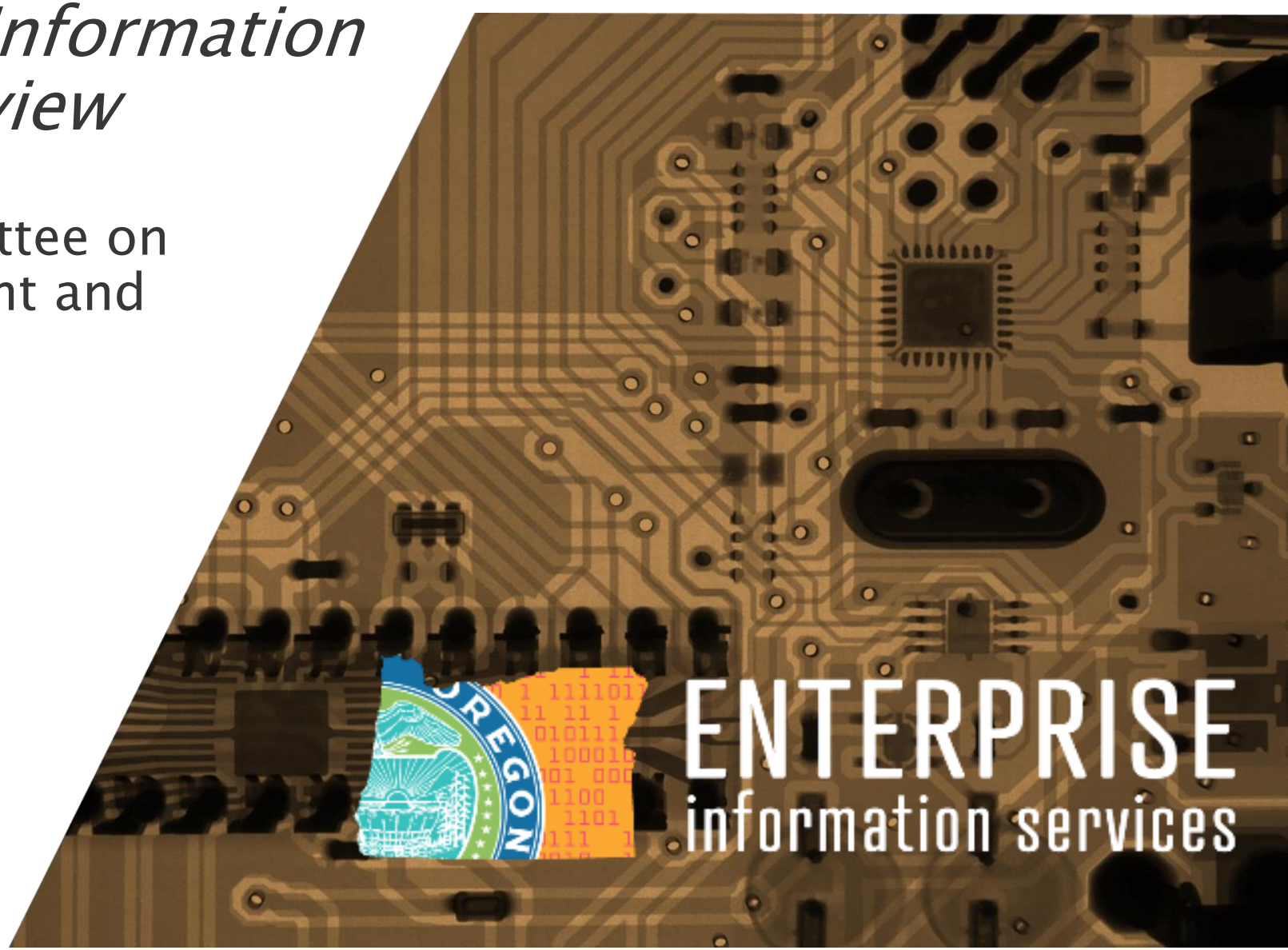
State of Oregon. Information Technology Overview

Joint Legislative Committee on Information Management and Technology

Terrence Woods &
Jennifer Bjerke

03 February 2021



State of IT. *Agenda*

03 February 2021 - State Information Technology Overview, pt. 1

- Public Sector IT - Current Trends
- Statewide IT Expenditures and IT Workforce
- 2020 Gartner Benchmark Studies
- EIS Overview
- *EIS Strategic Framework 2020-2023 – version 1.0* Mission, Vision, Values, Objectives and Recent Accomplishments
- Program Overview and Highlights

