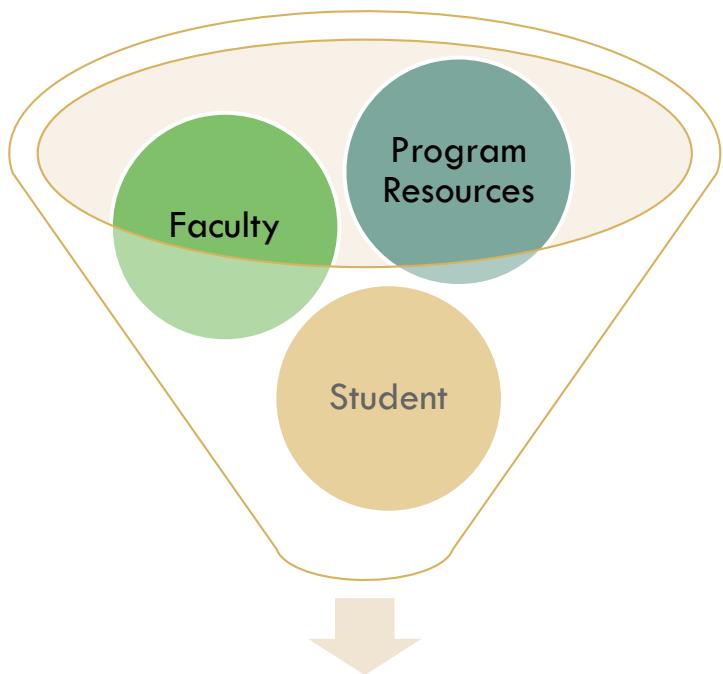


2019 FEMA HIGHER EDUCATION STATE OF THE COMMUNITY: ANNUAL SURVEY AND REPORT



**Annual Survey of Emergency
Management Higher Education**

June 1, 2019

Report for the FEMA Higher Education
program by DeeDee Bennett, Ph.D.

2019 FEMA Higher Education State of the Community: Annual Survey and Report

REPORT FOR THE FEMA HIGHER EDUCATION PROGRAM BY DEEDEE BENNETT, PH.D.

EXECUTIVE SUMMARY

The FEMA Higher Education Program Survey is annually conducted to collect and provide consistent data related to the faculty, curriculum, and students of emergency management programs. The following key questions guide the survey:

- 1) What is the focus of the emergency management (EM) programs?
- 2) Who are the students that benefit from EM programs?
- 3) What type of support is accessible to EM programs?
- 4) Which FEMA Higher Ed services do the EM programs use?

EM Programs

Based on the responses from 112 U.S. based institutions and six foreign institutions, this report indicates most programs have an overall focus on preparing students for work in the public sector. The programs are housed in various departments, schools, and colleges on campus, indicating a range of disciplinary interests. While responding programs have a variety of degree, certificate, and concentration offerings, most of the programs offer bachelor's degrees. Furthermore, the EM programs are increasingly providing the majority of their curriculum in an online format.

EM Students

The data in this report indicates that over 53,000 students have graduated with an emergency management degree. More than 50% of the programs have seen an increase in enrollment and graduation over the past three years. Over 60% expect an increase in enrollment and graduation over the next three years. The data also indicates an increase in diversity, as well. However, some of the diverse students have decreased since 2018, such as the percentage of women, international students, and Black/African American students.

Program Support

Responding programs overwhelmingly rely on part-time faculty. Over 30% of faculty (of each type) have a practitioner background. While external funding has generally been inaccessible for most problems, library resources, administrative support, local EM, state EM, and national EM support have been broadly accessible. For the programs anticipating changes, most expect an increase in student enrollment, new faculty positions, and restructuring of the program, department, or school. Most of the programs use the number of graduates as a metric of success.

FEMA Resources

All of the respondents were identified from the FEMA Higher Education database as having an emergency management program and using FEMA Higher Education resources. Most of the programs use the independent study courses, journal articles, and the principles of emergency management document found on the FEMA Higher Education website. However, nearly 50% of program respondents were not aware of the FEMA Higher Education webinars. Similarly, many of the program respondents have not participated in or not aware of the Special Interest Groups or Focus Groups.

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Further analysis discussed in this report, highlights the comparison of the results over this year and the past two years, as well as specific analysis separated by undergraduate, graduate, and international programs.

ACKNOWLEDGMENTS

This report would not be possible without the efforts of the FEMA Emergency Management Higher Education Program. Specifically, the continued support of Wendy Walsh, Barbara Johnson, and Danielle Green was instrumental in reaching active emergency management programs. Additionally, a special thanks to Dr. Carol Cwiak for the use of her initial survey instrument and to all of the institutional representatives who took the time to participate in this survey. Special thanks to Thora Knight, graduate assistant at University at Albany.

CITATION

Bennett, DeeDee. (June 2019). “2019 FEMA Higher Education State of the Community: Annual Survey and Report.” Report for FEMA Higher Education Program. Emmitsburg, MD.

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OVERVIEW

The FEMA Higher Education State of the Community Annual Survey and Report is one of the few that provides consistent data related to the faculty, curriculum, and students of emergency management programs. Annually, the FEMA Higher Education Program requests a state of the community, status of emergency management-related educational programs at institutes of higher learning (IHE). This year, 2019, the effort was contracted to Dr. DeeDee Bennett at the University at Albany. Dr. Bennett was also contracted in 2017 and 2018 to conduct this survey. The survey was initiated in 2004 by former FEMA Higher Education Program Director, Dr. Wayne Blanchard, and initially led by Dr. Henry Fischer (Cwiak, 2016). The survey has been conducted every year, except for 2005, 2006, and 2013.

The purpose of this project was to assess the usefulness of the products and services provided by the FEMA Higher Education program (FEMA Higher Ed) and to collect data on the current status of emergency management programs. The sample of programs contacted was identified from the FEMA Higher Ed database. The FEMA Higher Ed database contained 312 institutions with emergency management-related programs. Using these 312 schools as the sample size, a survey was sent to answer four basic assessment questions: (1) What is the focus of the EM program? (2) Who are the students that benefit from this program? (3) What type of support is accessible to the program? (4) Which FEMA Higher Ed services do the EM programs use? This report is based on the responses from 118 participating institutions, listed in Appendix I.

Table 1: Sample of survey respondents

Location	Institutional Database	Institutions Responding	Programs Represented	Response Rate
Within the U.S	295	112	152	38%
Not Within the U.S	17	6	7	35%
Totals	312	118	159	38%

METHODOLOGY

This project used a web-based survey administered online. Invitations to participate were sent via email. The study used a single-stage sampling technique in which the researcher used the FEMA Higher Ed database to invite all known emergency management higher education programs that had at one time used a product or service offered by FEMA (Cresswell, 2008; Dillman, Smyth, and Christian, 2014). All representatives listed as the point of contact for the emergency management programs were invited to participate in the online survey via email. The survey instrument used was modified from the previous survey administered in 2016 by Carol Cwiak at North Dakota State University, with permission (Cwiak, 2016). The applied instrument was modified to include specific questions related to program identification, student diversity, international programs, and detailed information about the products and services provided by FEMA Higher Ed program.

The invitation email was sent out on the same day the survey launched; April 1, 2019. Individuals who did not complete the survey were sent at least one reminder email; the poll closed on May 2, 2019. The

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total response rate was 37% with 118 of the 319 institutions represented. Figure 2 shows the number of respondents who participated in the survey over the 20-day window.

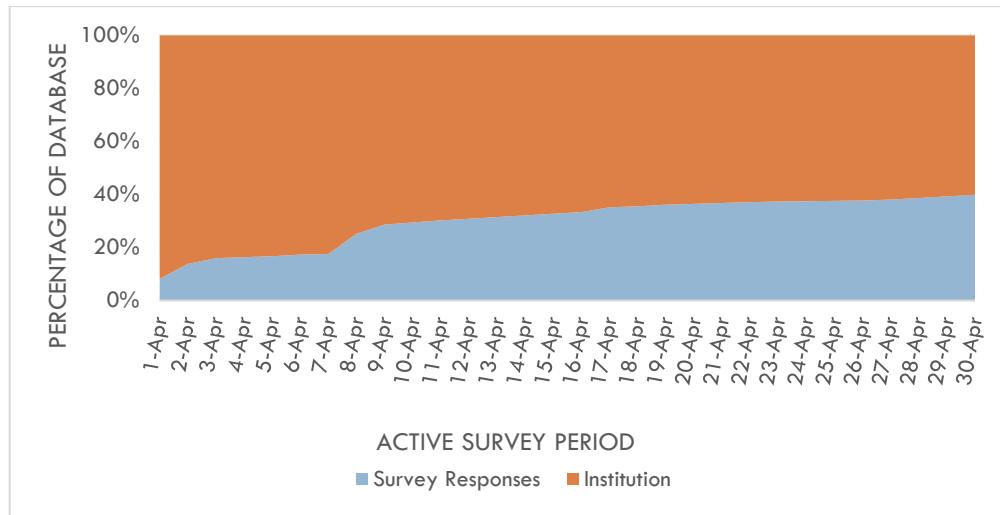


Figure 1: Survey responses over time.

Nearly 74% of respondents took 20 minutes or less complete the survey. Furthermore, none of the questions (except the first one consenting to the survey) required a response from every program. For example, only programs that indicated they offered associates degrees were asked following questions relating to the associate's degree curriculum. Therefore, for each section of this report, take note of the total number of program respondents, reported as "n," which may vary.

The survey instrument was administered at the University of Albany Qualtrics Research Platform. Answers to open-ended short-answer questions were rudimentarily coded by semantic content analysis, grouping the frequency of similar responses (such as services, curriculum) and any final qualifiers (positive or negative) to give an overview of respondent sentiment (Krippendorff, 2004).

The results are highlighted in the following sections related to the four-fold focus for all U.S. based programs; information about the program, the students, the faculty and institutional support, and the use of the FEMA Higher Ed products and services. Subsequent sections report the results from undergraduate, graduate, and international programs. Throughout the report, comparisons are made with the results from the 2017 and 2018 surveys.

PROGRAM

A total of 110 US-based institutional representatives responded to the survey, submitting information for nearly 150 programs. While each institute of higher education (IHE) contacted for this survey are known to offer emergency management curriculum and coursework, the program focus, name, and department location vary. This section of the report focuses on identifying information about all US-based IHEs responding to this survey and provides an overview of the types of emergency management programs

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offered nationwide. Figure 3 displays the corresponding schools and department in which the emergency management program resides.

Only the top ten departments are recorded in Figure 3, as well as the 'other' category. Though the annual respondents vary, each year majority of programs reside within Emergency Management departments. Not shown in Figure 3, in 2019, approximately 3% of programs reside in Emergency Management/Homeland Security departments, 3% in Technology-related departments, 1% in Business Management, 1% in Engineering, and 1% in Urban Planning. The 'other' category included a variety of departments, which didn't easily fit into one of the aforementioned such as Earth Science, Transportation Management, Online and Innovation Education, and International Studies.

