

DISASTER RESILIENT UNIVERSITIES SURVEY RESULTS



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EXECUTIVE SUMMARY

Background: This survey helps to delineate factors that are important to create a disaster resilient university (DRU). This research project is part of the Emergency Management for Higher Education (EMHE) grant by the U.S. Department of Education, which was awarded to the University of Central Florida in 2009. The EMHE grant supports higher education institutions in developing, reviewing, improving, and fully integrating campus-based all-hazards emergency management planning within the framework of the four phases of emergency management. This research study will contribute to the successful implementation of the grant project. The primary use of the results from this survey will be to improve the emergency management plans and procedures at the University of Central Florida. A comparison with other universities and their programs will provide us a roadmap of where our emergency management plans are and what we need to improve and achieve to enhance our current programs and plans.

Methodology: Universities and colleges in the DRU listserv, EMHE 2008 grant recipients, and Federal Emergency Management Agency (FEMA) Disaster Resistant University grant recipients were invited to complete an online survey about elements that are important to create a disaster resilient university. Most of the questions require the respondents to identify the progress of their institution in terms of managing emergencies and developing plans, procedures and activities for creating a disaster resilient university. The survey was conducted by the Center for Public and Nonprofit Management at the University of Central Florida. The principal investigator was Dr. Naim Kapucu, Department of Public Administration.

Summary of Key Findings:

- Around 13% respondents are very confident that their university qualifies as a disaster resilient university, 18.8% indicate that they agree that their university qualifies as a disaster resilient university, while around 30% report that they somewhat agree that their university qualifies as DRU.

The level of preparedness in universities/colleges:

- 42.7% of the 97 respondent's report that their campus community is well prepared to manage disasters and emergencies (7.3% strongly agree while 35.4% agree).
- 75.2% of the respondents report that they make emergency communication procedures available to the campus community and exercise them regularly (22.7% strongly agree, 27.8% agree while 24.7% somewhat agree).
- 78.4% report that they conduct a number of trainings and exercises on campus to create awareness about emergency management plans and procedures (19.6% strongly agree, 26.8% agree while 32% somewhat agree).
- 78.4% report that the culture in their campus focuses on information sharing between different departments (19.6% strongly agree, 28.9% agree while 29.9%

somewhat agree). While 74.3% of the respondents also report that they focus on information sharing with outside organizations (10.3% strongly agree, 35.1% agree and 28.9% somewhat agree).

Emergency Management Plans:

- 85% of the respondents indicate that an all-hazards comprehensive emergency management plan has been developed and implemented at their campus (25.5% strongly agree, 37.2% agree while 22.3% somewhat agree).
- 79.6% claim that their comprehensive plan is compliant with NIMS requirements (33.3% strongly agree, 28% agree while 18.3% somewhat agree), while 18.4% report that it is not complaint with NIMS.
- Around 35% of the respondents also indicate that they have a FEMA approved Hazard Mitigation Plan.
- 45.6% of the respondents indicate that they have adopted their local government's plan (6.5% strongly agree, 15.2% agree while 23.9% somewhat agree).
- Only 26.6% indicated that they had a C-CERT team, 7.4% were unsure if they had one while 66% reported that they didn't have a fully functional C-CERT team on campus.
- 54.2% of the respondents report that they have adequate resources to implement and maintain a comprehensive emergency management system, while 43.6% indicate that they don't
- 62.4% of the respondents indicate that they regularly conduct comprehensive vulnerability assessments and profile hazards and identify gaps in campus resources.
- 56% of respondents indicate that their emergency management plans are reviewed annually.

Leadership:

- 74.2% of the respondents indicate that they have a formal campus emergency management/campus safety advisory committee.
- Almost everyone (95.8%) indicates that senior administrators sit on their advisory council/committee, 88.7% report that campus security personnel and 70.4% indicate that residence life personnel are part of their respective committees. Only 18.3% report that students are part of their campus safety advisory council, while 63.4% indicate faculty being involved in the committee.
- Most universities and colleges report that there is only one reporting level between their campus emergency manager and the President/Chancellor/Provost.
- 87.1% of the respondents indicate that their university leadership (president /provost / chancellor) actively supports emergency management at their university/college (35.5% strongly agree, 33.3% agree and 18.3% somewhat agree).
- 85.8% also indicate that their institution has established an Incident Commander to manage and resolve incidents on campus (39.6% strongly agree, 29.7% agree while 16.5% somewhat agree).

Community Partners:

- Police, fire and first responders are the most popular entities universities and colleges collaborate with when preparing for emergencies, while local/community religious organizations are the least popular community partners followed closely by business organizations.
- Training and drills seem to be the most popular activity that universities carry out with groups such as police, fire and first responders (85.9%), offices of local emergency management (69.4%), medical and health service providers (67.2%).
- Only few respondents indicate that they share finances with police, fire and first responders (15.9%), offices of local emergency management (9%), government relief organizations (2%) and medical and health services providers (7.1%).

Emergency Information Management and Risk Communication:

- The most important source used in gathering information about potential threats before and during emergencies is the National Weather Service (73.7% indicate that this source is very important, 17.1% indicate it is important, while 5.3% indicate that it is somewhat important). The least important source is the National Hurricane Center (NHC) (42. 7% indicate that this source of information is unimportant).
- 88.2% of the respondents report that using simple language to explain what is going on is the most effective strategy. 77.6% report that the strategy of including specific action to be taken by students, staff, and faculty in the warning message is a very effective strategy to present information about potential threats on campus.
- Tailored warning messages to different cultures on campus and providing communications in different languages to cater for the international student body don't seem to be very effective and popular strategies.
- E-mail, text messaging system, university/college website, responding to rumors/gossip with factual information, using triggers or protocols as the impetus to activate Emergency Notification System (ENS), and using specific triggers that address the nature of the incident stand out as the most important strategies to utilize in order to disseminate information about potential threats on campus.
- 86.8% report that their university/college has a written crisis and risk communication plan.
- Around 58% report that their university's inter-departmental operability communications equipment is sufficient for their campus needs and 54% report that their institution's intra-departmental operability communications equipment is sufficient for their campus needs.

Continuity of Operations Plans:

- Out of the 75 respondents, 52% report that their university/college has a Continuity of Operations Plan and 69.2 % report that their COOP is NIMS compliant.

- 73.2% indicate that their COOP incorporates and addresses payroll (39.3% strongly agree, 23.2% agree while 10.7% somewhat agree),
- 60-70% of the respondents indicate that class schedules, transportation, food services, timeline for restoring functionality, internal and external dependencies , an off-campus site to preserve records and key information, and alternate arrangements/sites for instructional continuity are all relatively well-covered and addressed in COOPs.
- Stipends seem to be the only element that is not well-covered in COOPs of most colleges/universities. Only 36.4% report that they cover stipends in their COOPs (9.1% strongly agree, 9.1% agree while 18.2% somewhat agree).

Training and exercises:

- 69% of the respondents indicate and agree that their institution has adequate resources to implement and maintain comprehensive training programs (12.7% strongly agree, 32.4% agree, while 23.9% somewhat agree)
- 73.2% indicate that their key staff and faculty are trained in ICS and NIMS courses (19.7% strongly agree, 18.3% agree, while 35.2% somewhat agree).
- 43.6% of the respondents indicate that students, faculty and staff avail FEMA IS courses (7% strongly agree, 16.9% agree, while 19.7% somewhat agree).
- 37% respondents report that functional drills and simulations are conducted on a yearly basis, 24.7% indicate that they are carried out once in two years, while 20.5% claim that they have never been carried out.
- Tabletop exercises and ICS and NIMS training seem to be the most popular types of exercises in university/college campuses, while full-scale exercises and evacuation site visits are the least popular type of exercises/drills.

Profile of the Respondents

The DRU listserv, which has over 450 members, was used for this survey. This number might not be representing every university/college in the U.S. but it is a great repository for providing information and commitment from institutions who want to become disaster resistant and resilient. The survey was also sent to universities which were recipients of the 2008 Emergency Management for Higher Education (EMHE) grant, and/or were part of the Federal Emergency Management Agency (FEMA) Disaster Resistant University initiative. There might be slight duplication in results since the 2008 EMHE recipients and the universities/colleges involved in the FEMA Disaster Resilient University initiative might also be part of the DRU listserv.

Around 72% of the respondents were male and 28% were female out of the 68 people who responded to this question. Out of these 68 respondents, 19.1% were under 35 years of age, around 30% were from 35-44 years, 25% were from 45-54 and 26.5% were over 54. The majority of the respondents were emergency managers, EM coordinators, Directors and Assistant Directors of the Office EM, Risk Management, EH&S, coordinator Emergency planning and Business Continuity. There were some Chief of police and Directors of Public Safety as well.

Out of the 114 respondents, 84.1% state that they are very familiar with emergency management and planning at their university. 13.3% report that they are familiar while 2.7% report they are somewhat familiar. None of the respondents were unfamiliar with emergency management and planning at their institutions. The high level of familiarity itself shows that results will prove to be intuitive and significant for this research.

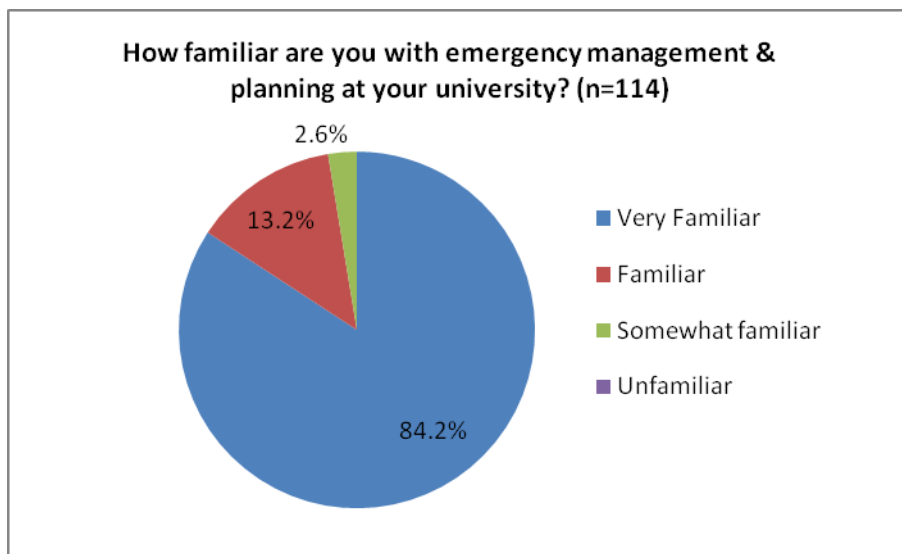


Figure 1: Familiarity with emergency management & planning

Respondents were asked about the total budget of their Emergency Management Office in the recent fiscal year. The majority of the respondents (57.7%) report that their office budget is between \$0 and \$100, 000. Around 24% reported their office budget to be between \$100, 001 and \$500,000. Only 2.8% of the respondents report their budget to be between \$500,001- \$1,000,000, while 15.5% said that they didn't know the total budget.

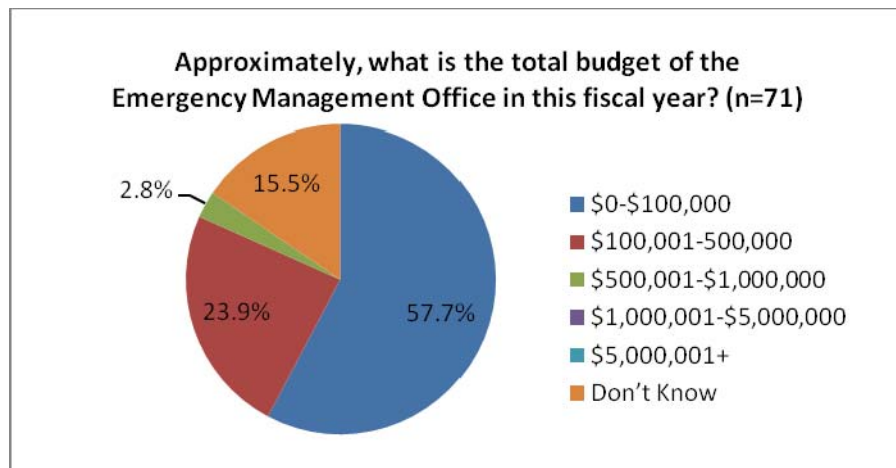


Figure 2: Emergency Management Office -Fiscal budget

Around 18.3% report that their Emergency Management Office budget has increased from the last year, while 7% report that it has actually been reduced. Most of the respondents report that (70.4%) that there hasn't been any change in this years' budget compared to last year's budget. 4.2% respondents claim that they are unaware of whether there has been an increase or a decrease.

