Information Security Report

2021

June 2, 2021

Joint Legislative Committee on Information Management and Technology

OREGON STATE TREASURY

Oregon's Financial Services Hub

Vision Statement

Leading the way for Oregonians to achieve long-term financial security

Mission Statement

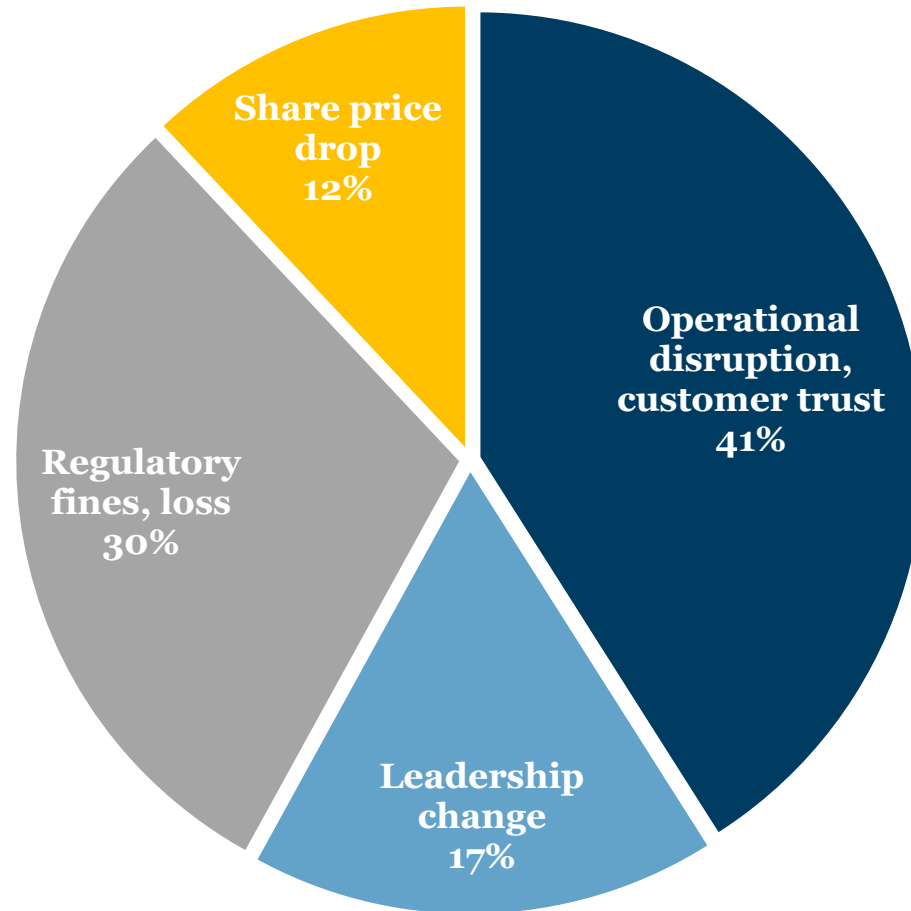**Improving Oregon governments' and citizens' financial capabilities**

Our IT Mission

Improving Oregon governments' and citizens' financial capabilities *through collaborative, resilient, innovative, and secure technology solutions*.

