Emergency Management Institute

Higher Education Project

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EM Hi-Ed Project Presentation Table of Contents

First Things First:
What Is Emergency Management?

- Umbrella Term – Captures wide range-people & organizations

- Addresses Question: What do we do about hazards and disasters?

- Comprehensive Emergency Management:

  - All Hazards – Natural, Technological, Intentional

  - All Phases – Mitigation, Preparedness, Response, Recovery

  - All Actors – Inter and Intra-Governmental, Private Sector, Voluntary

    Organizations

Where Does One Find Emergency Management?

- All levels of government in the U.S.
  - Federal (FEMA, other Federal Agencies)
  - State – Every State Has An Organization
  - Local – Virtually Every County and City
- Private Sector:
  - Business Contingency and Continuity Planning – wide range of other terms
- Many others sectors involved, e.g.:
  - Emergency Services
  - Public Health

Background Context for EM HiEd Project – Late 1994-Early 1995

- Reaction to Criticisms and Weaknesses:

  - Hugo, Andrew, Loma Prieta

  - Inadequate Level of Professionalism Within Emergency Management

- New Hazards: Y2K, Terrorism, Technologies, Illnesses, Climate?

- Increasing Intensity/Frequency for Some Hazards (e.g., Flooding)

- Growing Vulnerability and Losses – Double to Triple Per Decade

- Baby Boomer EM Generation Nearing Retirement

- New EMI Superintendent and New Associate FEMA Director:

  - EMI to Focus on Functional Training

  - Seek to Leverage Institutions of HiEd – Focus on Education

National Science and Technology Council, 1996 on Natural Hazards

- "Future prospects are sobering.
  - Continued U.S. population growth,
  - Increased urbanization and concentration in hazard-prone coastal areas,
  - Increased capital and physical plant,
  - Accelerated deterioration of the urban infrastructure, and
  - Emerging but unknown new vulnerabilities posed by technological advance
  - Virtually guarantee that economic losses from natural hazards will continue to rise throughout the early part of the coming century.
  - Losses of $100 billion from individual events, and perhaps unprecedented loss of life, loom in our future."

Technological & Intentional Hazards

- 123 plants in 24 States where a chemical release of dangerous materials could threaten more than one million people.

  (U.S. Environmental Protection Agency, 2004)

- 15,000 high-risk chemical facilities proximate to tens of millions of citizens

Underlying Problems in 1994/1995 And Now

- We Build in Floodplains

- We Destroy Wetlands

- We Build Along Earthquake Faults

- We Build On The Coast

- We Build On Alluvial Fans (spilling from mountains)

- We Build In and Near Forests Susceptible to Wildfires

- We Try To Control Nature

- We Don't Zone, Code, Build, Maintain (Aging Infrastructure), Inspect and Enforce Appropriately Enough

- Thus – **Disasters Are A Growth Business**

Global Background Context

- "There has been a rapid escalation in the incidence of severe disaster events in recent decades.

- Total reported global costs have risen 15-fold over the past five decades,

- While numbers of people affected tripled between the 1970s and 1990s."

  (ProVention Consortium, "Measuring Mitigation," 2004)

- **No Light At The End of The Tunnel – Here or Abroad**

Have We Learned Nothing?

- In Large Measure Knew/Know What To Do

- Past and Current Practices Not Effective Enough

- Need Professional EM Cadre Better Positioned for 21st Century Environment

Things Needed (Need) To Change

- "Human history becomes more and more a race between education and catastrophe." (H.G. Wells)

- "The time has come for a new national approach to natural hazards." (Congressional Natural Hazards Caucus, January, 2001)

- Saw Need For More Professional EM Cadre

- With Professionalism will come More Respect and Value in the EM Position, and then more appropriate Salaries and adequate Budgets

Goals
EMI Higher Education Project

- Increase Collegiate Study of Hazards, Disasters, & Emer. Mgmt.

- Enhance Emergency Management Professionalism

- Support Development of Academic Discipline of Emer. Mgmt.

- Long-Term: Make Contribution to Enhanced Hazards Footing

- Long-Term: Greater Collegiate Role in EM and Disaster Reduction

What About Colleges and Universities?

- Only Four Formal "Emergency Management" College Programs
  - Two did not provide academic credit
  - Academic Credit: 1 BA, 1 Certificate
- Believed that academic community could engage more in hazards, disasters and what to do about them.

Why Just Four Programs in 1994?

- Faculty and Administration Perceptions:
  - EM Sounds More Vo-Tech Than Academic
  - Practitioners Won't Take Free Training
  - Small Audience/Cadre
  - Slim Job Prospects and Advancement
- Reality Differed From Perceptions
  - EM Very Academic and Interdisciplinary
  - Practitioners Do Enroll
  - The Audience Turns Out To Be Huge When Broadly and Correctly Understood
  - Students Get Jobs and Advancement

Framework for Role of Academia in EM and Disaster Reduction

- **Generate Knowledge**
  - Science & Technology, Communicating Risk
  - Hazards Public Policy Design & Implementation
  - Social Research – e.g., on Mass Behavior Change
  - Redefine Scholarship – Applied Research, Professional Service
  - Organize and Systematize Knowledge
- **Transfer Knowledge** – e.g., Students, Stakeholders
  - Other Academics – Break out of Disciplinary Straightjackets
- **Legitimacy** – Academic Programs Enhance EM Legitimacy
- **Advocacy** – e.g., Culture of Disaster Prevention
- **Community Service** – Engage with Local Community
- **Set Positive Example** – Walk The Talk
- **Foster Change** – Leader in Disaster Prevention Enculturation

Desired HiEd Contribution

- To Meet EM Responsibilities Nationwide

- Cadre of Professionals Required
  - Every Level of Government
  - Throughout Private Sector

- Bring to Organizational Management Team
  - Requisite knowledge-based competencies (education)
  - Skills-based personal, managerial, and operational competencies (training, education, experience).

Why Study EM Academically?

- "…some emergency management systems are exclusively 'ambulances at the bottom of cliffs', whereas others are also 'fences at the top'.

  (Dr. Neil Britton, "Higher Education in Emergency Management: What is Happening Elsewhere,"

  Paper for the 2004 EM HiEd Conference, June 2004, p. 2.)

- This is why, for those who tout the "Be-All" of "Experience," that "Experience" needs to be grounded in EDUCATION.

Why Study EM Academically?

