Security Risks

Categories of Risk

- Physical
- Software
- Data
- Database
- Network
- Hardware
- Human
- Terrorism
- Legislative

Physical Risks

- Environmental (Temperature, humidity)
- Exterior Factors (Flooding, earthquake)
- Construction Standards (Risk Isolation)
  - The Planet datacentre in Texas – 1 June 08
- Off-site Backup
- Amazon S3
- Power Risks (UPS/Battery Backup, generators)
- Access Control/Authorization
- Network Storage (Distributed Database

Software Risks

- Critical Software
- Backup Policies
- Threats
- Default Application Configurations
- Software Bugs
- Compromised Source Code
- 3rd Party Hosting/Application Provider

Data Risks

- Access control
  - Windows Expired Passwords
- Integrity
- Responsibility
- Retention Schedule
- Liability
- How it is stored
- Backups
- Encryption
  - True Crypt

Database Risks

- Backup policies
- Test Restores
- Vulnerability Assessment
- Access Controls (Grants and Views)

Network Risks

- Encryption
- Wire/Wireless Vulnerabilities
- Intrusion Detection Systems (IDS)
- Remote Access/VPN

Hardware Risks

- Lost Hardware
- Safeguarding Resources
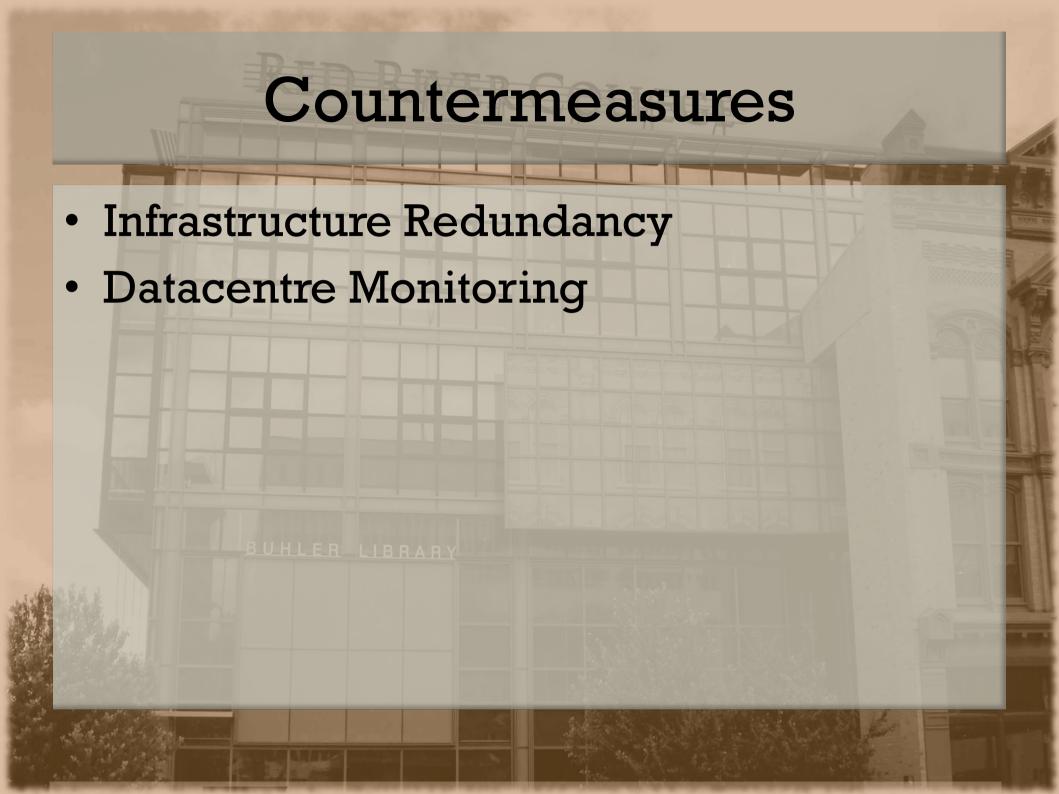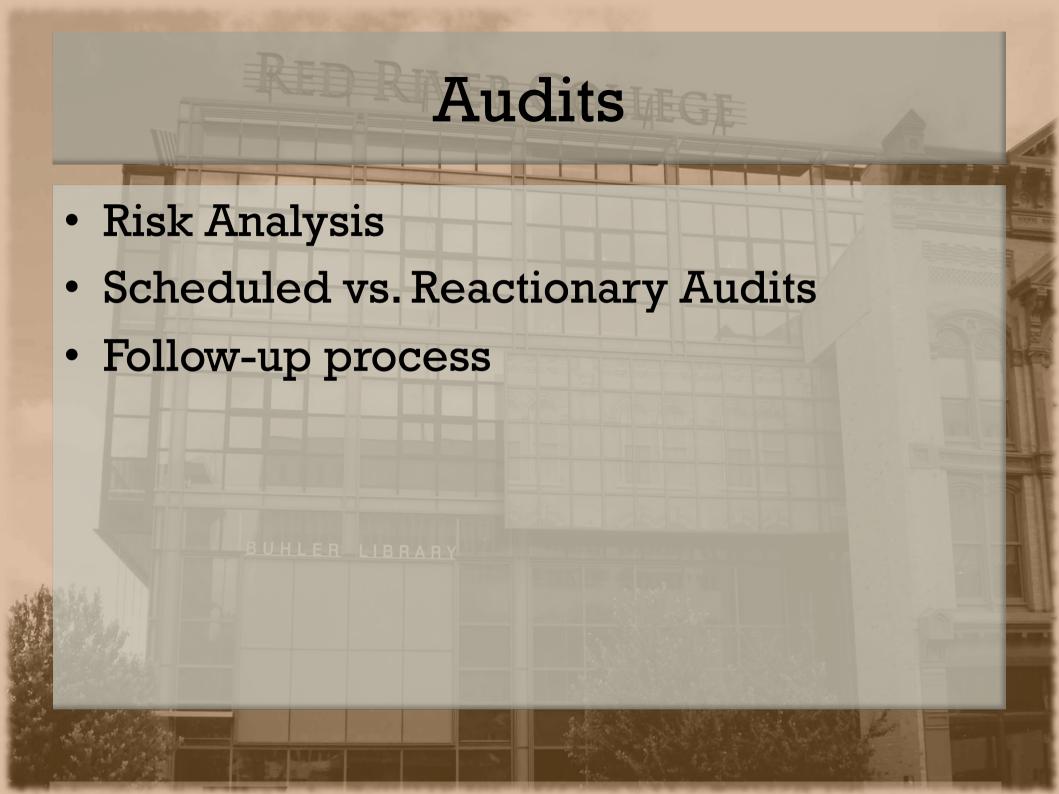- Asset Management
- Hardware Failure

Human Risks

- Training
  - Shaw/MTS/TeraSpan
- Accountability
- Introduced Vulnerabilities
- Internet Activities
- Access Control
- Morality
- "Hit by the Bus"

Terrorism

- Physical Infrastructure Risks
- Data Risks
- Threats to Personnel

Legislative Risks

- Regional, National, and International risks
- PIPEDA
- Sarbanes-Oxley Act
- Ontario Bill 198 (CSOX)

Countermeasures

- Infrastructure Redundancy
- Datacentre Monitoring

Audits

- Risk Analysis
- Scheduled vs. Reactionary Audits
- Follow-up process

Forensics

- Logging/Log Types/Shelf life of logs
- Engaging experts as needed
  - Security Experts
  - Data Recovery Experts
- Law Enforcement
  - WPS Computer Forensics

Corporate Policies

- Outsourcing
- Hiring Policies
- On-going Training
- Insurance
- "Hit by the Bus"
- Outsource/Takeovers

Security Plan/Policies/Processes

- Periodic Review
- Easy to Access and Update