Cybersecurity Financial Services Industry

- Cyberattacks have spiked **400% since March 2020**

- **29.6%** chance of experiencing a data breach

- **$5.85** million – average cost of breach in the FSI

- **233 days** – time to identify and contain a breach

- **52%** of data breaches are financially motivated

- **87 %** of cost is business disruption and information loss

OREGON STATE TREASURY

Most Common Impacts of Cyber Events

Share price drop
12%

Operational disruption, customer trust
41%

Regulatory fines, loss
30%

Leadership change
17%

OREGON STATE TREASURY

Threats to Financial Services Organizations

- Compromised credentials

- Cloud misconfiguration

- Vulnerabilities in third-party software

- Customer- and employee-targeted phishing

- Supply chain attacks

- Virtual Private Network (VPN) attacks

- Ransomware

Barriers to Better Cybersecurity

- Lack of sufficient funding

- Inadequate staffing

- Increased sophistication of threats

- Lack of support from program areas

- Inadequate availability of cybersecurity professionals

*2018 Deloitte NASCIO Cybersecurity Study

Finance Industry Investment Priorities

- Access control

- Protective technology

- Data security

- Detection processes

- Threats and anomalies

* 2020 Deloitte-FS-ISAC – Reshaping the Cybersecurity Landscape

Treasury's Cyber Security Profile

- Millions of annual transactions, hundreds of billions of dollars

- Provide the computing infrastructure and expertise needed to conduct business securely and reliably

- Three connected locations (Salem, Capitol, Tigard)

- Design and manage solutions that meet business needs through a combination of cloud-based, purchased, and custom in-house developed applications

- Process and organizational maturity

OREGON STATE TREASURY

Information Security Program

- Oversees Treasury's InfoSec program

- Work is divided into four main areas:

    1. Security engineering
    2. Security operations
    3. Incident response
    4. Program management

- Responsible for implementing robust threat and anomaly detection capabilities

- Activities include extensive outreach to and education of Treasury staff
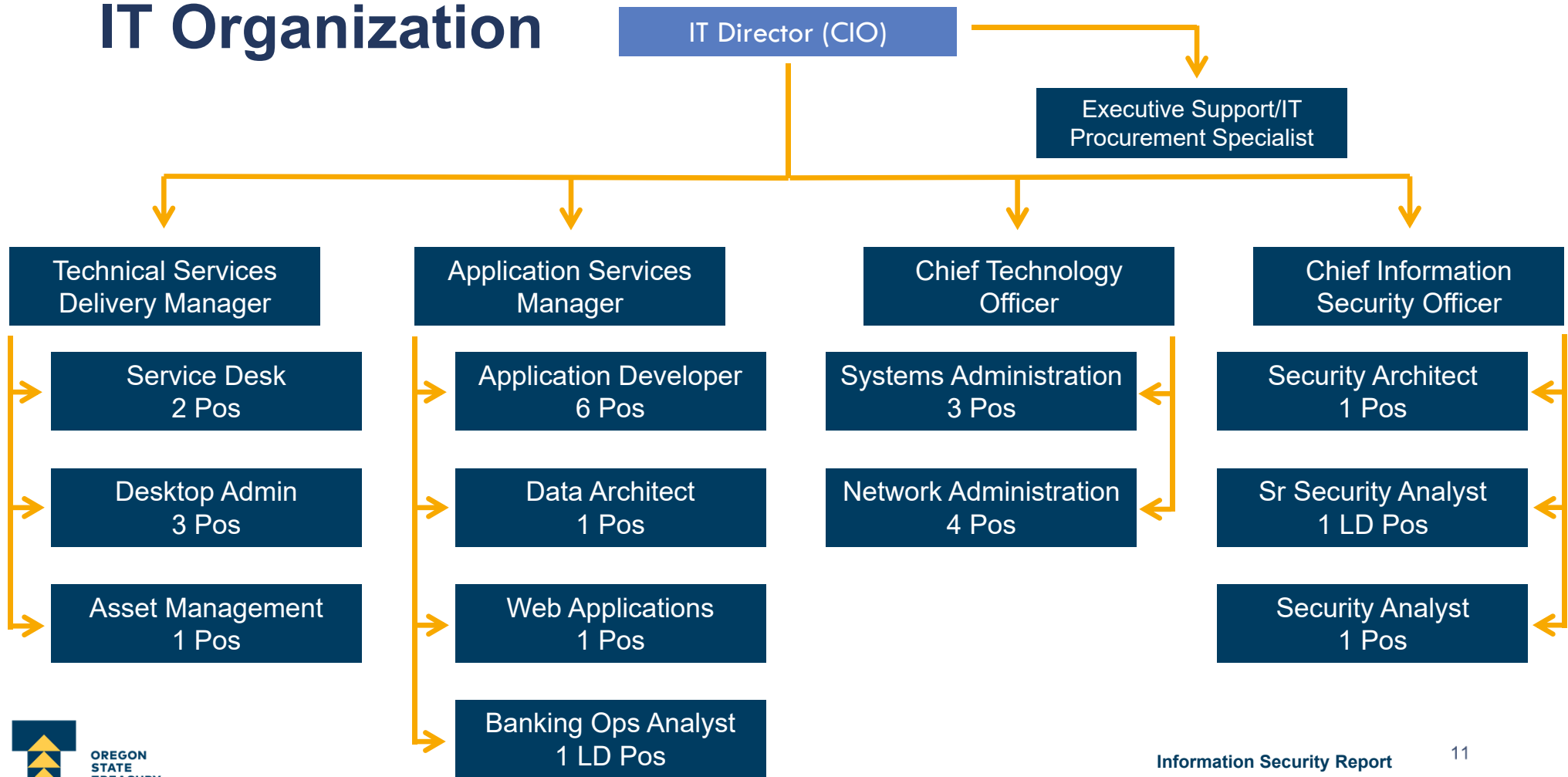
Information Security