"Emergency management leaders need an academic, not just experiential, knowledge base of…natural and manmade hazards…[to develop] the deep understanding necessary…to effectively develop and implement *strategic* efforts to mitigate threats or to properly prepare for the response and recovery from their consequences."

(Glen L. Woodbury, *Journal of Emergency Management*, March/April 2005, p. 27)

Why Study EM Academically?

"We will continue to place more and more citizens at risk. This may result because they became homeowners in hazard prone areas….Some will be future victims of terrorists attacks. Whatever the agent, one thing is clear. There will be more victims of disaster in the next decade than there has been in the last. Maybe its time for more university faculty to bring this topic into their classrooms."

(Dr. Thomas Drabek, Western Social Science Association Paper, 2005)

Why Study EM Academically?

- Question Governmental Gospel
- Look at Different Points of View
- Look at Different Approaches to EM
- Provide Background Knowledge/Context
- Build Emergency Management Theory
- Develop Research and Analysis Skills
- If We Had It Right, Why Does Disaster Loss Curve Look Like Rocket Trajectory?

Professionals are "Educated" Some Desirable EM Competencies:

- Knowledge of Hazards
- Analytical Thinking -- Ability to Evaluate
- Ability to Synthesize Information
- Communication Skills -- Written, Oral
- Leadership and Followership Skills
- Management Skills
- Networking and Consensus-Building
- Understands and Social and Political Context of Hazards/Disasters
- Problem Solving & Strategic Thinking
- Diversity Sensitivity
- Creativity, Imagination, Adaptability

Definition of "Profession" & Importance of Education

"A Vocation or occupation requiring advanced education and training, and involving intellectual skills, as medicine, law, theology, engineering, teaching, etc.…"

(Webster's New World Dictionary, Third College Edition)

What Constitutes A Profession?

- Systematic Body of Knowledge
- Common Core of Entrance Requirements
- System for Advancement, Dissemination of Knowledge
- College Degrees in Subject Area
- Recognition that "On The Job Training" is Insufficient
- Identification of Minimum Standards, Certification
- Standards of Conduct or Ethics
- Professional Societies
- Public & Professional Recognition and Respect

Emergency Manager Professional

- Ideally a professional Emer. Mgr. is individual who has:

  - Attained a baccalaureate or graduate degree in emergency management

  - Passed state regulated emergency management assn. exam

  - Occupies a position entitled "emergency manager"

  (Wilson and Oyola-Yemaiel, "Three Essential Strategies for Emergency Management Professionalization in the U.S." *International Journal of Mass Emergencies and Disasters*, March 2005.)

Warning!

About to Discuss Emergency Management "Stereotype"

- Stereotype – Image Held, Right or Wrong

- Discussing It Steps On Some Toes

- Does Not Apply to All In Previous Generations

- Even When Some "Stereotypical" Images are Applicable, It's Still Possible to Have Good and Effective Emergency Management

- Nonetheless, All Has Not Been Well in the EM Past, and This Deserves Some Reflection

Emergency Manager "Stereotype"
The Way of the Past

- Not College Educated (4-year Degree)

  - 2004 survey of NC Emergency Mgrs – 15% had BA/S

- Middle to Late Middle-Aged Caucasian Male

- Knowledge Base:

  - Experiential (Learns on the Job)

  - Consensus (Others who Learned on Job, i.e. Past Practice)

  - Values "Street Smarts," not "Book Learning"

- Job Obtained Other Than With EM Competencies & Fundamentals

- Doesn't Read Hazard, Disaster, Emer. Mgmt. Research Literature

- Emergency Management is 2nd or 3rd Career

Emergency Manager "Stereotype"
The Way of the Past (Continued)

- Spends E.M. Career In One Jurisdiction

- Frequently Not Full-Time Professional, Nor Valued As Such
  - Wears Other Hats (or is "The Other Hat" – e.g. Fire Dept. 1st)
  - Many Part-Time & Volunteer Positions

- Plans FOR Jurisdiction - Primarily Disaster Response Oriented
  - Reactive, Command and Control Style

- Works Primarily With Emergency Services
  - Minimal Access to Top Decision-Makers

- Has Not Done a Hazard, Risk, Vulnerability Assessment

- Employs a Hazard-Based Emergency Mgmt. Approach

- Has Not Joined EM Professional Association

- Not Well Paid or Funded

New Generation Emergency Managers
Goal: Enhance EM Profession

- **College Educated--Many With EM Degrees**

- **Younger, More Diverse and Culturally Sensitive**

- **Knowledge Base: Science, Research, Case Studies of Lessons Learned**

- **Has Studied & Developed EM Fundamentals & Competencies, e.g.,**

  - **Deeper Understanding of Hazards, Disasters, What To Do About Them**

  - **Analytical, Communication Skills**

  - **Technologically More Capable/Adept, e.g., GIS Applications**

  - **Programmatically Rooted in Comprehensive & Integrated EM**

    – **i.e., all-hazards, phases, actors**

    – **via partnering, networking, coordinating**

- **Life-Long Learner--Reads Hazard, Disaster, EM Research Literature**

New Generation Emergency Managers

- **Emergency Management Career of 1st Choice**
- **Upwardly and Geographically Mobile**
- **Full-Time Emergency Management Professional**
  - **Executive-Style Manager, Valued and Respected**
- **Does Strategic Planning -- With Jurisdictional Stakeholders**
  - **Proactive Partner, Facilitator, Net-worker**
- **Broader Range of Working Contacts**
- **Does Hazard, Risk, Vulnerability Assessments**
- **Risk-Based Approach to Emergency Management**
  - **Emphasizes Social Vulnerability Reduction & Building Resilience**
- **Joins Professional Associations**
- **Better Paid and Funded**

Broader Range of Working Contacts
Goal: Enhance EM Profession

- Elected and Appointed Officials

- Economic Development Commissions

- Planning and Zoning Boards/Commissions

- Risk Managers

- Building Departments and Code Enforcement

- Developers -- Business Community in General

- Natural Resources/EPA Organizations

- Storm Water and Floodplain Managers

- Academia and Professional Organizations

- Community Based Organizations

Summary of Desired Evolution of Emergency Management

FROM:

- No Degree
- Hazards Focus
- Isolated
- Response Mgmt.
- Reactive
- Not Diverse
- 2nd or 3rd Career
- Anybody Can Do It

TO:

- Minimum of BA/BS
- Vulnerability/Risk Focus
- Partner & Networker
- Risk Management
- Proactive
- Diverse
- Career of 1st Choice
- Credentials

Bottom Line

Someone who can articulate a **persuasive** and **defendable** case for **disaster prevention and emergency management** to top elected and appointed officials.

