

State Enterprise Security Update

Department of Information Resources

**Before the Senate Committee on
Transportation and Homeland Security**

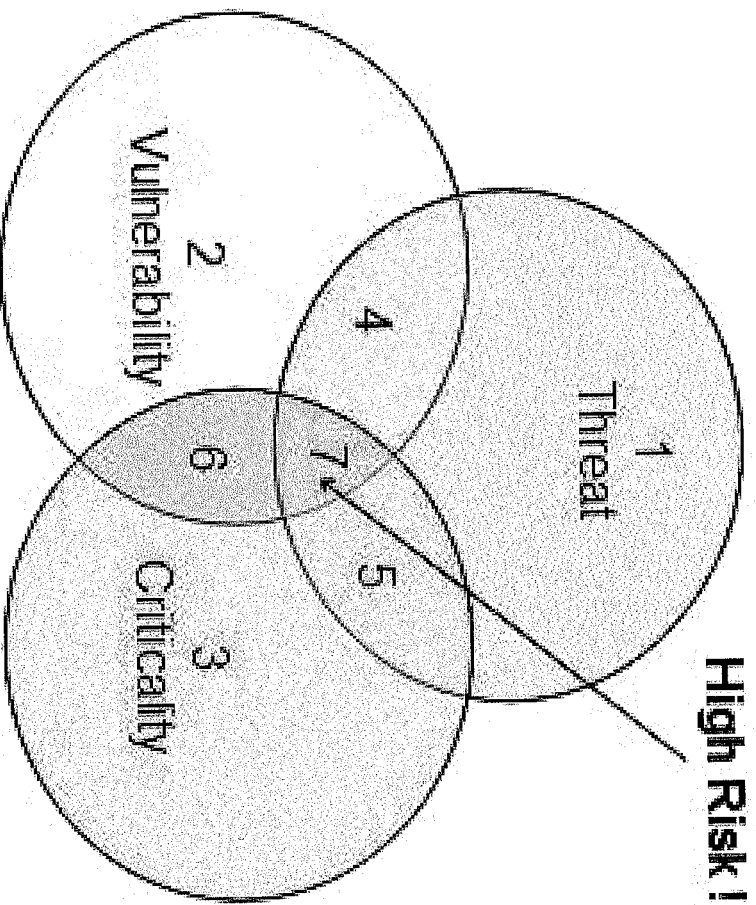
June 8, 2010

Defining Information Security

- **Information Security (InfoSec) is defined as:**
Protecting information and information systems from unauthorized access, use, disclosure, disruption, modification, or destruction in order to provide [integrity, confidentiality, and availability]*
- **Note the focus on information and systems, not just computers**

* From U.S. Code Title 44, Chapter 35, Subchapter III, § 3542, Definitions, b.1

Cornerstone of Security: Managing Risk



The Context of Risky Situations

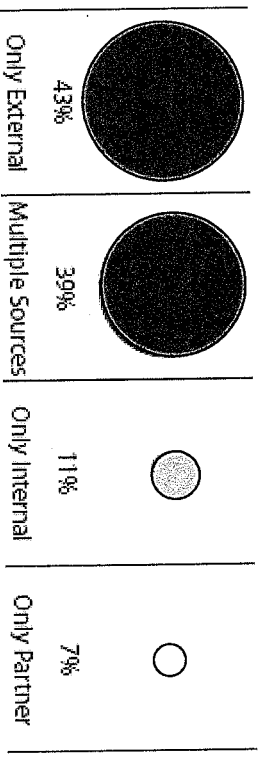
Scope of Problem

- **FY 2009 – State of Texas agencies and universities reported a daily average of 575 security incidents**
- **Jan 2005 to Aug 2009 – Texas-based orgs reported by Privacy Clearinghouse:**
 - **105 incidents involving privacy data (43 state gov incidents)**
 - **3+ million individual records exposed (+12% of the state's population)**
 - **Estimated cost of \$202 per record exposed**
 - **Totaling \$606 million dollars to recover from the attacks**

