

Supply and Demand of Certified Emergency Management Personnel in Illinois: How is this

Addressed by Career and Technical Education?

Robert J. (Bob) Leahy, Jr.

University of Wisconsin - Stout

Abstract

The field of emergency management may be in danger of not meeting the supply and demand. Employment outlook statistics for the nation over the past four years have drastically changed downward and are even less in the state of Illinois. So how do candidates get attracted or recruited to emergency management? How is Career and Technical Education (CTE) playing a role?

There do not appear to be any formal secondary level schools or programs in Illinois specifically addressing emergency management. Post-secondary schools with emergency management programs or other emergency-related career field programs are available. Programs from other organizations and agencies exist that can be implemented to introduce teens and young children about emergency management.

Supply and Demand of Emergency Management Certified Personnel in Illinois: How is
this Addressed by Career and Technical Education?

Introduction

Emergency management can be defined as the field and discipline dealing with risk and risk avoidance, and is the process of preparing for, mitigating, responding to and recovering from an emergency. It is an essential role of government at all levels. However government is not the only organization concerned with emergency management. A variety of sectors, including education, healthcare, business and industry too must plan and prepare for, respond to and recover from disruptions to business and operations. “Jobs are increasing in both the public and private sector, ranging from companies like Servpro to disaster response consultants to specialists working for governments, corporations or health care facilities” (Sotonoff, 2013).

In this ever-growing field, the supply of trained and certified emergency management personnel could be in danger of not meeting the demand. Over the years there has been a paradigm shift that has been moving the field of emergency management from what has frequently been a secondary or follow-on career for former law enforcement, firefighter, military and medical personnel with experience and additional training to a primary career and recognized profession with post-secondary degree programs at levels to PhD.

This poses several questions. Are candidates being attracted to, or recruited to, emergency management other than by retirement from a first career or by accident? Is Career and Technical Education (CTE) playing a role? If not, how can this be accomplished? Specifically, how is the state of Illinois addressing this issue?

Background of the Issue

According to T. Alan Lacey and Benjamin Wright in the *Monthly Labor Review Nov 2009* published by the U.S. Department of Labor, Bureau of Labor Statistics, from 2008 to 2018 emergency management specialists are looking at a 21.7% change (2009). However this changed in the Bureau of Labor Statistics *Occupational Outlook Handbook, 2014-15 Edition* where the job outlook from 2012 to 2022 for emergency management directors (there was a change in code and occupation title between the reports) is now at 8% (2014). *Figure 1* is a screen capture of the summary table of Emergency Management Director from that handbook.

Summary

Quick Facts: Emergency Management Directors	
2012 Median Pay ?	\$59,770 per year \$28.73 per hour
Entry-Level Education ?	Bachelor's degree
Work Experience in a Related Occupation ?	5 years or more
On-the-job Training ?	None
Number of Jobs, 2012 ?	9,900
Job Outlook, 2012-22 ?	8% (As fast as average)
Employment Change, 2012-22 ?	800

Figure 1. Quick Facts: Emergency Management Directors 2012-2012

As part of the research, the Illinois Career Information System (CIS) was accessed and the occupation of emergency management specialist (they are still using the old occupation title) was reviewed. One disappointing fact found is that currently Illinois is predicting “slower than average employment growth is expected for emergency management specialists through the year 2020” (Illinois Career Information System, 2014). According to CIS, the growth outlook is 5.7% whereas the nation is at 13.2%.

Personnel working in emergency management have many different job titles to include, but are not limited to, Emergency Management Director, Emergency Services Director, Emergency Management System Director, Emergency Planner, Emergency Management Coordinator, Emergency Preparedness Coordinator, Emergency Preparedness Program Specialist, Emergency Management Program Specialist, Emergency Preparedness Specialist, and Emergency Management Consultant. The degree and scope of their responsibilities of the four phases of emergency management (preparedness, response, recovery and mitigation) can vary greatly depending on the governmental agency, organization, business or industry the individual is associated with in their particular position.

Unlike other emergency professions such as law enforcement, firefighting, and emergency medical services that have formal academies or licensing requirements to start in those fields, there is no clearly defined pathway for entering the field of emergency management. Historically it is personnel from those other emergency professions who tend to migrate to emergency management partway through, or at their retirement from, those careers. It is a combination of the training and experience, along with formal education in emergency management, which makes them desired candidates.

