Cybersecurity in Missouri Municipalities
Brad Sandt, President & CEO

Cybersecurity for Local Government
• What are common cybersecurity risks?
• How vulnerable are Missouri Cities?
• What else to worry about besides a data breach?
• Where is your community vulnerable?
• How will you respond to a breach?
• How do we attack this problem?

Cybersecurity Risks
• Data Breach
• Accidental Data Loss
• Phishing/Spear Phishing
• Malware
• Ransomware
Cybersecurity Risks

• Data Exfiltration Common Vulnerabilities and Exposures (CVE)
• Remote Code Execution (RCE)/Privilege Escalation (PE)
• Account Takeover
• Supply Chain Attack
• Distributed Denial of Service (DDoS)
Stats

- Average cost of a data breach is $3.86M in 2020 (IBM)
- Average lifecycle of a breach was 280 days (IBM)
- Personal data involved in 58% of breaches in 2020 (IBM)
- 64% of Americans have never checked to see if they were affected by a data breach (Varonis)
- 86% of breaches were financially motivated (Verizon)

Stats

- Average ransomware payment rose 33% in 2020 (Fintech News)
- 94% of malware is delivered via email (CSO Online)
- U.S. Ranks Highest with 18.2% of all ransomware attacks (Symantec)
- 20% of malicious domains used within one week of registering (Cisco)
- 30% of data breaches involve internal actors (Verizon)
- Since the pandemic began, the FBI reported a 300% increase in cybercrimes (IMC Group)

Not If, but When

- Identify: How can they get in?
- Protect: What tools do we have?
- Detect: Can we locate intrusions?
- Respond: How can we fix an intrusion if it occurs?
- Recover: Do we have a plan in place to get back to normal?
Simple Steps to Take

• Backup, Backup, Backup (air gap)
• Endpoint Protection/Anti-Malware
• Patch Systems (Windows/OSX/Network/Applications)
• Use Strong (and Different) Passwords/Multi-Factor Authentication
• Practice Safe Clicking
• Be Skeptical (Social Engineering)
• Create an Incident Response Plan
Simple Steps to Take

• General security awareness training.
• Simulated phishing campaigns.
• Third Party Assistance