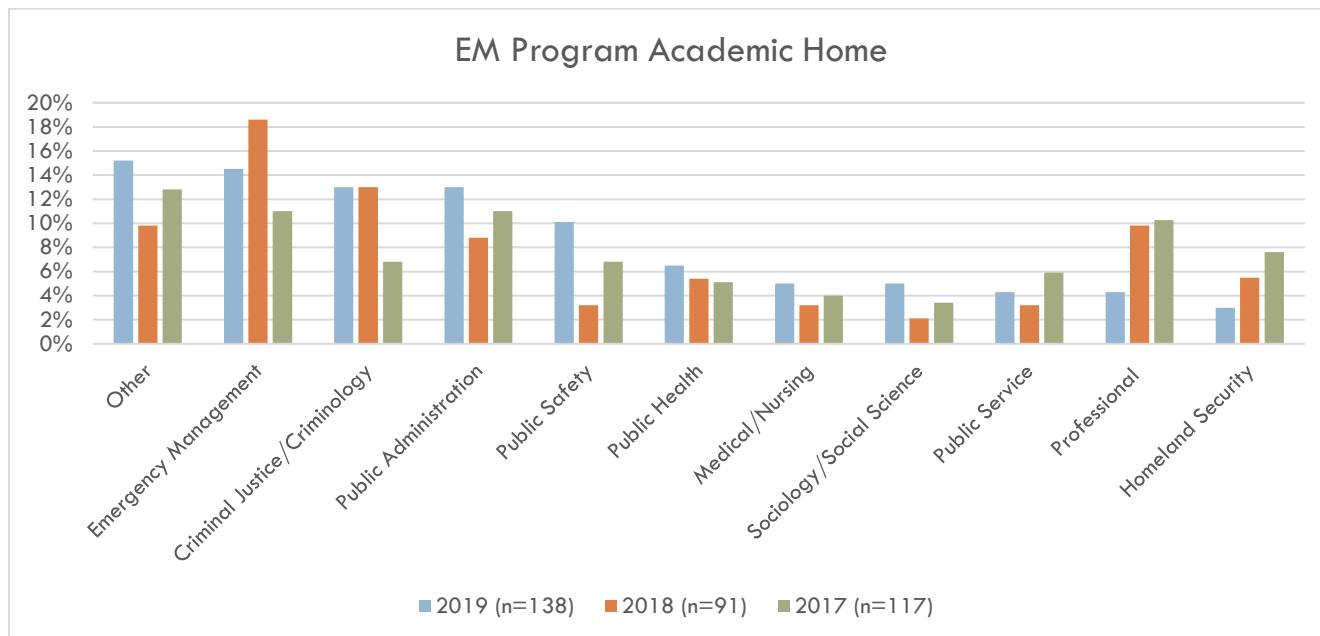


Figure 2: Percentage of emergency-management related program respondents by academic department.

Emergency management program representatives were also asked about their Classification of Instructional Programs (CIP) code(s) as developed by the U.S. Department of Education's National Center for Education Statistics (NCES). Table 1 identifies the responses, including typology title. Several respondents replied with more than one CIP code, (the count is 190 responses for this single question). Not only does this indicate most programs may be interdisciplinary, but it also reflects that many representatives may not be aware of the CIP code used to identify their program initially. In Table 1, the 'other' category reflects several respondents who indicated they were not aware of the CIP code and specific codes not mentioned in the multiple-choice answers, such as 26.0599 - Microbiological Sciences and Immunology, and 55 - Public Service.

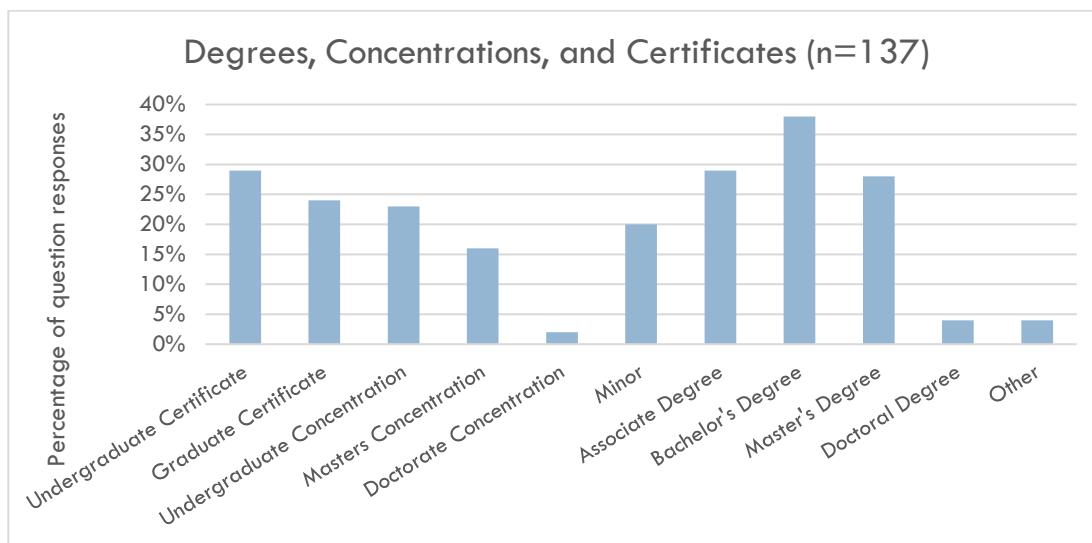
As shown, approximately 51% of respondents identify their program with the CIP Code 43.0302 Crisis/Emergency/Disaster Management. Using 118 as the total, nearly a third of respondents identify solely with Homeland Security, CIP code 43.0301 and almost a quarter of the programs identify more broadly with the CIP code for 43 Homeland Security, Law Enforcement, Firefighting, and related protective services. While those three CIP codes constitute the bulk of programs included in this survey, over 40% of the programs identify with other CIP code, as shown in Table 1.

Table 2: Corresponding percentage of survey respondents by CIP code and typology.

CIP Code and Typology Title	Percentage	n
43.0302 Crisis/Emergency/Disaster Management	31.58%	60
43.0301 Homeland Security	20.00%	38
43 Homeland Security, Law Enforcement, Firefighting, and related protective services	15.79%	30
Other	11.05%	21
44.X Public Administration and Social Service	4.74%	9
51.X Health Services/Allied Health/ Health Sciences, general	4.74%	9
30.999 Multi-Interdisciplinary studies, other	4.21%	8
34 Health-Related Knowledge and Skills	2.63%	5
24.0199 Liberal Arts and Sciences, General Studies and humanities, other	2.11%	4
45.X Social Sciences	1.58%	3
52.X Business/Commerce, general	1.05%	2
14.0804 Transportation and Highway Engineering	0.53%	1

DEGREE OFFERINGS

The broad dissemination of this report included IHEs with programs that offered a wide area of emergency management curricula. Out of 137 programs responding, the majority offer an emergency management bachelor's degree (38%). Majority of IHE offerings (degrees, certificates, or concentrations) in the emergency management space are focused at the undergraduate level (55%). However, several programs offer graduate degrees, certificates, and concentrations (34%). Figure 4 identifies the type of curriculum offered in each program by the percentage of responses. From this question, a total number of 136 offerings for degrees are represented.

**Figure 3:** Type of curriculum offered by responding programs as a percentage of responses.

The ‘other’ category included programs which incorporated coursework, which did not offer students a certificate, concentration, minor, or degree opportunity.

SECTOR FOCUS

Out of 138 programs, 45% considered the public sector as the primary orientation of their program. Nearly 27% considered private sector to be a central focus of their program, while less than 20% of programs also consider non-profit (NVOAD) and humanitarian (global EM) to be focal sectors of their emergency management program, 18%, and 11% respectively. Results shown in Figure 5 reflect programs with more than one primary orientation; thus, the total count of selections for this question is 282.

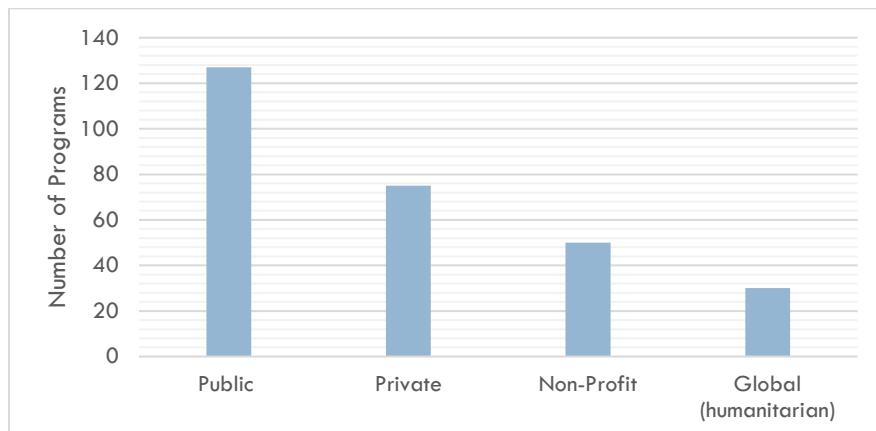


Figure 4: Primary sector focus of EM programs, respondents were able to select more than one.

CURRICULUM

Majority of the programs represented in this survey were not in the process of developing programs (72%). Of the programs indicating they are developing new programs (n=37): 24% were for new concentrations, certificate, or minors, 16% were for graduate programs, 13% were to include Cyber as part of the program focus, 11% were for undergraduate opportunities, and 5% were for online course offerings.

Majority of the programs (83%) offer coursework through some form of distant education (online). Approximately 43% of respondents (n=41) offer over three-fourths of the curriculum [76% - 100%] both in-person and online and over 67% offer majority of their curriculum online [76% - 100%]. Figure 6 shows the percentage of the curriculum offered in both modalities (n=96), as well as the percentage of the curriculum provided solely online (n=82).

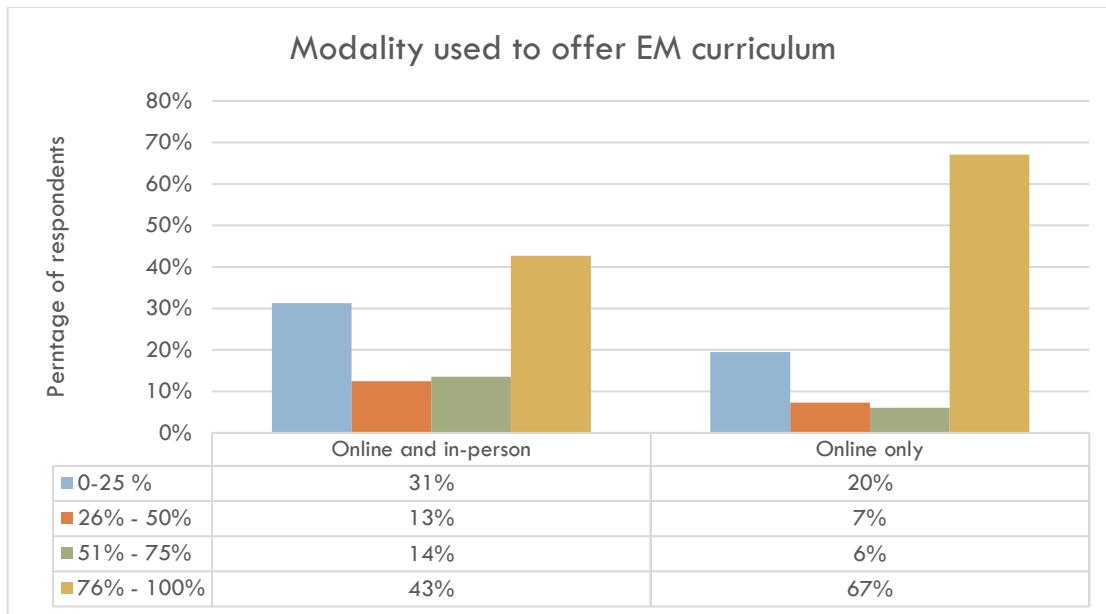


Figure 5: Chart of online and in-person course offerings by percentage.