A Catalyst for a Safer America

"Emergency management education, whether in the form of university-level knowledge-based courses or practitioner-oriented skills-based programs, is primarily about **capacity building** within individuals and within systems."

(Neil Britton and John Lindsay, "Designing Educational Opportunities for the [EM] Professional of the 21st Century…, May 2005)

Audiences

- Typical College Students
  - Juniors and Seniors
  - Upon Graduation-- Enter EM Profession
  - Upon Graduation Enter Other Professions
  - Public, Private, and Volunteer Sectors
- Practitioners
  - Enhance Professionalism, Advancement
- Affiliated Practitioners
  - Want to Enter the Field
  - Want Advancement/Knowledge Expansion

Philosophical Context Overview

- E.M. of the Future, Not E.M. as is Today

- Building Disaster Resilient Communities Culture

- Balance Technocratic/Vulnerability Models of EM

- Three Foundational Building Blocks Needed:

  - Education

  - Training

  - Experience

Building Disaster Resilient Communities

- Sustainable Development Philosophy

- Unconstrained Development = Disaster

- Strategic Community Planning

  - Smart Growth

  - Long Term View

- Respect and Defend the Environment

- Network and Partner

Building Disaster Resilient Communities Networking and Partnering

- BDRC Too Big for One or Small Number

- **Bring People Together from Variety of Backgrounds and Disciplines to Refract Problems Through Prism of Complementary Minds Allied in Common Purpose**

- Strengthens Social, Economic, and Environmental Resiliency

Building Disaster Resilient Communities

- Looks at Built and Social Environment

  - Reduce Vulnerability of People

  - Reduce Vulnerability of Structures

- Seek Inter and Intra-Governmental **Equity**

  - Quality of Life

  - Responsibility for Future Generations

Building Disaster Resilient Communities
The Future of Emergency Management

- From Background to Boardroom

- Long-term and Global Perspective

- Four-Phases Disaster Life Cycle

  - Holistic -- Not Just Advanced Mitigation

- Emer. Mgmt. Will Equate With BDRC

Technocratic versus Vulnerability Approach to Emergency Management

- Technocratic Model
  - Focus on Physical Processes of Hazard
  - Apply Managerial Problem Solving
  - Apply Technology, Engineering, Money
  - Tends toward a Top-Down Approach
  - Tends toward Command and Control Mindset
- Vulnerability Model
  - Focus on Socio-Economic-Political Factors
  - Reduce Vulnerability of People
  - Bottom-Up Approach
  - Tends toward Networking, Partnering, Coordinating

Technocratic vs. Vulnerability Approach

- Focus:
  - Physical Processes
  - Reduce Damage
- Style -- Managerial
  - Hierarchical
  - Key Individuals and Orgs. Problem Solve
  - Apply Technology, Engineering, Money
- Philosophical Orientation
  - Utilitarian
  - Conquer Nature
- Stove-Piped

- Focus:
  - Social Processes
  - Reduce People Vulnerability
- Style -- Collegial
  - Decentralized
  - Community Approach to Problem Understanding
  - Apply Creativity, Imagination, Pressure
- Philosophical Orientation
  - Egalitarian
  - Live with Nature
- Holistic

Paradigm Shift?

- Paradigm: The overall framework of basic assumptions used to analyze and interpret data, view the world, understand reality.

- Anything that we perceive or say about the world is necessarily couched within some frame-worked way of looking at it.

Paradigmatic
Ways of Looking at the World

- Religious   -- Revelation
- Philosophical -- Contemplation
- Tribal   -- Tradition

- Technocratic -- Observation
- Vulnerability -- Participative, Interactive

Emergency Management Higher Education Project Activities and Course Information

EM HiEd Project Activities

- Maintenance of "The College List"

- Development of College Courses & Books

- Audio-Visual Materials (clips, mini-lectures, interviews)

- Make EM Training Courses Available to 2-Year Schools

- Compilation of EM & HS Course Syllabi

- Service Learning in EM (Model and Examples)

- Intern Opportunities

EM HiEd Project Activities

- Emergency Management Competencies

- Proposals Compendium

- Letters of Support, Consultation

- Activity Reports

- Partnerships – Looking for Developmental Partners

- Faculty Vacancy Announcements

- Annual EM HiEd Conference at EMI

  - Next Conference: June 5-8, 2006 (Emmitsburg, MD)

Partnerships

- Association of Floodplain Managers

- Coastal Services Center (DOC/NOAA)

- U.S. Army Corps of Engineers (EM Div.)

- National Science Foundation

- North Carolina Division of Emer. Mgmt.

- Public Entity Risk Institute

Types of EM HiEd Project Activities Courses for Colleges

- Associate Degree Level
  - EM and HS-Related Training Courses
- Bachelor Degree Level
  - Contract Developed by Professors
    - Support Emergency Management Programs
    - Farmed-Out to Existing Departments
- Graduate Level
  - Support EM Graduate Programs
  - Incentive to Develop New Certificate Programs

EM HiEd Project Courses

- Mostly Upper Division, Class-Room Based

- Modifiable to Lower Division, Graduate

- Developed via Contract by Academics

- Academic Education, Not Advanced Training

- Seek to Blend Theory and Practice

- Ready-To-Teach

- More Than Can Be Taught in Semester

Courses Developed (17)

- **Building Disaster Resilient Communities**

- **Breaking the Disaster Cycle–New Directions in Hazards Mitigation (Grad)**

- **Business and Industry Crisis Management**

- **Earthquake Hazard and Emergency Management**

- **Hazards Mitigation Principles and Practice**

- **Hazards Risk Management**

- **Holistic Disaster Recovery – Creating A More Sustainable Future**

- **Individual and Community Disaster Education**

- **Political & Policy Basis of Emergency Management**

Courses Developed (continued)

- Public Administration and Emergency Management

- Research & Analysis Methods in Emergency Management

- Social Dimensions of Disaster (2nd Edition)

- Social Vulnerability Approach to Disasters

- Sociology of Disaster

- Technology and Emergency Management

- Terrorism and Emergency Management

- Tourism, Travel & Hospitality Mgmt. Industries and Emer. Mgmt.

