2009) issued two Homeland Security Presidential Directives (HSPD) that would initiate a paradigm shift in mitigation, preparedness, training and exercises, response, and recovery efforts nationwide. The HSPD's were in direct compliance with the Homeland Security Act of 2002. The first presidential directive (HSPD-5) required the Secretary of Homeland Security to develop and administer a standardized national incident management system and a national response plan (NRP). The primary goals identified in HSPD-5 were to establish an all-discipline, all-hazards national template that government and

non-governmental organizations would use to manage natural or man-made disasters; incorporate core elements of the incident command system, multi-agency coordination system, and unified command into the national template; and, develop a guiding policy that would clearly articulate the federal incident management structure and coordination process. The second presidential directive (HSPD-8) would require federal agencies to adopt all-hazard response plans; establish a national preparedness doctrine; and, mandate that all local and state entities receiving grants or federal assistance adopt NIMS and national preparedness policies (Butters, 2006; Harrald, 2007).

The national effort to achieve NIMS compliance was in its fifteenth month and the NRP was less than one-year old when Hurricane Katrina made landfall in Mississippi and Louisiana. Emergency management and response personnel at the local, state, and federal level were still being trained to the new doctrines, and the NRP had never been tested in a major disaster. The poor state of readiness was compounded by the fact that the new national emergency preparedness system substituted system flexibility for doctrine; replaced creativity with structure; and, exchanged ingenuity for bureaucracy.

In the months following Katrina, Congressional and White House investigative reports would initiate a reassessment and realignment of FEMA and DHS emergency preparedness priorities. The Post-Katrina Emergency Management Reform Act of 2006 re-assigned leadership, resources, and the core elements of comprehensive emergency preparedness to FEMA. In addition, the investigative reports reaffirmed that mitigation, preparedness, training and exercises, response and recovery efforts are in fact an essential mission of local and state governments (Harrald, 2007; Homeland Security National Preparedness Task Force, 2007; Gall & Cutter, 2007).

This abbreviated historical review of the practice and discipline of emergency management in the United States has provided insight into the evolution of emergency preparedness efforts over the past sixty years. The review highlighted that emergency preparedness managers and key support personnel rely upon science, technology, planning, and innovative management techniques to minimize the adverse affects of a natural or man-made hazard. In addition, the review pointed out that in many communities the emergency preparedness manager and emergency support service positions are often filled by professional city employees. The review also identified that prior to the mid 1940's, communities and states were expected to address the impacts of a disaster as they did other societal issues. Furthermore, the review clearly outlined that mitigation, preparedness, training and exercises, response, and recovery are the core elements of a comprehensive emergency preparedness plan. And finally, the review demonstrated how the responsibility of emergency preparedness and disaster relief has slowly and haphazardly evolved into an essential mission for local, state, and federal governments.

A general rule regarding disasters is that they are low-probability events. The randomness and infrequency in which disasters occur is often the genesis for many of the obstacles that hinder emergency preparedness. The fact that governments operate on a limited budget creates a common situation where policy-makers must choose which programs or projects to fund. When policymakers and citizens share the view that low-probability equates to low-priority, then it is often very difficult to generate sufficient public or political will to earmark funds for emergency preparedness over other high profile programs and projects that address an immediate need and/or generate positive poll results. Effective strategies to overcome the perpetual obstacle of weak issue salience are very limited. Those communities with an ongoing history of disaster(s)

may be somewhat advantaged because the institutions, programs, and policies that were created to cope with the event(s) often remain in place, promoting continued emergency preparedness long after public and political attention has waned (Coppola, 2007; Sylves, 2008).

Fragmented government responsibility can become a major obstacle to emergency preparedness. Fragmented responsibility usually develops when clear lines of authority, roles, and responsibility have not been established. There are two types of fragmented responsibility - vertical and horizontal. Vertical fragmentation occurs when local, state, and federal entities fail to collaborate, cooperate, and communicate. The decentralized layers of government that exist between local, state, and federal entities are often responsible for vertical fragmentation. Because governmental entities receive their legal power to enforce, regulate, declare, and respond from a unique set of founding documents, emergency managers are challenged to keep participants informed, cooperative, and oriented to the same mission (Sylves, 2008).

Horizontal fragmentation occurs when persons, groups, or institutions compete for emergency management jurisdiction. The situation is further complicated when these entities fail to establish a collaborative and cooperative spirit. Rogue agencies with overlapping authority, responsibility, and agendas who can act upon their own prerogative during a disaster can severely confuse and disrupt the overall effort. Effective strategies to overcome or reduce vertical and horizontal fragmentation would include creating local mutual aid agreements, auto-aid agreements, and inter-state mutual aid agreements; comingling resources, personnel, and expertise; conducting regular inter-agency training sessions; performing annual field exercises; and, sharing joint emergency operation centers or multi-agency centers (Sylves, 2008).

As mentioned, efforts to develop, implement, and support an effective emergency preparedness program are continually challenged by issue salience, vertical fragmentation, and

horizontal fragmentation. One additional obstacle to achieving an effective emergency preparedness plan is failing to secure adequate technical expertise throughout the process. Because emergency preparedness is accomplished in a complicated political, social, and economic setting, it is essential during the design, implementation, and sustaining phases to have an individual who has expertise and experience in public relations; politics; information management; geographic information systems; disaster planning; disaster laws; and, disaster programs (Sylves, 2008).

