



# Information Security Advisory Council



Thursday, March 3rd 2014

Student Union, Calloway Peak (room 137 A)

# Meeting Agenda

- |  |             |
|--|-------------|
| 1. Welcome from Office of CIO + Governance Overview. | 2:00 - 2:05 |
| 2. Council Member Introductions.                     | 2:05 - 2:10 |
| 3. Presentation - Information Security Overview.     | 2:20 - 2:50 |
| 4. Planning - Next Steps + Logistics.                | 2:50 - 3:00 |

# Welcome From The Office of CIO

Thank you for lending your support and assistance!



# Welcome From The Office of CIO

Transparency

Engagement

Broad Expertise

Shared Ownership



# Information Security Overview

## Information Is A Mission Critical Asset!

We all depend on information that is:

- Accessible
- Accurate / Timely
- Cost Effective



“The diffusion of technology and commodification of information transforms the role of information into a resource equal in importance to land, labor, and capital.” - Peter Drucker

# Information Security Overview

## Scope of Personal Information

Over 412,000 individuals have entrusted their personal information to AppState.

Approximately about the same # of individuals living in Raleigh.

(423,179 in 2012 Census)



# Information Security Overview

## “A Tale of Two HigherEd Data Breaches”

February 25, 2014 by [Megan O'Neil](#)

[f](#) [t](#) [in](#) [g](#) [e](#) | [Comment \(0\)](#)

Data Breach at Indiana U. Exposes Information on 146,000 Students

Average Recovery Cost \$111 per individual impacted.

Ponemon Institute

Data Breach At University Of Maryland Exposes 309,000 Records

by EYDER PERALTA

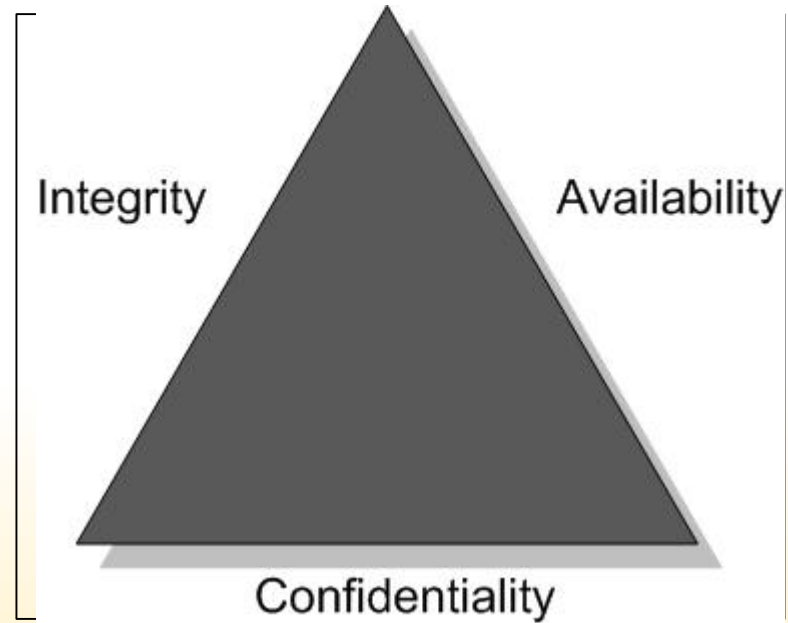
# Information Security Overview

ASU Information Is Subject To Risks

**Confidentiality Risks** - *Hacking, Accidental Data Exposures,*

**Availability Risks** - *Natural Disasters, System Failures,*

**Integrity Risks** - *Coding Errors, Data Input, Corrupted Backups*





# Information Security Overview

Info. Security Is About Managing Risk

## Important Questions

What are biggest risks to University?

What about our community?

What actions can we undertake help achieve a balance of risk and opportunity?