Source: *Texas Homeland Security Strategic Plan, 2005-2010*

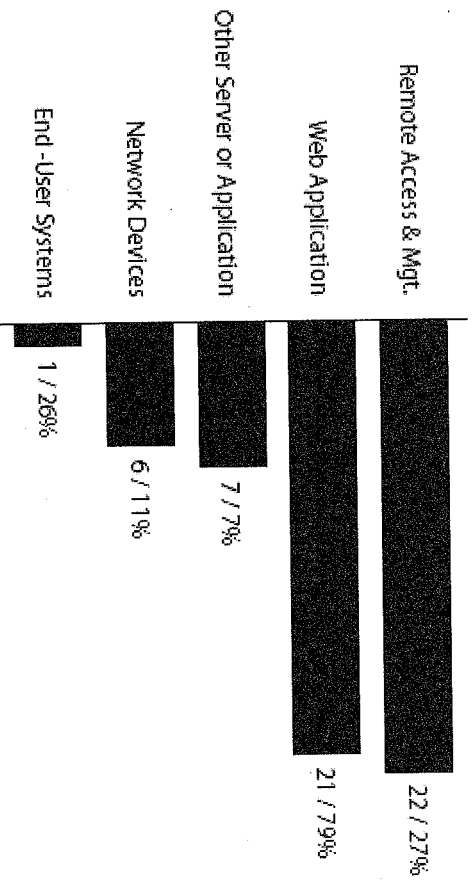
Relative Risk of External vs Internal Threats

Single vs. multiple breach sources by percent of breaches



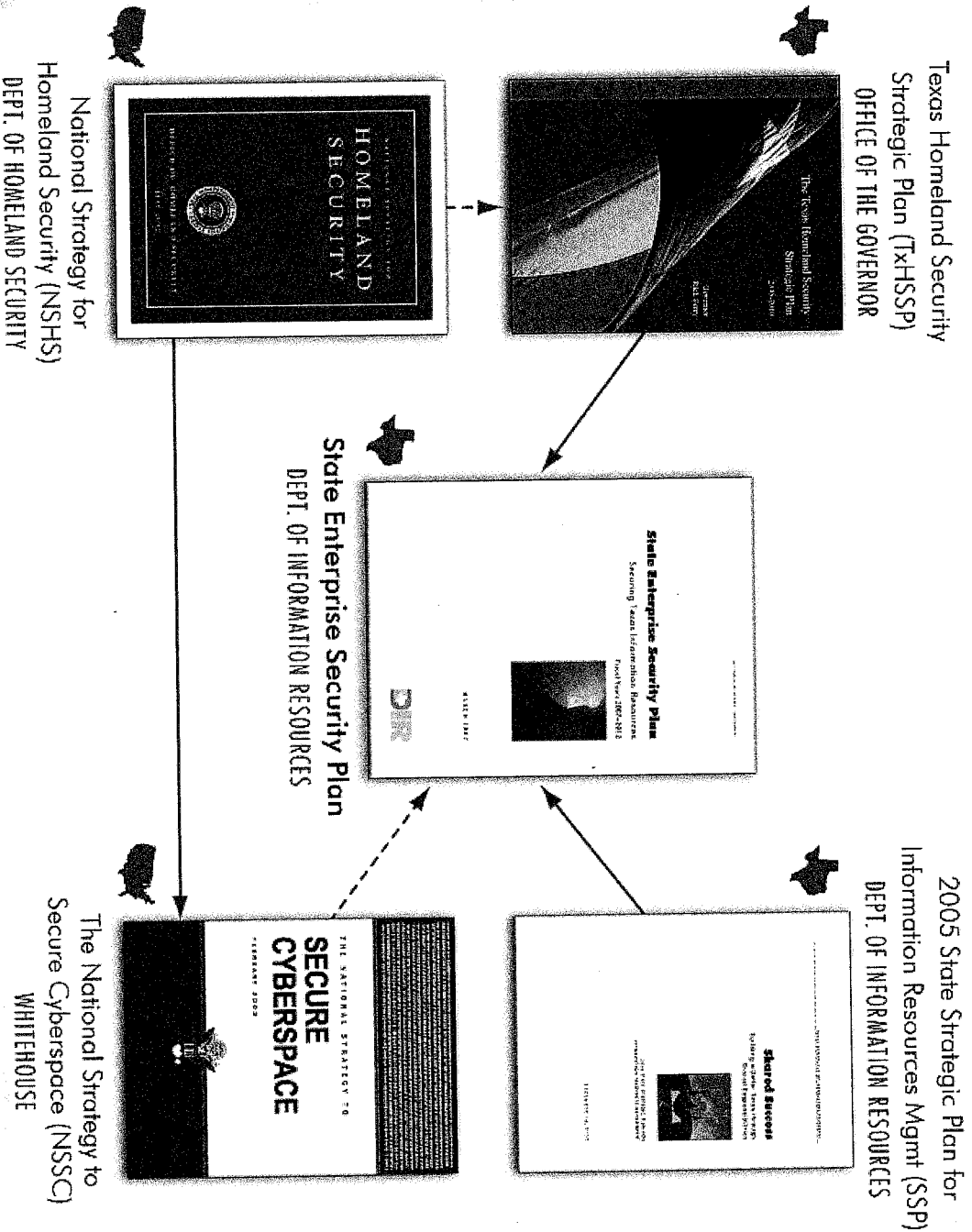
“Results from 600 incidents over 5 years make a strong case against the long-abiding and deeply held belief that insiders are behind most breaches.”