Procedures

Because the author was not enrolled in the Executive Fire Officer Program while attending the EAFSOEM course in March 2008, an applied research project for the course was not assigned. The author was accepted into the Executive Fire Officer Program in August 2008, and attended the first-year Executive Development (ED) course in January 2009. The completion of this applied research project was delayed until after the ED course applied research project was submitted on August 17, 2009. On August 22, 2009, the author began formulating a title, problem statement, purpose statement, research methodology, and research questions for this applied research project. On August 28, 2009, the author completed a National Fire Academy research proposal form and emailed the form to John York (assigned evaluator). Between August 28, and September 14, 2009, the author and York corresponded by email on four occasions each, refining the research proposal.

In October 2009, the author began collecting reference material for the introduction and background sections of this ARP. A copy of the *City of Bend Emergency Operations Plan* was obtained from Mark Taylor, Bend Fire Department's Training and Safety Chief. The plan contained all necessary reference material regarding NIMS, ICS, resolutions, ordinances, city

code, and emergency management policy. Statistical data regarding unemployment, comparative housing costs, and population were downloaded from the Economic Development of Central Oregon website. Additional population data was downloaded from Portland State University. Statistical data regarding notice of defaults filed in Deschutes County were retrieved from Jeff Sageser, Deschutes County Clerk's Office. Statistics pertaining to FTE numbers in the City of Bend were obtained from a power-point presentation developed by the city's finance department. Building permit statistics were obtained from Melanie Paule, Support Services Supervisor - City of Bend Building Department. Specifics regarding the professional services contract between retired Deputy Fire Chief Jenson and the City of Bend were obtained during a 1-1/2 hour interview with Jenson on November 16, 2009. A copy of the professional services contract and additional reference documents were obtained from Jenson on February 4, 2010. Reference material used in the significance section of this applied research project was extracted from the EAFSOEM student manual and from the United States Fire Administration's Strategic Plan: Fiscal Years 2009-2013.

During the months December thru February, the author began researching reference material for the literature review. The research occurred via the internet using the LRC's online card catalog, Google, and Bing. These search engines were used to access reference material relating to emergency preparedness in the United States and obstacles to emergency preparedness. While researching emergency preparedness in the United States, search terms such as history of emergency preparedness in the United States, history of emergency management in the United States, evolution of emergency preparedness in the United States, evolution of emergency management in the United States and numerous other variations relating to the

history and evolution of disaster management, disaster preparedness, and disaster relief were used to obtain information. Each search engine provided several positive results.

When researching obstacles to emergency preparedness, search terms such as obstacles to emergency preparedness in the United States, obstacles to emergency management in the United States and numerous other variations relating to obstacles, challenges, and barriers to disaster management, disaster preparedness, and disaster relief were used to obtain information. Each search engine provided several positive results.

From the combined search categories, the author selected - *Federal Emergency Management and Homeland Security Organization: Historical Developments and Legislative Options; Civil Defense and Homeland Security: A Short History of National Preparedness Efforts; The Federal Emergency Management System in the United States: Past and Present; and, FEMA History* as downloads from the internet. The author purchased - *Disaster Policy and Politics: Emergency Management and Homeland Security; Emergency Management: The American Experience 1900-2005; and, Introduction to International Disaster Management* from the Amazon online store. One additional book - *Chief Fire Officer's Desk Reference* was selected from the author's private library.

Although the literature review provided great insight into the practice and discipline of emergency management; confirmed that mitigation, preparedness, training and exercises, response, and recovery efforts are essential missions of local and state governments; examined common obstacles to emergency preparedness; and, identified several strategies to overcome such obstacles, additional information was needed to help answer the research questions. In an effort to gather this information the author created a questionnaire entitled *Identifying the Obstacles Which Hinder Emergency Preparedness* (Appendix A).

The questionnaire included a short introductory narrative which informed the respondents that from August 2006 to July 2008, all policy and reference material pertaining to emergency preparedness in the City of Bend underwent comprehensive review, and that the outcome of that review resulted in a complete rewrite and reorganization of emergency preparedness for the city. The remainder of the questionnaire was formatted into 5 sections; containing a total of 12 (yes/no) questions, 7 fill-in the blank multiple choice statements, and 5 comment boxes. Each section started with an explanatory sentence which prompted the respondent to offer their opinion as to the correctness of each question or statement. Each explanatory sentence was followed by a series of questions or fill-in the blank multiple choice statements, and a comment box.

Sections A, B, and C were designed to validate the accuracy of a statement the author made in the introduction section where the author stated "As of January 2010, it appears that little success has been achieved with ensuring that these critical revisions and additions to emergency preparedness within the City of Bend have been effectively communicated, exercised, or evaluated by city staff." The results of Sections A, B, and C have the potential of revealing to what degree critical revisions and additions to emergency preparedness within the City of Bend have actually been effectively communicated, exercised, or evaluated by city staff.

The explanatory statement in Section A advised each respondent that the questions would solicit their opinion as to whether or not the revisions and additions to emergency preparedness were effectively communicated to them. Section A contained five questions and a comment box. The explanatory statement in Section B advised each respondent that the questions would solicit their opinion as to whether or not they were provided an opportunity to effectively exercise the revisions and additions to emergency preparedness. Section B contained four questions and a

comment box. The explanatory statement in Section C advised each respondent that the questions would solicit their opinion as to whether or not they were provided an opportunity to evaluate the effectiveness of recent revisions and additions to the city's emergency preparedness plan. Section C contained three questions and a comment box.