With individuals entering the emergency management field after retiring from their first career, the youngest they can be is about 38 years of age. The United States military is one of the few careers that you can enter at age 18 and retire after 20 years with a pension. In law enforcement, most agencies require you to be 21 by academy graduation date, though some take cadets as young as 18 (“Basic Requirements,” 2014). In this scenario, this might have someone entering emergency management at age 41. In any case, they would also need to have earned at

least an appropriate bachelor's degree during their initial career prior to starting in emergency management.

In theory it is possible for those starting their second career, in emergency management, to complete 20 years or more before retiring completely from the workforce. But if those individuals start their initial emergency professions at a later stage of life, and/or stay in those professions longer than 20 years before retiring (e.g., 30 years), then their time in emergency management positions could be considerably less.

Another way individuals get into emergency management is by accident. Elaine Pittman, the associate editor of *Emergency Management* magazine ("How Emergency Management Is Changing," 2011) revealed how some women "backed into" the emergency management field rather than with a background as first responders or veteran. Stories such as Nancy Dragani, executive director of the Ohio Emergency Management Agency, who began her career as a disc jockey with Armed Forces radio and joined the National Guard when she got off active duty. After spending time at a local agency, she joined Ohio Emergency Management as a public information officer. Another is Nancy Ward, administrator of Federal Emergency Management Agency (FEMA) Region IX, who began her career working in California's Department of Social Services for 15 years. After a federal disaster declaration in California, she volunteered with a grant program that provided assistance to families and individuals affected by a disaster. After that, Ward volunteered after every disaster and eventually was running the program.

Impact on Career and Technical Education

According to Scott & Sarkees-Wircenski (2011) "CTE encompasses a large number of diverse programs that are designed to assist students in developing the knowledge, attitudes, and skills required to enter and advance in occupational careers." In *Career and Technical*

Education: Illinois' Pathway to Success (Lucas, 2013), a publication of the Illinois Department of Employment Security, they are reporting that according to the Illinois Career Information System (CIS) that emergency management specialists is a career that training can be done through CTE.

Figure 2 “depicts the Illinois career cluster graphic, commonly called a “fan”, which shows the relationship between a secondary career and technical education (CTE) area in Illinois, a career cluster, associated career pathways, and a sample of career and program options within each pathway” (Law, Public Safety, Corrections and Security Fan Cluster Model, 2011).