Courses Under Development (5)

- Coastal Hazards Management (Graduate Course)

- Disaster Response Operations & Management

- Floodplain Management (Graduate Course)

- Hazards Mapping and Modeling

- Terrorism and Homeland Security

"Course Treatments"
Under Development

- Legal/Ethical Basis For Emergency Management and Homeland Security

- Hazards Risk Assessment Methods

- Images of Disaster in Film

Courses Suggested For Future Development

- Survey of U.S. Hazards Course

- Communicating Risk/Risk Communication

- Cost Benefit Analysis and Risk Assessment

- Hazards Engineering for Non-Engineers

- International Disaster Management

- Legal Basis for and Ethical/Legal Issues in EM & Homeland Security

- Planning, Hazards and Disasters

- Politics of Emergency Management & Disaster

- Psychological Dimensions of Disaster

- Theory of Emergency Management

Emergency Management Institute
Emergency Management Training Courses
Instructor Guides & Student Manuals

- Basic Skills in Emergency Management
  - Leadership and Influence
  - Decision-Making and Problem Solving
  - Effective Communication
  - Developing Volunteer Resources
- Debris Management
- Disaster Response and Recovery Operations
- Donations Management
- Emergency Management Operations
- Emergency Planning
- Exercise Design and Program Management
- Flood Fight Operations

Emergency Management Institute
Emergency Management Training Courses
Instructor Guides & Student Manuals

- Hazardous Weather and Flood Preparedness
- Hurricane Planning
- Incident Command System & Related Courses
- Local Situation (RAPID) Assessment
- Mitigation for Emergency Managers Courses
- Principles of Emergency Management
- Public Information Officers Course
- Resource Management
- Warning Coordination
- Workshop on Partnerships for Creating and Maintaining Spotter Groups

Emergency Management Institute, and
National Fire Academy
Homeland Security Related Training Courses

■ Such Subjects As:

- Terrorism Awareness (Senior Officials Workshop)

- Terrorism Planning Annex Design

- Weapons of Mass Destruction Orientation Courses

- Variety of Incident Command System Courses

- Exercise-Related Courses

■ Available via CD ROM

Books Under Development

- Disciplines, Disasters, and Emergency Mgmt.

- Emergency and Risk Mgmt. Case Studies

- Introduction to Emergency Management

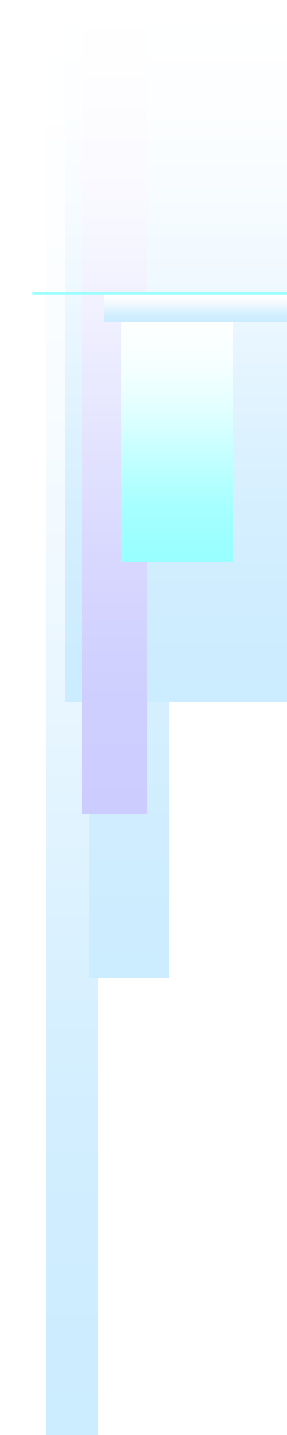- Papers From 2005 EM HiEd Conference

Materials Developed and Under Development

- Hazard & Disaster Film and Video Annotated Bibliography and Clips DVD – Under Development

- Compilation of Articles -- *International Journal of Mass Emergencies and Disasters*, 1983-2002, ~ 900 pages

- Video Interviews of Participants, June 2004 EM HiEd Conference – on DVD

- Mini-Lectures Project – Short Videos of Professors on EM Topics – Under Development

- 2005 EM HiEd Conference Select Panel Presentations – via DVD (to be developed)

Course and Book Distribution

- Via Internet: http://training.fema.gov/emiweb/edu

    - Go to "Free College Courses, Books and Materials," and click
        - Courses Completed, Ready to Download,
        - Courses Under Development
        - Materials

    - "AD-Level EM and Homeland Security-Related Training Courses"
        - Associate's Degree Level Courses CD ROM
        - FEMA Homeland Security Related Courses

- CD ROM

- Via National Technical Info. Service (Dept. of Commerce)

Emergency Management and Related Collegiate Program Information

Emergency Management Programs – Late 1994 - Early1995

- University of North Texas (BS)

- Thomas Edison University (BS)

- Rochester Institute of Technology (BS)

- UCLA Continuing Ed Certificate Program

Emergency Management Collegiate Programs - 2005

- 121 College Emergency Management Programs:
  - 41 Certificates, Minors, Diplomas
  - 27 Associate Degrees
  - 15 Bachelor Degrees
  - 32 Masters-Level Programs
  - 6 Doctoral-Level Programs
- 118 Under Investigation, Proposed or Developing:
  - 49 at Associate Level
  - 36 at Bachelor Level
  - 33 at Graduate Level