The fill-in the blank multiple choice statements in Sections D and E were designed to solicit the opinions of city staff regarding possible internal obstacles which might be preventing critical revisions and additions to emergency preparedness within the City of Bend from being communicated, exercised, or evaluated. The explanatory statement in Section D advised each respondent that the statements would solicit their opinion as to the probability of the city encountering a man-made or natural disaster within five or ten years. Section D contained two fill-in the blank statements and one comment box. The explanatory statement in Section E advised each respondent that the statements would suggest several obstacles which might be hindering emergency preparedness in the city. Each respondent was asked to share their opinion as to the accuracy of each statement by filling-in each blank with the most correct comment. Section E contained five fill-in the blank multiple choice statements and a comment box.

The author used the website www.SurveyMonkey.com to design, distribute, collect, and analyze the results from the questionnaire. The questionnaire was designed on Saturday January 30, 2010, and using SurveyMonkey's email feature, distributed for the first time on Monday February 1st. In an attempt to generate additional participation, the questionnaire was re-distributed to non-respondents on Thursday February 4th, and again on Monday February 8th. The questionnaire closed on Friday February 12th. In determining who among city staff would be selected to receive a questionnaire, the author defaulted to using the distribution list contained in the emergency operations plan. This distribution list identified all key personnel involved in

emergency preparedness by city department and job classification. The questionnaire was distributed to the 40 key personnel identified on this list.

Several limitations were encountered while writing this applied research project. First, the history and evolution of emergency preparedness and disaster relief in the United States is incredibly lengthy, detailed, complex, and confusing. The same holds true for the discipline and practice of emergency preparedness, and the obstacles that interfere with its progress. The author was challenged when writing the literature review with presenting content that was applicable, succinct, and of sufficient quantity. As presented, the literature represents an extremely abbreviated review of the evolution and history of emergency preparedness and disaster relief in the United States.

Second, the *Identifying the Obstacles Which Hinder Emergency Preparedness* questionnaire was a rather non-scientific sampling tool. Although the questionnaire was designed to entice and heighten participation, it did not receive a 100% response rate. It must be noted that the 70% response rate that was achieved does have a moderate likelihood of skewing the questionnaire's results.

Third, although the questionnaire solicited a reasonable amount of feedback, the quality and quantity of the feedback was limited. This limitation was directly tied to how the questions and/or fill-in the blank multiple choice statements were worded and formatted, and the relatively few number of fill-in the blank multiple choice statements in Section D and E. Although the 5 comment boxes gathered a total of 34 responses, it was extremely difficult to integrate the comments into the final results.

A final limiting factor is that the overarching intent of this applied research project was to conduct an informal analysis of a lingering problem within the city. The preferred outcome of

this analysis is that the author will identify several legitimate obstacles which are preventing critical revisions and additions to emergency preparedness within the City of Bend from being communicated, exercised, or evaluated by city staff. This applied research project was never intended to be an in-depth, exhaustive scientific analysis that would precisely or exactly depict any or all of the obstacles which might be hindering emergency preparedness in Bend.

Results

Of the 40 key personnel who were emailed the *Identifying the Obstacles Which Hinder Emergency Preparedness* questionnaire, 30 responded to the author's request for assistance; achieving a 75% participation rate. Twenty-seven of the questionnaires were completed in their entirety and three were partially completed. As mentioned in the procedures section, Sections A, B, and C of the questionnaire were designed to validate the accuracy of a statement the author made in the introduction section where the author stated, "As of January 2010, it appears that little success has been achieved with ensuring that these critical revisions and additions to emergency preparedness within the City of Bend have been effectively communicated, exercised, or evaluated by city staff."

The questions in Section A asked each respondent if critical revisions and additions to emergency preparedness had been effectively communicated to them. The results reflect that 28 respondents (93.3%) agreed that the reasons why NIMS and ICS were adopted as the formal doctrines for preparation, response, and recovery to natural and man-made disasters were effectively communicated to them. Eighteen respondents (62.1%) expressed that the revisions to the emergency management policy had been effectively communicated to them. Respondents were equally split (50% yes - 50% no) that amendments to the emergency management section of the Bend Code had been communicated to them.

	Answer	Response	Percentage
1. Why NIMS was adopted	Yes	28	93.3%
	No	2	6.7%
2. Why ICS was adopted	Yes	28	93.3%
	No	2	6.7%
3. Emergency Management Policy	Yes	18	62.1%
	No	11	37.9%
4. Amendments to Bend Code	Yes	15	50.0%
	No	15	50.0%
5. Emergency Operations Plan	Yes	16	55.2%
	No	13	44.8%
6. Comments (Appendix B)		5	

Table A - Effectively Communicated

Sixteen respondents (55.2%) acknowledged that the method and structure by which the newly adopted emergency operations plan will provide overall planning and coordination for emergencies was effectively communicated to them.

The questions in Section B solicited each respondent's opinion as to whether or not they were provided an opportunity to effectively exercise the revisions and additions to emergency preparedness. The results demonstrate that 11 respondents (36.7%) had received recurrent training and exercises that would allow them to effectively execute their Command Staff and/or General Staff responsibilities as outlined in NIMS and ICS.

	Answer	Response	Percentage
7. Command and General Staff	Yes	11	36.7%
	No	19	63.3%
8. Emergency Management Policy	Yes	5	16.7%
	No	25	83.3%
9. Bend Code	Yes	6	20.0%
	No	24	80.0%
10. Emergency Operations Plan	Yes	4	13.3%
	No	26	86.7%
11. Comments (Appendix B)		12	

Table B - Effectively Trained and Exercised

Five respondents (16.7%) indicated that the city had provided recurrent training and exercises that would allow them to effectively execute their responsibilities as outlined in the revised Emergency Management Policy. Six respondents (20%) revealed that the city had provided recurrent training and exercises that would allow them to effectively execute their responsibilities as outlined in the emergency management section of the Bend Code. Only four respondents (13.3%) expressed that they had received recurrent training and exercises that would allow them to effectively execute their Command Staff and/or General Staff responsibilities as outlined in the newly adopted emergency operations plan.

