

UW CERT Best Practices

Introduction

Over a period of 6 months, from March 29 – August 31, 2004, the University of Washington Office of Emergency Management developed the Campus Emergency Response Team (CERT) Pilot Project utilizing funding from a FEMA Innovative Grant. The attached report is meant to not only summarize the development of the project, but also to identify best practices, challenges, and opportunities associated with adapting this community-based training program to a major research university setting.

Background on CERT

The Community Emergency Response Team concept was initially developed and implemented by the Los Angeles City Fire Department (LAFD) in 1985. The training program that LAFD initiated, based on the need for training civilians to meet their immediate needs for up to 72 hours after a disaster, struck a national chord. In 1995 FEMA adopted the CERT training module and began instituting it in communities nationally. The Emergency Management Institute (EMI) and the National Fire Academy also adopted and expanded the CERT materials believing them applicable to all hazards.

Scope

Upon being awarded a FEMA Innovative Grant, the University of Washington, Office of Emergency Management (OEM) initiated the CERT Pilot Project, which would adapt the FEMA community model to a major research university setting. In adapting the CERT model to meet its own needs, the OEM recognized that the University of Washington, as a major research university with a daytime population of 60,000, faced challenges that most communities did not. The staff identified the following seven objectives of the CERT Pilot Project:

1) Staff

What level of staff support is needed to run a program such as this?

2) Organization

How would the CERTs be organized? Would they be building-specific?
Department specific?

3) Recruitment

Who should the training audience be? How would staff be recruited? How would work compensation be covered for participants taking the training? How would the training audience benefit?

4) Training

How would the training materials be tailored to the exigencies of a major research university? When and where would the training take place? What type of qualified trainers would be used?

5) Integration

How would the CERTs be integrated into the existent disaster response structure of the University and community? Specifically, how would they interact with the UW PEAT (hazmat assessment) and ATC 20 (Post-disaster building inspection) teams? Would they self-mobilize, and how and when would they establish contact with the UW Emergency Operations Center?

6) Funding

How would these teams be funded? To what extent would university departments fund equipment and continuing training? What funding resources were available? What internal funding mechanisms could be accessed in the case that external funding sources were to decrease?

7) Training Evaluation

How were the training sessions evaluated? What types of tools or forms were used?

Staff

Recognizing the schedule requirements of developing a CERT program, the OEM hired a graduate student from the Department of Urban Planning, Joshua Curtis, to manage the project. Mr. Curtis was classified as a Research Assistant and, as such, worked 20 hours a week on the project between March 29 and August 31, 2004. In addition to his work with the OEM, Mr. Curtis also used the CERT project as a basis for his Professional Project through the Department of Urban Planning.

Organization

Recognizing that successful CERT teams would need a thorough knowledge of the area to which they are assigned, the OEM decided that the CERTs would be organized at a building level. Initially, two buildings on campus stepped forward: Health Sciences and the University of Washington Medical Center. Due to time and schedule restrictions, the Medical Center withdrew from the training, leaving an opening for another building to get involved. Both the Communication Building and Gerberding Hall stepped up to the challenge.

Building Profiles

Health Sciences: Home of over 30 departments and 7,000 staff and faculty, the Health Sciences building is one of the largest on campus. It also presents some of the most challenging circumstances for disaster response. Many of the departments in the building are actively involved in medical research, using chemicals and biological compounds that would be deleterious to human health. In addition, the building is divided into 16

different wings, lending to difficult navigation. In the case of a disaster, Health Sciences would be considered a top priority building by the Emergency Operations Center. Of the 26 CERT participants, 18 were from Health Sciences.

Communications: The Communications Building houses several offices, labs, and departments. Most notably, the Graduate School and Department of Communication are located in the building. Approximately 200 staff and faculty work in the Communications Building. Three participants in the CERT pilot project were from the Communications Building.

Gerberding: Gerberding is the administrative headquarters for the University. Currently 516 people work in the building with the main offices for the Executive Vice President, President, Provost, Financial Management, Attorney General, Business Services, Research, Planning and Budgeting, Government Relations, University Relations and Emergency Management. Four participants in the CERT pilot project were from Gerberding.

Lessons Learned

The CERTs' organizational structure is a key component to a successful CERT program on a large campus. It was initially decided that the CERTs would be organized per building. There were several reasons for this:

1. CERT members would need to be familiar with the buildings for which they would be responsible.
2. Members would be more motivated to organize and run drills when they were responsible for their own buildings.
3. Geographic proximity would facilitate CERT continuation.
4. The University of Washington is already divided into many different zones and jurisdictions, and adding one more level of complexity would be a deterrent to CERT organization. A division of building-based teams is intuitive and easy to maintain.

However, in the implementation of the pilot project, the following challenges to a building-based organization were observed:

1. Since the CERT training is offered on a volunteer basis, some buildings may only have a few staff interested. If there are not enough interested staff members to support a CERT, the training would not be available to that building.
2. Alternatively, some buildings have enough interested staff to support several CERTs, and many larger buildings would need to have multiple CERTs.
3. The presence of a large amount of CERT teams on campus could present financial and logistical challenges in the long-run.