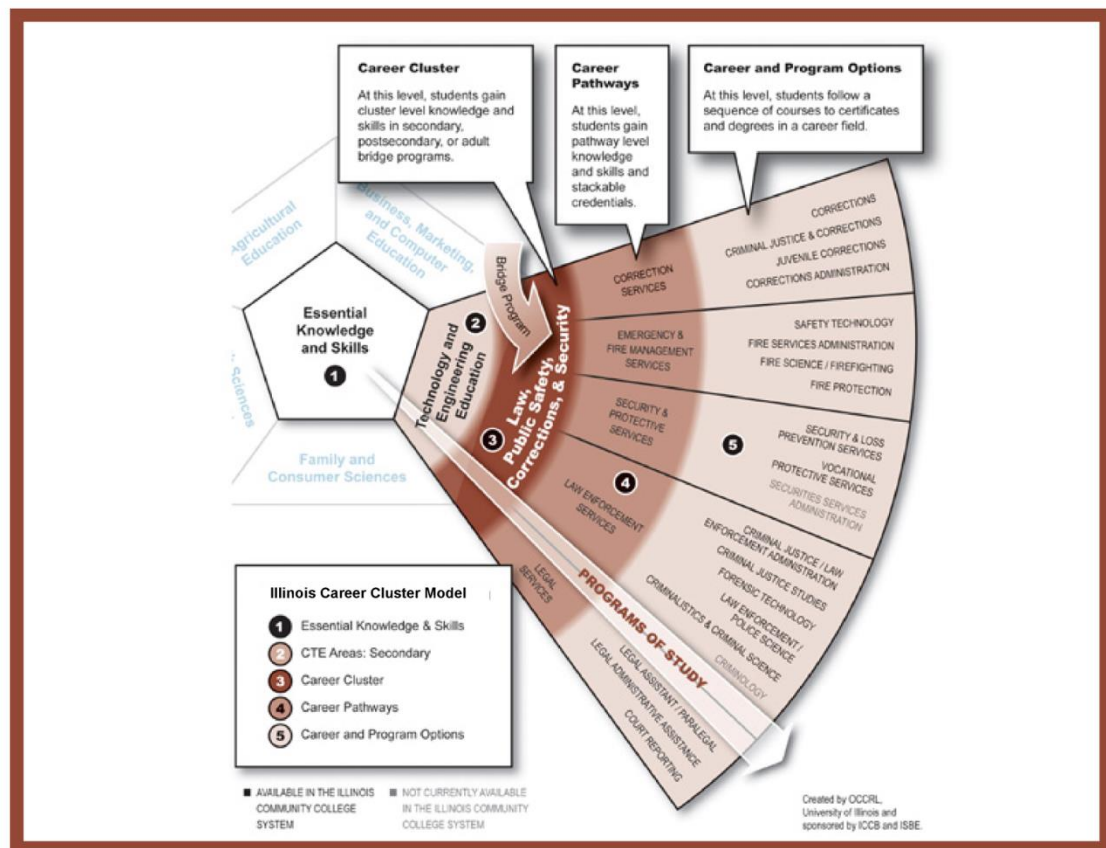


Figure 2. Illinois Career Cluster Model - Law, Public Safety, Corrections, & Security

Figure 3. Law, Public Safety, Corrections and Security: Emergency and Fire Management Services Career Pathway Plan of Study for Learners, Parents, Counselors, and Teachers/Faculty

Figure 3. Law, Public Safety, Corrections and Security: Emergency and Fire Management Services Career Pathway Plan of Study for Learners, Parents, Counselors, and Teachers/Faculty

Computer Applications, Journalism, Keyboarding, and Public Speaking) (Illinois Career Information System, 2014).

Research did show other emergency professions that could lead to emergency management, such as law enforcement or firefighting, are being addressed at some Illinois secondary schools. The Chicago Police and Firefighter Training Academy (CPFTA) is a two-year after school program that allows students to train at the Chicago Police and Fire Academies for a future career in law, public safety, fire science and more while earning school credit. It was developed jointly with the Chicago police and fire departments, Chicago Public Schools' Department of Career and Technical Education, and the City Colleges of Chicago (Chicago Police and Firefighter Training Academy, 2014).

Outside Illinois, a new high school in New York City that integrates emergency management into core curriculum opened its doors in 2013. "The Urban Assembly School for Emergency Management (UASEM) is a public Career and Technical Education high school that prepares students to engage in complex quantitative and qualitative reasoning skills with an understanding of the principles of Emergency Management" (UASEM Home, 2014).

Post-secondary Education

Illinois has 48 community colleges, collectively serving every county. Harper College, an Illinois suburban community college, offers a two-year Emergency and Disaster Management Associate in Applied Science degree. The College of DuPage, another Illinois suburban community college, opened a \$25 million Homeland Security Education Center, which includes a 9-11 relic and memorial. An estimated 7,600 students a year will participate in the center's wide range of incident response training classes (Sotonoff, 2013). At least nine different Illinois

community colleges offer degrees or certificates in emergency management. Others offer two-year degrees in law enforcement and fire science.

Illinois has nine public universities with 12 campuses. Western Illinois University began offering a bachelor of science degree in Emergency Management in 2007. It also offers a master of science degree in Law Enforcement and Justice Administration. The University of Illinois-Urbana, University of Illinois-Chicago, Southern Illinois University, Governors State University, and Northern Illinois University offer master of science degrees in Public Administration. The University of Illinois-Springfield offers both a masters and PhD in Public Administration.

Private colleges and universities in Illinois also offer emergency management related degree programs. Blackburn College in Carlinville, Augustana College in Rock Island, and Lewis University in Romeoville offer a bachelor of science in Public Administration. Northwestern University in Evanston and DePaul University in Chicago offer master of science degrees in Public Administration.

Degree programs in emergency management are offered in other states. Institutions such as American Public University (APU) and its sister school American Military University (AMU) offer online degree programs in Emergency and Disaster Management at the bachelor and master levels as well as certificates.