STUDENTS

During the 2018-2019 academic year, respondents (n=99) estimated 2,934 have graduated from programs offering undergraduate or graduate degrees in emergency management. Assuming the FEMA Higher Education Program database represents 100% of the EM programs, extrapolation for a total number of students is based on 38% of U.S. based programs represented in the survey. From extrapolation, approximately 7,930 students graduated from an emergency management program during the academic year. Table 2 shows the number of graduates from emergency management programs over the last three years.

Table 3: Estimated total number of graduates from emergency management programs

Graduate Category	2017		2018		2019	
	raw numbers	extrapolated estimate	raw numbers	extrapolated estimate	raw numbers	extrapolated estimate
Number of EM graduates	2,364	6,389	2,956	9,755	2,934	7,930
Number of graduates since the inception of FEMA Higher Ed.	---	36,049	---	45,804	---	53,525

The previous report in 2018, estimated nearly 46,000 students graduated from emergency management programs since the inception of the FEMA Higher Education programs survey began (Bennett, 2018). With the addition of extrapolated estimated from this year, there have been over 53,000 graduates from EM programs.

ENROLLMENT

Enrollment in emergency management programs continues to rise. During the past three years, 61% of respondents (n=59) indicate that enrollment increased, while 24% (n=23) saw no change.

Approximately 15% of responding programs had a decrease in enrollment (n=14). The projections for the next three years indicated a slightly more optimistic pattern, with 65% of respondents (n=62) expecting an increase in enrollment and only 4% (n=4) projecting a decrease. Figure 7 is a stacked chart, which shows the student patterns for enrollment and graduation over the past three years and estimates for the next three years.

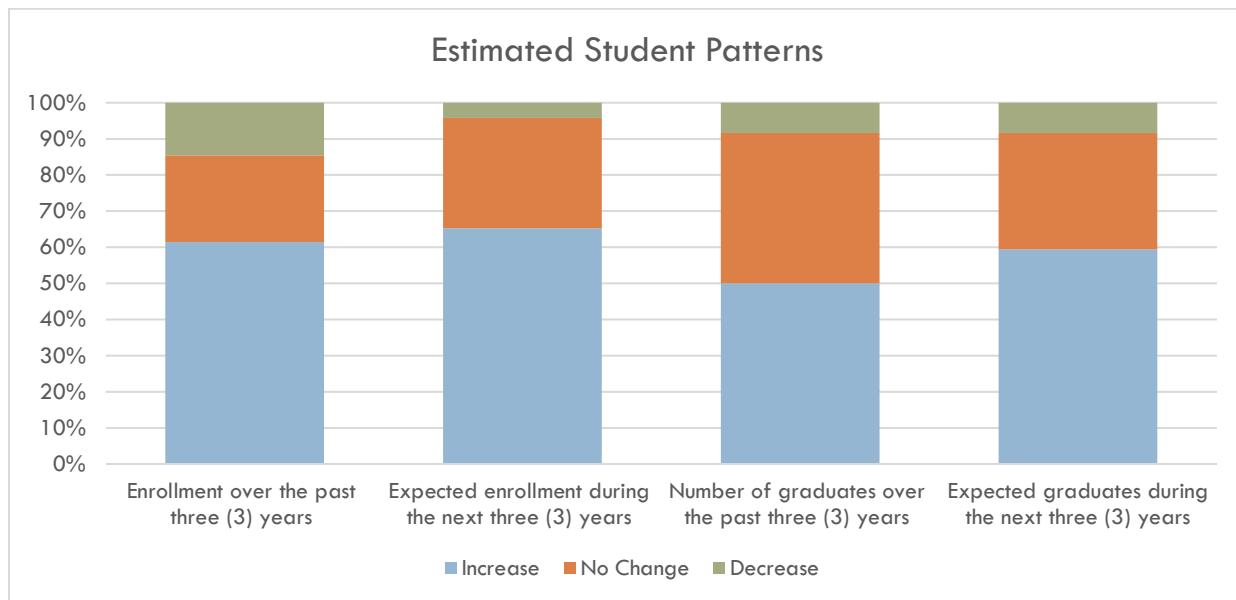


Figure 6: Stacked chart of estimate student patterns (enrollment and graduation) ± three years.

As shown, student graduation rates are not similar to enrollment. Respondents (50%, n=48) indicate there was an increase in graduating students over the past three years, while nearly 42% (n=40) saw no change in the number of graduating students. Very few programs had a decrease in student graduation rates (8%, n=8). Programs are slightly optimistic to expect an increase in student graduation in the next three years (59%, n=57). Nearly a third of respondents anticipate no change in the number of students graduating in the next three years (n=31).

POST GRADUATION

After graduation, students may go on to graduate school or secure employment. Keeping track of students' post-graduation can be quite challenging. However, approximately 45% of degree-granting emergency management programs (n=44) have tracked their students' employment after leaving their IHE. Of those programs able to keep in contact with their graduates, approximately 48% move into public sector EM-related positions. Nearly 32% of graduates move into private sector positions, while fewer graduates move into non-profit (NVOAD) or humanitarian (global) areas, 13% and 14% respectively.

DIVERSITY

Over the past couple of years, this survey has been used to track diversity in the student body of emergency management programs. Data from 2017 and 2018 indicate that the student body is becoming more diverse. This year approximately 44% of programs (n=41) indicated an observed increase in diversity among their students. Of note, nearly 42% of programs (n=39) indicated that their diversity has remained steady. Almost 13% of respondents were unable to monitor diversity, and only 1% say a decrease in diversity.

The term diversity, while overused, can have several different meanings, including gender, racial/ethnic minority populations, and nationality. In this survey, for the first time, programs were also asked to consider diverse groups of students, which also included non-traditional, first generation, and military.

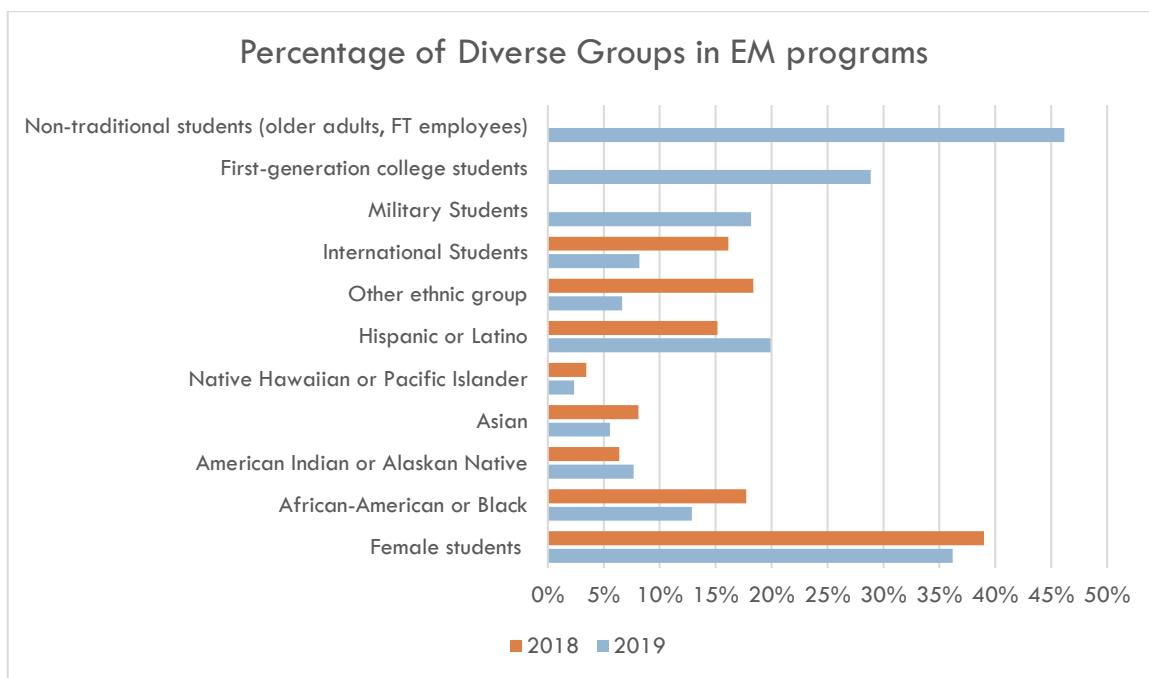


Figure 7: Average percentage of diverse student populations enrolled in EM programs.

Figure 8 shows the average percentage of diverse student populations enrolled in EM programs in 2018 and 2019. By far, program respondents noted the most diverse group of students to be non-traditional (46%), older adults returning to school and individuals going to school while maintaining full-time jobs. Comparing results from the 2018 survey to 2019 shows that the percentage of female students dropped an average of 3%, as did the percentage of African-American (5% decrease) Asian (2% decrease), and international students (8% decrease). The decline in international students follows a trend nationwide, where the U.S. Immigration and Customs Enforcement reports a drop of international students at all levels by 2.7% from March 2018 to March 2019 – as determined by visa holders (Redden, 2019).¹

¹ For more information, see <https://studyinthestates.dhs.gov/sevis-by-the-numbers>.

PROGRAM SUPPORT

TYPE OF FACULTY

At the university level, faculty can generally be categorized into four categories; tenure-track, tenured, full time non-tenured, and part-time (or adjunct). Most often, tenure-track faculty are the assistant professors (and occasionally associate professors) working towards specific research, teaching, and service metrics as prescribed by the university and department. Tenured faculty members are most often full professors, associate professors, or equivalent. Lecturers, Instructors, and other full-time faculty often do not have the same metrics for research as the tenured or tenure-track professors and instead focus the majority of their time on teaching. Similarly, part-time faculty members (such as adjuncts) also do not have research duties and are focused on education, usually one class and one semester at a time. Among degree-granting programs in emergency management, the majority rely on part-time faculty (adjunct or equivalent). In fact, given the number of respondents, there are several programs which rely entirely upon part-time faculty (upwards of 200). Table 3 shows the average type of faculty in emergency management programs along with standard deviation.

Table 4: Type of faculty in emergency management programs

Type of Faculty	Min	Max	Mean	Std. Dev	n
Full-time tenure-track	0	100	4.18	12.84	67
Full-time tenured	0	31	3	5.54	52
Full-time non-tenured	0	49	2.47	5.63	53
Part-time faculty	0	200*	16.7	30.98	77
Affiliated or associated faculty	0	30	3.9	7.77	29

*200 was the max response for each question

The raw numbers of faculty in emergency management programs, as shown in Table 4, highlight a decreasing trend across each faculty type. The most dramatic is with full-time tenured and part-time faculty. Table 5 shows the raw number of faculty in emergency management programs over the past three years.