Agency-wide Information Security Program
Information Security Risk Management

Application Security

Information Security Policy

Network & Systems Security
Third-party Due Diligence

Security Awareness

Incident Response

Threat and Vulnerability Management

Continuous Monitoring
Identity and Access Management
Data Security

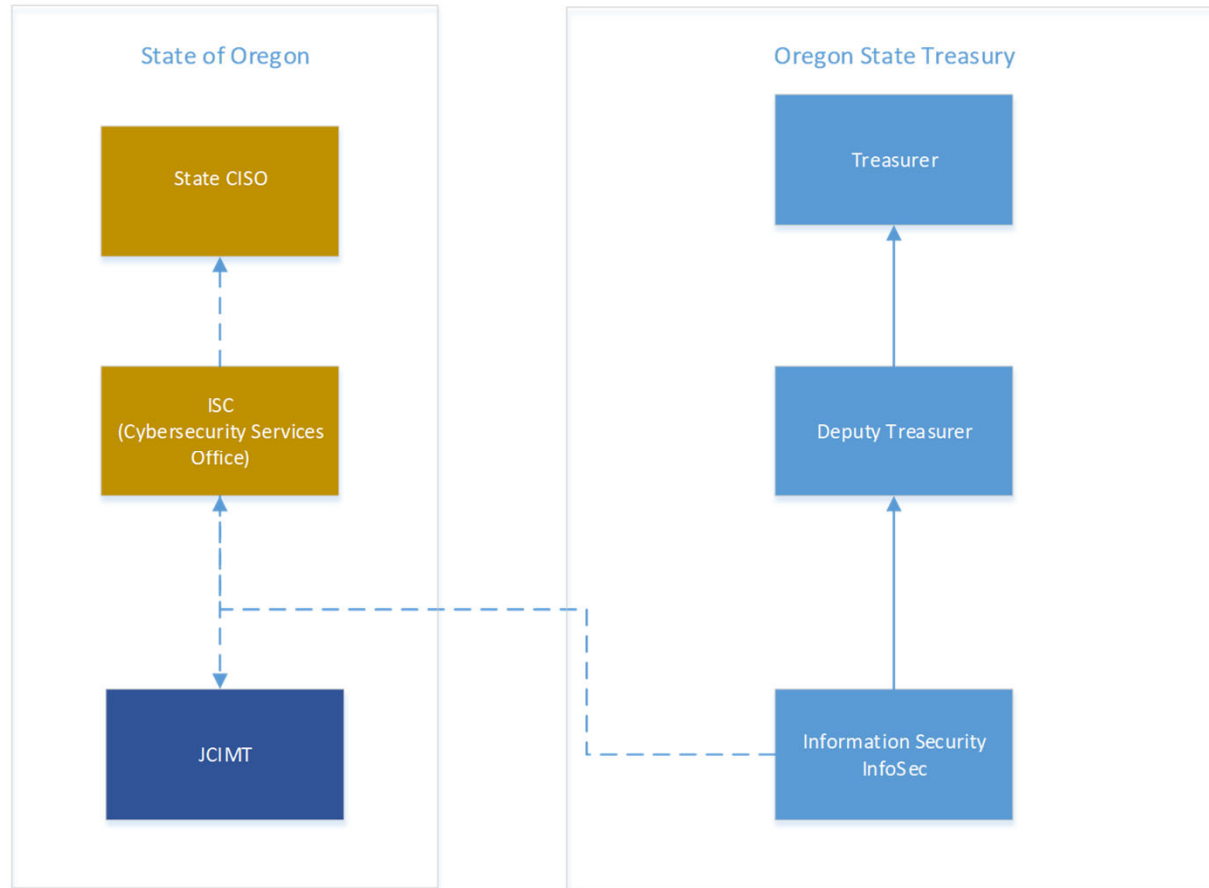**OREGON STATE TREASURY**

Information Security Program

Built on information security frameworks:

- International Standards Organization (ISO) 27001:2013

- Cybersecurity Framework v1

- Center for Internet Security (CIS) Critical Security Controls v7.1

- Oregon Statewide Information Security Standards (2019)

IT Organization

IT Director (CIO)

Executive Support/IT Procurement Specialist

Technical Services Delivery Manager

- Service Desk
2 Pos
- Desktop Admin
3 Pos
- Asset Management
1 Pos

Application Services Manager

- Application Developer
6 Pos
- Data Architect
1 Pos
- Web Applications
1 Pos
- Banking Ops Analyst
1 LD Pos

Chief Technology Officer

- Systems Administration
3 Pos
- Network Administration
4 Pos

Chief Information Security Officer

- Security Architect
1 Pos
- Sr Security Analyst
1 LD Pos
- Security Analyst
1 Pos

