



STRATEGIC PLANNING  
FOR CRITICAL INFRASTRUCTURES

MSPCI Program

# National Trends in Homeland Security Education: UW's Graduate Program in Critical Infrastructure Protection

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- **Outline**
  - **Program overview**
  - **About the students**
  - **Issues and Challenges**

## Program Overview

- Created in aftermath of 911
- Created for officials and decision/policy makers in public and private sector, to be more effective in management of critical infrastructure systems and emergency services
- Fully accredited master's program through Department of Urban Design & Planning, 52 credit Masters program
- Completely on-line program, 2 courses per quarter, 8 quarters or two years to complete
- Combines methods courses with infrastructure courses
- Culminates in a capstone experience

- Brings business and analytic frameworks to management of infrastructure systems (methods courses):
  - *A systems approach — the forest, not the trees*
  - *Modeling — analyzing the problem correctly*
  - *Strategic planning — tools that improve the future*
  - *Continuity Planning*
  - *Legal, Constitutional, Ethical Issues*
  - *Risk Management*
  - *Spatial Analysis (GIS)*
- Technical learning about specific infrastructures equips students to tackle real-world problems (content courses)
  - *Physical Infrastructure Systems*
  - *Cybersecurity*
  - *Public Health and Emergency Management*
- Case study approach brings the two together (practica and capstone courses)
  - *Integration and synthesis — Program concepts*
  - *Application — Solving a real problem*
  - *Multiple methods — Problem-based case, tabletop exercise, research project*

•Total: 32

•Education level:

- BA, BS 67%
- Masters 29%
- PhD 5%

•Educational background:

- Liberal arts 19%  
(history, geography)
- Social science 48%  
(political science, public  
administration, criminal  
justice)
- Natural sciences 33%  
(engineering, geology,  
health)

•Age:

- < 25 29%
- 26-35 48%
- 36-45 10%
- 46 > 10%

•Employment:

- Private sector 34%
- Government 41%
- Military 25%

•Residency:

- Washington 62%
- Other Western states 19%
- East Coast 10%
- International locations 10%

## Background & Jobs

- Technology consulting and law enforcement : New Deputy Director of the Office of Emergency Communications in the DHS Cyber Security and Telecommunications Directorate

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- Security operations specialist at the Hanford site in WA state: FBI Special Agent
- Analyst at defense and national security contracting company: Program Manager
- Civil engineer in state transportation department: Master planning and CIP development
- Communications and law: US Air Force civilian in Industrial and personnel security
- Youth education consultant: Project Manager at LA Emergency Management
- Training and scheduling Air Force officer: Crisis Action Planner for US Pacific Command

- Difficulties in reaching target audience for program
  - **Lack of marketing expertise at the University with security issues and with military**
  - **Delays in internet advertising strategy**
- Challenges with on-line delivery
  - **Some subject matter difficult to teach, e.g., GIS**
    - *Required costly revisions of course*
  - **Communications between faculty and students critical**
    - *Explicit communication about feed-back, when and where*
  - **Designing group assignments for an on-line environment**
    - *Striking a balance between group interaction and individual work*

## **MSPCI Website:**

[www.criticalinfrastructures.washington.edu](http://www.criticalinfrastructures.washington.edu)

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