Table 5: Total number of faculty as reported, by type

Type of Faculty	2019	2018	2017
Full-time tenure-track	280	295	395
Full-time tenured	156	575	351
Full-time non-tenured	131	190	233
Part-time faculty	1290	1442	2269
Affiliated or associated faculty	113	232	--

Many programs employ faculty with practitioner backgrounds to teach in their programs. Figure 8 shows that part-time faculty most often have a practitioner background. However, nearly 50% of full-time non-tenure track and 40% of the full-time tenure track faculty also have a practitioner background, as well. Nearly 42% of respondents (n=93) indicated they hired a new individual in their program. Only 3% of respondents were unable to hire a new person. Of those that did hire, over 59% (n=61) of the hires (faculty/staff) were for part-time individuals.

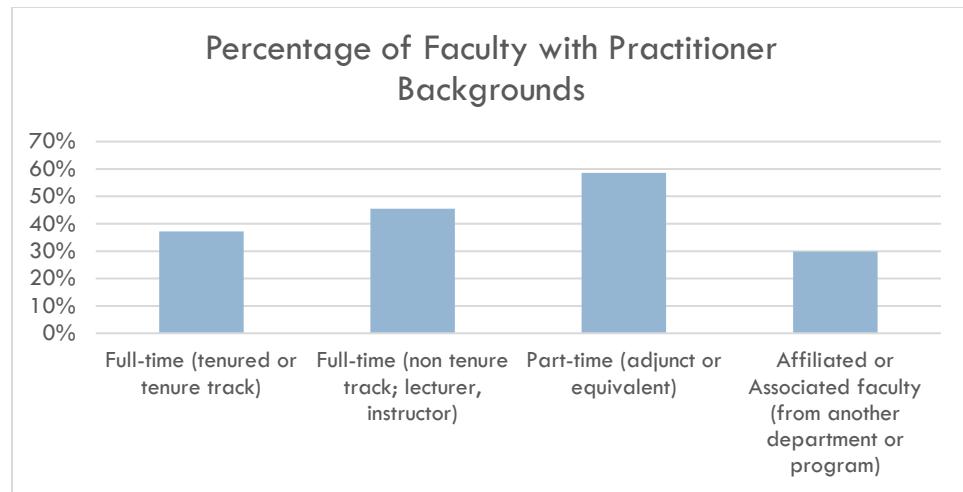


Figure 8: Average percentage of faculty with an EM-related practitioner background

ACCESS TO PROGRAM SUPPORT

Most of the programs (45%) indicated that external funding opportunities are generally inaccessible ($n=87$), though nearly 43% of the programs reported that internal funding opportunities are generally accessible. Library resources and administrative support have been accessible to most EM programs, 82%, and 64%, respectively. With regards to support from the EM community, most of the programs indicated that support is generally inaccessible at all levels or they were neutral in their response, highlighted in Table 6.

Table 6: Accessibility of various types of program support

Program Support Type	Extremely inaccessible		Moderately inaccessible		Slightly inaccessible		Neutral		Slightly accessible		Moderately accessible		Extremely accessible		Total
External funding opportunities	21.84%	19	12.64%	11	10.34%	9	34.48%	30	9.20%	8	10.34%	9	1.15%	1	87
Institutional funding	11.49%	10	11.49%	10	5.75%	5	28.74%	25	26.44%	23	11.49%	10	4.60%	4	87
Library resources	1.15%	1	2.30%	2	2.30%	2	12.64%	11	11.49%	10	48.28%	42	21.84%	19	87
Administrative support	5.75%	5	8.05%	7	3.45%	3	18.39%	16	20.69%	18	32.18%	28	11.49%	10	87
Local EM community	2.30%	2	4.60%	4	3.45%	3	18.39%	16	14.94%	13	37.93%	33	18.39%	16	87
State EM community	4.60%	4	5.75%	5	6.90%	6	24.14%	21	25.29%	22	22.99%	20	10.34%	9	87
National EM community	3.45%	3	6.90%	6	6.90%	6	31.03%	27	25.29%	22	20.69%	18	5.75%	5	87
FEMA-specific	5.81%	5	4.65%	4	4.65%	4	33.72%	29	18.60%	16	24.42%	21	8.14%	7	86
DHS-specific	6.90%	6	5.75%	5	8.05%	7	48.28%	42	18.39%	16	11.49%	10	1.15%	1	87

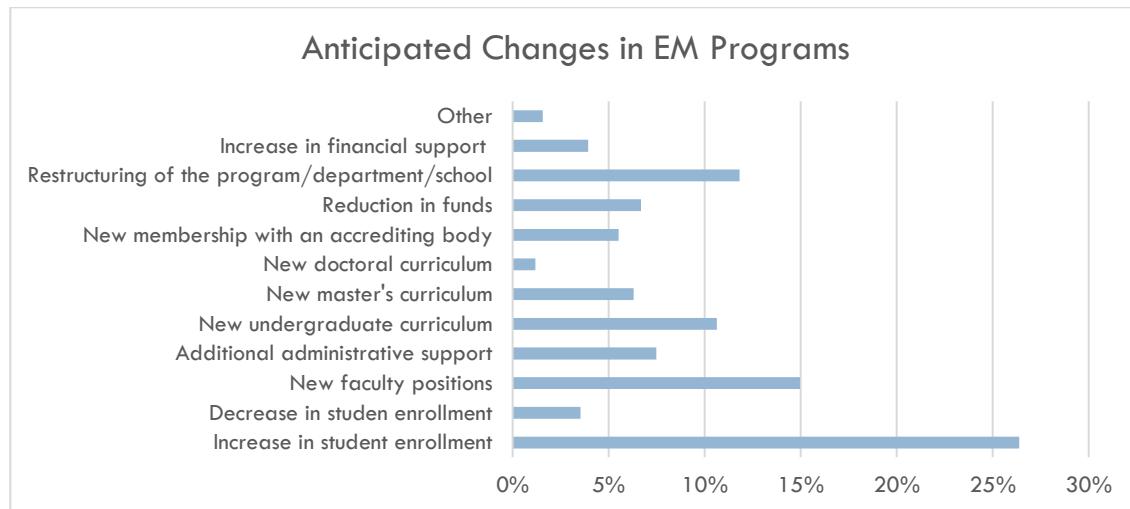
Table 7 shows the comparison of access indicators for the last three years. As shown, the averages are similar for 2018 and 2019.

Table 7: Comparison of the access and support indicators over the three years

Support Indicators	2017			2018			2019		
	Mean	Std. Dev.	n	Mean	Std. Dev.	n	Mean	Std. Dev.	n
External funding opportunities	3.35	1.97	104	3.44	1.88	77	3.32	1.65	87
Institutional funding	3.80	2.07	106	4.07	1.89	76	4.00	1.64	87
Library resources	6.22	1.25	106	6.21	1.39	77	5.63	1.25	87
Administrative support	4.90	1.95	106	5.14	1.95	77	4.83	1.65	87
Local EM community	5.49	1.60	104	5.61	1.59	77	5.26	1.47	87
State EM community	5.17	1.72	104	5.19	1.73	77	4.70	1.52	87
National EM community	4.64	1.62	104	4.82	1.74	77	4.53	1.40	87
FEMA-specific	4.68	1.65	104	4.68	1.87	76	4.60	1.51	86
DHS-specific	4.12	1.55	104	4.20	1.76	76	4.05	1.29	87

ANTICIPATED CHANGES

Majority of respondents anticipate an increase in student enrollment (26%), approximately 15% anticipate new faculty positions, and 12% expect to restructure their program, department, or school. The least likely change is for new doctoral programs (1%), a decrease in student enrollment (4%), or an increase in financial support (4%).

**Figure 9:** Anticipated changes in the program over the next year.

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Approximately 2% of the respondents indicated a likely change different from the selection offered in the survey. For example, one program reported a new offering for at Tribal HSEM Certificate in the Fall of 2019. Other responses included:

"Explore e-learning opportunities."

"Shift state emphasis greater growth and stability."

"Interdisciplinary ties to other parts of campus."

METRICS OF SUCCESS

Nearly 24% of the programs use the number of graduates as a metric of success for their programs. A little over 15% of the programs indicated that student opportunities, the performance of program reviews, and increase in student majors as a metric of success. While all respondents were provided the multiple choice metrics listed in Figure 10, less than 3% of responding programs used another metric not listed. Other metrics included employer and alumni feedback surveys (such as from internships) and input from advisory committees.

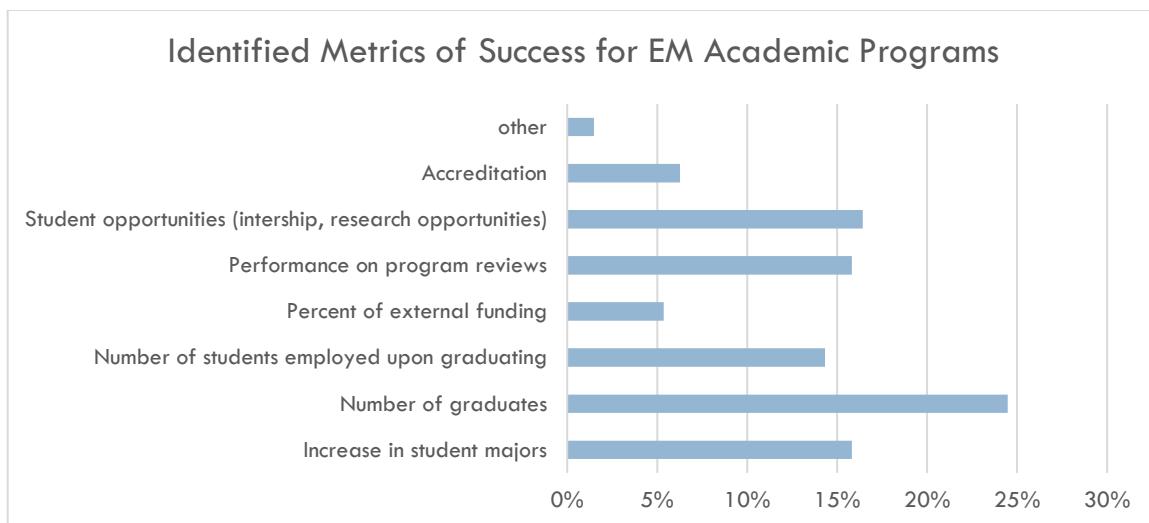


Figure 10: Program-identified measures of success

FEMA EMI HIGHER ED RESOURCES

In addition to providing insight on program matriculation and faculty support, this survey also asked questions regarding the use of FEMA Higher Ed resources. The FEMA Higher Ed program offers several opportunities online or in-person for curriculum development, research meetings, and training.

ONLINE RESOURCES

Out of 114 programs responding, the majority use the Independent study courses offered online (25%). Majority use the Independent study courses as supplemental course material (96%), while others use as the primary source of information for a course (4%). The journal articles and the principles of

emergency management document are a close second and third popularly used online resources, 22% and 21%, respectively.

