Internationally, education is the fastest growing industry in general, and in emergency management in particular. Education is a building block of professions, and the professionalization of emergency management has encouraged the expansion of academic and training programs in the United States and other nations. As a consequence, there is an international shortage of qualified faculty, more specifically there is a shortage of faculty with doctoral degrees. There is also a shortage of people with bachelor’s and master’s degrees in emergency management to fill positions in state, tribal, local, and national level positions, as well as private and nonprofit sector positions. In fact, the US Department of Labor’s Bureau of Labor Statistics has indicated that emergency manage is among the top 20 fastest growing professions in the United States, and there are also indications that the same is true elsewhere in the world.

The shortages of qualified emergency management faculty and prospective workers in the field are closely related. The increasing demand for qualified personnel in the United States has encouraged the development of emergency management education and training programs. Federal Emergency Management Agency’s (FEMA) Emergency Management Institute (EMI) maintains a roster of emergency management, Homeland Security, humanitarian assistance, and related programs and now estimates the number to be over 300 with almost as many institutions offering coursework, certificates, and/or degrees. Now, the proliferation of education programs warrants efforts to establish educational standards and to accredit programs. In this article, we examine the efforts by FEMA and other organizations to expand the research community, particularly in the social sciences, and to encourage and support the development of academic programs in emergency management for practitioners, including practitioners who will also teach in academic programs, and for research faculty for upper division undergraduate and graduate programs.

The expansion of emergency management faculty, the social science disaster research community, academic programs, and emergency management student bodies has been encouraged by the professionalization of emergency management itself, efforts by FEMA’s EMI, the National Science Foundation (NSF), the International Association of Emergency Managers (IAEM), and organizations such as the William Averette Anderson Fund (BAF or Bill Anderson Fund). The goal of this article is to examine the early history of those efforts to provide context for discussions of the current roles of higher education in emergency management. It begins with the expansion of the social science disaster research community in 1984, follows the early efforts by FEMA’s EMI in the 1990s to encourage and support the development of academic programs, and ends with the efforts of the International Association of Emergency Management to professionalize the field and the BAF to expand minority representation in the disaster research community and in the profession of emergency management. That context also includes the Disaster Research Center (DRC) at the University of Delaware, the Natural Hazards Center at the University of Colorado Boulder, and the growing number of disaster research centers that
support disaster scholars and students to assure that research continues and increase the likelihood that professional emergency managers will benefit from that research.

THE EXPANSION OF THE SOCIAL SCIENCE RESEARCH COMMUNITY

In 1984, the FEMA and the National Association of Schools of Public Affairs and Administration (NASPAA, which is now the Network of Schools of Public Policy, Affairs, and Administration) entered into an agreement to develop a community of disaster scholars within NASPAA’s member institutions and programs. Dean Charles Bonser at Indiana University’s School of Public and Environmental Affairs organized the program with the help of Dr. William Petak at the University of Southern California, who is an expert on mitigating seismic risk. An initial group of approximately 30 scholars was invited to the National Emergency Training Center in Emmitsburg, Maryland, to learn about emergency management and FEMA’s operations and to gain some understanding of the state of social science disaster research. The group included scholars from public administration, urban and regional planning, political science, public policy, and related disciplines. Some already were working in disaster-related areas, such as earthquake policies (Louise Comfort), local government and natural hazards (Beverly Cigler), the role of the Nuclear Regulatory Agency in managing risk (Richard Sylves), dealing with terrorist attacks (William Waugh), and land-use planning related to environmental hazards (David Godschalk and Jack Kartez). The group spent 2 weeks in Emmitsburg after an orientation at FEMA headquarters in Washington, DC.

The program included workshops, discussions, lectures, and a field trip to the Three Mile Island nuclear facility. The instructors were FEMA personnel and a number of prominent social science disaster researchers, primarily sociologists with connections to the DRC at Ohio State University. (The DRC was established at Ohio State University in 1963 and moved to the University of Delaware in 1985.) The fellows were required to produce research reports to submit to FEMA at the conclusion of the workshop. The FEMA/NASPAA agreement included other efforts, as well, including a special issue of Public Administration Review that was published in 1985 and student internships at the training center. The intent was for this to be the first of several workshops to expand the existing research community in public policy and administration, but no other workshops followed.1

From the initial group of FEMA/NASPAA fellows, some never developed disaster- or emergency management-related research programs and a few focused on disaster research briefly or integrated what they learned in Emmitsburg into their own research agendas. Roughly, a fourth of the class became the core of the public policy and administration disaster research community. Between 1984 and 2012, they produced 22 books, over 120 peer-reviewed articles, and 78 book chapters. They directed approximately 17 doctoral dissertations related to hazards and disasters and received grant funding of approximately $7.8 million. Members of the group worked with practitioner organizations, including the Certified Emergency Manager (CEM) and Emergency Management Accreditation Program Commissions and have testified before congressional committees and advised members of Congress on emergency management issues. They also became the core of the American Society for Public Administration’s Section on Emergency Management (now the Section on Emergency and Crisis Management). More books and articles and doctoral dissertations have been added since 2012 and more are in progress. Some of the fellows did develop and teach emergency management courses and create certificate and degree programs. Waugh, for example, began teaching emergency management as a special topic course for MPA students in the late 1980s and developed a certificate program and MPA, MPH, MPP, and PhD specializations in the early 1990s. As might be expected after almost 35 years, the number of the original fellows still actively engaged in disaster research, teaching, and consulting is getting small.