Homeland Security, International Disaster Relief/Humanitarian Assistance, & Emergency Management-Related Programs
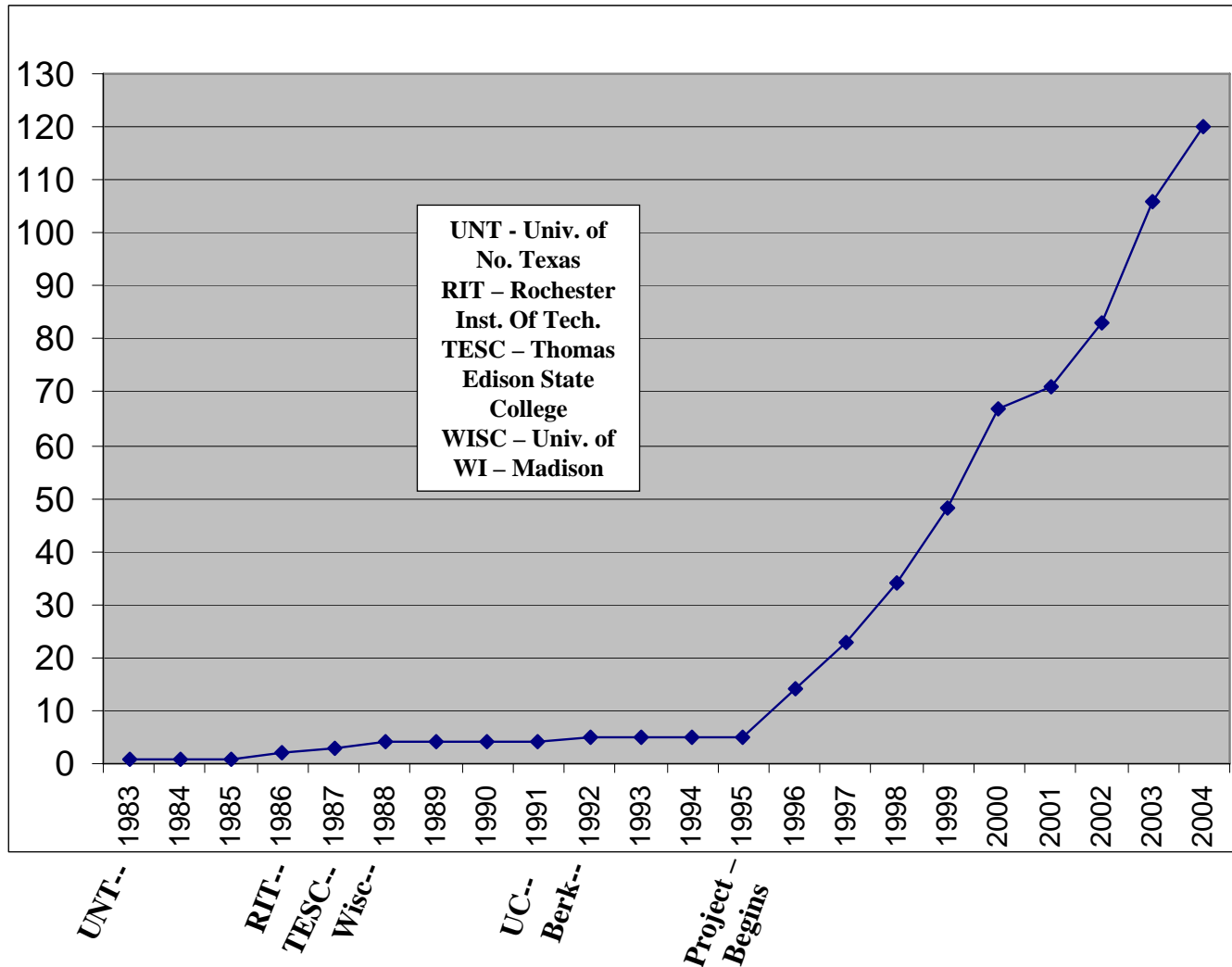
- **56 Homeland Security/Defense, Terrorism Programs**
  - 15 Others Under Development
  - 11 More Under Investigation

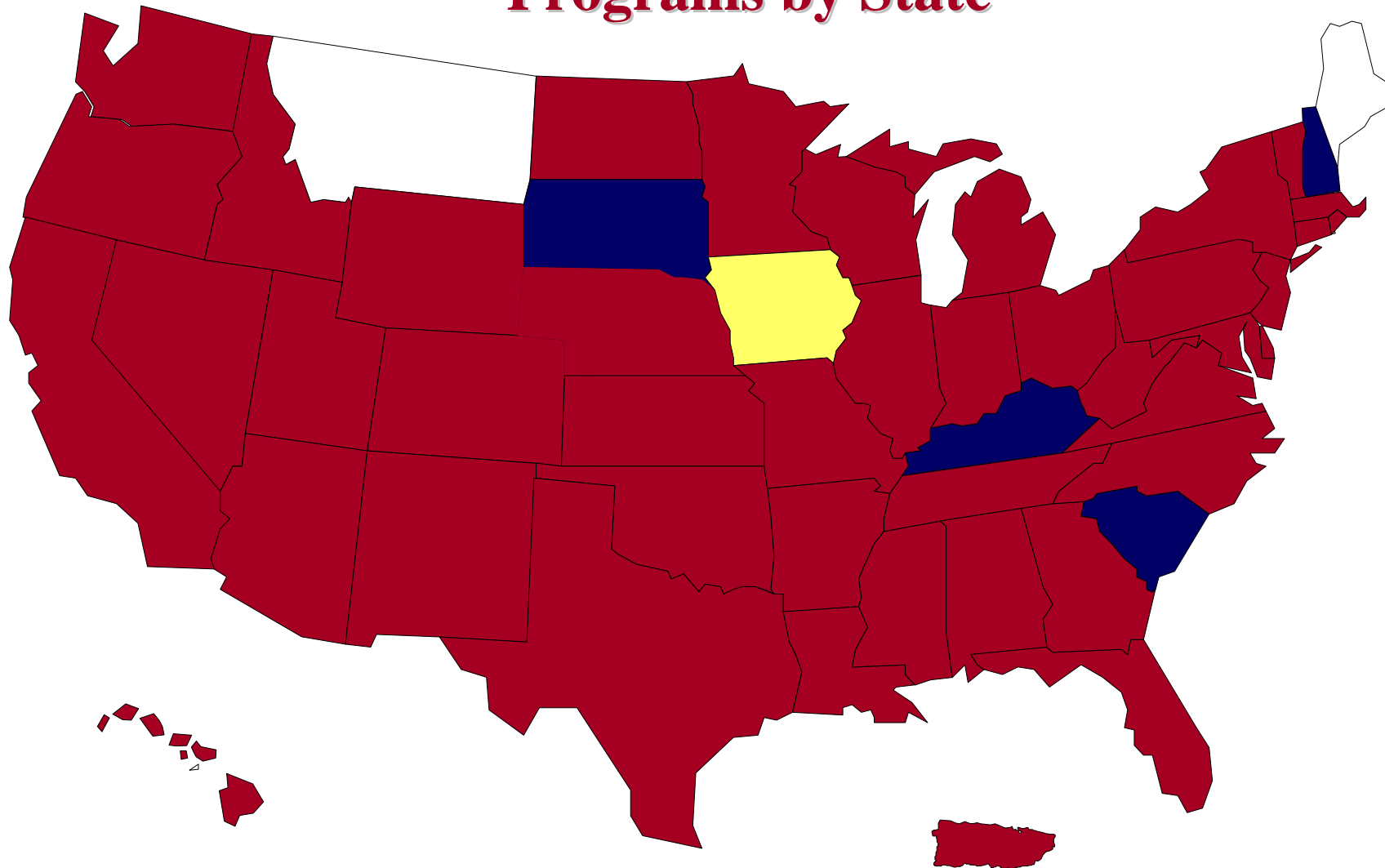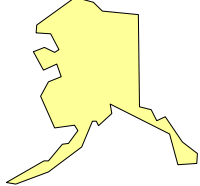- **9 International Disaster** Relief/Humanitarian Assistance