For respondents who did not select the Principles of Emergency Management Document (n=38), precisely 50% were also not aware of the document. For respondents who indicated that they used the principles of Emergency Management document (n=73), 66% use it in undergraduate courses, 32% use it in graduate courses, and 3% use it in other ways.

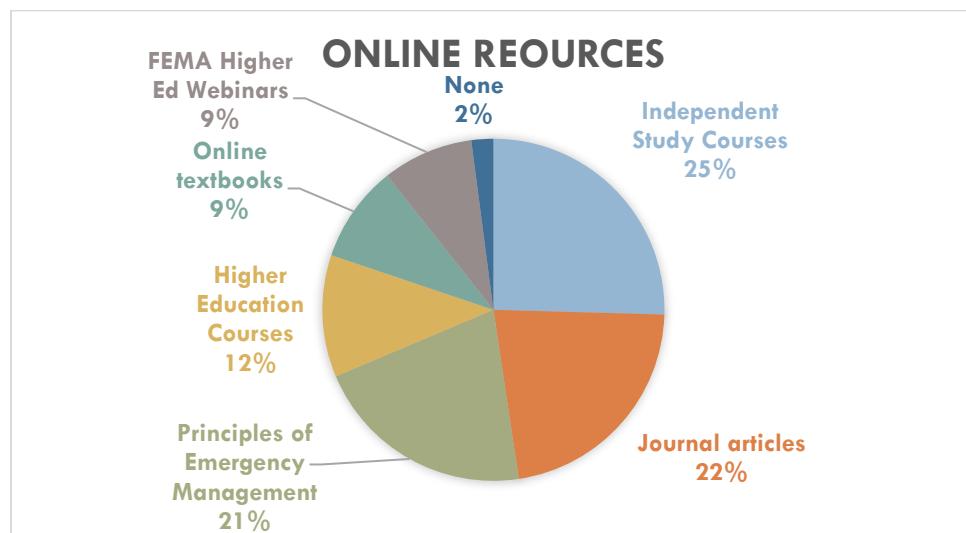


Figure 11: Use of FEMA Higher Ed online resources

Of the respondents who indicated that they use the FEMA Higher Education courses (n=31), they were requested to identify which courses they used. Below is the ranking for each course from most to least used.

Course	Percentage
National Incident Management Systems Course (NIMS)	10.34%
Building Disaster Resilient Communities	8.62%
Disaster Response Operations and Management	6.90%
Terrorism and Emergency Management	6.90%
Business Crisis and Continuity Management	6.03%
Sociology of Disaster	6.03%
Principle, Practice, Philosophy, and Doctrine of Emergency Management	5.17%
Homeland Security and Emergency Management	4.31%
Principles and Practice of Hazard Mitigation	4.31%
Social Dimensions of Disaster	4.31%
Technology and Emergency Management	4.31%
Political and Policy Basis of Emergency Management	3.45%
Social Vulnerability Approach to Disasters	3.45%
Breaking the Disaster Cycle: Future Directions in Natural Hazard Mitigation	2.59%
Catastrophe Readiness and Response Course	2.59%
Comparative Emergency Management	2.59%
Hazards Risk Management	2.59%

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Course	Percentage
Public Administration and Emergency Management	2.59%
Hazards, Disasters and U.S. Emergency Management - An Introduction (working draft)	1.72%
Hazard Mapping and Modeling	1.72%
Holistic Disaster Recovery: Creating a More Sustainable Future	1.72%
Individual and Community Disaster Education	1.72%
Research and Analysis Methods in Emergency Management	1.72%
Coastal Hazards Management	0.86%
Earthquake Hazard and Emergency Management	0.86%
Emergency Management Principles and Application for Tourism, Hospitality & Travel Management	0.86%
Flood Plain Management (Graduate Level)	0.86%
Floodplain Management: Principles and Current Practices	0.86%

The least used resources were online textbooks (9%) and FEMA Higher Ed webinars (9%). For respondents who indicated that they did not use the FEMA Higher Ed webinars, 48% were not aware of the webinars, and 32% noted the webinars are often at an inconvenient time. None of the respondents indicated they were unable to use the platform.

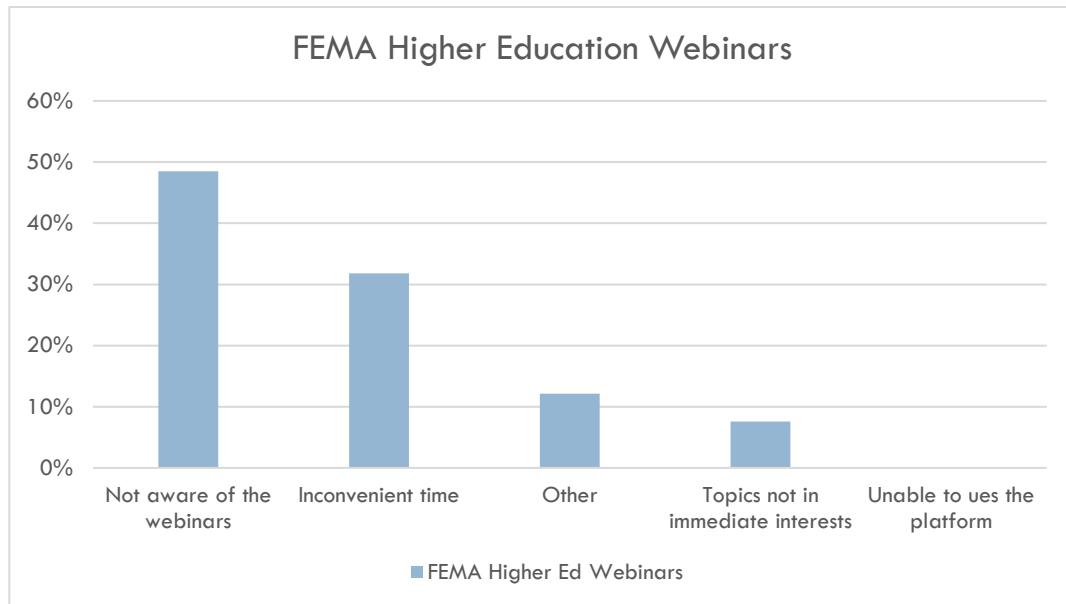


Figure 12: Reasons programs do not participate in the FEMA Higher Ed webinars

For the programs that selected 'other,' there were a variety of reasons, including:

"They are not really directed at graduate level work."

"No interactions with FEMA/DHS."

"Students have been informed on an independent basis, but will look at specifically incorporating them as part of course work."

"Have not found a problem in utilizing them when needed and with a time that coincides with the class."

PARTICIPATION IN PROGRAM

Over 108 programs responded to questions regarding their participation in the FEMA Higher Ed program's in-person activities. Majority of respondents 64% (n=114) have participated in the FEMA Higher Ed Symposium, while only 13% were not aware of the opportunity. Majority of respondents (n=108) were not aware of the FEMA Higher Ed focus groups (46%).

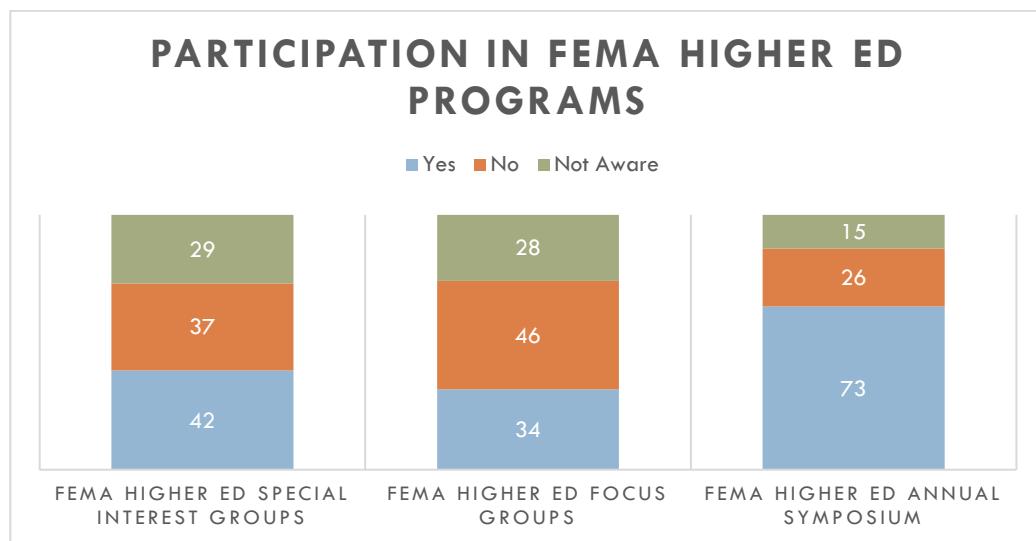


Figure 13: Participation in FEMA Higher Ed Programs

For respondents that have previously attended the FEMA Higher Ed Annual Symposium, they were subsequently asked how often they have attended. Approximately a third of representatives attend the symposium most years (33.3%) or have only attended once or twice (33.3%).

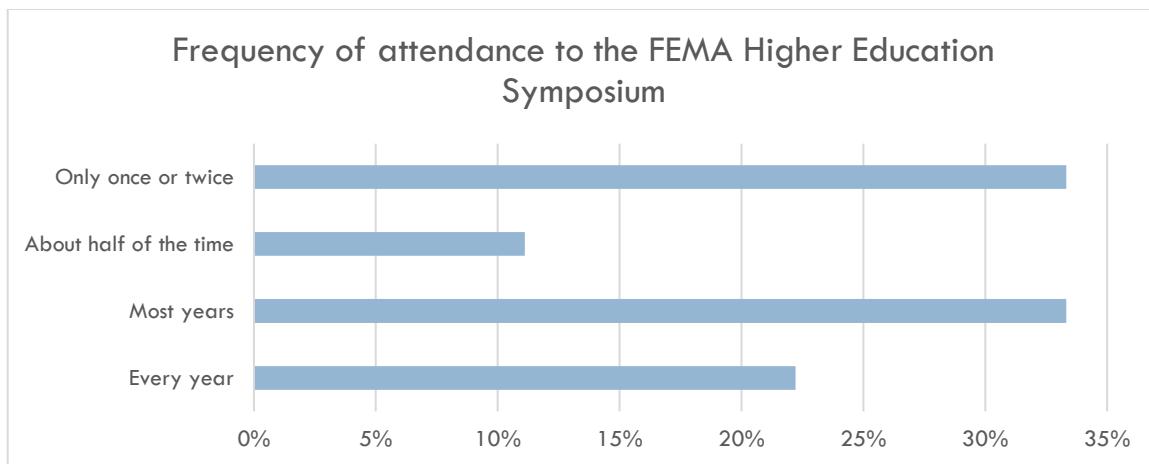


Figure 14: Percentage of respondents who attend the FEMA Higher Ed Symposium by frequency.

Regarding the FEMA Higher Ed Special Interest Groups, 63% (n=65) are interested in receiving more information, and approximately 20% are interested in joining. Similarly, a majority of respondents

(52%, n = 68) are interested in more information about FEMA Higher Ed Focus Groups, and 24% are interested in joining.