Option: The Office of Emergency Management is currently examining strategies that would group buildings into geographic zones on campus. If pursued, the zones would need to be geographically intuitive and inclusive of all buildings. A zone-based organization would allow underrepresented buildings to participate in CERT training.

Recruitment

Prior to the implementation of the CERT pilot project, several buildings, among them the University Medical Center and Health Sciences, had expressed interest in participation in the program. As mentioned above, the Medical Center withdrew from the project in the early stages of implementation, and Mr. Curtis was tasked with finding participants to take its place. The Director of the Office of Emergency Management sent a recruitment email out to all departments in the University. The OEM had briefed the President's Cabinet several months before on the CERT project, and had received tacit support. This support lent weight to the pilot project. In addition to the email, the CERT staff member made a presentation on CERT in front of the UW Health and Safety Committee, made up of representatives of the eleven organizational units on campus. As a result, several buildings expressed interest in participating: Communications, Gerberding, Miller Hall, Denny Hall, and Art. Due to staffing, space, and logistical constraints, the Communications and Gerberding buildings were ultimately selected.

The following methods were used to recruit staff members once the buildings were selected:

1. Fliers: A flier was created and posted in Health Sciences and Communications.
2. Orientation: An orientation session was held of Gerberding and Health Sciences on May 26. In attendance were 30 prospective CERT participants. A separate orientation for Communications was held on May 17. Interested staff were introduced to the CERT concept, history, and plans for CERT at the university.
3. Applications: All interested staff were asked to fill out applications, which were sent to the CERT staff person to be kept on file.

Lessons Learned:

1. It is essential to have the support of University supervisors. Having the President's Cabinet's approval of the CERT project lent the project a perceived weight and importance that it would not have otherwise had.

Training¹

In March, 5 staff members from the Office of Emergency Management, Health Sciences, and the University Medical Center participated in a CERT Train-the-Trainer workshop in Auburn, Washington. This training provided the staff a strong knowledge base upon which to model the UW CERT training. These five staff members also served as an ad-hoc CERT Committee and regularly met with the newly hired CERT program manager. The committee decided that the CERT training would be offered over a period of 9 weeks during the summer:

Start Date: June 15, 2004

End Date: August 10, 2004

¹ See accompanying document: CERT Training Schedule

Training Times: Tuesdays, 1:00 PM – 4:00 PM
Location: Health Sciences T-Wing, Rm. 478

The CERT Committee decided early on that they would capitalize on the expertise and experience present on campus in order to provide this training. Apart from the Light Search and Rescue training, all sessions were conducted by UW staff. There were several advantages to this:

1. Integration: By including those staff already involved in some aspects of the UW disaster response structure, the CERT teams would assume a higher perceived importance.
2. Adaptation: UW staff members have a thorough understanding of the campus, its history, and its vulnerabilities and capacities. What they might have lacked in experience with the CERT training, they made up for in the ability to tailor trainings to the realities of the UW campus.
3. Finances: All UW-based trainers donated their time to the project, thus drastically reducing the costs of the overall training. Whether or not the trainers will continue to donate their time in the future remains uncertain.

Resources:

Development

A certain level of resources, both human and material, is needed for the successful development of any training on campus. In order to develop the CERT training module, the following resources were invaluable:

1. CERT Train-the Trainer – Members of the CERT Committee all attended the March 29 and 30, 2004 Train-the-Trainer workshop offered in Auburn, Washington. The course was invaluable in developing the CERT Pilot Project.
2. CERT Instructor Guide.*
3. CERT Participant's Manual.*
4. CERT PowerPoint Presentations.*

Delivery:

In addition to those outlined in the CERT Instructors Guide, the following resources were key to the success of the CERT Pilot Project:

1. Human
 - a. Part/full time staff person dedicated solely to development of CERT training,
 - b. Liaisons in each building that will receive CERT training.
2. Material
 - a. Workspace/phone/basic office supplies/desk/Computer and access to copier for staff person.
 - b. Training Room with a capacity of 30 (depending on size of group), and a projection screen

* Available online: <http://training.fema.gov/emiweb/CERT/>

- c. Storage, preferably in close proximity to room training will be conducted, and will be used to store medical and other supplies needed for training
- d. Vehicle to transport supplies
- e. Vehicle to transport participants to final simulation if beyond walking distance
- f. Building for final simulation. Helpful to have several different rooms with different entrances so that participants are not stepping over each other when conducting separate drills.

Schedule

While the pilot project was very successful, the CERT Committee decided that a revised training schedule in the future was necessary to ensure continuation of the program. The 9-week schedule offered scheduling challenges. Few supervisors were able to grant leave to staff for 9 weeks straight, many staff had vacations scheduled, and the training allotment for staff was 25 hours a term, just under the 27 hours required for the CERT program.