- **12 Public Health, Medical and Related Programs**
  - 3 Others Under Development (Public Health & Medical)

- **19 Related Programs**
  - Environmental Protection, Science, Mgmt., Tech. (7)
  - Hazardous Materials Management (1)
  - Public Safety & Security (8)
  - Emergency Services Operations & Management (3)

Emergency Management College Programs by Year

UNT - Univ. of No. Texas
RIT – Rochester Inst. Of Tech.
TESC – Thomas Edison State College
WISC – Univ. of WI – Madison

UNT--   RIT-- TESC-- Wisc--   UC-- Berk--   Project – Begins

Map of US Showing Status of EM College Programs by State

Emer. Mgmt. Program in Place =

Related Emer. Mgmt. Program =

Proposed Emer. Mgmt. Program =

No Program =

State Map Break-Out

- 42 States: Have Emergency Mgmt. Programs

- 4 States: EM Programs Being Investigating
  – Kentucky, South Carolina, South Dakota, Utah

- 1 State: Has EM-Related HiEd Program

  -- Alaska

- 3 States: Have No EM or Related Program

  -- Maine, Montana, Vermont

- DC & Puerto Rico Have Emer. Mgmt. Programs

Programs Growing In Size As Well As Numbers

- The Crisis and Disaster Management Program has steadily grown – to the point that it is now the 2nd largest in the home department. (Dianna Havner Bryant, CMSU, April 2003)

- The MPA EM Concentration program was overwhelmed this year – had to turn students away – more in queue for next semester. (Bill Waugh, GSU, April 2003)

Programs Growing In Size

■ JSU is averaging 30 new graduate EM students per semester.

(Brenda Phillips, Feb. 2003)

■ EM Certificate going so well we're adding an AD.

(Don Beckering, Hennipin TC, March 2003)

Programs Growing In Size

- "Over the past four years we have seen our student population nearly double

  [185 declared majors]

- …Our credit hour production more than triple…

- Contemplating putting a cap on enrollment."

(Dr. David McEntire, University of North Texas, March 2004)

Programs Growing In Size

- "The B.S. in Emergency Management is one of the fastest growing four year degrees at the University of Akron."

- (Drs. David Hoover and Nancy Grant, Co-Directors, Center for Emergency Management and Homeland Security Policy Research, University of Akron, Ohio, March 15, 2004)

Programs Growing In Size

- *"*Our MPA EM Concentration is growing steadily and more students in our nonprofit administration concentration are choosing to earn the graduate certificate in disaster management at the same time.

- We are also getting more applications for the PhD in public policy program with a concentration in disaster management."

(Dr. William Waugh, Jr. , Dept. of Public Administration, Georgia State University, March 16, 2004)

Programs Growing In Size

- Graduate enrollment in the Emergency/Disaster Management [EDM] program has increased by 28% in the last five months to 72 students. Under-graduate enrollment…has increased by 54%…to 111 students.

- Graduate enrollment in our Homeland Security [HS] program has increased 58%…to 271 students. Undergraduate enrollment…has increased by 32%…to 303 students.

    (Robert Jaffin, Chair, Public Sector and Critical Infrastructure Studies Dept., American Public University System, March 16, 2004)

Programs Growing In Size

- Disaster Managers: A New Profession in Turkey through the ITU Graduate Degree Program! A vision became a reality.

- All 13 Graduates were placed in high level government and private sector disaster management positions.

- Applications for upcoming program have increased 4-fold.

(Dr. Derin Ural, Director, Disaster Management Program, Istanbul Technical University, Turkey, March 18, 2004)

Programs Growing In Size

"The Master of Science graduate degree in Fire & Emergency Management Administration at Oklahoma State University continues to grow.

It is now the second largest of 19 master degree programs in the College of Arts & Sciences at OSU. We are expecting more than a 40% enrollment increase in our courses by the end of this academic year…"

(Dr. Anthony Brown, Professor and Director, Fire & Emergency Management Program, Dept. of Political Science, OSU, April 12, 2004)

Students Getting Jobs

"One of our problems is that some of our graduate students are being hired out from under us – by merely being enrolled in the Crisis and Emergency Management Program."

(Greg Shaw, George Washington University, July 1999)

Students Getting Jobs

■ "EAM program going very well…70 of 74 graduates landed EM-relevant jobs…$38 to $42K range."

(Mary Ann Rollans, Dean, Arkansas Tech University, March 2003)

■ "At end of Spring 2005 will have graduated 179 students – 98% working in highly specialized positions related directly to field of emergency management." (Mary Ann Rollans, Dean, Arkansas Tech University, April 2005)

Students Getting Jobs & Experience Relationship

"Major industries and government agencies place a high demand on utilizing our students for exercises, internships, and hiring them in positions that surpass entry level due to their extensive experience gained while enrolled in the program…The major challenge facing the program is being able to keep up with the demand for our students to participate in internship and externship activities."

(Dean Mary Ann Rollans, Arkansas Tech University, Spring 2005)

EM Student Job Market

- **28% Job Market Increase** in…

  "Emergency Management Specialists" …

  By year 2012.