# Information Security Overview

## Some Risks Feel Very Familiar

- Data Loss



- Equipment Theft / Loss



- “Recreational” Hacking



# Information Security Overview

## Some Risks Still Feel Relatively New

- **Mobile Device Threats**



- **Hacktivism**



- **Organized CyberCrime**



### THE GLOBAL PRICE TAG OF CONSUMER CYBERCRIME

**\$113 BN**

ENOUGH TO HOST THE 2012 LONDON OLYMPICS NEARLY 10 TIMES OVER



83% OF DIRECT FINANCIAL COSTS ARE A RESULT OF FRAUD, REPAIRS, THEFT AND LOSS



**USD \$298**

AVERAGE COST PER VICTIM  
REPRESENTS A 50 PERCENT INCREASE OVER 2012

ALL AMOUNTS IN USD  
SEE EXTRAPOLATION CALCULATIONS\*\*

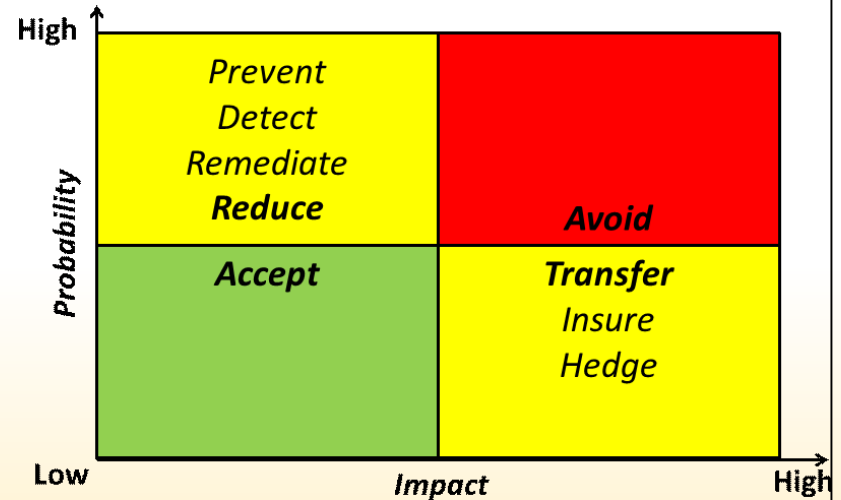
# Information Security Overview

Risks are everywhere

**but**

we don't have to address every  
risk.

Assessing Risks

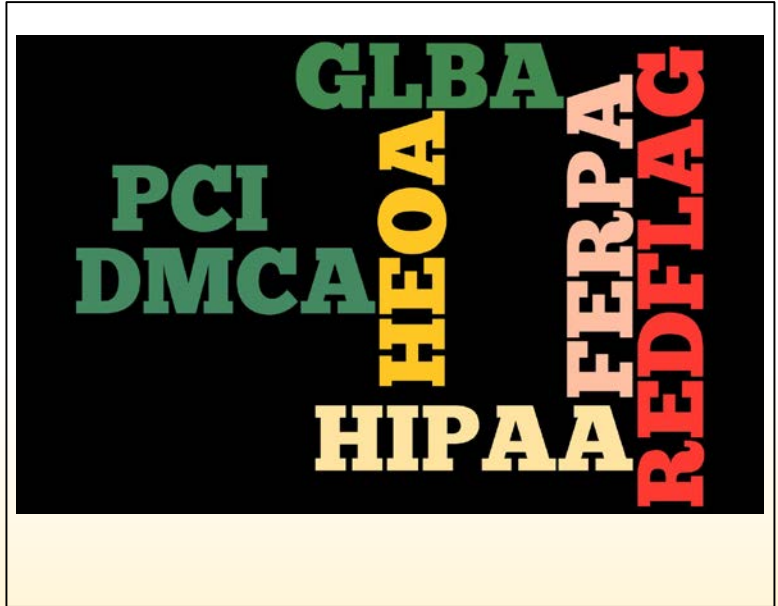


# Information Security Overview

## We Are Subject Compliance Regulations

The management of our data and associated practices is subject to compliance requirements.

Higher Education often faces greater number regulations than commercial organizations.



# Information Security Overview

## Personal vs Univ. Information Security Concerns

We want to keep our personal information safe.

We want to personally avoid being victims to disruptive, damaging, and costly online fraud attempts attacks.

We individually each want quick and reliable access to relevant and trustworthy information.

Most of us want to be law abiding citizens in cyberspace.



Individual Concerns

# Information Security Overview

## Personal vs Univ. Information Security Concerns

We want to keep our faculty, staff, and student information safe.

We want to keep the University community from being subjected to disruptive, damaging, or costly attacks.

We want to consistently provide quick and reliable access to trustworthy information.

We want to help ensure the University honors legal, and contractual, ethical obligations.



## 2. Information Security Overview

We Face Unique Security Challenges!

### Shared Values

Academic Freedom

Foster Experimentation

Openness / Free Flow  
Of Information

Reasonable Expectation  
of Privacy

### Shared Needs

Data Protection  
Standards

Ability To  
Detect/Prevent Attacks

Meet Records Requests







# Information Security Overview

Information Security Is An Organizational Issue

And A Shared Responsibility.

**Cyber Security**

is everyone's responsibility...

**Protect your information**

at home and at work!



# Information Security Overview



## UNC Information Security Formalization

**2008** - University of North Carolina Information Technology Security Council (ITSC) formed.

**12/ 2011** - ITSC recommends the adoption of **ISO 27002** as the common security framework for the University of North Carolina system.