74.6% of the 63 respondents report that there Emergency Management Office is run by one employee. 7.9% report that two full time employees work in their office, 11.1% indicate 3 full-time employees, while 3.2% report 4 employees.

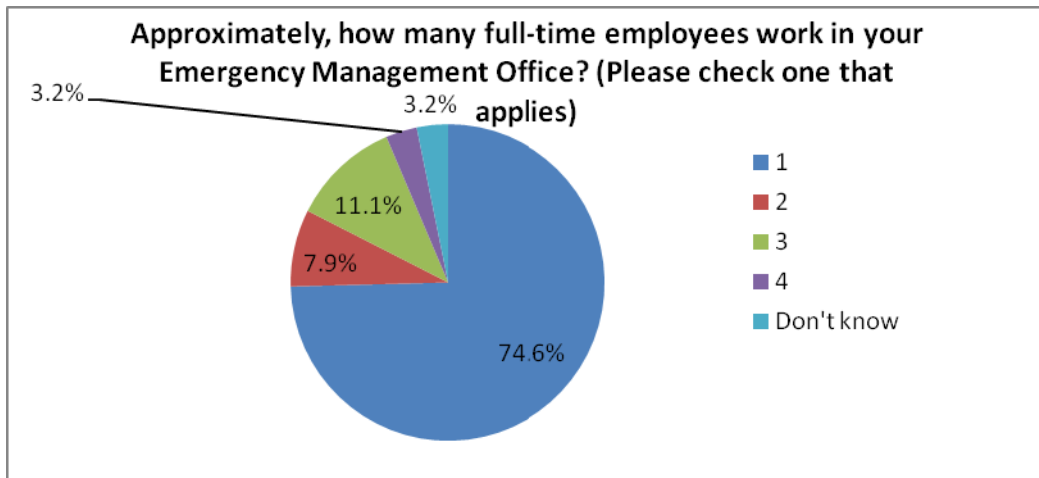


Figure 3: Number of full-time employees

Respondents were asked if emergency management positions were added in response to disasters such as 9/11, Hurricane Katrina, etc. 22.5% indicates that new positions had been added while 76.1% indicated that they hadn't. 32.4% of the 71 respondents report that emergency management positions have been added in response to the Tragedy of Virginia Tech, while 64.8% indicate that no positions were added in response to Virginia Tech shootings. Moreover, 52.9% of 70 respondents report that there have been actual activations for real emergencies at their university in the last two years, while 45.7% indicate that there haven't been any in the past two years.

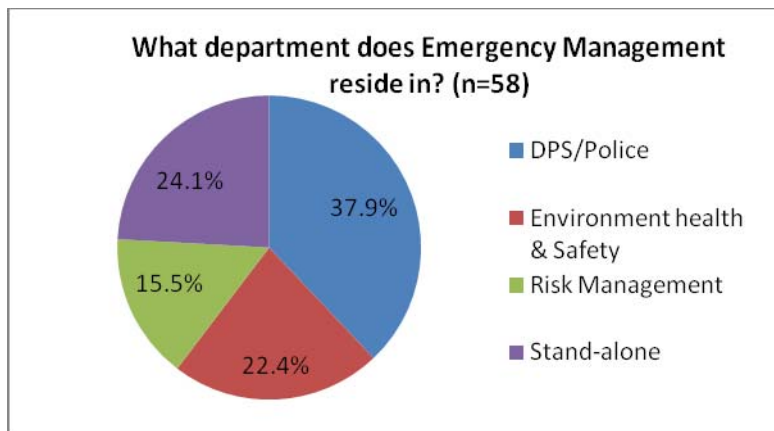


Figure 4: Emergency Management department

Out of the 58 respondents 37.9% indicate that the emergency management office resides in the department of public safety of the Department of Police, 22.4% indicate that it resides in Environmental health and safety, while 15.5% indicate that their office resides in the Risk Management department/office. 24.1% of the respondents claim that their emergency management office is a stand-alone office and is not part of any specific department.

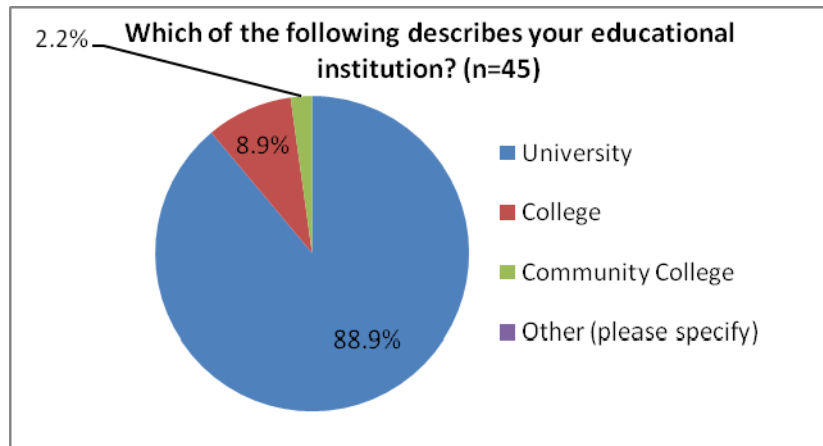


Figure 5: Type of education institution

88.9% of the 45 respondents who provided information about their educational institution indicated that their institution was a university, 8.9% indicated it was a college while 2.2% report that their educational institution is a community college.

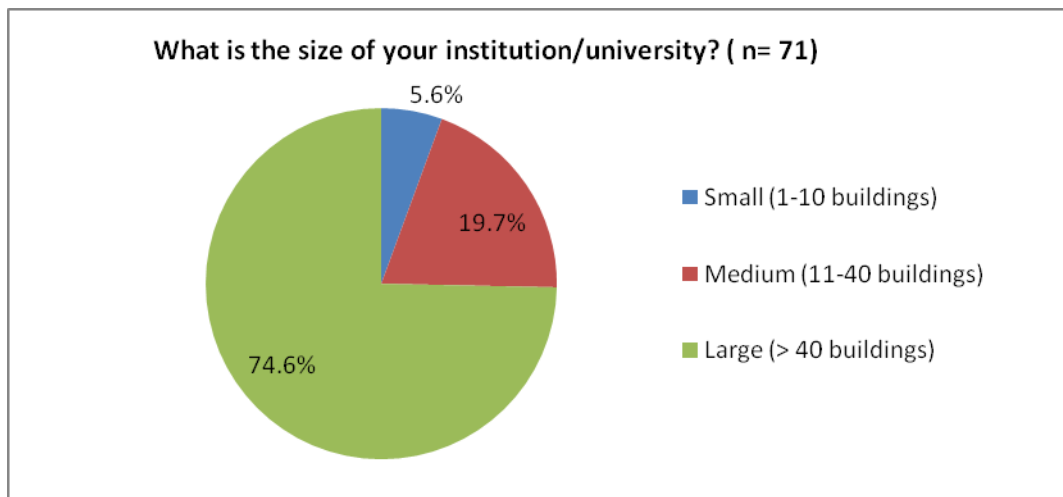


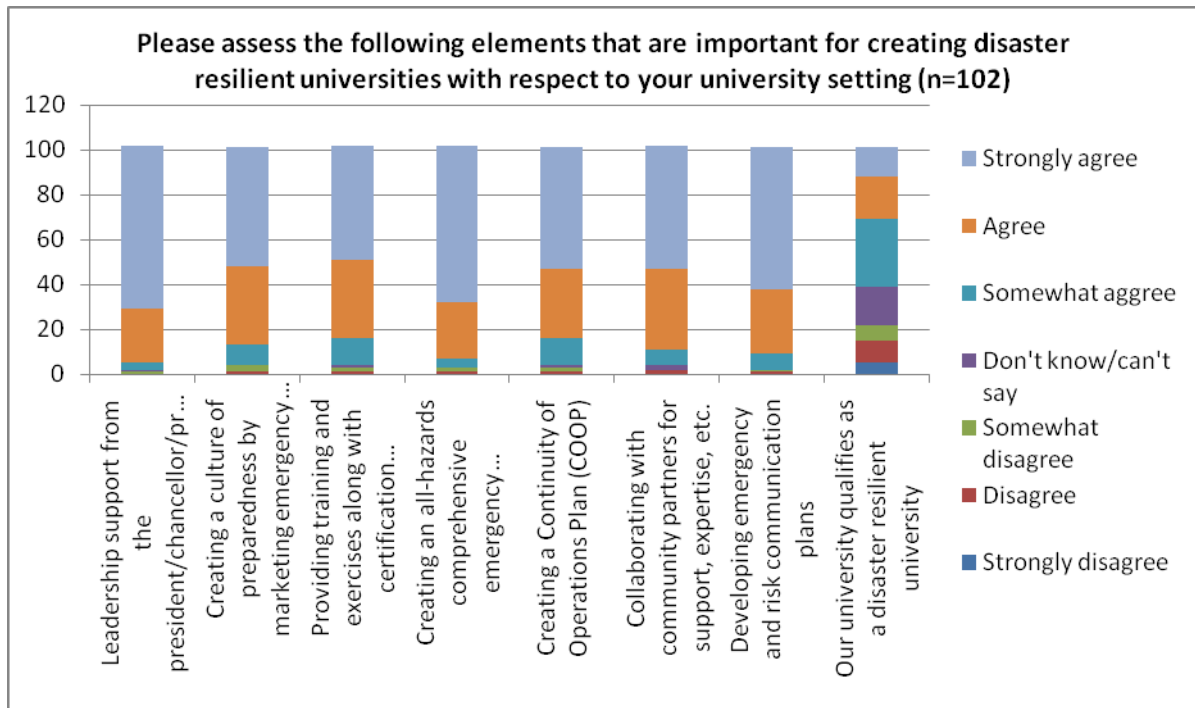
Figure 6: Size of institution/university

Around 5.6% of the 71 respondents indicate that their educational institution is small (1-10 buildings), around 20% report that their institution is medium-sized (11-40 buildings), while the majority (around 75%) indicate that their institution is large with more than 40 buildings.

Key Elements for Creating a Disaster Resilient University (DRU)

50%-71.6% respondents indicate that they strongly agree that these elements are very important for creating disaster resilient universities with respect to their university settings. Around 23.5% - 35.3% agree that these are important while 2.9%-11.9% somewhat agree that these elements are important. Only 1-3% somewhat disagree and disagree that some of these elements are not very important to create a disaster resilient university.

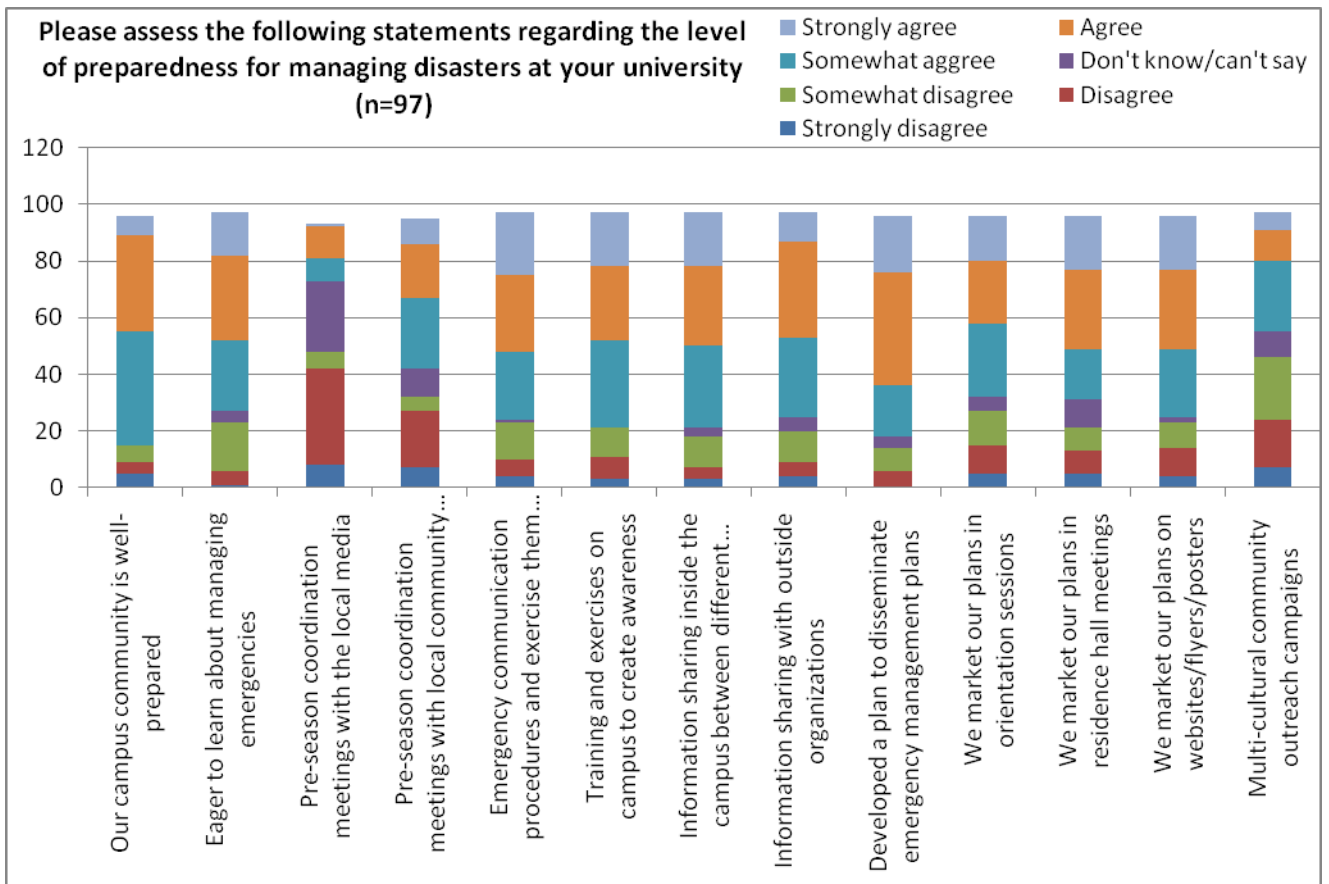
Around 13% are very confident that their university qualifies as a disaster resilient university. 18.8% indicate that they agree that their university qualifies as a disaster resilient university, while around 30% report that they somewhat agree that their university qualifies as DRU. 16.8% of the respondents claim that they don't know if it qualifies as a DRU. 5% strongly disagree, 9.9% disagree and 6.9% somewhat disagree that they qualify as a DRU.