The questions in Section C inquired whether or not the respondent was provided an opportunity to evaluate the effectiveness of recent revisions and additions to the city's emergency preparedness plan. Fifteen respondents (51.7%) indicated that they had been afforded the opportunity to express their thoughts as to how recent revisions and additions to emergency preparedness were effectively communicated to them.

	Answer	Response	Percentage
12. Revisions and Additions	Yes	15	51.7%
	No	14	48.3%
13. Training and Exercises	Yes	14	48.3%
	No	15	51.7%
14. Emergency Preparedness	Yes	17	58.6%
	No	12	41.4%
15. Comments (Appendix B)		3	

Table C - Opportunity to Evaluate

Fourteen respondents (48%) identified that they had been afforded the opportunity to express their thoughts as to how effective the training and exercises were in preparing them to expertly execute their Command Staff and/or General Staff responsibilities. Seventeen respondents (58.6%) confirmed that they had been afforded the opportunity to express their

thoughts as to how prepared the City of Bend is to effectively and efficiently mitigate the impacts of a man-made or natural disaster.

As mentioned in the procedures section, Sections D and E were designed to solicit the opinions of city staff regarding possible internal obstacles which might be preventing critical revisions and additions to emergency preparedness within the City of Bend from being communicated, exercised, or evaluated. The statements in Section D solicited each respondent's opinion as to the probability of the city encountering a man-made or natural disaster within the next five or ten years.

	Answer	Response	Percentage
16. Five Years	Low	4	13.8%
	Moderate	21	72.4%
	High	4	13.8%
17. Ten Years	Low	5	17.2%
	Moderate	16	55.2%
	High	8	27.6%
18. Comments (Appendix B)		6	

Table D - Probability of Man-made or Natural Disaster

The results reflect that four respondents (13.8%) believe that there is a low probability of a man-made or natural disaster occurring in the city within the next five years; twenty-one (72.4%) believe that there is a moderate probability of a man-made or natural disaster occurring in the city within the next five years; and, four (13.8%) believe that there is a high probability of a man-made or natural disaster occurring in the city within the next five years. When solicited to share their opinion as to the probability of a man-made or natural disaster occurring in the city within the next ten years, five respondents (17.2%) expressed that there is a low probability of such an occurrence; sixteen (55.2%) believe that there is a moderate probability of such an occurrence; and, eight (27.6%) believe that there is a high probability of a man-made or natural disaster occurring in the city within the next ten years.

The statements in Section E suggest several obstacles which might be hindering emergency preparedness in the city. Each respondent was encouraged to share their opinion as to the accuracy of each statement. When asked to rate whether having a reliable emergency preparedness plan that would effectively and efficiently mitigate the impacts of a man-made or natural disaster was a priority for the city, nine respondents (32.1%) indicated that it was a low priority; fourteen (50%) indicated that it was a moderate priority; and, five (17.9%) indicated that it was a high priority issue.

	Answer	Response	Percentage
19. Priority of Emergency Preparedness	Low	9	32.1%
	Moderate	14	50.0%
	High	5	17.9%
20. Major Challenges	Not an Obstacle	1	3.7%
	A Possible Obstacle	9	33.3%
	A Definite Obstacle	17	63.0%
21. Inundated with other tasks	Not an Obstacle	1	3.7%
	A Possible Obstacle	11	40.7%
	A Definite Obstacle	15	55.6%
22. Projects of equal/greater or greater priority	Not an Obstacle	0	0.0%
	A Possible Obstacle	15	55.6%
	A Definite Obstacle	12	44.4%
23. Projects of lesser priority	Not an Obstacle	2	7.4%
	A Possible Obstacle	17	63.0%
	A Definite Obstacle	8	29.6%
24. Comments (Appendix B)		8	

Table E - Possible Obstacles

When asked if major challenges such as revenue shortfalls, structural deficits, lay-offs, and politically charged issues present an obstacle to emergency preparedness in the city, one

respondent (3.7%) opinioned that such challenges were not an obstacle; nine respondents (33.3%) offered that such challenges presented a possible obstacle; and, seventeen respondents (63%) expressed that such challenges were a definite obstacle to emergency preparedness.

When respondents were asked if a situation exists in the city where personnel assigned the task of developing and coordinating emergency preparedness have been unable to focus on this project because they are inundated with other assignments and projects, one respondent (3.7%) indicated that the situation is not an obstacle; eleven respondents (40.7%) thought that the situation represents a possible obstacle; and, fifteen respondents (55.6%) replied that the situation was a definite obstacle to emergency preparedness.

When asked if other projects of equal or greater priority divert available resources from the city's effort to develop a reliable emergency preparedness plan, zero respondents (0%) selected the "Not an Obstacle" choice; fifteen respondents (55.6%) felt that this was a possible obstacle; and, twelve respondents (44.4%) expressed that this was a definite obstacle to emergency preparedness.

When asked if other projects of lesser priority divert available resources from the city's effort to have a reliable emergency preparedness in place, two respondents (7.4%) offered that this was not an obstacle; seventeen respondents (63%) suggested that this was a possible obstacle; and, eight respondents (29.6%) expressed that this was a definite obstacle.

