

# New Directions for Institutional Research: Institutional Research and Homeland Security

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Dawn Kenney - Central New Mexico Community College  
Director of Planning and Institutional Research  
Planning, Budget, and Institutional Research

Hans L'Orange, SHEEO/NCES Network  
Vice President for Research and Information Resources

Denise Sokol, The University of Colorado at Denver Health Sciences Center  
(Retired)

Dr. Nicolas A. Valcik - The University of Texas at Dallas  
Associate Director of the Office of Strategic Planning and Analysis and  
Clinical Assistant Professor for the Program of Public Affairs

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# Introduction

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- Tension between mission of higher education institutions' missions and legislative mandates
- Increased Federal mandates over the past few years
- Multiple higher education business practices and information systems are impacted by new state and federal mandates which are often unfunded mandates
- Patriot Act 2001
- Institutional Research Offices are often required to report information to federal agencies to meet compliance guidelines.

# The Tension between Data Confidentiality and National Security in Higher Education

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- Institutional research (IR) offices collect and report individual level data on faculty, staff, and students to multiple state and federal agencies. As IR professionals, we know that the safeguarding of confidential data is critical to maintaining the trust of those who provide the data.
- Numerous attempts at the federal level have failed to implement uniform, comprehensive statutes and policy safeguarding data confidentiality across federal statistical agencies.
- The tension between data confidentiality and national security becomes apparent during times of national crisis. For example, prior to 9/11, Section 408 of the National Education Statistics Act (NESA) had protected the confidentiality of individual level data submitted to the National Center for Educational Statistics (NCES). After 9/11, Section 408 of the NESA was amended by Section 508 of the PATRIOT Act which allows the U.S. Department of Justice to use *ex parte* orders to request and use individual level data submitted to NCES by institutions of higher education for the “investigation and prosecution” of terrorists (see Section 508(c)(1)(A) of PL 207-56, 2001).
- National dialogue between IR professionals as well as the development of internal campus committees can increase awareness of new federal and state legislation. Codes of professional conduct and ethics can provide further support for the IR professional when faced with making difficult choices between data confidentiality and data sharing.

# Information Security Issues in Higher Education and Institutional Research

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- Security threats are covered under Human Factors, Software Applications and Server Infrastructure.
- A data asset security plan must be set in place to prevent breaches on higher education campuses. Since Institutional Research offices are very different on who they report to in a higher education organization and their roles in the organization, there is no uniform standard across the country on how to protect those assets.
- Today's penetration threats come from highly trained professional hackers, thieves, and political opportunists with powerful motives, endless time, and significant resources (Goggins, 2008).
- Examples of data asset breaches, stolen laptops, lost pen drive, hacker and distributed passwords.
- Security policy, standards, and procedures must be put in place, communicated and audited for compliance.

# Homeland Security Initiatives and Background Checks in Higher Education

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- Despite new and enhanced federal legislation aimed at bolstering homeland security initiatives that impact college campuses, there is still no federal requirement for universities to conduct Criminal Background Checks (CBC) on foreign employees or students arriving in the United States to work or attend colleges and universities.
- CBC's have been utilized in higher education primarily on employees with a "security sensitive" designation or those who work with minors, the elderly and those in the medical profession.
- After several high profile cases of employees being hired by higher education institutions, the use of CBC's have increased.
- Privacy laws such as the federal Family Educational Rights and Privacy Act (FERPA) 20 U.S.C. 1232, et seq., 34 CFR Part 99 (and its state equivalents) also impact the use of CBCs in terms of how a CBC is initiated, evaluated, stored and safeguarded.
- In the years since 9/11 steps have been taken to make workplaces and campuses safer. The inadequacies in the legislation enacted are real and create a threat that must be mitigated or removed if employers in higher education are to carefully manage their exposure to liability and provide safe and secure work environs.

# SEVIS: Homeland Security Impacts American Colleges and Universities

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- **SEVIS** – Student Exchange Visitor Information System was part of the Patriot Act 2001 enacted to promote Homeland Security initiatives.
- The workloads of the professionals who work with international students and scholars and/or the SEVIS system not only dramatically increased but also became unmanageable.
- For some schools, compliance with SEVIS rules is a lengthy, time-consuming, and costly endeavor. For other campuses, the process appears straightforward.
- Many hold the opinion that security concerns took precedence over and eroded the status and leadership of U.S. higher education around the world. There appeared to be a complete and total disregard of institutions' educational philosophies in the development and deployment of SEVIS.
- In the haste to force SEVIS onto the higher education landscape, the policy and rules makers often ignored the educational needs and goals of the students coming to the United States for their college education. International students are looking elsewhere for their education.

# Uses of GIS for Homeland Security and Emergency Management for Higher Education Institutions

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- Higher Education Institutions began to reconsider their policing requirements during the 1960s and 1970s as a result of the unrest and riots during the civil-rights and anti-war protests.
- The safety of institutions depend on the accuracy of the GIS data, the availability of the data and integrating this GIS data into university-wide enterprise systems.
- Many universities have teamed up with local emergency responders, if and when their own resources become overwhelmed.
- Mapping needs that first responders desired during the September 11, 2001 terrorist attack included the need to know where to close and open transportation arteries, where to turn off and on public utilities, where to take the injured, where supplies and services are to be distributed and where are objects and materials that are going to be harmful or fatal.
- Given that almost every incident that occurs on a university campus has a spatial component, GIS and geospatial technologies are ideal for allowing a university to address, analyze and assist administrators in making correct decisions.

# Compliance Issues and Homeland Security with New Federal Regulations for Higher Education Institutions

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- Since the 1940's, there has been an increase in oversight over universities' research activities in an effort to promote a greater sense of security and safety for the general public.
- Homeland Security Chemical Facility Anti-Terrorism Standards 2007
- The case study "The University", has made great improvements since the first study in 2004.
- New construction will be needed to correct some of the issues due to the expansion and growth of "The University".
- Improvements will take years to completely rectify some of the issues that the study addressed.
- Institutional Research played a central part in this research and provided information that was useful in addressing shortfalls with Chemical HAZMAT.

# Impact on Enrollments after Incidents at Higher Education Institutions

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- There have been forty-two shootings with fatalities in American schools and colleges between August 1, 1966 when Charles Whitman opened fire from Austin Tower at the University of Texas and April 16, 2007 when Seung-Hui Cho killed 32 people at Virginia Tech.
- Hurricane Katrina forced over 50,000 students to evacuate their campuses and many of these enrolled in other campuses.
- Drawing conclusions is risky and more research is clearly warranted to fully understand student enrollment behavior around catastrophes, but incidents on specific campuses appear to have limited impact on student behavior.
- Enrollment trend numbers start from a new, lower base but climb back up; students and institutions are remarkable resilient.

# Conclusion

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- **Protection of Data From Within The Institution – statistical confidentiality**
- **Protection of Data From Outside The Institution – security breaches from server breaches, software applications, information left on laptops, etc.**
- **Campus Security – criminal background checks, SEVIS, GIS, and compliance issues.**
- **The Unfunded Mandates Reform Act of 1995 (UMRA) .**
- **The Congressional Budget Office does not consider either the Homeland Security Act or the USA Patriot Act unfunded mandates. They are considered to have marginal to no cost to state budgets.**
- **As we have seen, the effect of an officially unfunded mandate or a seemingly unfunded mandate can greatly impact institutions of higher education. The cost of compliance can significant.**

# Questions?

1978 to 2009 - Natural Disaster Incidents  
in U.S. Higher Education Institutions that Incurred Damage