Respondents were also asked if there were any additional elements that have not been covered in this survey that you think are important to create disaster resilient universities. Only 9 respondents answered this question. Additional elements identified by these respondents were: More direction, planning templates, local training, mandates for HE so that Administrators can't say we have a plan or training that is not up to National Incident Management System (NIMS) standards, Multi-modal communications plan, strong emergency management personnel selection criterion, buy in from upper level management not only in "theory" but also financially.

The Level of Preparedness in Universities/Colleges

42.7% of the 97 respondents report that their campus community is well prepared to manage disasters and emergencies (7.3% strongly agree while 35.4% agree). 41.7% indicate that their campus community is somewhat prepared to deal with disasters and emergencies on campus. 15.7% report that their campus community is not well-prepared to manage disasters. Overall results show that a majority of campuses are fairly well-prepared to deal with emergencies and disasters.



72.2% agree that they are eager to learn about managing emergencies (15.5% strongly agree, 30.9% agree and 25.8% somewhat agree), while 23.7% say they are not eager to learn about managing emergencies (17.5% somewhat disagree, 5.2% disagree and 1% strongly disagree)

Conducting pre-season coordination meetings with the local media and with local community are also important aspects to create preparedness. Only 21.5% agree that they conduct pre-season coordination meetings with the local media (1.1% strongly agree, 11.8% agree and 8.6% somewhat agree), while 26.9% claim that they don't know if they

conduct these pre-season meetings with local media. 51.7% report that they do not conduct these pre-season coordination meetings with the media (6.5% somewhat disagree, 36.6% disagree and 8.6% strongly disagree). Results show that pre-season meetings with community agencies are more popular than meetings with the local media since 55.7% report conducting preseason coordination meetings with community organizations, while 33.8% disagree with the statement and do not conduct these meetings with community agencies.

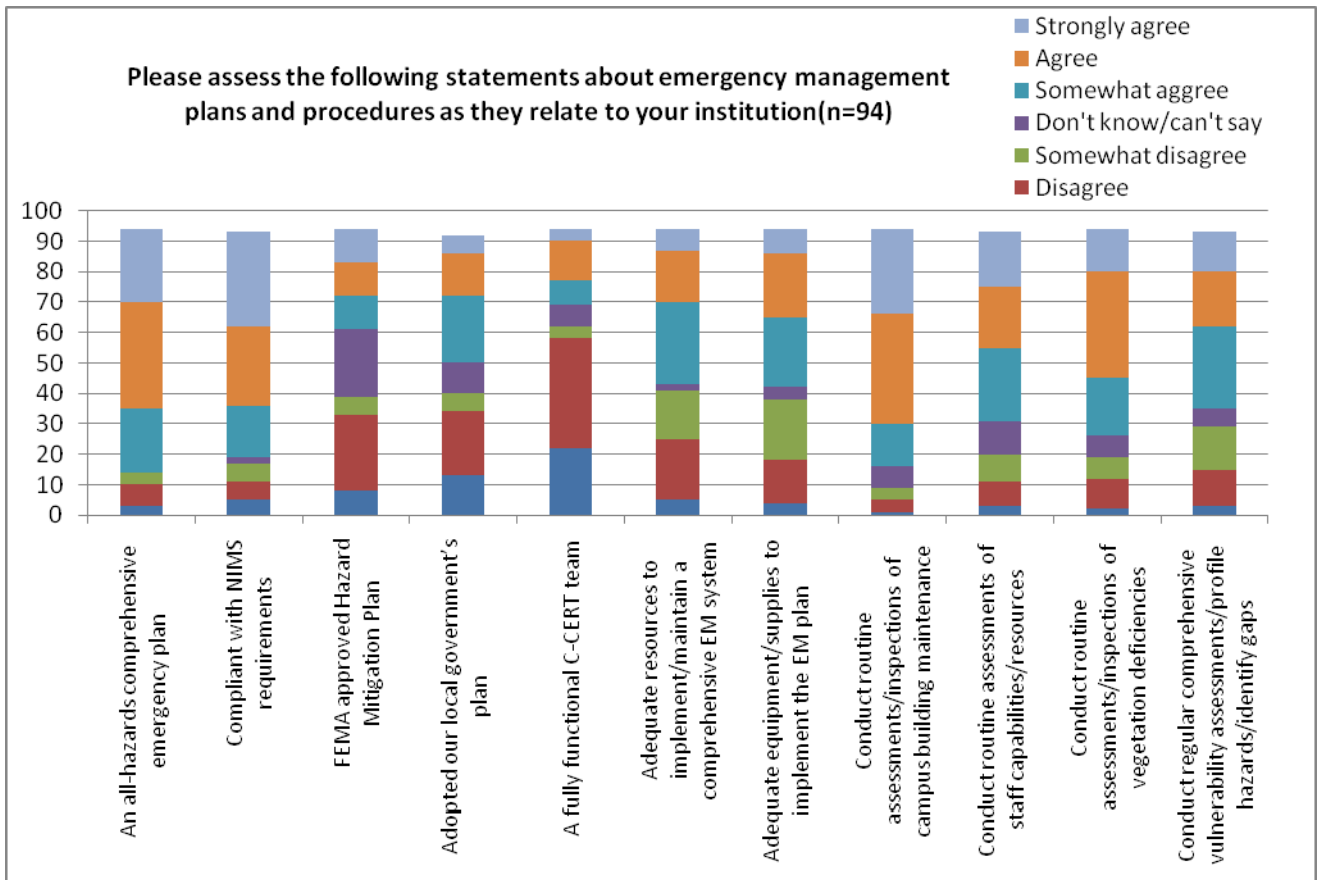
75.2% of the respondents report that they make emergency communication procedures available to the campus community and exercise them regularly (22.7% strongly agree, 27.8% agree while 24.7% somewhat agree). 78.4% report that they conduct a number of trainings and exercises on campus to create awareness about emergency management plans and procedures (19.6% strongly agree, 26.8% agree while 32% somewhat agree). 81.3% also report that their university/college has developed a plan to disseminate emergency management plans on campus.

78.4% report that the culture in their campus focuses on information sharing between different departments (19.6% strongly agree, 28.9% agree while 29.9% somewhat agree). 18.5% report that they do not focus on information sharing inside the campus between different departments. Moreover, 74.3% of the respondents report that they focus on information sharing with outside organizations (10.3% strongly agree, 35.1% agree and 28.9% somewhat agree). 20.6% of the respondents report that they do not focus on sharing information with outside agencies.

Marketing emergency plans and procedures such as lockdown plans for various campus buildings, shelter in place and evacuation plans are an important aspect of creating a culture of preparedness on campuses. 66.7% report that they market such plans in orientation sessions (16.7% strongly agree, 22.9% agree while 27.1% somewhat agree), 67.8% indicate that they market plans in residence hall meetings (19.8% strongly agree, 29.2% agree while 18.8% somewhat agree), and 74% report marketing plans via campus websites, flyers and posters around the campus (19.8% strongly agree, 29.2% agree while 25% somewhat agree).

43.3% of the respondents report that they have designed and developed multi-cultural community outreach campaigns for educating special needs populations within their campuses (6.2% strongly agree, 11.3% agree while 25.8% somewhat agree). 9.3% are not aware if their campus is involved in multi-cultural community outreach campaigns and programs, while 47.4% indicate that they are not investing in multi-cultural community outreach campaigns for educating the vulnerable population (22.7% somewhat disagree, 17.5% agree while 7.2% strongly disagree).

Emergency Management Plans



Results from the survey show that most of the institutions have developed an all-hazards comprehensive emergency management plan that is compliant with NIMS. 85% of the respondents indicate that an all-hazards comprehensive emergency plan has been developed and implemented at their campus (25.5% strongly agree, 37.2% agree while 22.3% somewhat agree). Only around 14.9% report that they have not developed and implemented an all-hazards emergency management plan. 79.6% claim that their comprehensive plan is compliant with NIMS requirements (33.3% strongly agree, 28% agree while 18.3% somewhat agree), while 18.4% report that it is not compliant with NIMS.

Although most of the institutions have developed an all-hazards plan, only a few have a Hazard mitigation plan that is approved by FEMA. Around 35% of the respondents also indicate that they have a FEMA approved Hazard Mitigation Plan, 23.4% report that they don't know whether their institution has a FEMA approved Hazard Mitigation Plan, while 41.5% indicate that they don't have a FEMA approved plan (16.4% somewhat disagree, 6.6% disagree while 8.5% strongly disagree).

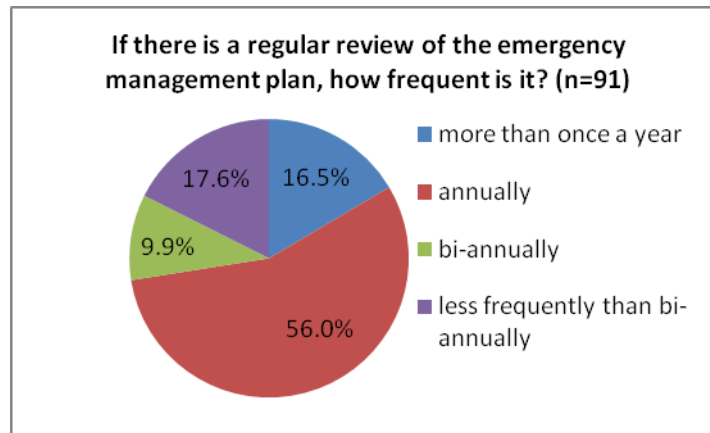
Moreover, 45.6% of the respondents indicate that they have adopted their local government's plan (6.5% strongly agree, 15.2% agree while 23.9% somewhat agree), 10.9% report that they are not aware of whether their university has adopted the local governments plan and 43.4% indicate that they haven't adopted plans of their local governments.

CERT teams form an important part in local emergency management. Respondents were asked about whether they had developed a fully-functional C-CERT team on campus as part of the emergency management program. Only 26.6% indicated that they had a C-CERT team, 7.4% were unsure if they had one while 66% reported that they didn't have a fully functional C-CERT team on campus.

Many resources and equipment are required to implement and maintain a comprehensive emergency management system on campus. 54.2% of the respondents report that they have adequate resources to implement and maintain a comprehensive emergency management system, while 43.6% indicate that they don't. Around 55% report that they have adequate equipment and supplies to implement their emergency management plans, while around 40% indicate that don't have enough equipment and supplies.

Moreover, routine assessments and inspections around campus are an integral part of maintaining an updated comprehensive emergency management plan on campus. 83% of the respondents indicate that their university/college conducts routine assessments and inspections of campus building maintenance (i.e. campus lighting, broken locks/doors, etc.). 66.7% report that they conduct routine assessments of staff capabilities and resources such as fire, police, medical, etc., while 11.8% report that they are not aware if their university/college conducts assessments pertaining to staff capabilities and resources. 21.5% indicate that they don't conduct these staff and resources assessments. 72% of the respondents indicate that they do conduct routine assessments/inspections of vegetation deficiencies that could pose security risks (i.e. overgrown vegetation, etc.). Thus overall, most of the universities and colleges are conducting routine assessments and inspections around the campus.