Discussion

The primary purpose of this study was to identify the obstacles which are hindering emergency preparedness in Bend, OR. The author proposed accomplishing that task by answering three research questions - What are the obstacles which are preventing critical revisions and additions to emergency preparedness within the City of Bend from being: 1)

communicated to city staff; 2) exercised by city staff; and, 3) evaluated by city staff? The author is of the opinion that before the research questions can be adequately answered additional information is required regarding two important variables: 1) to what extent does the City of Bend have legal authority and a civic duty to embrace emergency preparedness as an essential mission; and, 2) what amount of progress has been achieved to effectively communicate, exercise, or evaluate critical revisions and additions to emergency preparedness with city staff?

Regarding authority and civic duty, from March 2008 to July 2008 Bend's city council codified the practice and discipline of emergency preparedness into an ordinance and city policy through several official actions. Resolution No. 2680 directed that "... a city-wide emergency management program that complies with State and Federal laws related to disaster preparation, response, and recovery ..." would be implemented (City of Bend, 2008, p. 1). Resolution No. 2707 acknowledged that Oregon Revised Statutes - Chapter 401, and local code, ordinances, and resolutions would assign the authority and responsibility to prepare and respond to emergencies to the local level (City of Bend, 2008). The Promulgation Letter contained in the introduction section of Bend's newly adopted emergency operations plan clearly articulates that the city has the responsibility to plan and respond to emergencies resulting from hazards which are known to threaten the jurisdiction (City of Bend, 2008, p. iii).

Sylves (2008) points out that prior to the mid 1940's, emergency preparedness was not viewed as a federal responsibility; communities and states were expected to address the impacts of a disaster as they did other societal issues. Bea (2007) mentions that from the end of World War II to present day the responsibility of emergency preparedness and disaster relief has slowly and haphazardly evolved into an essential mission for local, state, and federal governments. Hogue & Bea (2006) and Bea (2007) identify that the Disaster Relief Act of 1950 was

responsible for establishing the enduring principle that local and state governments, not the federal government, were responsible for disaster relief. Bea also recounted how the Disaster Relief Act of 1974 would further expand the government's preparedness and disaster efforts, and re-enforce the stance that federal aid was intended to supplement, not replace, local and state efforts. The final reference in the literature review which details to what extent the City of Bend has the legal authority and civic duty to facilitate emergency preparedness is the Post-Katrina Emergency Management Reform Act of 2006. Harrald (2007) and Gall & Cutter (2007) detail how language contained in the act further re-enforces the principle that mitigation, preparedness, training and exercises; as well as, response and recovery efforts are in fact an essential mission of local and state governments.

Undoubtedly the background and significance, and literature review clearly illustrates that the City of Bend shoulders the legal authority and civic duty to embrace emergency preparedness as an essential mission. As mentioned in the introduction, it is critical to the safety and welfare of those living in and visiting the region that the City of Bend has in place a reliable emergency preparedness plan.

The *Identifying the Obstacles Which Hinder Emergency Preparedness* questionnaire will be used to determine the amount of progress that has been achieved with effectively communicating, exercising, or evaluating critical revisions and additions to emergency preparedness with city staff. When asked if critical revisions and additions to emergency preparedness had been effectively communicated to them, 93% of city staff agreed that NIMS and ICS was effectively communicated; 62% expressed that revisions to the emergency management policy had been effectively communicated to them; 50% agreed that amendments to the Bend Code had been effectively communicated to them; and, 55% acknowledged that the

method and structure of the emergency operations plan was effectively communicated to them. The high success rate with NIMS and ICS is most likely representative of the progress that the emergency preparedness task force and Jenson achieved prior to 2009. The lower success rate with the other elements may be a result of a decreased focus on emergency preparedness by the emergency preparedness task force after Jenson's contract expired in 2008.

When asked whether or not they were provided an opportunity to effectively exercise the revisions and additions to emergency preparedness, 36% of city staff acknowledged receiving NIMS/ICS Command Staff and/or General Staff training and exercises; 16% confirmed receiving training and exercises to effectively execute their Emergency Management Policy responsibilities; 20% identified receiving training and exercises to effectively execute their Bend Code responsibilities; and, 13% expressed receiving Command Staff and/or General Staff training and exercises to effectively execute their emergency operations plan responsibilities. The very low success rate within this category may again be a direct result of a decreased focus on emergency preparedness by the emergency preparedness task force after Jenson's contract expired in 2008.

When asked if they were provided an opportunity to evaluate the effectiveness of recent revisions and additions to the city's emergency preparedness plan, 51% of city staff had an opportunity to comment on how effective revisions and additions were communicated to them; 48% identified having an opportunity to comment on how effective the Command Staff and/or General Staff training and exercises were; 58% confirmed that they had been afforded the opportunity to comment on how prepared the City of Bend is to cope with the impacts of a man-made or natural disaster. The moderate success rate within this category may also be a

direct result of a decreased focus on emergency preparedness by the emergency preparedness task force after Jenson's contract expired in 2008.

Results from the *Identifying the Obstacles Which Hinder Emergency Preparedness* questionnaire provided ample insight into how much progress has been achieved with effectively communicating, exercising, and evaluating critical revisions and additions to emergency preparedness with city staff. The results demonstrate that progress varies widely within each category. Only eleven members of city staff have received NIMS/ICS Command Staff and/or General Staff level training, and only four city staff members have received Command Staff and/or General Staff training and exercises to effectively execute their emergency operations plan responsibilities. As mentioned, the varied success rates within each category may be a direct result of a decreased focus on emergency preparedness by the emergency preparedness task force after Jenson's contract expired in 2008.

