

A photograph of the Red River College building, a modern glass-fronted structure with a grid of windows. The building is situated next to an older brick building. The sky is overcast. A semi-transparent blue rectangle is overlaid on the center of the image, containing the text 'Security Risks'.

RED RIVER COLLEGE

# Security Risks

BUHLER LIBRARY

# 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
- 3<sup>rd</sup> 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”

The background of the slide is a photograph of the Red River College Buhler Library. The building is a multi-story structure with a large glass facade. The words "RED RIVER COLLEGE" are visible at the top, and "BUHLER LIBRARY" is visible on a lower level. The image is faded and serves as a backdrop for the text.

# 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



The background of the slide is a photograph of the Red River College Buhler Library building. The building is a multi-story structure with a large glass facade and a prominent entrance. The words "RED RIVER COLLEGE" are visible on the upper part of the building, and "BUHLER LIBRARY" is visible on the lower part. The image is slightly faded and has a warm, sepia-toned overlay.

# 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