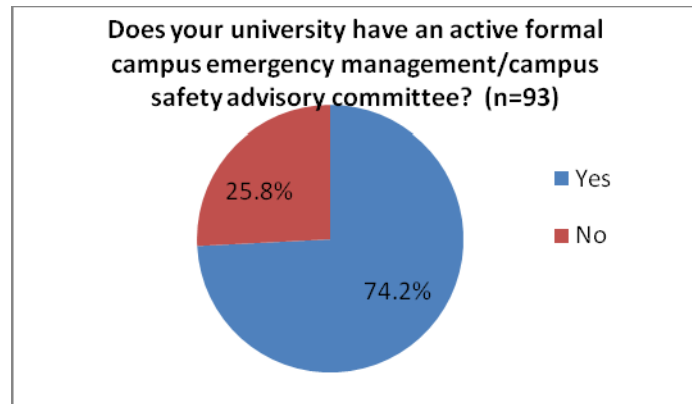
Profiling hazards specific to universities/colleges and conducting vulnerability assessments regularly on campus help to mitigate threats by identifying gaps in campus resources and emergency management plans. 62.4% of the respondents indicate that they regularly conduct comprehensive vulnerability assessments and profile hazards and identify gaps in campus resources (14% strongly agree, 19.4% agree while 29% somewhat agree) and 31.1% indicate that they do not (15% somewhat disagree 12.9% disagree while 3.2% strongly disagree).



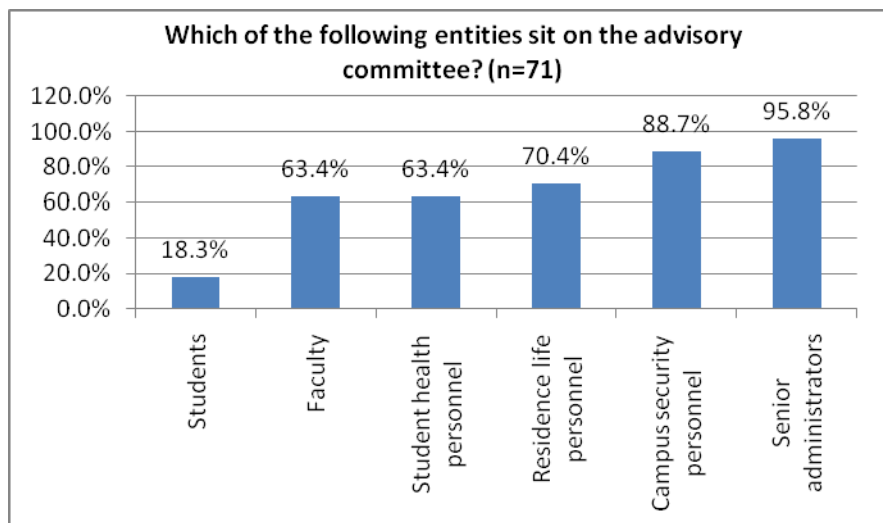
Most of respondents indicate that their emergency management plans are reviewed annually (56%). 9.9% report bi-annual reviews, 16.5% indicate reviews more than once a year , while 17.6% indicate even less than bi-annual reviews.

Leadership Support for Disaster Management Efforts

Leadership support and buy-in from leaders and key players within a campus and outside the campus is a very important aspect of creating a disaster resilient and resistant university. An active formal campus emergency management or campus safety committee comprising of various internal leaders on campus and external players from the community helps to promote and improve emergency management efforts on campus. 74.2% of the respondents indicate that they have a formal campus emergency management/campus safety advisory committee.



66 of the respondents also provided names of their campus emergency management/campus safety advisory committee. The most common names were: Emergency Management Team, Campus Safety Committee, Emergency Management Planning Committee and Emergency Management Advisory Committee. Other common names included: Emergency Response Team, Critical Incident Management Team, Emergency Preparedness Team, Crisis Management Team, Safety Committee and Emergency Management/Planning/Operations Group.



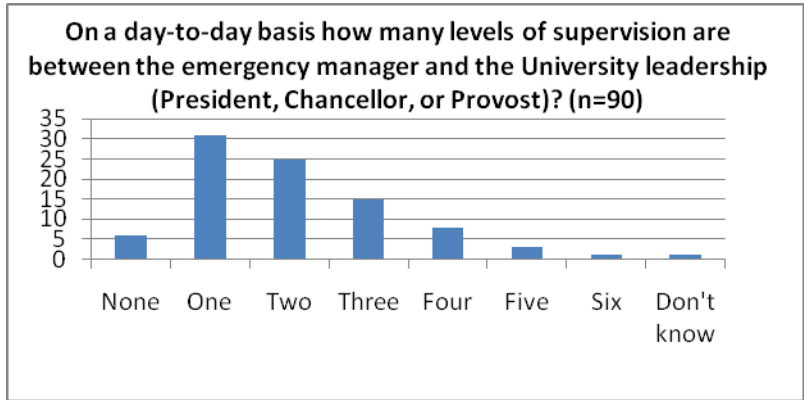
Almost everyone (95.8%) indicates that senior administrators sit on their advisory council/committee, 88.7% report that campus security personnel also sit on the committee, while 70.4% indicate that residence life personnel are part of their respective committees as well. Only 18.3% report that students are part of their campus safety advisory council, while 63.4% indicate faculty being involved in the committee.

Respondents were asked about other members that may be involved in their advisory councils. 41 respondents provided information on other members that are part of their advisory councils and committees. The list below shows other important entities and departments that are involved in advisory councils/committees relating to emergency management.

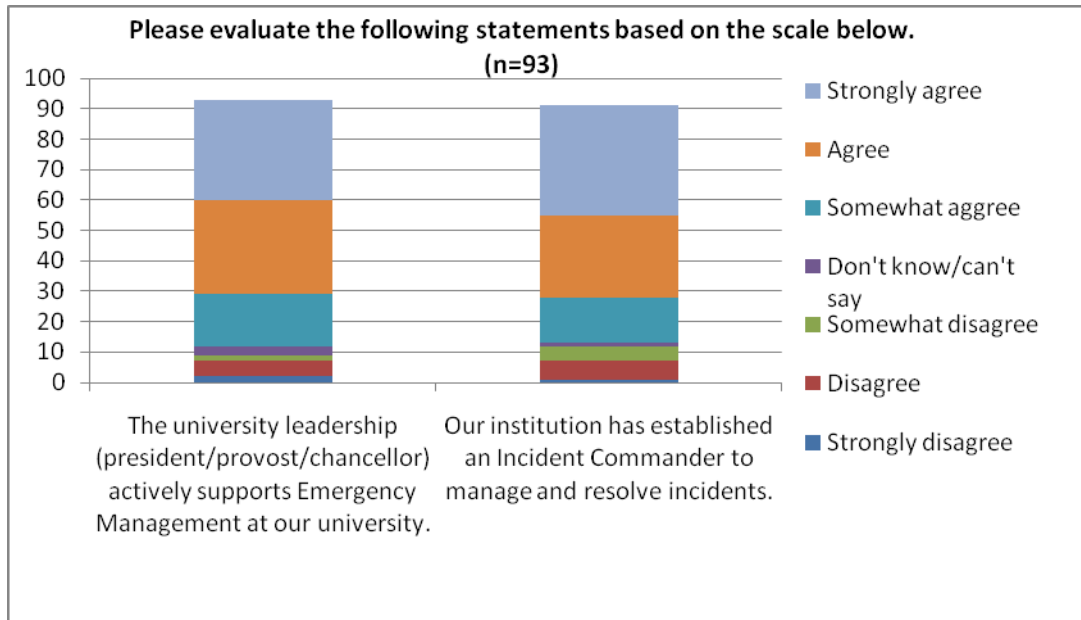
1. Student Life & Student Affairs (12)
2. IT (11)
3. Facilities (10)
4. Public Affairs & Public Relations (10)
5. Risk Management (10)
6. Physical Plant (8)
7. EHS (8)
8. Office of Senior President /Vice President & Provost/Chancellor (6)
9. Human Resources (5)
10. Academics & Research (5)
11. Auxiliary Services (4)
12. General Counsel (3)
13. Medical and Health Center (3)
14. Business Services (3)
15. Support Staff (3)
16. Athletics/Intercollegiate Athletics/Physical Education and Recreation; (3)
17. PIO (3)
18. Communications (3)
19. GIS (3)
20. Office of Budget & Resource Planning / Office of Finance & Administration (3)
21. CIO (2)
22. News Services (2)
23. Other entities/departments listed include: Police, Libraries, outside agencies, Instructional Technology, Transportation, Dining, Representatives from Colleges, Representatives from Branch Campuses, other departmental administrators, Purchasing, Counseling and Testing Center, and Maintenance & Operations.

Respondents were asked about the reporting levels separating the emergency manager from the President/Chancellor/Provost. Most universities and colleges report that there is only one reporting level between an emergency manager and the President. Around 25% indicate that there are two levels between the emergency manager and the president/provost/chancellor. Around 6% also indicate that the link between the

emergency manager and the campus president is direct and there are no supervision levels between them.



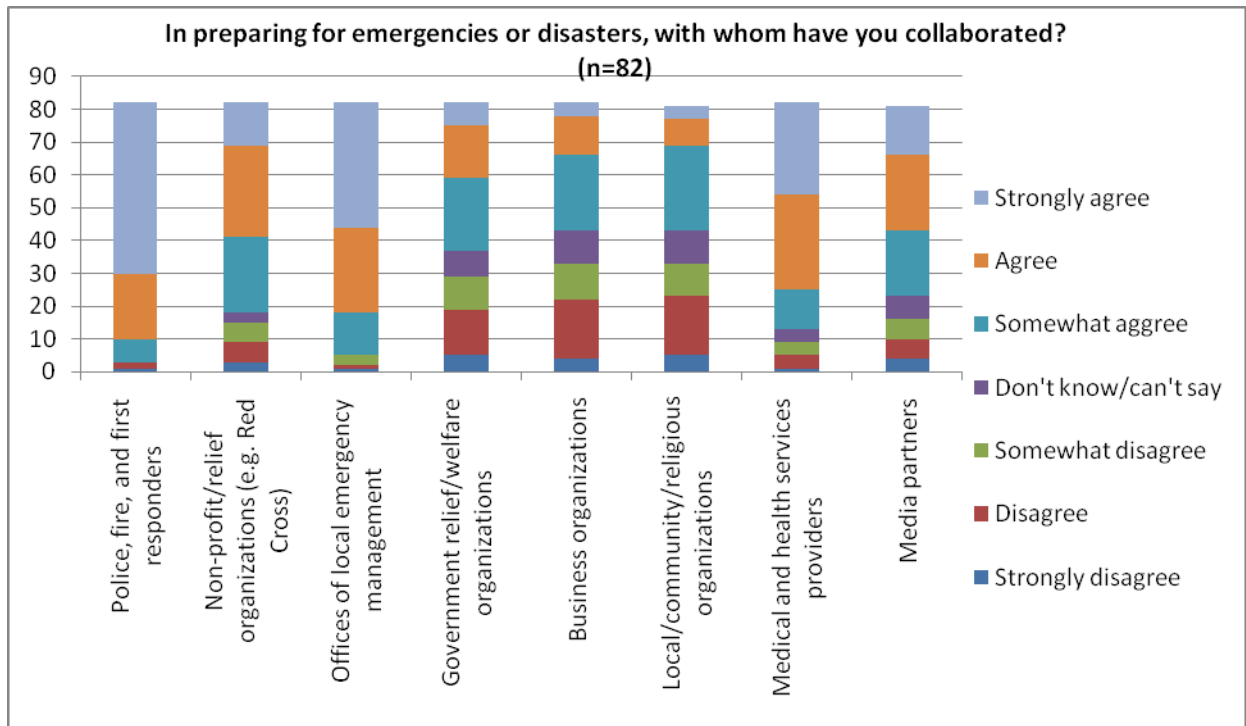
87.1% of the respondents indicate that their university leadership (president /provost / chancellor) actively supports emergency management at their university/college (35.5% strongly agree, 33.3% agree and 18.3% somewhat agree). 3.2% report that they don't know if senior leadership actively supports emergency management while 9.8% indicate that university leadership does not actively support emergency management.



85.8% also indicate that their institution has established an Incident Commander to manage and resolve incidents on campus (39.6% strongly agree, 29.7% agree while 16.5% somewhat agree).