It is important to reiterate that a social science disaster research community existed prior to the
FEMA/NASPAA workshop and that community coalesced around the DRC at Ohio State University and the Natural Hazards Center—and later the centers at Texas A&M University, University of South Carolina, and elsewhere. The workshop did serve to bring more scholars into the broader community. Despite the failure to build upon the initial faculty workshop in 1984, the NSF initiated a program to develop the “next generation” of disaster researchers and the BAF is increasing the diversity of the disaster research community by providing mentorship and other support for minority students who want to become emergency managers and/or disaster researchers.

THE EDUCATIONAL COMMUNITY

In the early 1990s, FEMA’s EMI offered training to about 5,000 practitioners every year but there were another 5,000 applicants who were turned down for lack of space, faculty, and funding. The concept of partnering with institutions of higher education to assist with this educational and training challenge was born with the launch of the FEMA Higher Education Project in 1994 by Kay Goss, Associate FEMA Director in charge of National Preparedness, Training, and Exercises (a Presidential appointee, US Senate confirmed), and John McKay, CEM, Director of Training (a Senior Executive Service career employee). The Chair of the EMI Board of Visitors at the time was Dr. Dennis Mileti, then the Director of the National Hazards Center at the University of Colorado at Boulder.

As technology progressed rapidly during the 1990s, online courses were developed and made available, expanding potential opportunities for training, especially at the state and local levels. Eventually, this online training was offered to millions around the world through FEMA’s Independent Study Course Program.

Goss had started her career as Assistant Professor in Political Science and Public Administration at the University of Arkansas for 4 years and then as Senior Assistant to the Governor of Arkansas for 12 years, she had coordinated the state agencies’ programs in emergency management, emergency medical services, fire service, and public safety. During this time, she had worked closely with the academic community in Arkansas to get a broader array of training and higher education courses, in a hopeful effort to eventually have degrees or at least areas of concentration offered, beyond the Arkansas fire Academy and the State Office of Emergency Services.

At the same time, higher education in emergency management was rare across the nation; there were only two or three higher education degree programs in the country, notably resident programs at the University of North Texas (UNT) and correspondence programs at Thomas Edison State College in Trenton, New Jersey and California State University, Long Beach.

The UNT was the pioneer institution having a resident bachelor’s program. In 2018, their thirty-fifth year, they had 1,502 graduates and were granted autonomous department status with Dr. Gary Webb as the Department chair. UNT is located in Denton, Texas, which is also the home base for FEMA Region 6. Colonel Robert Reed was the director of the UNT program when the FEMA Higher Education Project was launched and he was appointed to the EMI Board of Visitors in 1995 by Goss, where he generously assisted in the framing of the FEMA efforts to expand higher education in emergency management to the states. Other emergency management professors joining in that effort included Dennis Mileti, Tom Drabek, William Waugh, Richard Sylves, and others.

Soon thereafter, Goss and McKay selected Dr. B. Wayne Blanchard, CEM, to manage the Higher Education Project. Blanchard has a PhD in International Relations and, until that point, had served mostly in the Civil Defense area of FEMA and had just recently moved to the EMI staff in Emmitsburg, Maryland.

Blanchard initiated several processes to keep interested academic and practitioner stakeholders informed and to move the discipline forward—regular weekly reports on news, activities, and technical assistance to institutions establishing programs, as well as a lexicon with terms and definitions, bibliographic information, the 50 most recommended books for graduate students, syllabi and course development.
information, think pieces to encourage discussions, and college lists by degrees and states. The initial goal was to encourage development of degree programs in every state by 2001. Over the years, until his retirement in 2010, Blanchard supervised the development of 22 college courses. Also, many of the courses offered throughout the country were developed locally, often with his guidance and facilitation, and shared on the FEMA Higher Education webpage.

In 1997, when it became clear that FEMA needed to facilitate a closer relationship between professors developing courses under contract to FEMA and professors delivering those courses, FEMA made the decision to host an annual conference to bring together higher education officials offering degrees and certificates in emergency management, as well as professors developing courses. Soon thereafter, practitioner leaders were also invited. The FEMA Higher Education Program Conference began with about 80 academics and practitioners in attendance and has grown each year. This year will be the 20th Annual Higher Education Symposium. It has drawn as many as 400 participants, including professors from seven countries. There are now over 600 higher education programs offering degrees or certificates in Emergency Management and another 100 programs are under consideration or development.