As Coppola (2007) and Sylves (2008) point-out, disasters are low-probability events. The randomness and infrequency in which they occur is often the genesis for many obstacles to emergency preparedness. An example of one such obstacle is issue salience. A common initiator of issue salience is the mental process where policymakers confuse probability with priority. The outcome of such a scenario is that policymakers and the public are continually challenged to generate the political will to earmark funds and resources for emergency preparedness. The *Identifying the Obstacles Which Hinder Emergency Preparedness* questionnaire will be used to determine if issue salience is present within the city. When members of city staff were asked to rate the probability of a man-made or natural disaster occurring in the city in the next five years, a combined 86% selected a low or moderate probability. When city staff was asked to rate the probability of a man-made or natural disaster occurring within the city in the next ten years, a

combined 72% selected a low to moderate probability. When city staff was asked to rate whether having a reliable emergency preparedness plan that would effectively and efficiently mitigate the impacts of a man-made or natural disaster was a priority for the city, a combine 82% indicated that it was either a low or moderate priority. The results from the *Identifying the Obstacles Which Hinder Emergency Preparedness* questionnaire strongly suggest that issue salience is an obstacle to emergency preparedness within the city.

Sylves (2008) indicates that when clear lines of authority, roles, and responsibility have not been established, fragmented government responsibility becomes a major obstacle to emergency preparedness. Sylves suggests that there are two types of fragmented responsibility - vertical and horizontal. Vertical fragmentation occurs when local, state, and federal entities fail to collaborate, cooperate, and communicate. Horizontal fragmentation occurs when persons, groups, or institutions compete for emergency management within a jurisdiction. Both situations can be further complicated when diverse entities fail to establish a cooperative spirit. This study fails to offer any evidence indicating that fragmentation is an obstacle to emergency preparedness in the city.

Sylves (2007) suggests that the exhaustive process of attaining emergency preparedness is conducted in a complicated political, social, and economic setting. As a result, it is essential during the design, implementation, and sustaining phases to have an individual who can champion and coordinate the goal of emergency preparedness through this difficult process. This individual must possess experience and expertise in public relations; politics; information management; geographic information systems; disaster planning; disaster laws; and, disaster programs. Sylves identifies the failure to secure adequate technical expertise throughout the process as a major obstacle to achieving an effective emergency preparedness plan. The

Identifying the Obstacles Which Hinder Emergency Preparedness questionnaire will be used to determine if this obstacle or other previously unidentified obstacles are present within the city.

When city staff was asked if major challenges such as revenue shortfalls, structural deficits, lay-offs, and politically charged issues present an obstacle to emergency preparedness in the city, 63% expressed that such challenges were a definite obstacle to emergency preparedness. When city staff was asked if a situation exists in the city where personnel assigned the task of developing and coordinating emergency preparedness have been unable to focus on this project because they are inundated with other assignments and projects, 56% replied that the situation was a definite obstacle to emergency preparedness. When city staff was asked if other projects of equal or greater priority divert available resources from the city's effort to develop a reliable emergency preparedness plan, 56% felt that this was a possible obstacle. When city staff was asked if other projects of lesser priority divert available resources from the city's effort to have a reliable emergency preparedness in place, 63% suggested that this was a possible obstacle.

The results from the *Identifying the Obstacles Which Hinder Emergency Preparedness* questionnaire strongly suggest that coping with major challenges such as revenue shortfalls, structural deficits, lay-offs, and politically charged issues is a definite obstacle to emergency preparedness in the city. Having an emergency preparedness task force that is inundated with other priorities is a definite obstacle to emergency preparedness in the city. Based upon how city staff answered the above questions it would be reasonable to assume that the lack of a dedicated person to champion and coordinate all emergency preparedness efforts through the design, implementation, and sustaining phases, is a definite obstacle. Results from the questionnaire also demonstrate that approximately 60% of city staff feels that a possible obstacle exists because

available resources are often diverted from emergency preparedness to projects of lower, equal, and greater priority.

This study has successfully revealed several important findings: 1) the City of Bend does in fact shoulder the legal authority and civic duty to embrace emergency preparedness as an essential mission; 2) NIMS and ICS were effectively communicated to city staff; 3) the emergency management policy, Bend Code, and emergency operations plan were not effectively communicated; 4) only eleven city staff have received NIMS/ICS Command Staff and/or General Staff level training; 5) a very low percentage of city staff have received training and exercises relating to the emergency management policy and Bend Code; 6) only four city staff have received Command Staff and/or General Staff training and exercises to effectively execute their emergency operations plan responsibilities; and, 7) approximately 50% of city staff have commented on all phases of emergency preparedness.

Findings from this study have exposed that there are six obstacles which are hindering emergency preparedness in the city: 1) issue salience is a definite obstacle; 2) coping with major city-wide challenges is a definite obstacle; 3) a distracted emergency preparedness task force is a definite obstacle; 4) not having a dedicated technical expert to coordinate and champion all emergency preparedness efforts through the design, implementation, and sustaining phases is a definite obstacle; and, 5) diverting resources to projects of lower, equal, and greater priority is a possible obstacle to emergency preparedness in the city.

Recommendations

Based upon the findings of this study the author is prepared to offer three recommendations. The first two recommendations are intended to address the five obstacles identified in the discussion section. The third recommendation will identify measures that the

city could employ immediately to achieve 100% compliance with the goal of effectively communicating critical revisions and additions to emergency preparedness.