Role of Community Partners in Managing Emergencies

Community organizations and agencies play a very important role in providing resources, personnel, equipment and important information that helps to manage emergencies on campus. Respondents were asked to indicate which community partners had they collaborated with while preparing for emergencies.



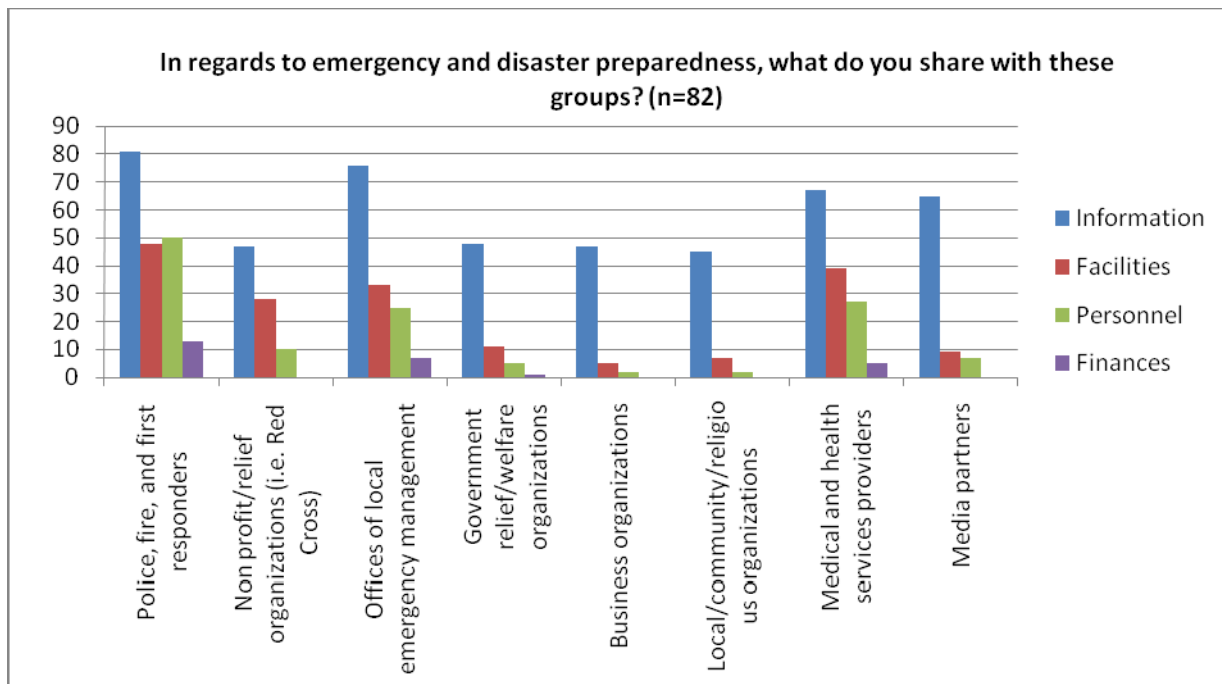
Police, fire and first responders are the most popular entities universities and colleges collaborate with when preparing for emergencies. 96.3% indicate that they collaborate with them (63.4% strongly agree, 24.4% agree and 8.5% somewhat agree). Offices of local emergency management are also very popular community partners. About 94% respondents indicate partnering with them (46.3% strongly agree, 31.7% agree and 15.9% somewhat agree). 78% of the respondents report that they collaborate with non-profit, relief organizations such as Red Cross and Salvation Army (15.9% strongly agree, 34.1% agree and 28% somewhat agree). Government relief and welfare organizations are not as popular as non-profit relief organizations. 54.8% indicate that they partner with government relief and welfare organizations (8.5% strongly agree, 19.5% agree and 26.8% somewhat agree).

Local/community religious organizations are the least popular community partners followed closely by business organizations. Around 46.9% respondents indicate

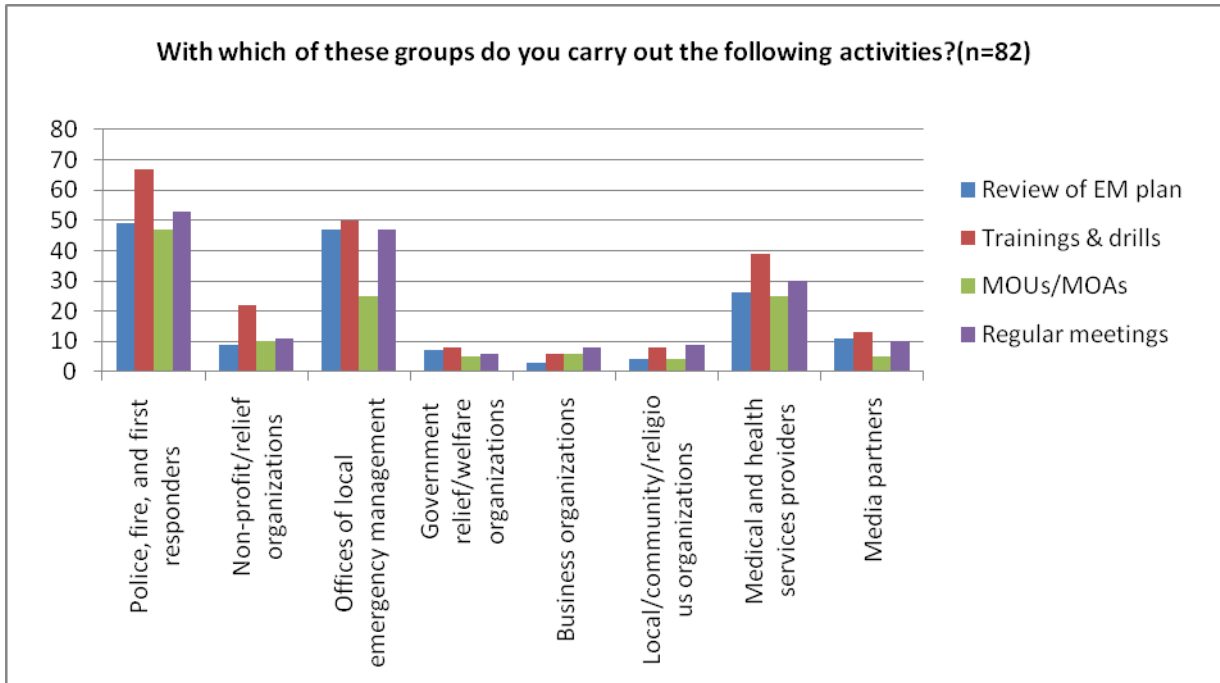
that they collaborate with community religious organizations (4.9% strongly agree, 9.9% agree while 32.1% somewhat agree). 47.5% report that they collaborate with business organizations (4.9% strongly agree, 14.6% agree while 28% somewhat agree).

Medical and health service providers are also popular partners for universities/colleges. Around 84% respondents report collaborating with media and health service providers (34.1% strongly agree, 35.4% agree and 14.6% somewhat agree).

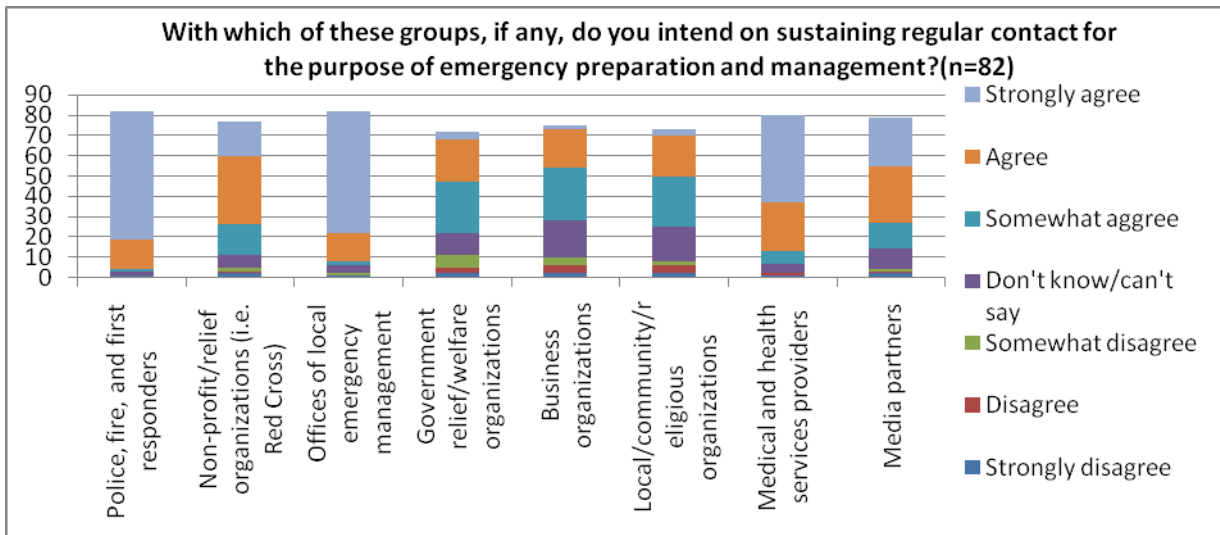
71.6% report collaborating with media partners while preparing for emergencies (18.5% strongly agree, 28.4% agree while 24.7% somewhat agree). 8.6% indicate that they don't know if their university collaborates with media partners, while around 20% report that they do not partner with media agencies.



The chart above clearly shows that information is shared the most across all external entities and groups when compared to the sharing of facilities, personnel and finances (around 82% to 99% indicate information sharing with all entities). Finances seem to be the least popular element that is shared with these groups. Only few respondents indicate that they share finances with police, fire and first responders (15.9%), offices of local emergency management (9%), government relief organizations (2%) and medical and health services providers (7.1%). After information sharing, facilities sharing are common across these entities followed by personnel sharing.



Training and drills seem to be the most popular activity that universities carry out with groups such as police, fire and first responders (85.9%), offices of local emergency management (69.4%), medical and health service providers (67.2%). Regular meetings with these groups and review of the EM plan are also popular among these three groups. However, MOUS and MOAs are not a popular activity in any group but police, fire and first responders. All four activities are carried out less with non-profit/relief organizations, government relief organizations, business organizations, local community religious organizations and media partners.



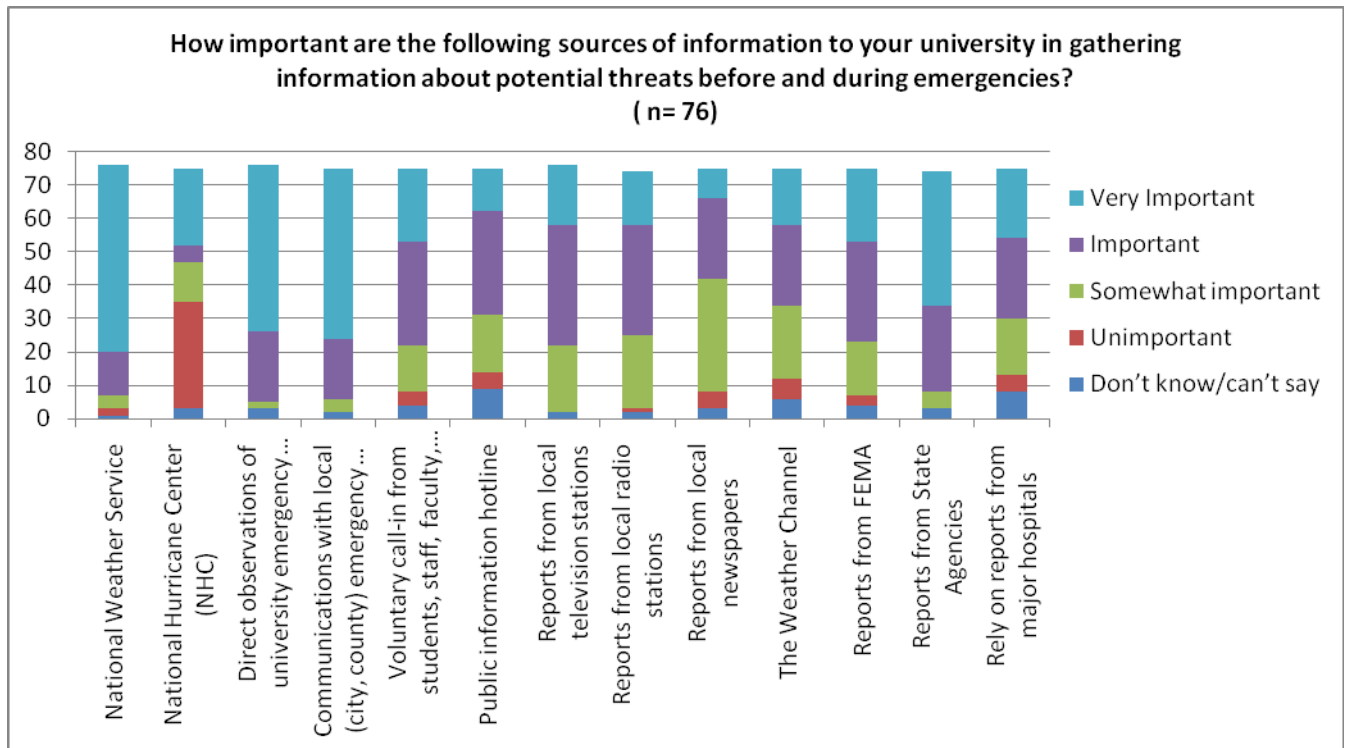
96.3% indicate that they intend to maintain regular contact with police, fire and first responders for the purpose of emergency preparation and emergency management (76.8% strongly agree, 18.3% agree and 1.2% somewhat agree). 92.7% report that they intend to maintain regular contact with offices of local emergency management (73.2% strongly agree, 17.1% agree and 2.4% somewhat agree), while 85.8% report that they want to maintain regular contact with non-profit and relief organizations (22.1% strongly agree, 44.2% agree while 19.5% somewhat agree). 82.3% indicate that they would like to sustain regular contact with media partners (30.4% strongly agree, 35.4% agree and 16.5% somewhat agree). 12.7% report that they don't know if they want to maintain contact with media players. 91.3% report that they would like to sustain regular contact with medical and health service providers (53.8% strongly agree, 30% agree while 7.5% somewhat agree).