IDEAS FOR DIFFERENT PRODUCTS AND SERVICES

Respondents were asked open-ended questions about ideas for products, activities, and services they would like to see from the FEMA Emergency Management Higher Education Program. Many would like to see changes around the learning materials, updates to the web resources and curriculum guides (n=39). Other were interested in student resources, and a significant number of respondents were interested in funding related opportunities.

Table 8: Types of FEMA Higher Education resources in which the respondents are interested.

Types of resources	n
Funding/ Research opportunities	9
Learning Materials (Update, Curriculum Guide, Digital, Regional/Local/Certification)	12
Student Resources (Mentoring, Campus Activities, Internships, Career)	10

Below are some of their responses, in their own words:

“Facilitate collaboration and opportunities for research.”

“Employment opportunities for program students and graduates. FEMA has hired some of our graduates, and we would like to see this continue.”

“Videos to support student understanding on some concepts- for example, a video showing an EOC in operations.”

“I would like to see EMIHE follow more of a FESHE set up to be standardized.”

“The college courses must be updated.”

“Courses evaluated by ACE or another group to make transfer of credits applicable for students.”

“Certification courses in the NYC area.”

“More opportunities for funding competitively. Too many preselected grants with east coast universities... Get into the Midwest and south and be more open.”

RESPONSE BY PROGRAM TYPE

There were differences in the responses based on the type of degree offered. In this section, the differences are reviewed separately based on U.S.-based programs that provide undergraduate degrees (certificates and concentrations at the associates and bachelor's level included) and those that offer graduate degrees (certificates, concentrations at the master's and doctorate degrees included). Note that in the separate analysis performed below, there is some overlap. Several programs offer both undergraduate and graduate degrees; therefore, their response was reported in both sections.

UNDERGRADUATE DEGREE-GRANTING PROGRAMS

Majority of the programs offer undergraduate degrees in emergency management (n=83). The undergraduate programs were overwhelmingly coded 43.0302 Crisis/Emergency/Disaster Management (n=41), according to the CIP taxonomy. The second highest coding was 43 Homeland Security, Law Enforcement, Firefighting, and related protective services (n=23), and the third was specific to Homeland Security 43.0301 (n=21). The primary orientation of the undergraduate programs was the public sector, 45% (n=83).

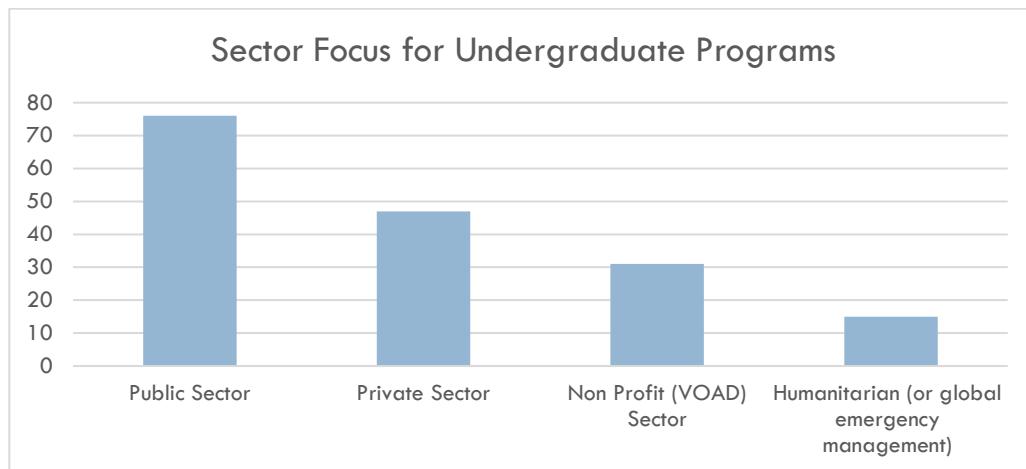


Figure 15: Sector focus of undergraduate programs.

Majority of the programs 69% do not plan to develop a new curriculum (n=81). Of those that are planning to create new courses, they indicated the following: *Associate of Applied Science in Emergency Management and Cyber Security, Blended B.S. degree in EM with a Paramedic Concentration, Tribal HSEM Certificate, Fully Online Bachelor's in Emergency Management, Public Safety/Emergency Management Bachelor's degree, Concentration in Health and Safety, Cyber + Business School combo, Associate of Applied Science in Emergency Management and Cyber Security, and Business Continuity plans.*

Over 85% of programs indicated they offer coursework in some form of distance online education (n=83). Figure 17 shows over 70% of undergraduate programs offer nearly 100% of their coursework online. Almost 50% of programs offer the majority of their course work both online and in person.

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Many programs have had an increase in diversity among the student body (43%), and nearly the same amount have experienced no change in the number of diverse students (41%). The average percentages across a wide range of diverse populations shows the following: 35% women, 44% non-traditional students, 27% first-generation college students, 18.4% military students, 5% international students, 19% Hispanic/Latino, 13% Black/African American, 7% American Indian or Alaska Native, 5% Asian, 1% Native Hawaiian or Pacific Islander.

Most programs (57%) do not track employment for undergraduates (n=79). For the 43% of programs that do track employment, 50% of their graduates find positions in the public sector, 32% in the private sector, 11% in the non-profit sector, and 6% with humanitarian or global efforts. Over 60% of programs have seen an increase in enrollment over the past three years (62%) and expect to see an increase during the next three years (68%). Most programs have also seen an increase in the number of graduates over the past three years (49%) and expect to see an increase in graduates over the next three years (64%) although quite a few programs did not have a change in the number of graduates over the past three years (40%).

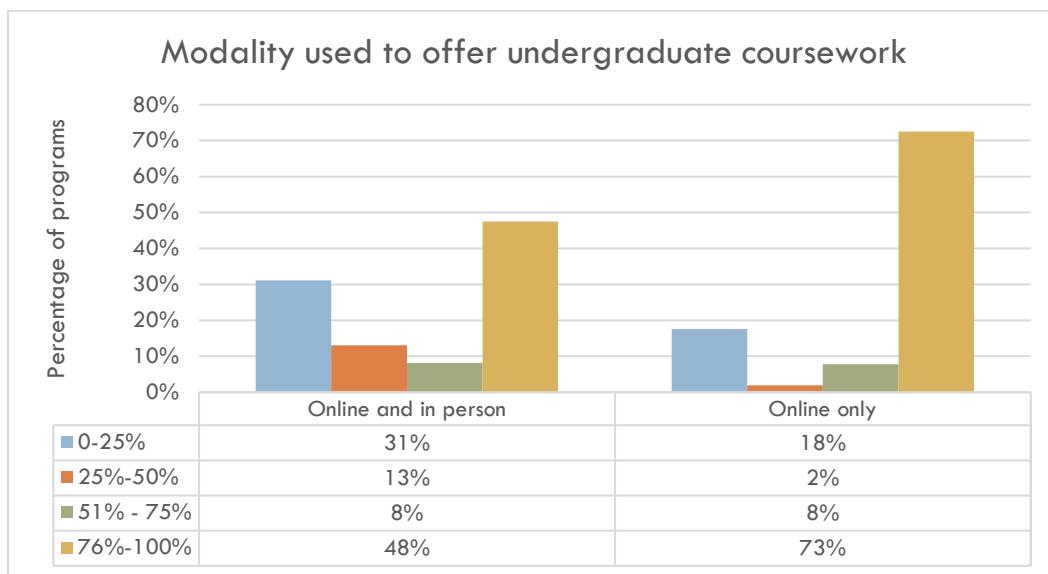


Figure 16: Modalities used to offer undergraduate curriculums.

Most undergraduate programs rely on part-time faculty. The average percentage of faculty in undergraduate programs are 59% part-time, 46% full-time non-tenure track, 41% full-time tenure or tenure track, and 26% affiliated or associate faculty. Nearly 40% of programs hired new faculty and staff, approximately 56% were part-time, and 44% were full-time.

Responding programs (n=71) indicated external funding (48%), as well as internal funding (39%), were inaccessible to their program. Likewise, institutional administrative support was inaccessible for most programs (65%). Library resources were the only resource generally accessible for most programs (47%). Local (73%), state (61%), national (49%), FEMA-specific (50%), and DHS-specific (30%) emergency management community support resources were all mostly inaccessible. Note that over 30% of respondents were neutral regarding national, FEMA-specific, and DHS specific emergency management community support, 34%, 36%, and 49%, respectively.

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Specific to programs offering Associates degrees over 70% do not utilize the prototype for Associates degrees in Emergency Management as part of their curriculum (n=34). The most popular FEMA Higher Education resource among all undergraduate programs were the independent study courses (24%), followed by journal articles (22%) and the principles of emergency management document (21%). The Higher Education Courses were used approximately 12% of the time, their top ten rankings follow:

Course	Percentage
National Incident Management Systems Course (NIMS)	8.99%
Disaster Response Operations and Management	7.87%
Building Disaster Resilient Communities	6.74%
Principle, Practice, Philosophy, and Doctrine of Emergency Management	6.74%
Terrorism and Emergency Management	6.74%
Social Dimensions of Disaster	5.62%
Sociology of Disaster	5.62%
Business Crisis and Continuity Management	4.49%
Homeland Security and Emergency Management	4.49%
Technology and Emergency Management	4.49%

Most of the programs that do not use the principles of emergency management document have prior knowledge of the material (55%). Most of the program representatives that do not attend the webinars were not aware of them (56%). Most representatives have not participated in the FEMA Higher Ed Focus group (42%), and 64% have attended the symposium. Majority of those who were not aware of the FEMA Higher Ed Special Interest Groups (59%) and FEMA Higher Ed Focus Groups (44%) are interested in receiving more information.

GRADUATE DEGREE-GRANTING PROGRAMS

Thirty-eight programs in this survey offer masters or doctoral degrees in emergency management or related fields. Nearly 53% were coded 43.0302 Crisis/Emergency/Disaster Management (n=41), according to the CIP taxonomy. The second highest coding was 43.0301 Homeland Security, n=11 (specifically), and the third was 43 Homeland Security, Law Enforcement, Firefighting, and related protective services n=7. The primary orientation of graduate programs was the public sector (35%), the secondary sector was private (28%).

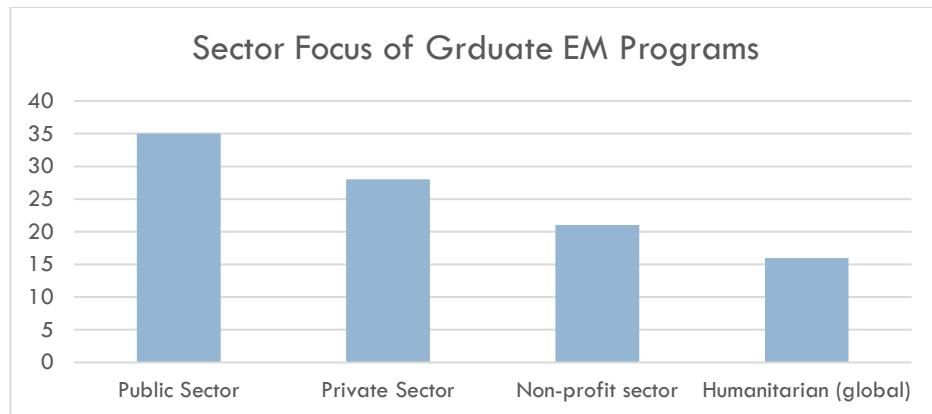


Figure 17: Sector focus of graduate programs.