First, the city must explore the feasibility of enlisting a technically qualified individual to coordinate and champion the goal of city-wide emergency preparedness throughout the design, implementation, and sustaining phases. It is the author's opinion that the city could successfully achieve this recommendation by enlisting a qualified individual either in a volunteer capacity or part-time employee status. Having a qualified individual on staff would immediately address and counter the negative impacts attributable to all five obstacles. This individual would also be available to immediately begin creating and initiating an emergency preparedness training and development program for city staff. This program would directly address the urgent need for city staff training and exercises, and would provide an appropriate venue for city staff to comment on all phases of emergency preparedness.

The second recommendation is intended to address the obstacle of external issue salience. The author recommends that the city initiate a multi-pronged emergency preparedness public information campaign. This campaign would take advantage of current technology, media, and correspondence channels in place today. Elements of the campaign would include adding an emergency preparedness tab to the city's webpage. This tab would be very conspicuously featured on the main page. The tab would incorporate a dropdown menu feature which would provide citizens a variety of pertinent emergency preparedness topics to choose from. Another element of the campaign would be to include a monthly emergency preparedness message or reminder on the city newsletter that is inserted into the monthly utility bill mailings. An additional element of the campaign would involve a pre-fire season and a pre-winter season

informational segment added to the city's television channel. These segments would provide citizens with seasonal emergency preparedness information, advice, and techniques.

The final recommendation is intended to address the goal of achieving 100% compliance with the task of communicating emergency preparedness with city staff. Whether or not the city moves forward with recruiting a technically qualified individual, the city must be timely with communicating basic elements of emergency preparedness to city staff. The author recommends that the emergency preparedness task force incorporate introductory elements of NIMS/ICS, the emergency management policy, the Bend Code, and the emergency operations plan into a one-hour informational workshop. Every member of city staff who is identified on the distribution list contained in the emergency operations plan would attend this workshop before December 31, 2010. All remaining city staff would attend this workshop before July 31, 2011.

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Appendix A
Questionnaire - *Identifying the Obstacles Which Hinder Emergency Preparedness*

From August 2006 to July 2008, all policy and reference material pertaining to emergency preparedness in the City of Bend underwent comprehensive review. The outcome of that review resulted in a complete rewrite and reorganization of emergency preparedness for the City.

Section A: The following questions solicit your opinion as to whether or not the revisions and additions to emergency preparedness were effectively communicated to you.

1. The reasons why the National Incident Management System (NIMS) was adopted as the formal doctrine for preparation, response, and recovery to natural and man-made disasters have been effectively communicated to me.

Yes No

2. The reasons why the Incident Command System (ICS) was adopted as the formal doctrine for preparation, response, and recovery to natural and man-made disasters have been effectively communicated to me.

Yes No

3. Recent revisions to the Emergency Management Policy have been effectively communicated to me.

Yes No

4. Recent amendments to the emergency management section of the Bend Code have been effectively communicated to me.

Yes No

5. The method and structure by which the newly adopted Emergency Operations Plan will provide overall planning and coordination for emergencies has been effectively communicated to me.

Yes No

6. Please include any comments you may have regarding this section of the questionnaire:

Section B: The following questions solicit your opinion as to whether or not you were provided an opportunity to effectively exercise the revisions and additions to emergency preparedness.

7. The City has provided recurrent training and exercises that will allow me to effectively execute my Command Staff and/or General Staff responsibilities as outlined in NIMS and ICS.

Yes No

8. The City has provided recurrent training and exercises that will allow me to effectively execute my responsibilities as outlined in the revised Emergency Management Policy.

Yes No

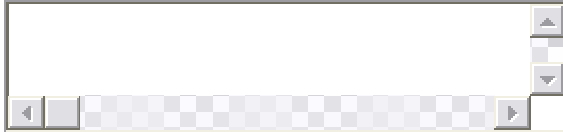
9. The City has provided recurrent training and exercises that will allow me to effectively execute my responsibilities as outlined in the emergency management section of the Bend Code.

Yes No

10. The City has provided recurrent training and exercises that will allow me to effectively execute my Command Staff and/or General Staff responsibilities as outlined in the newly adopted emergency operations plan.

Yes No

11. Please include any comments you may have regarding this section of the questionnaire:



Section C: The following questions solicit your opinion as to whether or not you were provided an opportunity to evaluate the effectiveness of recent revisions and additions to the City's emergency preparedness plan.

12. I have been afforded the opportunity to express my thoughts as to how effectively recent revisions and additions to emergency preparedness were communicated to me.

Yes No

13. I have been afforded the opportunity to express my thoughts as to how effective the training and exercises were in preparing me to expertly execute my Command Staff and/or General Staff responsibilities.

Yes No

14. I have been afforded the opportunity to express my thoughts as to how prepared the City of Bend is to effectively and efficiently mitigate the impacts of a manmade or natural disaster.

Yes No

15. Please include any comments you may have regarding this section of the questionnaire:



Section D: The following statements solicit your opinion as to the probability of encountering a manmade or natural disaster within the next five or ten years.

16. I believe that there is a _____ probability of a manmade or natural disaster occurring in the City of Bend within the next five years.

- Low Moderate High

17. I believe that there is a _____ probability of a manmade or natural disaster occurring in the City of Bend within the next ten years.

- Low Moderate High

18. Please include any comments you may have regarding this section of the questionnaire:

Section E: The following statements suggest several obstacles which might be hindering emergency preparedness in the City. Please share your opinion as to the accuracy of each statement. Please fill-in each blank with the most correct comment.

19. Having a reliable emergency preparedness plan in place that will effectively and efficiently mitigate the impacts of a manmade or natural disaster is currently a _____ priority topic for the City.