Around 62%-70% of the respondents report that they intend to maintain regular contact with government relief and welfare organizations, business organizations or/and local community religious organizations. Only 3%-6% of these respondents indicate that they strongly agree to maintain regular contacts, 25%-30% of them indicate that they agree, while 34%-35% of these respondents somewhat agree that they want to maintain regular contact with these entities. 10-16% report that they don't intend to maintain regular contact with government relief and welfare organizations, business organizations or/and local community religious organizations.

Emergency Information Management and Risk Communication

Emergency Information Management and risk communication planning are very important aspects of emergency preparedness, mitigation and response. Out of the various sources of information that universities use in gathering information about potential threats before and during emergencies the most important source is the National Weather Service (73.7% indicate that this source is very important, 17.1% indicate it is important, while 5.3% indicate that it is somewhat important). Other sources referred to as very important are “Direct observations of university emergency management staff about emergency conditions” (65.8%), “Communications with local (city, county) emergency managers” (68%).

According to the results the least important source is the National Hurricane Center (NHC). 42. 7% indicate that this source of information is unimportant. Most of the sources like the public information hotline, reports from local television reporters, reports from local radio stations, reports from FEMA, etc lie in the important level and not the very important level.

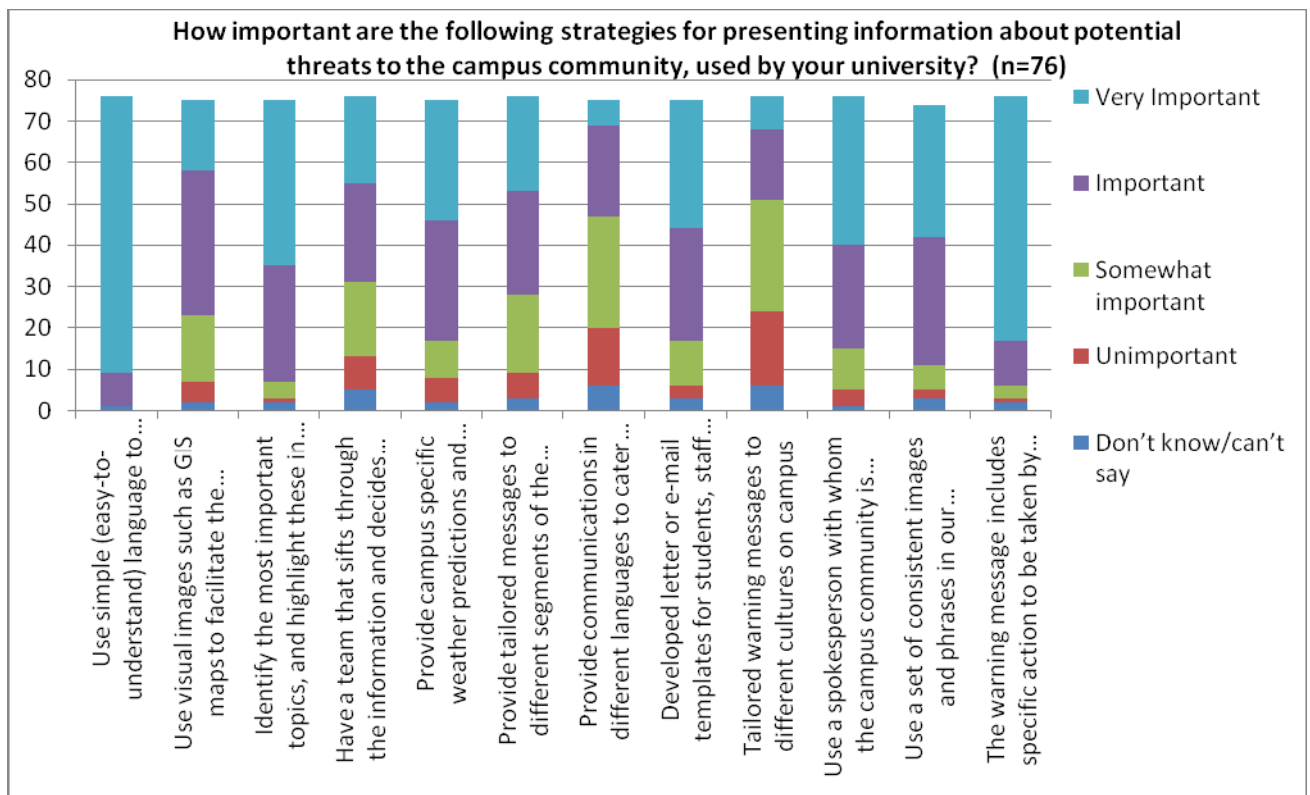


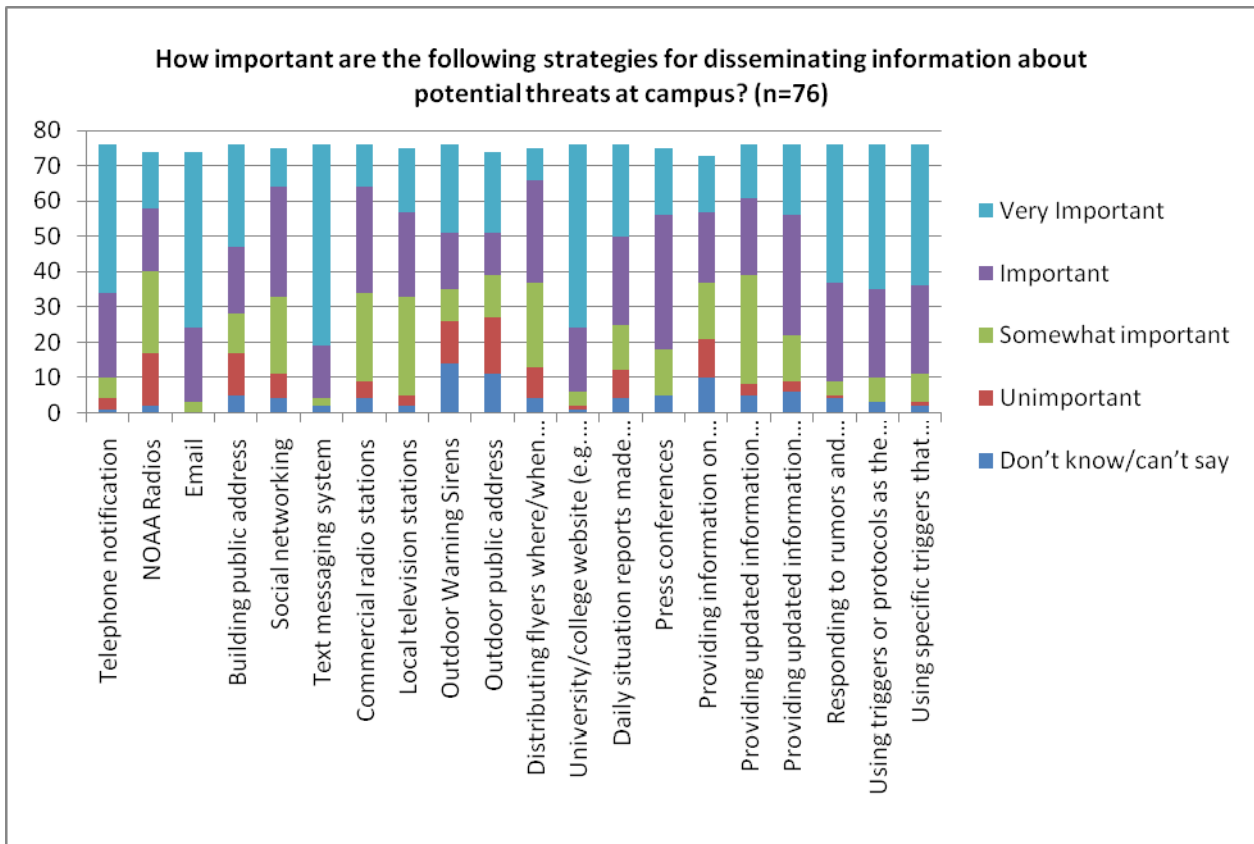
There are various strategies that are utilized by universities and colleges to inform the campus community about potential threats. Some strategies are more effective than others. We can gauge the effectiveness of strategies by the level of importance attached

to each strategy. The strategy of using simple (easy-to-understand) language to explain what is going on is the most effective since 88.2% of the respondents report that this strategy is considered very important in providing information to the campus community, while 10.5% consider this as an important strategy. The strategy of including specific action to be taken by students, staff, and faculty in the warning message is also a very popular strategy to present information about potential threats on campus (77.6% report that this strategy is very important while 14.5% indicate that it is important)

Moreover, tailored warning messages to different cultures on campus and providing communications in different languages to cater for the international student body don't seem to be very effective and popular strategies.

Other strategies listed by respondents were utilizing social networking media, gaining information and partnering with the local health department/government health authority, utilizing reports from the local police and fire departments, information sharing with state and county offices of emergency management, and utilizing local fusion centers such as Intel, etc.





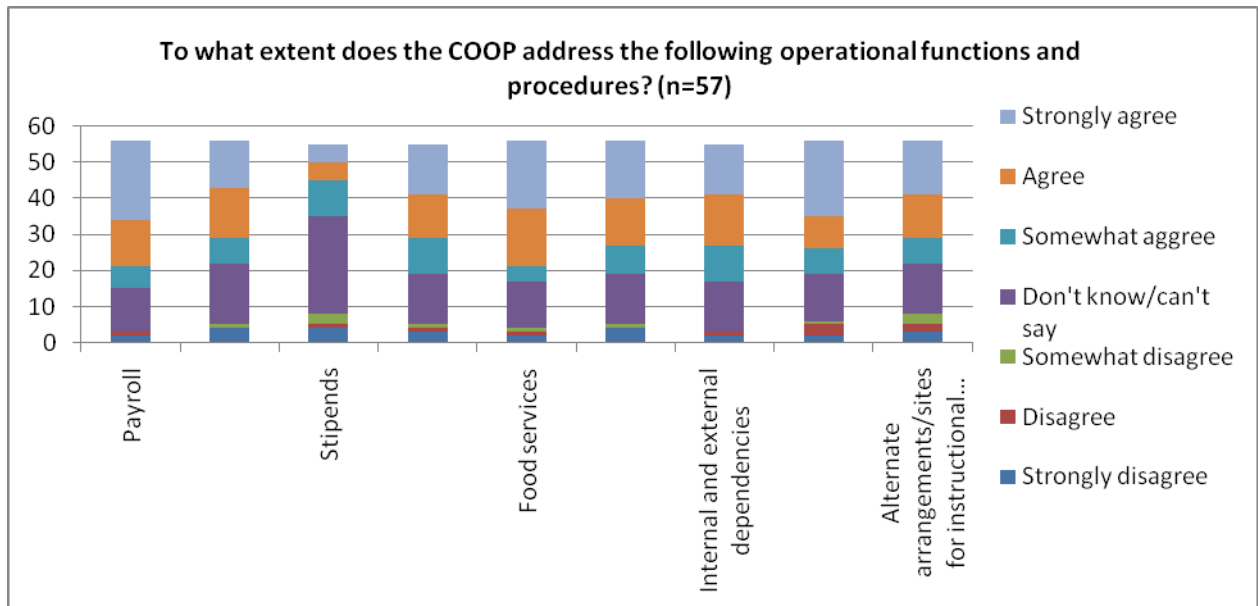
E-mail, text messaging system, university/college website, responding to rumors/gossip with factual information(51.3% very important and 36.8% important), using triggers or protocols as the impetus to activate Emergency Notification System (ENS)(53.9% very important and 32.9% important), and using specific triggers that address the nature of the incident (52.6% very important, 32.9% important) stand out as the most important strategies to utilize in order to disseminate information about potential threats on campus. Providing updated information at least every hour before and during the event, utilizing NOAA Radios, carrying out outdoor public address and outdoor warning sirens are the least popular methods for disseminating information about potential threats at campus.