Other Education Sources

Training and different types of certification in emergency management can be obtained through other institutions in Illinois. The Illinois Emergency Management Agency (IEMA) conducts and hosts courses and programs. Though not normally open to the general public, these programs are many times available to sponsored volunteers of the state's various emergency

management organizations. Programs include the Illinois Professional Development Series (PDS) and the Illinois Professional Emergency Manager (IPEM) (“Training & Exercises.” 2014).

Online emergency management related courses are offered by the Federal Emergency Management Agency (FEMA) as part of their independent study program (ISP) through the Emergency Management Institute (EMI) (“Independent Study Program,” 2014). Continuing Education Units (CEUs) and college credit can be obtained with successful completion of many of these online courses.

Other courses, training, and experience can also be obtained locally through organizations such as the American Red Cross, The Salvation Army, and faith-based organizations.

Data Collection and Analysis

The research conducted for this issue is a meta-analysis. Information was assembled from a number of state and federal sources in addition to public and private institutions and associations. An important note when reviewing data of emergency management occupations at the federal and state level is that beginning with the 2010 Standard Occupational Classification (SOC), the detailed occupation for emergency management was changed to a new code and occupation title:

Emergency Management Directors (11-9161) moved into major group 11-0000

Management Occupations from major group 13-0000 Business and Financial Operations

Occupations, where it was previously Emergency Management Specialists (13-1061)

(“2010 SOC User Guide,” 2010).

The current description for this classification changed slightly from the previous description. “Coordinate disaster response...” was replaced with “Plan and direct disaster response...” The full description is:

Emergency Management Directors (11-9161)

Plan and direct disaster response or crisis management activities, provide disaster preparedness training, and prepare emergency plans and procedures for natural (e.g., hurricanes, floods, earthquakes), wartime, or technological (e.g., nuclear power plant emergencies or hazardous materials spills) disasters or hostage situations (“Occupational employment and wages, May 2012,” 2013).

Additional information and insight to this topic is from the author, who is an emergency management professional with over 20 years’ experience, whose background and experience started in the military and law enforcement before entering the emergency management field.

Over 30 different sources were reviewed. Exclusion criteria included programs not directly related to emergency management, historical references not pertinent to the topic at hand, and current articles written after 2011 that are still referencing 2009 employment outlook statistics for emergency management occupations.

Strategies to Solve the Issue

After reviewing the existing data, it may be difficult to propose and justify creating secondary school level CTE opportunities for emergency management, at least in the state of Illinois. The research conducted did not reveal any active secondary school level emergency management CTE type programs in Illinois and it appears that the formal CTE programs start at the post-secondary level. So the question to ask is how can we get students interested in, or exposed to, emergency management while in secondary school? In addition to formal school

programs, or lack thereof, the research revealed two programs aimed at high school level students in the area of emergency management. A youth disaster preparedness education resources catalogue was also discovered.

Teen CERT

Teen Community Emergency Response Team (CERT) “teaches you readiness and response skills. Hands-on practice and realistic exercises prepare you for the unexpected in your community. Newly learned leadership skills empower you to safely respond to an emergency and assist victims without endangering yourself or others. You'll be equipped with skills that last a lifetime” (“Teen Community Emergency Response Team,” 2013). Teen CERT is the same CERT course material currently taught to adult students (20-23 hours); however the instructor's guide includes teaching methodologies directed for teenage students.

Teen CERT is promoted at individual high schools that in theory could create their own CERT teams to use in a case of a disaster happening in or around the school. It also allows students to receive "public service" credit towards graduation. In additions to preparedness, this would give the teens a taste of the emergency management field. The Teen CERT training would be conducted by the same local instructors who teach the adult CERT course.

Leadership in Emergency Management Program

This FEMA three hour (minimum) program has been implemented in summer camps and gives ninth to twelfth graders the experience of role playing incident command positions in disaster scenarios based on real events. It was piloted at Massachusetts Maritime Academy's Sea, Science and Leadership camp in 2009 and 2010, and the program is currently still in development (High School Camp Curriculum,” 2011). Additional lessons are available for up to

three days with no additional cost. According to the Leadership in Emergency Management Instructor's Guide (2011):

High school students are in several critically powerful positions in their lives. First, they are at a stage where they still have impact on their adult parents' awareness of general emergency preparedness. Secondly, they are at a pivotal age in which the life skills they acquire now can dictate the habits they form as independent adults when they move on to higher education, living on their own, and joining the general workforce.