Attack pathways by number of breaches (black) and percent of records (red)



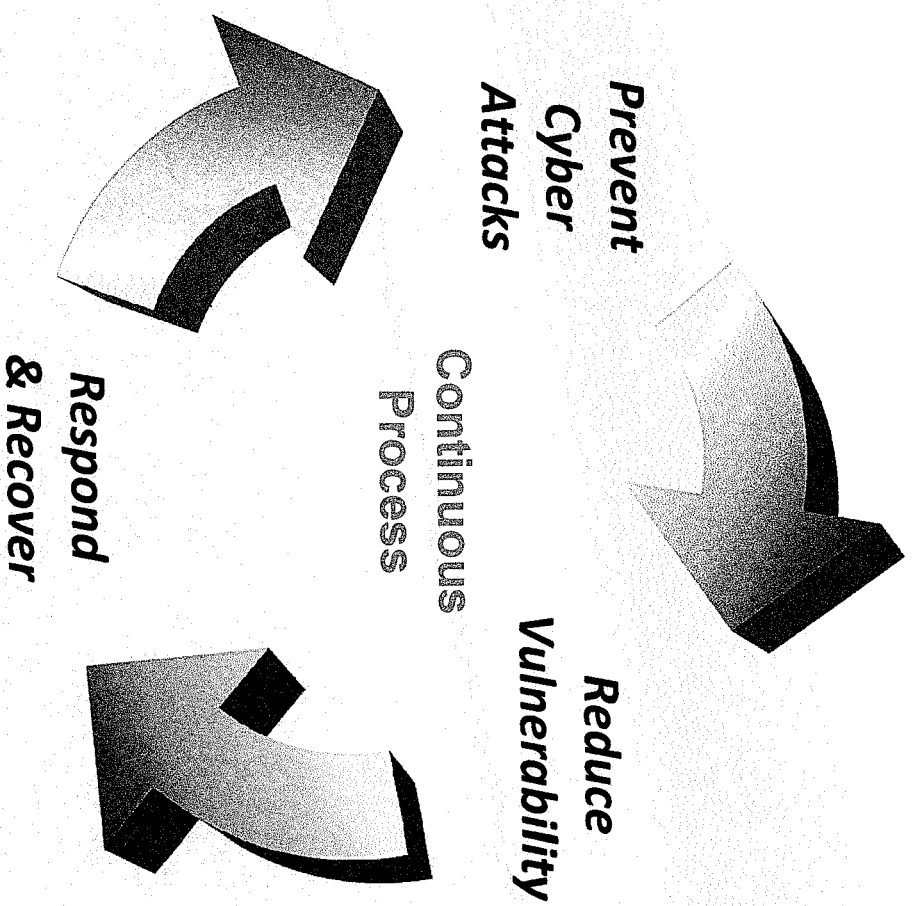
Source: 2009 Data Breach Investigations Report, Verizon Business RISK Team