Out of the 76 respondents, 86.8% (66 respondents) report that their university/college has a written crisis and risk communication plan; while 13.2% (10 respondents) report that they don't have a written plan. Out of the 66 respondents that report having a written crisis and communication plan, around 60% report that it is tested on a regular basis.

Out of the 76 respondents that answered the question on interoperability communications equipment used in campuses, Around 58% report that their university's inter-departmental operability communications equipments is sufficient for their campus needs while the rest report that these equipments are insufficient. Moreover, around 54% report that their institution's intra-departmental operability communications equipment is sufficient for their campus needs.

Continuity of Operations Planning

Out of the 75 respondents, 52% report that their university/college has a Continuity of Operations Plan (COOP) in place. However, out of the 52% (39) who have a COOP only 59 % (23) report that the plan is updated, evaluated and tested on a yearly basis. Also around 69.2 % (27) report that their COOP is NIMS compliant.

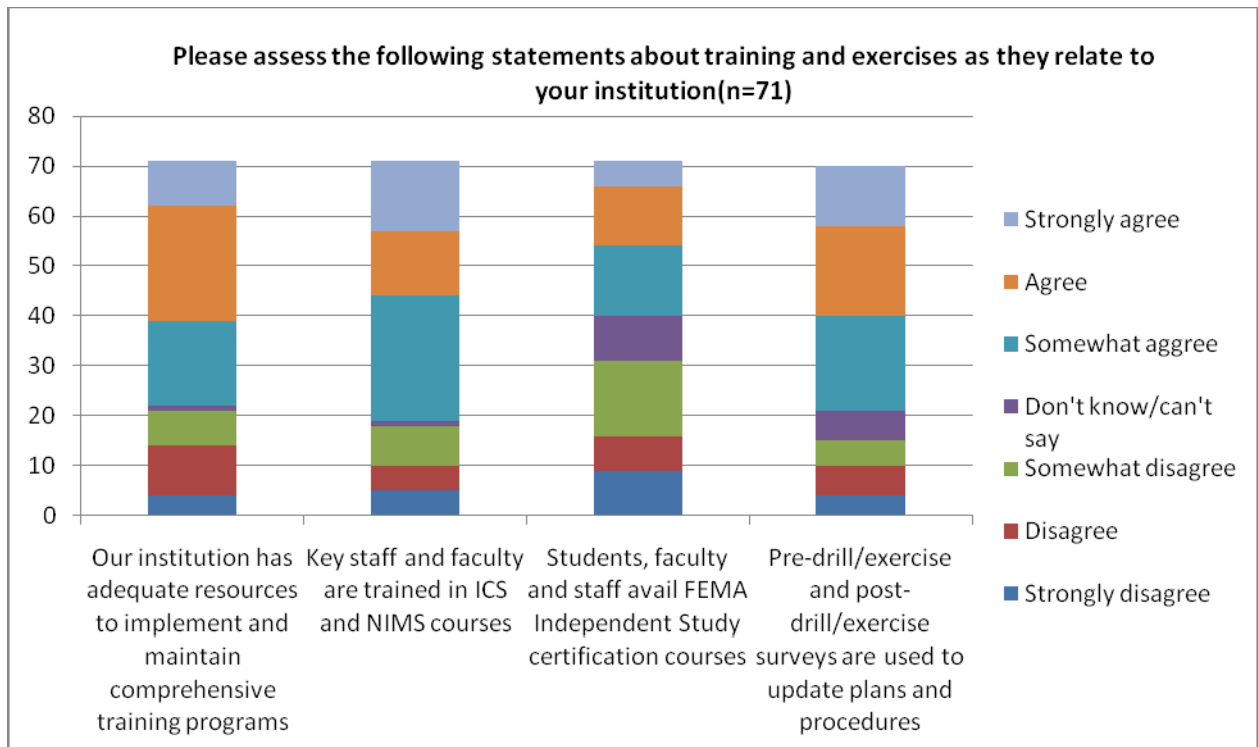


A coop addresses various operational and functional procedures on a campus. Respondents were asked about the extent to which various elements and functions were addressed and incorporated in their COOPs. 73.2% indicate that their COOP incorporates and addresses payroll (39.3% strongly agree, 23.2% agree while 10.7% somewhat agree), while 5.4% report that their COOP doesn't address payroll. 21.4% report that they are unaware if payroll is incorporated as part of their COOP.

60-70% of the respondents indicate that class schedules, transportation, food services, timeline for restoring functionality, internal and external dependencies , an off-campus site to preserve records and key information, and alternate arrangements/sites for instructional continuity are all relatively well-covered and addressed in COOPs. Around 23% - 30% report that they don't know if these elements are addressed in their COOPs. Stipends seem to be the only element that is not well-covered in COOPs of most colleges/universities. Only 36.4% report that they cover stipends in their COOPs (9.1% strongly agree, 9.1% agree while 18.2% somewhat agree). Around 50% of the respondents are unaware of whether their COOPs incorporate stipends while 14.6% report that their COOPs do not address stipends.

Training and exercises

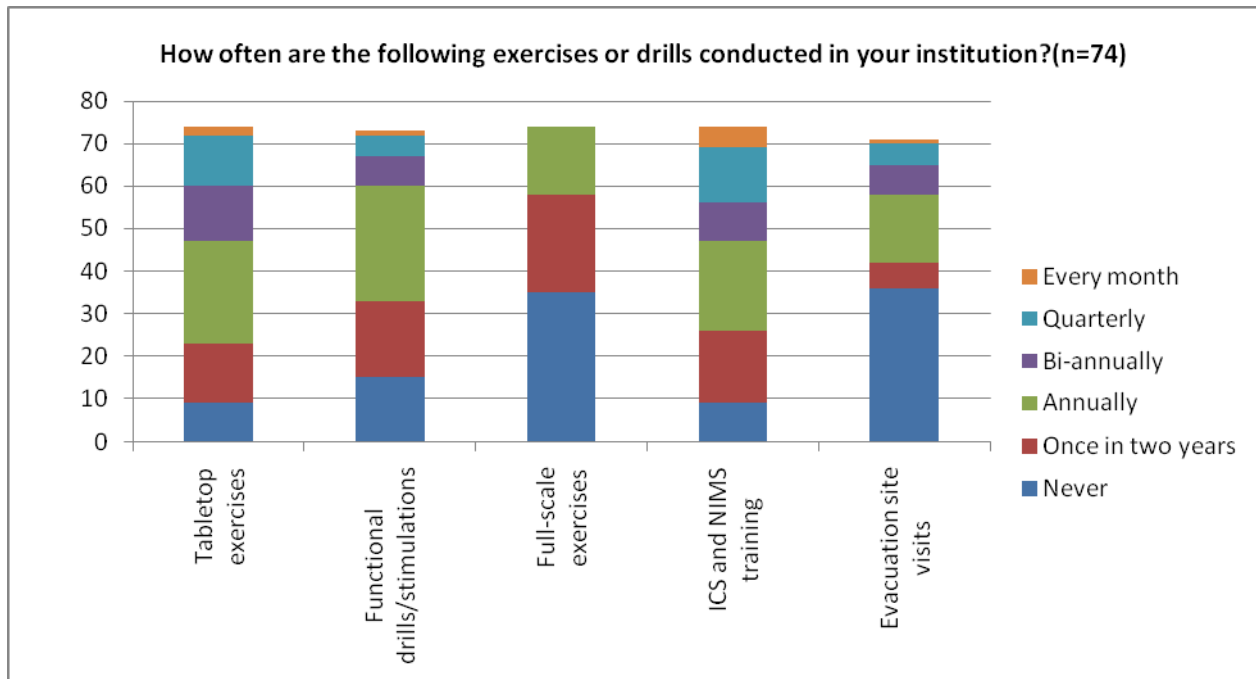
69% of the respondents indicate and agree that their institution has adequate resources to implement and maintain comprehensive training programs (12.7% strongly agree, 32.4% agree, while 23.9% somewhat agree). 29.6% disagree that their university/college has the adequate resources to establish and implement a comprehensive training program (9.9% somewhat disagree, 14.1% disagree, while 5.6% strongly disagree).



73.2% indicate that their key staff and faculty are trained in ICS and NIMS courses (19.7% strongly agree, 18.3% agree, while 35.2% somewhat agree). 1.4% report that they don't know if their key staff and faculty are trained in ICS and NIMS courses, while 25.3% disagree and report that their key staff and faculty is not trained in these courses (11.3% somewhat disagree, 7% disagree, and 7% strongly disagree).

FEMA Independent Study (IS) certification courses are an important training resource that students, faculty and staff can avail. 43.6% of the respondents indicate that students, faculty and staff avail FEMA IS courses (7% strongly agree, 16.9% agree, while 19.7% somewhat agree). 12.7% respondents report that they are not aware if these courses are being availed in their universities/colleges. 43.7% disagree with the statement and report that these IS courses are not availed on campus (21.1% somewhat disagree,

9.9% disagree, while 12.7% strongly disagree). Pre-drill/exercise and post-drill/exercise surveys are used by 69.9% of the respondents (17.1% strongly agree, 25.1% agree while 27.1% somewhat agree). 8.6% of the respondents are unaware if pre- and post-drill/exercise surveys are utilized on their campus, while 21.4% report that they do not employ these surveys to update emergency plans and procedures in their university/college (7.1% somewhat disagree, 8.6% disagree and 5.7% strongly disagree).



37% respondents report that functional drills and simulations are conducted on a yearly basis, 24.7% indicate that they are carried out once in two years, while 20.5% claim that they have never been carried out. Tabletop exercises and ICS and NIMS training seem to be the most popular types of exercises in university/college campuses. Only around 12.2% respondents indicate that these two types of exercises have never been conducted in their campuses. Tabletop exercises are mostly carried out in universities annually (32.4%). Only about 2.7% of respondents report that tabletop exercises are conducted every month. 16.2% report that these exercises are carried out quarterly and 17.6% indicate that they are carried out bi-annually. ICS and NIMS training is mostly carried out annually as well (28.4%). 6.8% indicate that these are carried out every month, 17.6% report that these are carried out quarterly, while 12.2% indicate they are carried out bi-annually.

Evacuation site visits are the least popular type of exercise/drill, as 50.7% indicate that these have never been carried out or conducted on their campuses. Around 22.5%

report that evacuation site visits are conducted yearly, while 9.9% report that these are conducted half-yearly. Full-scale exercises are also very unpopular in universities and colleges. 47.3% indicate that full-scale exercises have never been conducted on their campus, 31.1% claim that these exercises take place once in two years, while 21.6% report that they are carried out annually.

DISASTER RESILIENT UNIVERSITIES SURVEY

This survey helps to delineate factors that are important to create a disaster resilient university. This survey will be used to assist the University of Central Florida and other universities that are trying to improve their current emergency management plans and procedures. The survey takes about 20 minutes to complete. Your responses are confidential, and will not be revealed without your consent; only aggregate results will be made available. We are happy to make a copy of final results available to you.

Thank you very much for your cooperation



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Please tell us about yourself:

Are you the addressee?