**01/ 2012** - The UNC CIO council accepted the recommendation from the UNC ITSC to use **ISO 27002**.



# Information Security Overview



## UNC Information Security Formalization

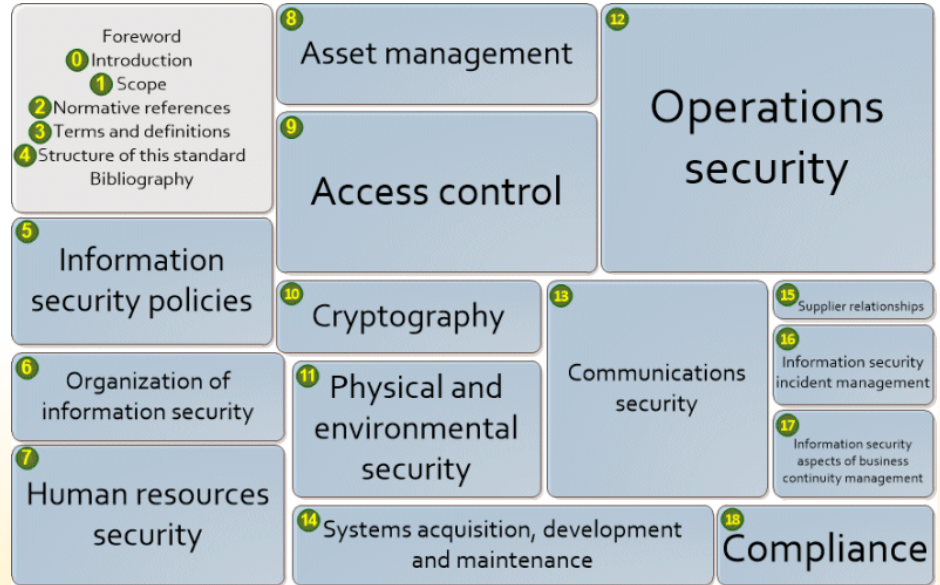
\* **03/ 2012** - Chancellors of all UNC system institutions submitted letters to UNC-GA indicating the adoption of **ISO 27002** as the official security framework for their campus.

# Information Security Overview



**ISO/IEC 27002:2013**

**Best Practices Recommendations**



# Information Security Overview



**ISO/IEC 27002:2013**

**Collection of 114 Controls**

**Administrative Controls** - Policies, Procedures, Guidelines, Standards of Practice.

**Technical Controls** - Firewalls, Antivirus, Intrusion Detection, VPN.

**Physical Controls** - Door Locks, Card Swipes, Security Cameras.

# Information Security Overview



**ISO/IEC 27002:2013**

**Structure Of The Standard**

Security Policy

Organization of Information  
Security

Human Resources Security

Asset Management

Access Control

Cryptography

Physical And Environmental  
Security

Communications Security

Information Systems  
Acquisition, Development,  
Maintenance

Supplier Relationships

Incident management

Aspects of Business Continuity

Compliance



# Information Security Overview

**Two Important Things For Us To Consider.**

**Security Is a Process  
Not A Destination.**



# ISAC Role and Charge

Our Council Web-Site

<http://isac.cio.appstate.edu/>





# ISAC Charge (Distilled)

Provide advisement, review, and endorsement of Information Security Plan including relevant **policies, strategic initiatives, services.**

Ensure that this plan is **aligned** to the needs of the Univ community:

Focused on **education and awareness** opportunities

Driven to achieve reasonable, cost-effective, and holistic **management of risks** related to University information resources.

# ISAC Scope of Authority

- \* Collaborative review, revision, and endorsement of the University Information Security Plan.
  - \* Collaborative review, revision, and endorsement of University Information Security Policies.
  - \* Identification of campus wide and role-specific security awareness and training needs.
  - \* Review and advisement concerning information security issues, trends, and opportunities.
  - \* Review and advisement concerning information security program service improvements.
  - \* Authority to establish committees and workgroups to research or focus on specific areas.
- Publication of all non-confidential council work, project information and meeting minutes to council web site.

# ISAC Deliverables

The primary deliverables of the Information Security Advisory Council work includes the following:

- A collaboratively developed **Information Security Plan** that defines strategic initiatives, objectives, and areas for continual improvement.
- A collaboratively developed **Security Awareness and Training Plan** that addresses key issues, needs, and concerns.
- A collaboratively developed set of proposed and/or ratified **Information Security Policies** that address the important information security needs of Appalachian State University.

# Information Security Plan

## Annual Planning Cycle

In alignment with University mission and needs:

What Are Our Strategic Initiatives?

What objectives and measurements do we make?

How can we focus on continual improvement?



should we spend our effort / resources?