This program, or one similar to it, could be conducted as an after-school event if the summer camp format would not draw as much participation as desired.

Youth Disaster Preparedness Education Resources

FEMA's Catalogue of Youth Disaster Preparedness Education Resources (2012) was created to assist individuals with locating preparedness resources that are tailored to youth. These resources are not only from FEMA, but include the American Red Cross, the National Crime Prevention Council, several states, and the New Zealand Ministry of Civil Defense to name a few.

Figure 4 is an example of a resource spreadsheet found in the catalogue. It identifies the various resources, what grade-level it is directed to, and the various products that may be found (e.g., games, books, audio/video clips).

Resource	Link	Elementary	Middle	High School	College	Games, Stories, Coloring Book, Cards, Songs, Cartoons, Posters	Photos, Videos/DVDs, Audio Clips	Checklists	Materials for Families	Materials for Educators (e.g., Classroom Materials, Lesson Plans, Quizzes, Certificates, Glossaries)	Camps, Workshops	Volunteer, Service Learning	Links to Other Resources	Provided	Option to Submit Materials (e.g., art or Questions)
911 for Kids	http://www.911forkids.com	X	X	X	X	X	X			X				X	
Alabama: Be Ready Camp	http://www.bereadycamp.org		X				X				X				
Always Ready Kids (ARK)	http://www.alwaysreadykids.org/Home.html			X	X		X	X			X	X			
American Academy of Pediatrics: Family Readiness Kit, 2nd Edition	http://www2.aap.org/family/frk/frkit.htm							X	X						
American College of Emergency Physicians: Disaster Hero	www.disasterhero.com	X	X	X		X								X	
American Public Health Association's Get Ready Campaign	http://www.getreadyforflu.org/newsite.htm	X	X	X	X	X	X	X	X	X				X	X
American Red Cross and FEMA: Disaster Preparedness Coloring Book	http://www.fema.gov/library/viewRecord.do?id=1640								X						
American Red Cross and FEMA: Helping Children Cope with Disaster	http://www.fema.gov/pdf/library/children.pdf								X	X					
American Red Cross and FEMA: Ready...Set...Prepare Activity Book (1)	http://books.google.com/books?id=oGs7i5pSK5QC&printsec=frontcover&source=gbs_ge_summary_r&hl=en&output=reader#v=onepage&q&f=false					X			X						
American Red Cross and FEMA: Ready...Set...Prepare Activity Book (2)	http://books.google.com/books?id=oGs7i5pSK5QC&printsec=frontcover&source=gbs_ge_summary_r&hl=en&output=reader#v=onepage&q&f=false														

3 Resource Spreadsheet
Catalogue of Youth Disaster Preparedness Education Resources

Figure 4. Example Resource Spreadsheet from Catalogue of Youth Disaster Preparedness Education Resources

Proposal

These programs could be proposed to high schools in coordination with their local emergency management agency in Illinois. An example is that as a result of the research for this paper, a proposal for Teen CERT has been presented to the Emergency Management Coordinator of the Palatine Emergency Management Agency (PEMA) for the two local high schools within the village. This will serve several purposes: Overall preparedness for citizens of the village, the possibility of attracting a younger pool of trained and certified volunteers for PEMA and the community, and an introduction to the field of emergency management.

Conclusions and Further Issues for Consideration

In Illinois, the career and technical education pathway to the career field of emergency management appears to formally start at the post-secondary level. The research conducted was a meta-analysis, and it did not reveal any formal secondary school or program for the emergency management field. Given Illinois' slower than average predicted employment growth rate in emergency management of 5%, and the current political and budgetary crises, chances of proposing, developing, approving and implementing secondary school level CTE programs are slim.

However small programs at the local levels, developed and/or conducted by the local emergency management agencies, could have a positive effect both for the community and getting students interested in the emergency management field. Unfortunately in the past it took major disastrous events such as the terrorist event of 9/11 and Hurricane Katrina to get various agencies and programs designed/created and funded.