All of the graduate programs offered a master's degree, 16% provided a doctorate. Similar to the undergraduate programs, the majority (71%) are not planning on developing a new curriculum (n=38). Of those planning on developing new courses, they indicated the following: adding a *doctoral program*, *focus on humanitarian action and global health*, or *community resilience*. Even at the graduate level, the majority of the programs (76%) offered curriculum online (n=29). Nearly 70% of the programs offered their coursework only online, and approximately 35% of the programs offered their coursework both online and in-person.

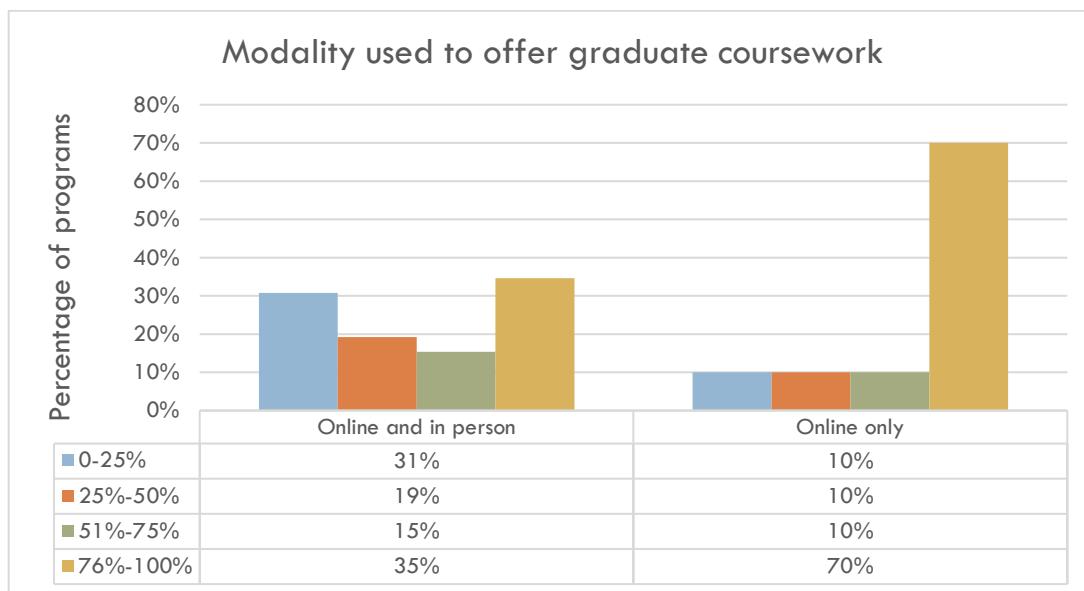


Figure 18: Modalities used to offer graduate curriculums.

Nearly 47% of graduate programs have had an observed increase in diversity among the student body and the same percentage of programs have seen no change in the number of diverse students. Only one program reported a decrease in diversity among graduate students. The average percentages across a wide range of diverse populations shows the following: 42% women, 56% non-traditional college students, 31% first-generation college students, 25% Hispanic/Latino, 18% military students, 16% Black/African American, 11% international students, 10% American Indian or Alaska Native, 7% Asian, 4% Native Hawaiian or Pacific Islander.

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Most of the graduate programs (54%) track their employment of students post-graduation (n=19). Of the programs that track employment, 48% of their graduates find positions in the public sector, 32.5% in the private sector, 18.9% in the humanitarian sector, and 14% in the non-profit sector. Nearly 60% of the graduate programs have seen an increase in enrollment over the past three years, and 57% expect to see an increase in enrollment over the next three years. Most of the programs have also seen a rise in the number of graduates over the past three years (56%) and expect an increase in the number of graduates over the next three years (53%).

Similar to the undergraduate programs, at the graduate level, most programs rely on part-time faculty. The average number of faculty in graduate programs vary by type: approximately four full-time tenure-track, five full-time tenured, four full-time faculty non-tenure track, 27 part-time faculty, and six associated faculty. Half of the graduate program hired new faculty and staff, approximately 57% were part-time, and 44% were full-time.

Responding programs (n=32) indicated that external funding (34%) was inaccessible. However, most indicated that library resources (91%), administrative support (65%), and internal funding (44%) has been accessible. Likewise, most programs indicated that local emergency management community support (62.5%), state emergency management community support (53%), national emergency management community support (50%), and FEMA specific support (53%) have been accessible. Most of the responding programs were neutral about DHS specific support.

The most popular FEMA Higher Education resource was the Independent Study (IS) courses (23%), followed by the principles of emergency management document (22%), and journal articles available online (21%). Only eight programs used the Higher Education Courses; the top eight rankings were as follows:

Course	Percentage
Building Disaster Resilient Communities	8.33%
Business Crisis and Continuity Management	6.25%
Disaster Response Operations and Management	6.25%
National Incident Management Systems Course (NIMS)	6.25%
Principle, Practice, Philosophy, and Doctrine of Emergency Management	6.25%
Social Vulnerability Approach to Disasters	6.25%

Most of the programs that do not use the principles of emergency management document have prior knowledge of the document (67%). Most of the program representatives that do not attend the webinars were not aware of them (41%). Most representatives have participated in the FEMA Higher Ed Symposium (76%), focus groups (39%), and the special interest groups (47%). Of those who were not aware of the special interest groups, most would like more information (69%). Similarly, nearly 56% are interested in more information about the focus groups.

INTERNATIONAL SCHOOLS

Six institutes of higher education from countries outside of the US responding to the survey, representing seven programs. Unlike the U.S. based programs, the programs abroad are located in a few departments Emergency Management (n=2), Public Administration or General Administration (n=2),

Public Safety (n=1), Business (n=1), and Health and Life Sciences (n=1). The primary focus of their programs is in the public sector (n=7). However, most programs represent more than one focus area; private sector (n=4), the non-profit sector (n=3), and humanitarian (global EM) (n=2). The seven international programs have several offerings, as shown in Figure 19.

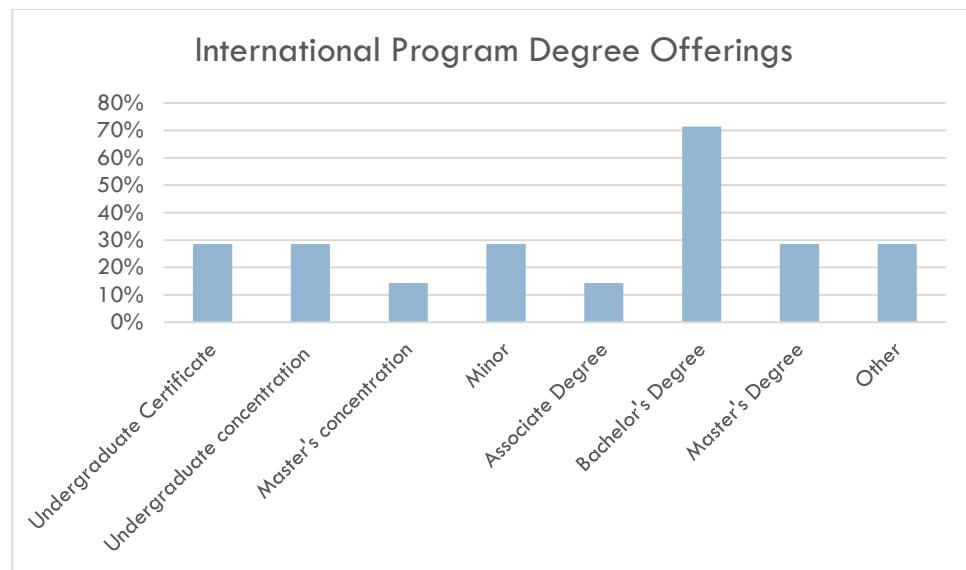


Figure 19: Percentage of international program offerings

All but one of the international programs plan to develop new programs over the next year. Several were interested in developing graduate-level degrees (master's and doctoral), and at least one was interested in a post-baccalaureate diploma. Some are interested in specific topical areas such as rural emergency management or technology. Nearly 71% of the international programs offer their coursework online (n=7). Three programs offer nearly all of their coursework solely in the online format, between 76%-100% of the curriculum.

Approximately 117 students have graduated from these international emergency management programs. Similar to the U.S. based programs, most of the international programs do not track their students post-graduation (n=4). Of those that track students, approximately 67% of the graduates secure positions in the public sector, 22.5% of graduates in the private sector, 20% in the non-profit sector, and 7.5% in the humanitarian sector.

Most of the programs have seen an increase in enrollment over the past three years (n= 4) and anticipate an increase in enrollment over the next three years (n=5). Most programs have seen no change in the number of graduates in their program (n=4). However, most programs anticipate an increase in graduates over the next three years (n=4).

The international programs rely primarily on part-time faculty. Nearly 11% of full-time tenure-track faculty, 35% of full-time non-tenured faculty, and 50% of part-time faculty have a practitioner background. Most of the programs hired new faculty or staff in the past year (n=4), most hired for a part-time position.

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International programs anticipate an increase in student enrollment and new faculty positions over the next year. None anticipate a decrease in student enrollment. Similar to U.S.-based programs, international programs also anticipate a reduction in funds to support their program.

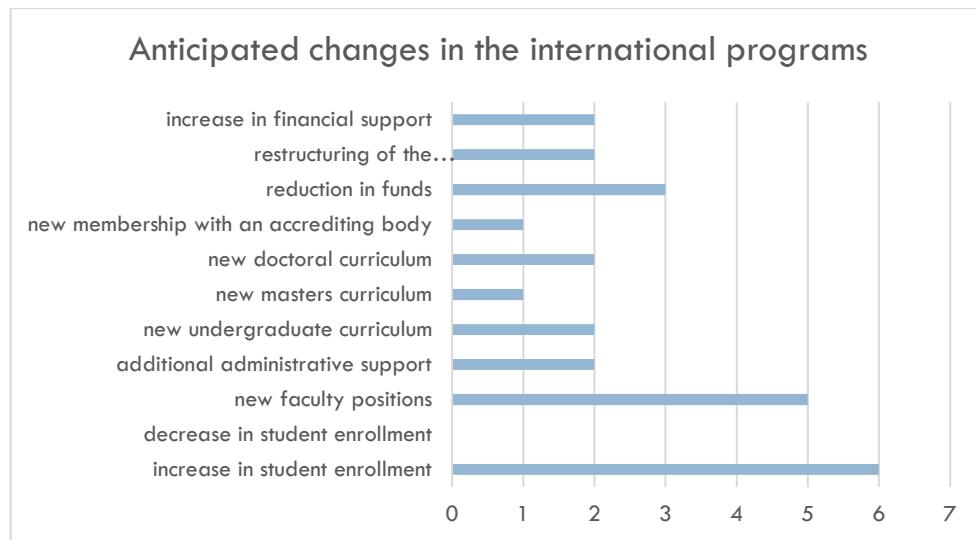


Figure 20: Anticipation of program changes for international schools

The international programs contacted were identified from the FEMA Higher education database as having a connection with the FEMA Higher Education Program. As such, international respondents were asked questions regarding their use of the FEMA-related resources online. As shown in Figure 21, most of the programs use the FEMA Higher Education Courses and the Independent Study courses. Only one of the programs haven't used any of the resources discussed in this survey.