For future CERT trainings, the following tentative schedule has been recommended:

1. An initial two-day session, in which the Disaster Preparedness, CERT Organization, Fire Safety, and Light Search and Rescue are taught. Classes will be held in the mornings, with hand's on drills in the afternoons.
2. Quarterly sessions will cover the remaining sessions:
 - a. Quarter 2: Disaster Medical #1 and #2 (one-day)
 - b. Quarter 3: Disaster Psychology and CERT and Terrorism (half-day)
 - c. Quarter 4: Final Review/Disaster Simulation (half-day)
3. Bi-weekly/monthly meetings will be held by individual CERT teams in order to ensure continuity and group motivation.

Integration

Another key component to the long-term sustainability of the CERT program is the successful integration of the CERT teams into the University's current disaster response structure. From the beginning, the Office of Emergency Management made every effort to get all disaster response players involved. Over the course of his contract, Mr. Curtis met with the following offices and units:

Environmental Health and Safety

The Environmental Health and Safety Department assists organizational units in meeting their responsibility to protect the environment and to provide a safe and healthful place of employment and learning. Among other duties, the department is responsible for providing fire safety, disaster preparedness, and lab safety classes. They also track all radioactive substances present on campus. Mr. Curtis met with several EH&S administrators in order to coordinate the CERT training with the department.

PEAT

The Pre-Entry Assessment Team (PEAT) was founded by the Environmental Health and Safety Department in May of 2003. Responsible for initial hazmat assessment, the PEAT is capable of entry with Level B PPE, air monitoring, radiation monitoring, limited rescue, and limited decontamination. There are currently 11 members and two teams, each time ideally composed of the following 6 positions: team leader, safety/communication, entry team (2), and backup Team (2). The PEAT is equipped to operate for up to 72 hours independent of outside assistance including electrical power, food, water and shelter for team members.

Facilities Services

Facilities Services is responsible for the logistical side of running the University of Washington campus, running the following offices: Campus Engineering and Operations, Custodial Services, Maintenance and Alterations, Finance and Administration, Organizational Relations, and Transportation Services. As such, they have a large role to play in the case of any disaster. Mr. Curtis met with Anne Guthrie, the Safety Administrator, who briefed him on the roles and responsibilities of the different offices within Facilities Services.

Campus Engineering and Operations

One of the offices within Facility Services, Campus Engineering and Operations has formed a small cadre of ATC 20/21 trained staff that will conduct structural assessments of buildings in the case of an earthquake. On August 17 2004, the staff from the Office of Emergency Management met with members of the PEAT and ATC 20/21 to discuss roles, responsibilities, and standard operating procedures in a disaster setting. Interaction between the PEAT, ATC 20/21, and CERT is vital to an effective disaster response. PEAT and ATC 20/21 will share their list of high priority buildings with the CERTs, and standard operating procedures will be formed that incorporate the roles and responsibilities of PEAT, ATC 20/21, and CERTs.

Funding

The Office of Emergency Management received a \$13,303 grant to implement the CERT Pilot Project. The project came in 1% under budget, and the following indicates the final breakdown of fund allotment²:

Salaries/Benefits/Overtime/Consultant Fees	62%
Travel and Per Diem	1%
Goods and Services	32%
Other	5%

Strategies

The following are funding areas that can be modified to fit a CERT budget:

² Disparity in final percentage due to rounding.

Staff: The bulk of the funding was devoted to the salary of the half-time employee. As mentioned above, the CERT Pilot Project was fortunate in being able to count on the donated staff time of all but one of the CERT trainers. In addition, volunteers were used for the final simulation. It must be noted, of course, that while volunteers and volunteer trainers are not paid, staff should devote a percentage of the budget to volunteer appreciation.

Materials: All CERT participants received a basic 72-hour Emergency Packs (see Training Plan and Schedule for contents) to which they were encouraged to add items as they saw fit. The amount of items which are included in the kit can be modified, while emphasizing more or less the participant's role in preparing this kit.

While the OEM will continue to solicit outside funding sources, alternative funding sources from within the university will also be pursued. Limited financial responsibility for materials may be placed on those departments wanting to receive future ERT training.

Evaluation

In order to accurately assess the progress and effect of the CERT training, two methods were used:

Surveys

Participants in the CERT Pilot Project were asked to fill out on-line surveys after each training session. Mr. Curtis used the UW on-line web tool, Catalyst, which allowed him to configure and automatically email surveys to the entire group the afternoon of each training session. The surveys all followed a similar format, asking participants to rate on a 1-10 scale each session, facilitators, handouts, any hands-on exercises, and the room. Participants were also asked to comment on the level of difficulty, usefulness, and overall impression of each session. The survey responses were overwhelmingly positive and provided the staff many useful recommendations for future of CERT.

Mid-Term Focus Group

The OEM met with the CERT Committee, a trainer, and two CERT participants halfway through the CERT training. During the meeting, topics such as CERT organization, scheduling, training areas, funding, and overall sustainability were introduced and discussed at length. The suggestions of the focus group have been incorporated into this final report.