Security Plan



State Enterprise Security Goals

- **Prevent cyber attacks** against Critical Infrastructure
- **Reduce vulnerability** to cyber attacks
- **Respond and Recover** to minimize the impact



Source: State Enterprise Security Plan, 2007-2012

Building State Response Capability

- Computer Security Incident Response Team Training
- Sentinel Project: CyberTerrorism Incident Handling, First Responder, Defense & Prevention courses
- Act-Online Cyber Security Training (10 courses)
 - 500 Enrollments, over 300 completions
- UT San Antonio's CIAS training (Telecom Sec, Exercises)
- Annual DIR Information Security Forum
- 30+ events & 24k hours training provided FY08-09

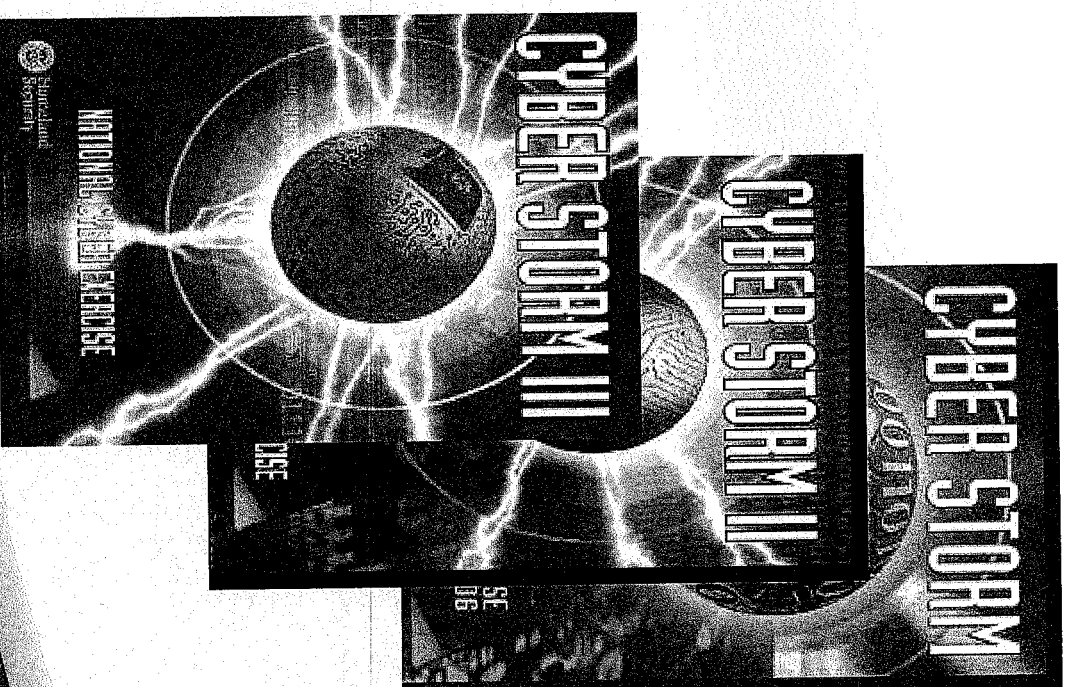


Software Engineering Institute

Carnegie Mellon

Cyber Storm: National Biennial Exercise Program

- Cyber Storm Series is a continuous learning and evaluation process
- Provides an opportunity for an intensive collective exercise of the cyber incident community
- Identifies significant areas for improvement and/or critical gaps in capabilities, processes, and procedures



Cyber Alerting and Information Sharing Partners

- Multi-State Information Sharing & Analysis Center
- Government Forum for Incident Response Teams
- US-CERT
- Infragard
- National Emergency Response and Rescue Training Center
- Governor's Homeland Security Council
- Texas Information Sharing & Analysis Center
- NSA National Centers of Excellence in Information Assurance