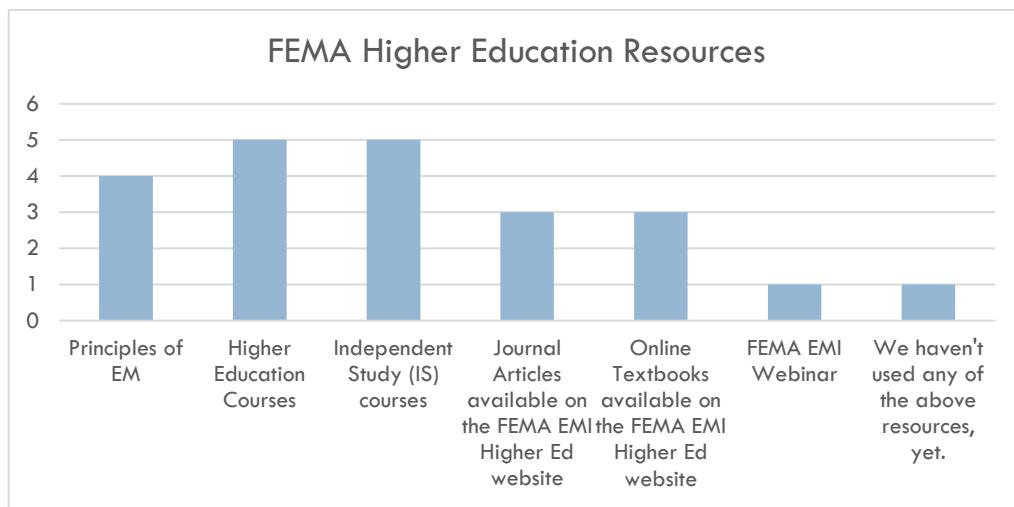


Figure 21: Use of FEMA Higher Education Resources by international programs.

Over 70% of the programs indicated they used the Higher education programs. Specific survey questions indicated that only used five of the FEMA Higher Education courses were selected by international programs, equally as listed below:

Course	Percentage
Comparative Emergency Management	20.00%
Disaster Response Operations and Management	20.00%
Hazards Risk Management	20.00%
National Incident Management Systems Course (NIMS)	20.00%
Principle, Practice, Philosophy, and Doctrine of Emergency Management	20.00%

None of the international programs have participated in the FEMA focus groups or special interest groups, and many were not aware of the opportunity. All are interested in either joining the FEMA focus groups or gaining more information about them. The programs indicated the same interest in the special interest groups.

Programs also included products and services they would like to see provided by FEMA to the international community; their responses are below:

"Student and faculty exchange support for collaborative opportunities between Canada and the USA."

"More opportunities for students to connect with experienced practitioners (mentoring program) - perhaps linked through the CRHNet mentoring program in Canada?"

"Working group on EM ethics."

DISCUSSION

This report summarizes the results from the 2019 annual survey of self-identified emergency management programs connected to the FEMA Higher Education Program's database. The database contained 312 institutions of higher education, 118 responded for a response rate of 38%. Majority of this report presents information about U.S. programs. However, approximately 38% of international emergency programs ($n=7$) with a connection to the FEMA Higher Education Program were included in a section, as well. Furthermore, undergraduate ($n=83$) and graduate ($n= 38$) degree-granting programs were separated into distinct sections as well.

The overview of emergency management programs indicates that most emergency management-related programs are housed in emergency management, criminal justice/criminology, public administration or public safety schools and departments. However, a significant portion of the respondents found academic homes in other categories, including business, earth science, international students, and technology-related departments, indicating an expanse in disciplines linked to the field. Where programs were housed did not accurately translate to a variety of U.S. Department of Education's National Center for Education Statistics (NCES) Classification of Instructional Programs (CIP) codes. Majority of program respondents chose Crisis/Emergency/ Disaster Management, Homeland Security, or Law Enforcement related CIP codes. Out of 137 programs responding, the majority offer an emergency management bachelor's degree (38%). Majority of IHE offerings (degrees, certificates, or concentrations) in the emergency management space are focused at the undergraduate level (55%). Overwhelmingly, all of the programs are focused on preparing students for the public sector (at the undergraduate, graduate, and international programmatic level). Furthermore, nearly 70% of the programs offer more than three-fourths of their curriculum only online. Nearly 85% of undergraduate

programs offer a majority of their curriculum solely online. Majority of the undergraduate programs do not intend on developing new curriculum.

The number of students who have graduated from emergency management programs has continuously increased per extrapolated data. The data indicated an estimated 53,500 students have graduated from the U.S. based since the inception of the survey. Out of the international programs, a total estimate of 117 students have graduated, without extrapolation. The diversity of the student body has only been tracked over the past two years, however, while diversity has increased in general, there have been significant drops in the populations of certain diverse groups, such as women, international students, and black/African American. It should be noted that graduate programs have seen an increase in the percentage of women students (42%). Programs generally anticipate an increase in enrollment and graduation rates over the next three years. For those tracking their graduate's post-commencement, majority of their graduates find employment in public sectors. Many of the programs do not track employment of their undergraduates (57%).

Emergency management programs rely on part-time faculty, and most of the part-time faculty have a practitioner background. Full-time non-tenured and full-time tenured faculty are the type of faculty which appear the least in emergency management programs. Most programs indicated that external funding was generally inaccessible. However, nearly all other types of program support were accessible to most programs. Similar to previous studies, many respondents were neutral regarding the accessibility of external support. Several programs anticipate changes in their programs over the coming year. Over 25% expect that change to come in the form of increased student enrollment. This year the survey provided a multiple-choice question for the metrics of success, based on the answers from the 2018 open answered responses. Respondents were able to select more than one answer, and the primary metric of success was the number of graduates from the programs.

Out of 114 programs responding, the majority use the Independent study courses offered online (25%). Majority use the Independent study courses as supplemental course material (96%), while others use as the primary source of information for a course (4%). The journal articles and the principles of emergency management document are a close second and third popularly used online resources, 22% and 21%, respectively. The least used resources were online textbooks (9%) and FEMA Higher Ed webinars (9%). Among programs offering associate's degrees more than 70% do not use the prototype for Associates degrees in Emergency Management, provided by the FEMA Higher Education Program. Many respondents would like to see updates to the learning materials, expanded collaborations, and opportunities in various regional locations. International programs are interested in support for collaborative opportunities across borders and a new working group on emergency management ethics.

CONCLUSION

The data in this report and comparisons from previous years show common trends in emergency management programs, the student body, program support, and access to FEMA resources. Programs are primarily focused on preparing students to work in the public sector. However, there is increasing expansion for preparing students in the non-profit and humanitarian areas. Emergency management programs appear in many different departments across disciplines. For researchers, teachers, and practitioners, mirrors discussions around inter- and multi-discipline nature of the field and may further indicate the potential significance of standing out as a unique curriculum. Furthermore, emergency

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management programs will likely have to learn from various disciplines and consider their lessons during curriculum development.

There has been a steady increase in graduates since 2004 and an increase in diversity among the student body. Though many aspects of our programs have remained constant, there have been some changes. In particular, while the student body has become more diverse, certain groups have dropped. This indicates we have work to do in this regard, especially since many of the most impacted communities post-disaster tend to mirror the student populations where decreases have been noted.

Some program support has been more accessible than others. It seems our program over-rely on part-time faculty, favoring individuals with practitioner backgrounds. Library resources, administrative support, and EM support have also been generally accessible. However, many of our programs indicated that full-time tenured faculty, external funding, access to job opportunities, and curriculum resources are more elusive. With the anticipated increase in student enrollments and graduations, our programs can expect to learn to do more with less.

Use of FEMA Higher Ed resources has remained steady, with the majority of the resources used by emergency management programs. However, respondents indicated that many of the resources need to be updated, communication about focus groups, special interest groups, and webinars needs to improve. Additional requests indicate that student resources and funding opportunities would be a welcomed resource to the FEMA Higher Education website.

Together we have built an active community of emergency management programs, and again the work never really stops. We should plan to continue with our success and be honest about the challenges we face. This baseline survey provides a start to identifying our program strengths and curriculum goals; however, individually, we must put forth additional effort to continuously improve.

"You don't make progress by standing on the sidelines, whimpering and complaining. You make progress by implementing ideas." – Shirley Chisholm

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APPENDIX 1 – LIST OF PARTICIPATING INSTITUTIONS

Adelphi University	John Jay College, City University of New York	State University of New York, Rockland Community College
Alma College	Justice Institute of British Columbia	State University of New York, New Paltz
American University of Puerto Rico	Kansas Wesleyan University	Thomas Edison State University
Arkansas State University	Lee University	Tulane University
Arkansas Tech University	Lenoir Community College	Truckee Meadows Community College
Arizona State University	Marian University of Wisconsin	Union College
Barry University	Massachusetts Maritime Academy	University of Akron
Bellevue University	Medaille College	University of Alaska Fairbanks
Bergen Community College	Metropolitan College of New York	University of Central Missouri
Blue Ridge Community College	McDowell Technical Community College	University of Chicago
Boston University	Middlesex County College	University of Florida
Brandon University	Millersville University of Pennsylvania	University of Hawaii, West Oahu
Bucks County Community College	Missouri State University	University of Idaho
Caldwell Community College	Montgomery County Community College	University of Illinois at Chicago
California Maritime Academy	Nash Community College	University of Maryland University College
California State University, Long Beach	National University	University of Minnesota
Central Queensland University	New Jersey City University	University of Nebraska at Omaha
Coastal Carolina Community College	North Dakota State University	University of Nevada at Las Vegas
College of the Mainland	Northeastern State University	University of New Hampshire at Manchester
Community College of Allegheny County	Northern Alberta Institute of Technology	University of New Haven
Cumberland County College	Northern Arizona University	University of New Orleans
Delaware Technical and Community College	Northwest Missouri State University	University of North Carolina at Charlotte
Des Moines Area Community College	Notre Dame College	University of North Carolina at Pembroke
East Tennessee State University	Ohio State University	University of North Carolina, Chapel Hill
Eastern Kentucky University	Pacific Union College	University of North Texas
Eastern Michigan University	Pennsylvania College of Technology	University of South Florida
Eastern New Mexico University	Philadelphia University	University of Texas Rio Grande Valley
Elizabeth City State University	Pierce College	University of Washington
Embry Riddle Aeronautical University	Purdue University	University of Wisconsin- Green Bay
Endicott College	Purdue University Global (formerly Kaplan University)	University of Wisconsin Oshkosh
Excelsior College	Regis University	Western Carolina University
Fayetteville Technical Community College	Rose State College	Westmorland County Community College
Florida State University	Saginaw Valley State University	West Texas A&M University
Fredrick Community College	Sam Houston State University	Wright State University
Gaston College	San Antonio College	York University
George Mason University	San Diego State University	
Guilford Technical Community College	San Jose State University	
Harper College	Saint Louis University	
Hesston College	Saint Michael's College	
Idaho State Meridian	State College of Florida	
Indian River State College	State University of New York, Albany	
Jacksonville State University		