- **Top 20 List of Growing Professions in U.S.**

  (Department of Labor, Bureau of Labor Statistics, 2004)

Employer Support of Emergency Management Higher Education

- Promotions with education consideration   - 218 (50%)

- Pay/reimbursement educational expenses   - 286 (66%)

- Provide incentives for going to college   - 100 (23%)

- Flexibility to attend school   - 260 (60%)

- Higher Starting Pay for degree   - 170 (39%)

(Craig Marks, Survey of Emergency Management Collegiate Students, 2004-2005)

Where Now In Emergency Management Higher Education and Professionalism: Issues, Frictions, Thoughts

Future EM and Professional Development Issues Some Good and Not So Good Signs

- Disaster Losses Projected To Become Worse
- EM's Resistant to Change or Catalysts for Change?
  - View of Education and Academics
- Collegiate EM Program Faculty, Support, Student Issues
- Gaining Recognition & Only the Qualified are Hired?
  - Where Planning was 25 Years Ago?
- Revolution or Evolution in EM Needed?
- Homeland Security Pull and Issues
  - EM Pulled By Where The Money and Priority Is
  - All-Hazards Approach or Single Hazard Approach?
  - Security and Public Safety Approach?
  - Emergency Services Preparedness & Response Orientation?
  - What Do We Call What We Do?
- Ready for a Catastrophic Disaster?

Disaster Losses – No End In Sight

- "Natural disaster costs in this country are still sky-rocketing."

(Dr. Dennis Mileti, Director (then), Natural Disaster Research and Information Center, University of Colorado, Boulder, 2002)

Escalating Disaster Loss - Some Implications

- US is very hazardous – leads to disasters
- US in top list of disaster incidents
- Disasters produce lots of Lessons Learned
- Lessons Learned produce Prescriptions
- Lots of Prescriptions means we Basically Know What To Do
- Losses Nonetheless Escalating
- Might be that current approaches to hazards are Inadequate
- Need Redesigned Approach?

Issue:
Applying Knowledge & Lessons Learned

■ "We already know how to reduce the losses from natural disasters, but we just not do it."

(Congressional Natural Hazards Caucus, 2001)

Linking EM Practice with Research: On The Bright Side

"Introducing university-level knowledge-based programmes is encouraging a more systematic introduction and treatment of risk, hazard, emergency and organisational management theory. It has enabled research findings to directly aid practice. This development has enabled [EM] to be taken as a university/college subject in its own right. Many [EM] agencies are realizing that there are distinct advantages from linking operational effectiveness with empirical research. Moreover, many decision-makers are seeing the benefit of recruiting people who are academically trained and familiar with the research literature that underpins risk, hazard and emergency management."

(Neil Britton and John Lindsay, "Designing Educational Opportunities for the [EM] Professional of the 21st Century…, May 2005)

Emergency Managers
Resistant to Change or Catalysts for Change?

"Emergency management today is a constant educational process, and if the local emergency manager does not wish to continue their education, they will find they have been left behind and are ineffective in their community."

(Jerry VeHaun, Past President, International Association of Emergency Managers, *DisasterCom*, April 2004)

Credentials:
The Future of Emergency Management

- "…hiring people with degrees and certifications and credentials *must* be the way of the future….Stricter hiring requirements are coming to a disaster agency near you…it *will* happen."

  (Craig Marks, Director, Community Preparedness and Disaster Management Program, University of North Carolina at Chapel Hill, School of Public Health, June 2004, "Eye on Education," IAEM Bulletin, p.3.)

Research and Practice
A Positive Projection

"Disaster research and its close companions (hazard research and risk research), and their application in the emergency management context is becoming more multi-disciplinary and multi-national. There is now a greater likelihood that research and practice can better capture the reality of relevant issues, and their particular social contexts. The field is gaining confidence that it can identify relevant universals pertaining to disaster as a phenomenon, and with it, developing more appropriate methods for managing them."

(Neil Britton and John Lindsay, "Designing Educational Opportunities for the [EM] Professional of the 21st Century…, May 2005)

Evolution of the EM Profession
A Positive Projection

"The search for increased public safety and community resilience will place ever-increasing demands on [EM] agencies to provide expertise in areas that the traditional response-oriented approach has not heavily invested in. Technology transfer from specialists to emergency managers, and from them to the community-at-large, will require new base-lines and new programs. These prerequisites will provide fertile ground for innovation in the educational development of the [EM]. Such growth in the education of [EM's] will accelerate the occupation's transformation into a profession – a step that will be to the benefit of both individual practitioners and to communities as a whole as the theories and practices of emergency management gain recognition and societal commitment."

(Neil Britton and John Lindsay, "Designing Educational Opportunities for the [EM] Professional of the 21st Century…, May 2005)

And An EM Observation:

- "With more and more colleges and universities offering certificates and degrees in emergency management, the profession has finally become the career of 'first choice' for today's best and brightest students of higher education."

(Steve Charvat, DC Office of Emergency Management, May 2002)

Thus:
One Emergency Management Future

- Analyzes and Applies Disaster Lessons Learned & Disaster Research

- Knowledgeable of Full Range of Jurisdiction's Hazards & Threats

- Knowledgeable of Risk Communication and Social Marketing Skills

- Makes Persuasive Case for Disaster Reduction & Risk Management

- Develops & Manages Comprehensive EM Program/Office

- Horizontally/Vertically Integrates EM Intra-Organizationally

- Lead Hazard Coordinator, Facilitator, Net-Worker, Problem-Solver

- Recognizes/Successfully Operates within Legal/Ethical, Social, Political, Economic, Bureaucratic Contexts for EM, including economic development

- Knowledgeable of Technological Tools & Applications

- Seeks to Reduce Social Vulnerability & Enhance Resilience

Practice vs. Education
(Emergency Management Student) Issue:

"In my conversations with practitioners, those with the most experience tended to have the least formal education. This group was the most edgy when it came to appreciating educational opportunities. They felt that years of experience trumped the need for education and they were resentful (read fearful) that a push for highly educated emergency managers would push them out of the profession."

(Craig Marks, *Professional Competencies for The Master's Level Emergency Manager*, April 2005)

EXPERIENCE VS. EDUCATION

"The degree [EM] is a head start on learning the work –

4 years of college gets you the general information,

and maybe some experience,

that would take many more years of on-the-job experience.

Period. So, the college education and training in the new EM

programs will drastically shorten the learning curve that many of

us went through to get where we are now in EM."