OREGON STATE TREASURY

Security Governance

State of Oregon

- State CISO
- ISC (Cybersecurity Services Office)
- JCIMT

Oregon State Treasury

- Treasurer
- Deputy Treasurer
- Information Security InfoSec
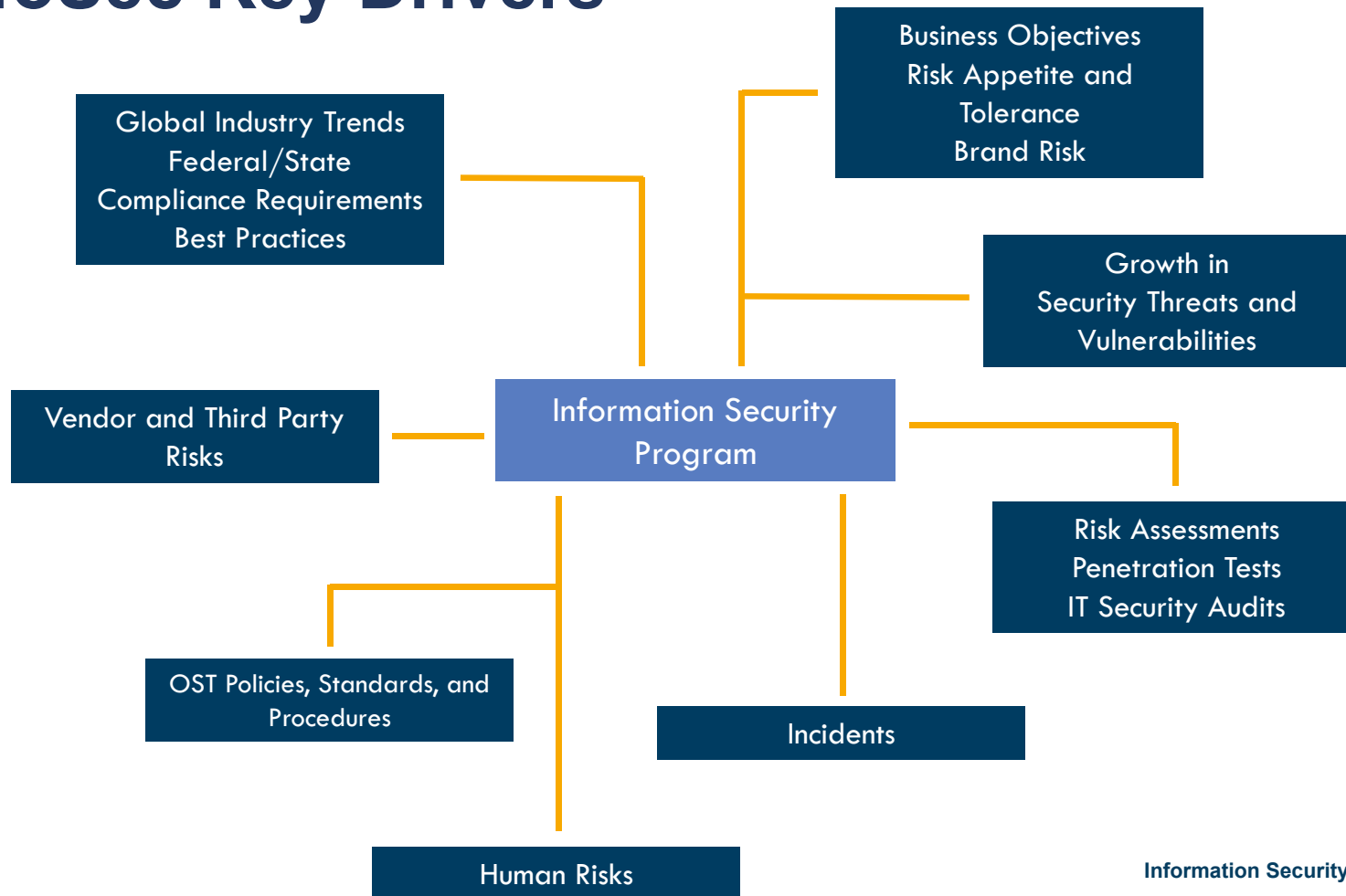
OREGON STATE TREASURY

Security Collaboration

- Financial Services – Information Sharing and Analysis Center (FS-ISAC)

- Independent Agency Security

- Cybersecurity Services office (CSS)

InfoSec Key Drivers

Global Industry Trends
Federal/State
Compliance Requirements
Best Practices

Business Objectives
Risk Appetite and
Tolerance
Brand Risk

Growth in
Security Threats and
Vulnerabilities

Vendor and Third Party
Risks

Information Security
Program

Risk Assessments
Penetration Tests
IT Security Audits

OST Policies, Standards, and
Procedures

Incidents

Human Risks

Security Assessments

- Comprehensive Penetration Test – (2019)

- SoS Cybersecurity Audit – (2021)

- Application Penetration Testing – (2021)

- Comprehensive Program Assessment – (2022)

OREGON STATE TREASURY

Recent Key Improvements

- Vendor cybersecurity rating service (2019)

- Threat and anomaly detection (2019)

- Enhanced malware protection (2020)

- Security awareness (2020)

- Enhanced third-party risk management (2020)

- Advanced email protection services (2021)

OREGON STATE TREASURY

Information Security Investments

- Identity and Access Management

- Network access control enhancements

- Zero-Trust security integration

- Expansion of multi-factor authentication

- Baking security into applications

- Focus on data security

- Expansion of threat and anomaly
  detection capabilities

OREGON
STATE
TREASURY

Ongoing Staff Training

- Cybersecurity Security Conferences

- Financial Industry Conferences

- SANS Security Training

- Cybersecurity webinars

- Security Certifications

- Information Security Community

OREGON
STATE
TREASURY

OREGON
STATE
TREASURY

Tobias Read
Oregon State Treasurer

350 Winter St NE, Suite 100
Salem, OR 97301-3896

oregon.gov/treasury