References

- Chicago Police and Firefighter Training Academy. (2014). Program overview. Retrieved from <http://www.cpfta.com/overview>.
- Discover Policing. (2014). Basic Requirements. *discoverpolicing.org*. Retrieved from http://discoverpolicing.org/what_does_take/?fa=requirements.
- Federal Emergency Management Agency. (2011). High school camp curriculum: Leadership in emergency management course. Retrieved from http://www.fema.gov/pdf/privatesector/fema_for_camps_highschool_one_pager.pdf.

Federal Emergency Management Agency. (2011). Leadership in emergency management instructor's guide. Retrieved from

http://www.fema.gov/pdf/privatesector/high_school_em_instructor_guide.pdf.

Federal Emergency Management Agency. (2012). Catalogue of youth disaster preparedness education resources. Retrieved from http://www.fema.gov/media-library-data/20130726-1903-25045-8302/updated_catalogue_youthdisaster_final_508_pdf.pdf.

Federal Emergency Management Agency. (2013). Teen community emergency response team. Retrieved from <http://www.fema.gov/community-emergency-response-teams/teen-community-emergency-response-team>.

Federal Emergency Management Agency. (2014). Independent study program (ISP). Retrieved from <http://training.fema.gov/IS/crslist.aspx>.

Illinois Career Information System. (2014). Emergency management specialists. Retrieved from <https://ilcis.intocareers.org/info2.aspx?FileID=Occ&FileNum=100520&TopicNum=0>.

Illinois Community College Board. (2011). Law, public safety, corrections and security fan cluster model. Retrieved from <http://64.107.108.147/programsofstudy/docs/Law%20Safety%20Fan%20Brochure.pdf> ,

Illinois Emergency Management Agency. (2014). Training & exercises. Retrieved from <https://www.state.il.us/iema/training/training.asp>.

Lacey, T. A., & Wright, B. (2009). Occupational employment projections to 2018. *Monthly Labor Review* Nov 2009, Vol. 132 Issue 11, p82-123 Retrieved from <http://www.bls.gov/opub/mlr/2009/11/art5full.pdf>.

Lucas, L. (2013) Career and technical education: Illinois' pathway to success. Illinois Department of Employment Security, Economic Information and Analysis Division,

September 2013. Retrieved from <http://www.ides.illinois.gov/Custom/Library/publications/ILMR/CTE.pdf>.

National Association of State Directors of Career Technical Education Consortium. (2014). Law, public safety, corrections and security. *Law Enforcement Services*. Retrieved from http://www.careertech.org/file_download/49fdb980-7aab-4f31-a201-bca12b947d5b.

Pittman, E. (2011). How emergency management is changing (for the better). *Emergency Management Magazine*. Retrieved from <http://www.emergencymgmt.com/training/How-Emergency-Management-Is-Changing.html>.

Scott, J., & Sarkees-Wircenski, M. (2011). Overview of career and technical education. (4th ed.). United States: American Technical publishers.

Sotonoff, J. (2013, June 28). Disaster and emergency management field growing. *The Daily Herald*. Retrieved from <https://www.dailyherald.com/article/20130628/news/706289946/>

The Urban Assembly School for Emergency Management. (2014). UASEM home. Retrieved from <http://uasem.org/>.

U.S. Department of Labor, Bureau of Labor Statistics. (2010). 2010 SOC User guide: What's new in the 2010 SOC. *Standard Occupational Classification Policy Committee (SOCPC)*. Retrieved from http://www.bls.gov/soc/soc_2010_whats_new.pdf.

U.S. Department of Labor, Bureau of Labor Statistics. (2013). Occupational employment and wages, May 2012: 11-9161 Emergency management directors. *Occupational Employment Statistics*. Retrieved from <http://www.bls.gov/oes/current/oes119161.htm>.

U.S. Department of Labor, Bureau of Labor Statistics. (2014). Emergency management directors. *Occupational Outlook Handbook, 2014-15 Edition*. Retrieved from <http://www.bls.gov/ooh/management/emergency-management-directors.htm>.

Webster, H. (2010). Best careers: Emergency management specialist. *U.S. News and World*

Report. Retrieved from <http://money.usnews.com/money/careers/articles/2010/12/06/best-jobs-2011-emergency-management-specialist>.