(Dale A. Currier, CPT, CEM, Ecology and Environment, Inc., Oswego, NY, IAEM

Discussion List Digest, May 3, 2005)

Practitioner vs. Academia Issue

"…in the field we (the 'public safety providers') tend to do 'stuff' (i.e, how we respond and defend our actions post response) 'from the gut' or even worse 'because we have always done it that way'…and we (public safety) have little (in most cases NO) empirical evidence to base that response on before or after said response occurs. When someone who is an Academic shows with research that we are doing something that is less than or even counter productive we (responders) tend to 'circle the wagons,' defending our actions with impassioned arguments that again have no science basis…"

(Louis N. Molino, Sr., IAEM Discussion List, April 19, 2005)

Experience vs. Education

People, organizations, communities, countries make bad decisions all the time based on their experience –

Some call this the "preparing to fight the last war" syndrome.

(Wayne Blanchard, FEMA EM HiEd Project Manager, 2005)

Experience AND Education

"We do the profession a great injustice if we only look to the future without **extending a hand to the past**. The depth and breadth of knowledge in practitioners must be acknowledged, embraced and built upon. To do so is to have the best of both worlds – **the open-mind and the learned-soul**."

(Cwiak, Cline & Karlgaard. "Emergency Management Attitudes…" North Dakota State University, 2004)

Practitioner vs. Academic Research

"Too many Joes (and Janes) on the street think academic research is:

- Some guy who shows up and takes money away from them…
- To Study something they don't care about…
- Writes it up in words…nobody understands…
- And publishes it somewhere that nobody ever reads."

(Craig Marks, IAEM Discussion List, May 1, 2005)

Friction Area:
Theory vs. Practice

"Practitioners placed this category higher on the list than academics (14 vs. 17). With new requirements coming from the federal government almost weekly, and the implementation of the National Incident Management System and the National Response Plan, along with the requirement for every first responder to be trained or face the loss of grant monies in FY-2006, I believe the practitioner is 'feeling the heat' with regard to advanced training. Programs that can capitalize on 'bundling' achievements within their programs (FEMA Professional Development Series, CEM…etc.) along with college credit will be meeting the needs of their customers better than those who merely see themselves as dispensers of knowledge."

(Craig Marks, "Professional Competencies For The Master's Level Emergency Manager," April 2005)

Theory versus Practice Issue Within EM Academic Programs

"My Own experience indicates that most faculty tend to be excellent academics rooted in various schools of methodological and substantive theory. In sharp contrast, others are 'nuts and bolts' oriented practitioners who have earned some type of academic credential. Too often they lack much respect for the place of theory in either the profession or any academic discipline."

(Dr. Thomas Drabek, Western Social Science Association Paper, 2005)

ISSUE - CURRENT EM JOB STATUS & EM STUDENT RECRUITS

"We will soon have a glut of educated individuals with no where to use that education. Right now I would bet that nearly 50% of the emergency management offices in this country operate with maybe no more than a coordinator/director and an office assistant or two, if any. These individuals are often overworked, underpaid and many times only do the EM thing on a part-time basis. Second, if there is not a concentrated effort to financially fund these positions at the rates they should be, we will loose many of these educated individuals to other disciplines such as Public Safety or the Federal Government. IAEM [International Association of Emergency Managers] needs to spend more time fostering and lobbying for the recognition of not only knowledge but experience and most importantly why emergency management is important and the benefits to a community that hires only qualified individuals at a salary that is commensurate with that individuals qualifications."

(Frank Kriz, Regional Planner, Arizona Office of Homeland Security, IAEM Discussion List Digest, May 3, 2005)

Problems/Challenges Schools With EM Certificates/Degrees Report

- Faculty -- recruiting qualified faculty
- Funding -- program./course development, staff, research
- Marketing
- Program Growth Pains
- Recruitment/Practitioner lack of interest
- Teaching
  - Theory/practice balance
  - Making it interesting
- Textbooks/Readings

Problems/Challenges – Schools With Emergency Management Programs

- Academic qualifications of students
- Academic recognition
- Administrative and pubic support/recognition
- Career counseling and student placement
- Change – Keeping up with technological and policy change
- Curriculum – Need broad, solid, full curricula
- Engagement with Distance Learning

Problem Area

(If "Emergency Management" is to be Recognized Discipline)

"University programs are today located where one or two faculty have had the force of personality to win approval from their university or college to begin a program."

(Craig Marks, *Professional Competencies For The Master's Level Emergency Manager,"* April 2005)

Problem Area:
Faculty Credentials

In reference to spurt in growth of emergency management and homeland security programs post 9-11:

"Suddenly, people who couldn't spell the word 'fire' and didn't know much about emergency management are offering programs."

(Dr. Nancy Grant, University of Akron, 2003)

Possible Problem Area:
Public Sector vs. Private Sector Program Focus?

"It may be the national push with regard to a vulnerability assessment and planning, or the push for public-private partnerships, or the realization that what keeps America going is not government, but business; however, one of the biggest differences in placement between the two surveys was in business recovery. The academics placed it 21st on their survey while this group (EM practitioners) placed it 13th. Programs should seek to see if they have a business recovery/continuity market and then develop classes within that growing area."

(Craig Marks, *Professional Competencies For The Master's Level Emergency Manager*, April 2005)

Emergency Management & Homeland Security All-Hazards vs. International Terrorism Focus

"What the all-hazards approach can contribute to the effort to deal with terrorism in its many forms is a basic framework for structuring the emergency response, preparing for the response, and recovering from attacks, as well as developing appropriate measures to prevent or reduce the impact of the attacks….the all-hazards approach encourages a broader perspective….and a broader foundation on which to build effective programs to manage hazards and disasters."

(Dr. William L. Waugh, Jr., *Journal of Emergency Management,* March/April 2005)

Emergency Management & Homeland Security All-Hazards vs. Response & Terrorism Focus

"Unfortunately…from my perspective, in the post 9-11 environment, the term emergency management is losing its proactive and all hazards emphasis and is devolving back into a term associated primarily with response and recovery and a focus on terrorism to the exclusion of an all hazards approach."

(Dr. Greg Shaw, "What Do We Call Ourselves…?, May 2005)

Emer. Mgmt. & Homeland Security Issue: All-Hazards, All-Phases vs. Response Focus

The job of this office is to prevent terrorism while emergency management's job is to respond.

(Keith Hall, Director, State of Kentucky Office of Homeland Security, *The Kentucky Post,* May 23, 2005)

Issue: Emergency Manager Valued as a Professional

"At least 99.9% of the people I have known in the emergency management sector have their hearts in the right place. The problem is really that unfortunately most of us are way to far down the food chain to really be listened to by those making decisions."

(IAEM Discussion List, June 21, 2005)