- Yes
- No → Please state your position/title here: _____

How familiar are you with emergency operations in your jurisdiction? (Please check one)

- Very Familiar
- Familiar
- Somewhat familiar
- Unfamiliar

Part 1: This section focuses on some elements that a university may require for developing disaster resiliency

Question 1: Please assess the following elements that are important for creating disaster resilient universities with respect to your university setting. Please use the following scale:

Strongly		Somewhat	Don't Know/	Somewhat		Strongly
Agree	Agree	Agree	Can't Say	Disagree	Disagree	Disagree
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>

- Leadership support from the campus president/chancellor/provost
- Creating a culture of preparedness by marketing emergency management plans and procedures
- Providing training and exercises along with certification opportunities for the campus community
- Creating an all-hazards comprehensive emergency management plan
- Creating a Continuity of Operations Plan (COOP)
- Collaborating with community partners for support, expertise, etc.
- Developing emergency and risk communication plans
- Our university qualifies as a disaster resilient university

Part 2: This section focuses on developing a culture of preparedness in university campuses

Question 1: Please assess the following statements regarding the level of preparedness for managing disasters at your university. Please use the following scale:

Strongly		Somewhat	Don't Know/	Somewhat		Strongly
Agree	Agree	Agree	Can't Say	Disagree	Disagree	Disagree
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>

- Our campus community is well-prepared to manage disasters and emergencies
- Our campus community is eager to learn about managing emergencies
- We conduct pre-season coordination meetings with the local media
- We conduct pre-season coordination meetings with the local community organizations
- We make emergency communication procedures available and exercise them regularly
- We conduct a number of training and exercises on campus to create awareness
- We focus on information sharing inside the campus between different departments
- We focus on information sharing with outside organizations
- We have developed a plan to disseminate emergency management plans on campus
- We market our plans (such as lockdown, shelter in place, evacuation, etc) in orientation sessions
- We market our plans (such as lockdown, shelter in place, evacuation, etc) in residence hall meetings

- We market our plans (such as lockdown, shelter in place, evacuation, etc) on websites/flyers/posters
- We have multi-cultural community outreach campaigns for educating special needs populations.

Part 3: This section is related to creating an all-hazards emergency management plan in universities and colleges

Question 1: Please assess the following statements about emergency management plans and procedures as they relate to your institution. Please use the following scale:

Strongly Agree	Agree	Somewhat Agree	Don't Know/ Can't Say	Somewhat Disagree	Disagree	Strongly Disagree
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>

- An all-hazards comprehensive emergency plan has been developed and implemented
- Our comprehensive plan is compliant with NIMS requirements
- We have a FEMA approved Hazard Mitigation Plan
- We have adopted our local government's plan
- We have a fully functional C-CERT team
- We have adequate resources to implement and maintain a comprehensive emergency management system
- We have adequate equipment and supplies to implement the emergency management plan
- We conduct routine assessments/inspections of campus building maintenance (i.e. campus lighting, broken locks/doors, etc.)
- We conduct routine assessments of staff capabilities and resources such as fire, police, medical, etc.
- We conduct routine assessments/inspections of vegetation deficiencies that could pose security risks (i.e. overgrown vegetation, etc.)
- We regularly conduct comprehensive vulnerability assessments and profile hazards and identify gaps in campus resources

Question 2: If there is a regular review of the emergency management plan, how frequent is it?

- more than once a year
- annually
- bi-annually
- less frequently than bi-annually

Part 4: The questions in this section are related to leadership support and teambuilding efforts to address emergency management concerns in universities and colleges

Question 1: Does your university have an active formal campus emergency management/campus safety advisory committee?

- Yes No

Question 2: If Yes, what is the title of the committee? *(Please provide the name.)*

Question 3: Which of the following entities sit on the advisory committee? *(Please check all that apply.)*

- Students
- Faculty
- Student health personnel
- Residence life personnel

- Campus security personnel
- Senior administrators
- Others (*Please specify*) _____

Question 4: On a day-to-day basis, how many levels of supervision are between the emergency manager and the University leadership (President, Chancellor, or Provost)?

Please evaluate the following statements based on the scale below.

Strongly		Somewhat	Don't Know/	Somewhat		Strongly
Agree	Agree	Agree	Can't Say	Disagree	Disagree	Disagree
1	2	3	4	5	6	7

Question 5: The university leadership (president/provost/chancellor) actively supports Emergency Management at our university.

- Yes No

Question 6: Our institution has established an Incident Commander to manage and resolve incidents?

- Yes No

Part 5: The questions in this section are related to community partners and their role in managing emergencies at universities and colleges

Question 1: In preparing for emergencies or disasters, with whom have you collaborated? Please use the following scale:

Strongly		Somewhat	Don't Know/	Somewhat		Strongly
Agree	Agree	Agree	Can't Say	Disagree	Disagree	Disagree
1	2	3	4	5	6	7

- Police, fire, and first responders
- Non-profit/relief organizations (e.g. Red Cross)
- Offices of local emergency management
- Government relief/welfare organizations
- Business organizations
- Local/community/religious organizations
- Medical and health services providers
- Media partners

Question 2: In regards to emergency and disaster preparedness, what do you share with these groups? Please use the following scale:

Strongly		Somewhat	Don't Know/	Somewhat		Strongly
Agree	Agree	Agree	Can't Say	Disagree	Disagree	Disagree
1	2	3	4	5	6	7

Finances Personnel Facilities

Information

Police, fire, and first responders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Non profit/relief organizations (i.e. Red Cross)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Offices of local emergency management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Government relief/welfare organizations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Business organizations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Local/community/religious organizations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Medical and health services providers	[]	[]	[]	[]
Media partners	[]	[]	[]	[]

Question 3: With which of these groups do you carry out the following activities? Please use the following scale:

Strongly Agree	Agree	Somewhat Agree	Don't Know/ Can't Say	Somewhat Disagree	Disagree	Strongly Disagree
<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>
Regular meetings MOUs/MOAs Trainings & drills						

Review of EM plan						
Police, fire, and first responders			[]	[]	[]	[]
Non-profit/relief organizations			[]	[]	[]	[]
Offices of local emergency management			[]	[]	[]	[]
Government relief/welfare organizations			[]	[]	[]	[]
Business organizations			[]	[]	[]	[]
Local/community/religious organizations			[]	[]	[]	[]
Medical and health services providers			[]	[]	[]	[]
Media partners			[]	[]	[]	[]

Question 4: With which of these groups, if any, do you intend on sustaining regular contact for the purpose of emergency preparation and management? Please use the following scale:

Strongly Agree	Agree	Somewhat Agree	Don't Know/ Can't Say	Somewhat Disagree	Disagree	Strongly Disagree
<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>

[]	Police, fire, and first responders
[]	Non-profit/relief organizations (i.e. Red Cross)
[]	Offices of local emergency management
[]	Government relief/welfare organizations
[]	Business organizations
[]	Local/community/religious organizations
[]	Medical and health services providers
[]	Media partners

Part 6: The following questions pertain to emergency information management and risk communication in universities

Question 1: Please assess the following information and communication strategies used at your university. Please use the following scale for all parts of the question:

Very Important	Important	Somewhat Important	Unimportant	Don't Know/ Can't say
<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>

A. Information Gathering

1. How **important** are the following sources of information to your university in gathering information about potential threats before and during emergencies?

[]	National Weather Service
[]	National Hurricane Center (NHC)
[]	Direct observations of university emergency management staff about emergency conditions
[]	Communications with local (city, county) emergency managers
[]	Voluntary call-in from students, staff, faculty, and citizens
[]	Public information hotline
[]	Reports from local television stations

- Reports from local radio stations
- Reports from local newspapers
- The Weather Channel
- Reports from FEMA
- Reports from State Agencies
- Rely on reports from major hospitals
- Other (*please specify*) _____

B. Information Processing and Presentation

How important are the following strategies for presenting information about potential threats to the campus community, used by your university?

- Use simple (easy-to-understand) language to explain what is going on
- Use visual images such as GIS maps to facilitate the communication of information
- Identify the most important topics, and highlight these in our communications
- Have a team that sifts through the information and decides what is most important from the institution's perspective
- Provide campus specific weather predictions and evacuation information
- Provide tailored messages to different segments of the campus community
- Provide communications in different languages to cater for the international student body
- Developed letter or e-mail templates for students, staff and families to provide information when an incident occurs
- Tailored warning messages to different cultures on campus
- Use a spokesperson with whom the campus community is familiar
- Use a set of consistent images and phrases in our communications
- The warning message includes specific action to be taken by the students, staff, and faculty
- Other (*please specify*) _____

C. Strategies for Information Dissemination.

How important are the following strategies for disseminating information about potential threats at campus?

- Telephone notification
- NOAA Radios
- Email
- Building public address
- Social networking
- Text messaging system
- Commercial radio stations
- Local television stations
- Outdoor Warning Sirens
- Outdoor public address
- Distributing flyers where/when needed
- University/college website (e.g. surge zone, evacuation route maps, shelters)
- Daily situation reports made available online and through mass emails
- Press conferences
- Providing information on electronic signs
- Providing updated information at least every hour before and during the event
- Providing updated information at least once every three hours before and during the event
- Responding to rumors and gossip with factual information
- Using triggers or protocols as the impetus to activate Emergency Notification System (ENS)
- Using specific triggers that address the nature of the incident
- Other (*please specify*) _____

Question 2: Does your university have a written crisis and risk communication plan?

Yes No

Question 3: If yes, is it tested regularly?

Yes No

Question 4: Is your university's inter-departmental operability communications equipment sufficient for your agency's needs?

Yes No

Question 5: Is your institution's intra-departmental operability communications equipment sufficient for your university's needs?

Yes No

Part 7: The following questions pertain to continuity plans and procedures that are available at your university

Question 1: Do you have a Continuity of Operations Plan (COOP) in place?

Yes No

Question 2: If Yes, is it NIMS compliant?

Yes No

Question 3: Is it updated, evaluated and tested on a yearly basis?

Yes No

Question 4: To what extent does the COOP address the following operational functions and procedures? Please use the following scale:

Strongly		Somewhat	Don't Know/	Somewhat		Strongly
Agree	Agree	Agree	Can't Say	Disagree	Disagree	Disagree
1	2	3	4	5	6	7

- Payroll
- Class schedules
- Stipends
- Transportation
- Food services
- Timeline for restoring functionality
- Internal and external dependencies
- An off-campus site to preserve records and key information
- Alternate arrangements/sites for instructional continuity
- Other (please specify) _____

Part 8: The following questions deal with training and certification opportunities that are available at your university

Question 1: Please assess the following statements about training and exercises as they relate to your institution. Please use the following scale:

Strongly		Somewhat	Don't Know/	Somewhat		Strongly
Agree	Agree	Agree	Can't Say	Disagree	Disagree	Disagree

1 2 3 4 5 6 7

- Our institution has adequate resources to implement and maintain comprehensive training programs
- Key staff and faculty are trained in ICS and NIMS courses
- Students, faculty and staff avail FEMA Independent Study certification courses
- Pre-drill/exercise and post-drill/exercise surveys are used to update plans and procedures

Question 2: How often are the following exercises or drills conducted in your institution? Please use the following scale:

Every					Once in	
Month	Quarterly	Bi-annually	Annually	two years	Never	
1	2	3	4	5	6	

- Tabletop exercises
- Functional drills/stimulations
- Full-scale exercises
- ICS and NIMS training
- Evacuation site visits

Part 9: Please provide your candid feedback on the following questions

Are there additional elements (that have not been covered in this survey) that you think are important to create disaster resilient universities?

Is there any document (such as comprehensive emergency management plans) or report that you would like to share with us pertaining to principles and elements of developing disaster resilient universities? Can we obtain copies of them?

Part 10: Please answer the following questions and check the correct options wherever applicable

Which of the following describes your educational institution?

- University
- College
- Community College
- Other (please specify): _____

What is the size of your institution/university?

- Small (1-10 buildings)
- Medium (11-40 buildings)
- Large (> 40 buildings)

What is your institution's student population?

What department does Emergency Management reside in?

- DPS/Police
- Environment health & Safety
- Risk Management
- Stand-alone
- Other (please specify): _____

Has your institution received grants from any of the programs/departments for improving campus emergency management?

- Department of Education
- Department of Homeland Security
- FEMA
- Department of Justice
- None
- Other (please specify): _____

What professional organizations does your university/college belong to?

- International Association of Emergency Management (IAEM)
- Campus Safety Health and Environment Management Association (CSHEMA)
- International Association of Campus Law Enforcement (IACLE)
- None
- Other (please specify): _____

Have any emergency management positions been added in response to the Tragedy at Virginia Tech?

- Yes No Don't know

Have any emergency management positions been added in response to any other disasters? (e.g.: 9/11, Katrina, etc.)

- Yes No Don't know

Have there been actual activations at your university during the last two years (these activations are for real emergencies and are not tests and drills).

- Yes No Don't know

If *Yes*, how many? _____

Approximately, how many full-time employees work in your Emergency Management Office? (Please check one applies)

- 1 2 3 4 over 5 (please specify): ____ Don't Know

Approximately, what is the total budget of the Emergency Management Office in this fiscal year? (Please check one)

- \$0-\$100,000 \$100,001-500,000 \$500,001-\$1,000,000
- \$1,000,001-\$5,000,000 \$5,000,001+ Other (Please specify) _____
- Don't Know

Is this an increase or decrease from last year's budget? (Please check one)

- Increase Decrease No change Don't Know

Please answer these questions to help us better analyze the results:

What is your sex? Male Female

What is your age? Under 35 35-44 45-54 over 54

What is your highest degree? _____ In which field? _____

Thank you very much!