# Security Awareness Plan

## Annual Planning Cycle

How can we help ensure that faculty and staff are aware of relevant security policies and standards?

What topics/themes are most important for keeping our community safe online?



# Information Security Policies

## Annual Review

Are there any new policies that we need to establish  
to ensure the effective management of Information Security

Risks?

Are there revisions to policies that are needed based on

changes?



# We Don't Have To Reinvent The Wheel!

EDUCAUSE

INTERNET<sup>2</sup>

HIGHER EDUCATION  
INFORMATION  
SECURITY COUNCIL

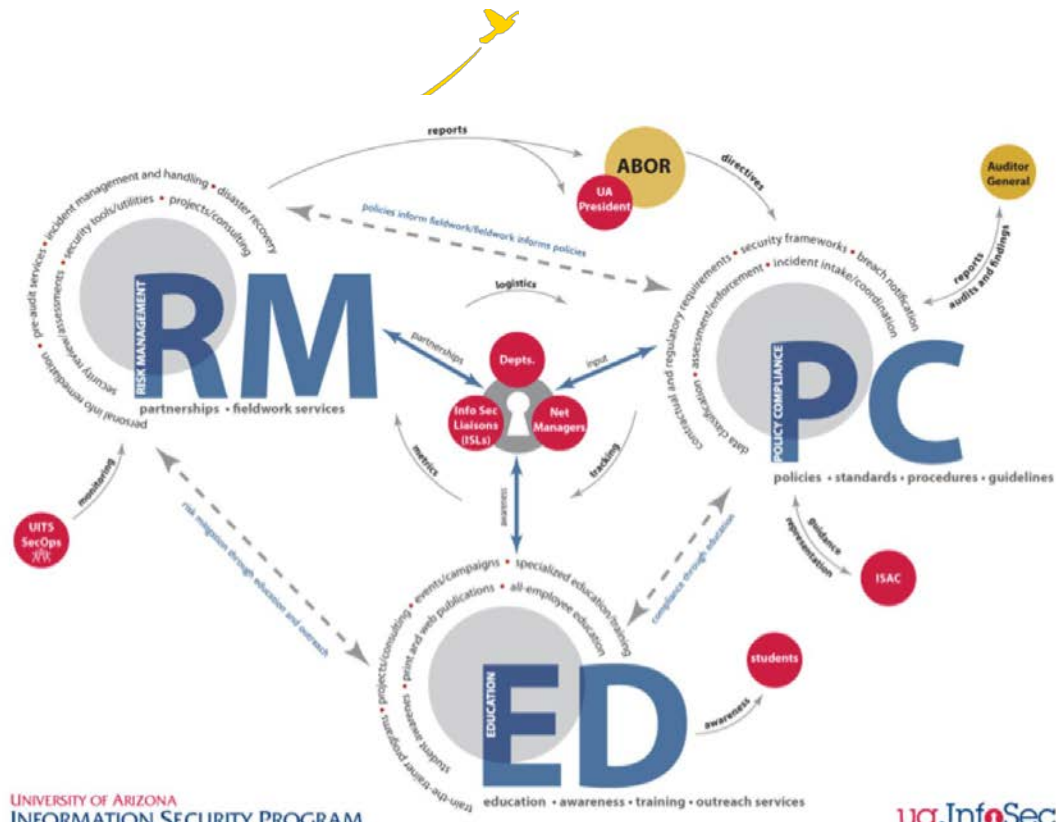
 **ISACA**<sup>®</sup>  
*Trust in, and value from, information systems*



UNC ITSC

**SANS**

Appalachian  
STATE UNIVERSITY



UNIVERSITY OF ARIZONA  
INFORMATION SECURITY PROGRAM

ua.InfoSec  
Appalachian  
STATE UNIVERSITY



# ITS-OIS Status Report

## ITS - Office of Information Security

CISO - Jim Webb

Security Analyst - Oscar Knight

Security Analyst - Kevin Wilcox

Web: <http://security.appstate.edu>

Phone: ext 6277



# ITS-OIS Status Report

## **ITS - Office of Information Security**

### **Our Services**

Awareness Training

Incident Management and Handling

Projects / Consulting

Policy Development

Risk and Compliance

Security Review



# ITS-OIS Status Report

## **ITS - Office of Information Security**

### **Current Major Projects and Partnerships**

Secure CC Transaction Solution.

Student Security Awareness Initiative.

Data Protection Toolkit





Thoughts? / Comments?/ Questions?

# Next Steps

## How Often Should We Meet?

Monthly?

## Next Meeting Agenda?

Report on Our ISO 27002 Status?

Address

Security Policy Group

Security Awareness Group

Incident Response Group