THE NSF, THE IAEM, AND THE WILLIAM AVERETTE ANDERSON FUND

Along with the FEMA efforts to build a research community and develop academic programs, the NSF, the IAEM, the William Anderson Fund, and other organizations have contributed to growth of research and education in emergency management. Bill Anderson had issued a call in 1990 in the Natural Hazards Observer for a program to develop the “next generation” of researchers and the NSF funded the Enabling the Next Generation of Hazards and Disasters Researchers program in the mid-1990s. Thirteen “Enabling Fellows” with their mentors met at Woods Hole, Massachusetts, in the summer of 1996 and a second group of 14 was mentored during 2002-2004. By late 2007, the 27 fellows had written over 42 peer-reviewed articles, three books, and 22 book chapters. They had also been awarded 18 grants totaling more than $3.2 million.

The NSF has also provided funding for the development of undergraduate research. The Research Experiences for Undergraduates (REU) program supports the active engagement of undergraduates in research in a variety of disciplines and on a variety of topics. Institutions propose projects on specific research topics and funds are awarded to those whose proposals are accepted. In the recent past, the NSF, through the REU program, has funded projects to develop undergraduate interests and skills in a variety of scientific areas, including community sustainability and resilience and hazards and disaster research. REU groups engaged in disaster research have been invited to the Natural Hazards Workshop and other research conferences. The DRC had an REU program a decade ago. Currently, NSF is funding groups work on Geographic Information Systems and Disaster Resilience Spatial Thinking (Rochester Institute of Technology) and Earthquake Information Technology (University of Southern California).

As student participation, particularly undergraduate research participation, has become a focus of the NSF and other funding agencies, the Natural Hazards Center at the University of Colorado Boulder, the DRC at the University of Delaware, the Hazard Reduction and Recovery Center at Texas A&M University, the Coastal Resilience Center of Excellence at the University of North Carolina at Chapel Hill, the Hazards Research Laboratory at the University of South Carolina, the Institute of Crisis, Disaster, and Risk Management at George Washington University, the Center for Public Health and Disasters at the University of California-Los Angeles, and other research centers have been very active in their efforts to involve students in research projects and to introduce them to the larger disaster research and practitioner communities through REU and other programs. For example, the number of students attending and presenting their research at the annual Natural Hazards Workshop has grown exponentially over the past two decades.

There has also been a series of workshops to address educational issues, including the workshop on “Designing Educational Opportunities for the

The BAF was created in memory of Bill Anderson, a distinguished disaster scholar at Arizona State University and a long career supporting disaster research at NSF, the World Bank, and the National Research Council of The National Academies. Bill had been a graduate assistant at the DRC at The Ohio State University. The fund helps BAF fellows attend national and international conferences and provides mentoring and financial support to assist them in their graduate studies. As of the spring of 2018, 11 fellows completed their studies. Five earned PhDs and six earned master’s degrees. Four have academic appointments and the rest are practitioners.

Dr. DeeDee Bennett at the University of Nebraska Omaha has received funding from NSF for a pilot project to increase Minority Scholars from Under-Represented Groups in Engineering and Social Sciences Capacity in Disasters (SURGE). The program “is focused on 2 grand challenges from disaster literature, (1) natural disasters disproportionately affect marginalized populations including the poor and racial and ethnic minorities and (2) there is longstanding underrepresentation of racial and ethnic minorities in scholarship and practice related to disasters” (D. Bennett, private communication, April 5, 2018). The project is taking an interdisciplinary approach involving social scientists and engineers to address the human, infrastructure, and environmental issues resulting from disaster. The “SURGE goals are to increase and retain the number of minority STEM graduates interested in hazards and disasters research, foster interdisciplinary research, and to connect minority STEM graduates to real-world problems following disasters.” Students from STEM and social science fields will participate in workshops and be mentored by scholars and practitioners (see www.surgedisasters.com). The project is part of NSF’s “10 Big Ideas for Future NSF Investments” initiative—one of 70 pilots and the only one focused on disasters. The goal is to promote inclusion and diversity.

CONCLUSIONS

The investments in the social science disaster research community and emergency management education for disaster researchers and professional emergency managers by FEMA, educational institutions, research centers, and other organizations have helped increase the number of doctoral-level faculty and the availability of educational programs for professionals in the field. The research community is growing and interdisciplinary research is becoming more common. Advantage is being taken of NSF’s resources to train faculty and students. The IAEM is also involving students in its programs and providing scholarship support. The decision over a decade ago to require a college degree in order to apply for the CEM credential, the top credential for professional emergency managers, has made professional education a priority for its members. Encouraging more students to become involved in disaster research and/or the practice of emergency management promises to address the shortage of faculty and to increase the professionalization of emergency management. EMI continues to support the development of academic programs and to encourage faculty development. The “Next Generation” of disaster researchers and emergency managers is taking form and it will be more diverse and better educated than its predecessors.

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