- Low Moderate High

20. Major challenges such as revenue shortfalls, structural deficits, lay-offs, and politically charged issues have diverted attention away from the topic of emergency preparedness.

This statement represents a current situation in the City of Bend that is _____ to emergency preparedness.

- not an obstacle a possible obstacle a definite obstacle

21. Those who have been assigned the task of developing and coordinating emergency preparedness in the City have been unable to focus on this project because they are inundated with other tasks, assignments, and projects.

This statement represents a current situation in the City of Bend that is _____ to emergency preparedness.

- not an obstacle
 a possible obstacle
 a definite obstacle

22. Other projects of equal or greater priority divert available resources from the City's effort to develop a reliable emergency preparedness plan.

This statement represents a current situation in the City of Bend that is _____ to emergency preparedness.

- not an obstacle
 a possible obstacle
 a definite obstacle

23. Other projects of lesser priority divert available resources from the City's effort to have a reliable emergency preparedness plan in place.

This statement represents a current situation in the City of Bend that is _____ to emergency preparedness.

- not an obstacle
 a possible obstacle
 a definite obstacle

24. Please suggest other obstacles that you feel are hindering emergency preparedness in the City:

Appendix B

Respondent Comments

Effectively Communicated

- 6.1 In regard to #5 above: the method and structure of the EOP is confusing and complex and could be simplified.
- 6.2 To be fair, I think it is at least in part each employee's responsibility to seek out this type of information, and I have done so, but not as thoroughly as I should.
- 6.3 I was not made aware of any of the city emergency documents.
- 6.4 The changes through 2008 were communicated. The updates made in 2009 were distributed but not explained.
- 6.5 All of my knowledge and background in NIMS and ICS come from my fire service experience. There has been no info communicated to me by "the City".

Effectively Trained and Exercised

- 11.1 These exercises and training provided by the city have enhance the ability of the police departments special weapons team to deploy and successful complete their missions.
- 11.2 All of these are marked "no" for the present situation but I know that there are plans in place to provide recurrent training and exercises in the near future
- 11.3 The City has not followed up with the outlined/adopted plan
- 11.4 I have not been part of any city wide training in regards to emergency management.
- 11.5 My "no" answers could be changed to yes if "The City" was changed to the fire department in 7 and 8. That said, the words "as outlined" keep the answers a no in 9-11.
- 11.6 I have not directly been involved in any training exercises.

- 11.7 The City needs to exercise the plan in a multi-discipline scenario in order to fully understand the plan. There appears to be a lack of buy-in from some portions of the City.
- 11.8 NIMS and ICS training has been conducted, however, training in regards to the new EOP has yet to occur.
- 11.9 We are in the process of creating a training program, starting with an EOC Orientation, and continuing exercises into the future.
- 11.10 Biggest challenge is that we are so short staffed that it is very difficult to make the time to participate in enough of the training offered to be confident we could execute our duties if the need arose.
- 11.11 One group training opportunity was provided. Info on where to obtain additional self directed on-line training was provided. I didn't do the training and there has been no follow up.
- 11.12 I think since the plan is newly adopted...we are just now planning training exercises.

Opportunity to Evaluate

- 15.1 This has always been the case. These opportunities have always been available.
- 15.2 As the author of the plan the above questions have been adopted - just not implemented
- 15.3 At this point I am concerned as how we will as a city deal with an emergency management. My concern is the coordinated effect of the organization. I feel in our department we will be able to handle our end of any event. I am concerned with the abilities of city hall.
- 18.1 In reference to the probability of a manmade disaster, dependent upon the weather patterns, I believe that there is a great/ high possibility of natural disaster.

Probability of Man-made or Natural Disaster

- 18.2 I hope we will be able to practice the emergency plan with all the players in the city.
- 18.3 We're long overdue for a major interface incident and have just dodged the bullet in the last couple of years.
- 18.4 Fire is the most reasonable assumption for natural and or manmade disaster for our region.
- 18.5 Need a definition of what qualifies as a "disaster" to answer this more accurately.
- 18.6 Primarily wildfire events, followed by severe weather events

Possible Obstacles

- 24.1 A failure by city officials to provide adequate personnel funding is the greatest threat to the ability for the emergency services to appropriately train, purchase needed equipment, and have adequate personnel to protect the citizens of Bend
- 24.2 Most players in the city don't think anything will happen and don't take any of the plan seriously
- 24.3 Employees outside the public safety departments, and elected officials, are not aware of the potential to be involved in an emergency incident response. Often, I believe, they feel that learning NIMS and ICS are irrelevant to their jobs and are outside the parameters of their training. The lack of a City Emergency Manager, with all the training, communications and operational issues that this position implies, is definitely a hindrance. Decisions, training and operational decisions are defaulted to the County Emergency Services Manager, who rightfully feels that taking this responsibility is outside the scope of his job.
- 24.4 No city wide drills on a regular schedule

- 24.5 I believe the micro-management of the city council is an obstacle. I believe people feel we live in a bubble and that is an obstacle.
- 24.6 Disaster preparedness is not a priority - ADA compliance, for example, has legal weight behind it and is getting a considerable amount of money and worker hours assigned to addressing the issue; an experienced coordinator in emergency response and preparedness; a buy in with department heads and personnel from NON public safety departments; having an attitude that a natural disaster of significant magnitude will not happen in Bend.
- 24.7 It does seem that emergency preparedness takes a back seat to the day to day functions of the City.
- 24.8 I do not know the work load of those assigned to this project.