10 February 2021 - State Information Technology Overview, pt. 2

- Enterprise IT Governance
- Assistant State CIOs: Policy Area Modernization
- EIS Enterprise Projects
- EIS Pandemic Support

Public Sector IT. Current Trends

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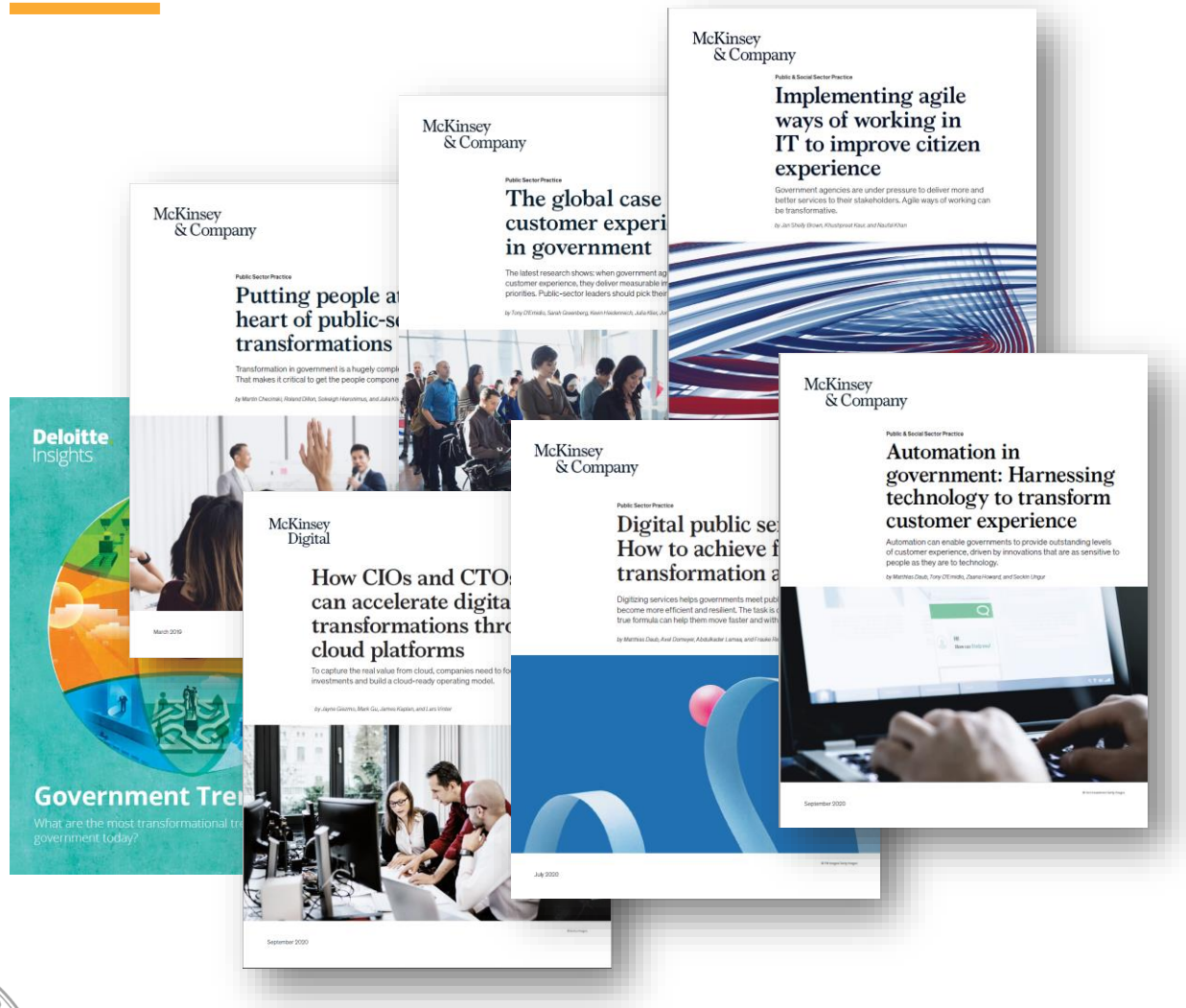
Public Sector IT. *Current Trends*



- **Customer Experience (CX).** Embracing the need for CX and design thinking within the creation of digital public services
- **Putting People First.** Recognizing the need for committed leadership, compelling communication, clear purpose and priorities, capability for change, and cadence and coordination in delivery
- **Agile.** Adopting agile practices to focus on the creation of immediate value and improve CX
- **AI, Automation, and Cloud.** Leveraging automation, AI, and cloud platforms to drive digital transformation and optimize service delivery

Statewide IT Expenditures and Workforce Data

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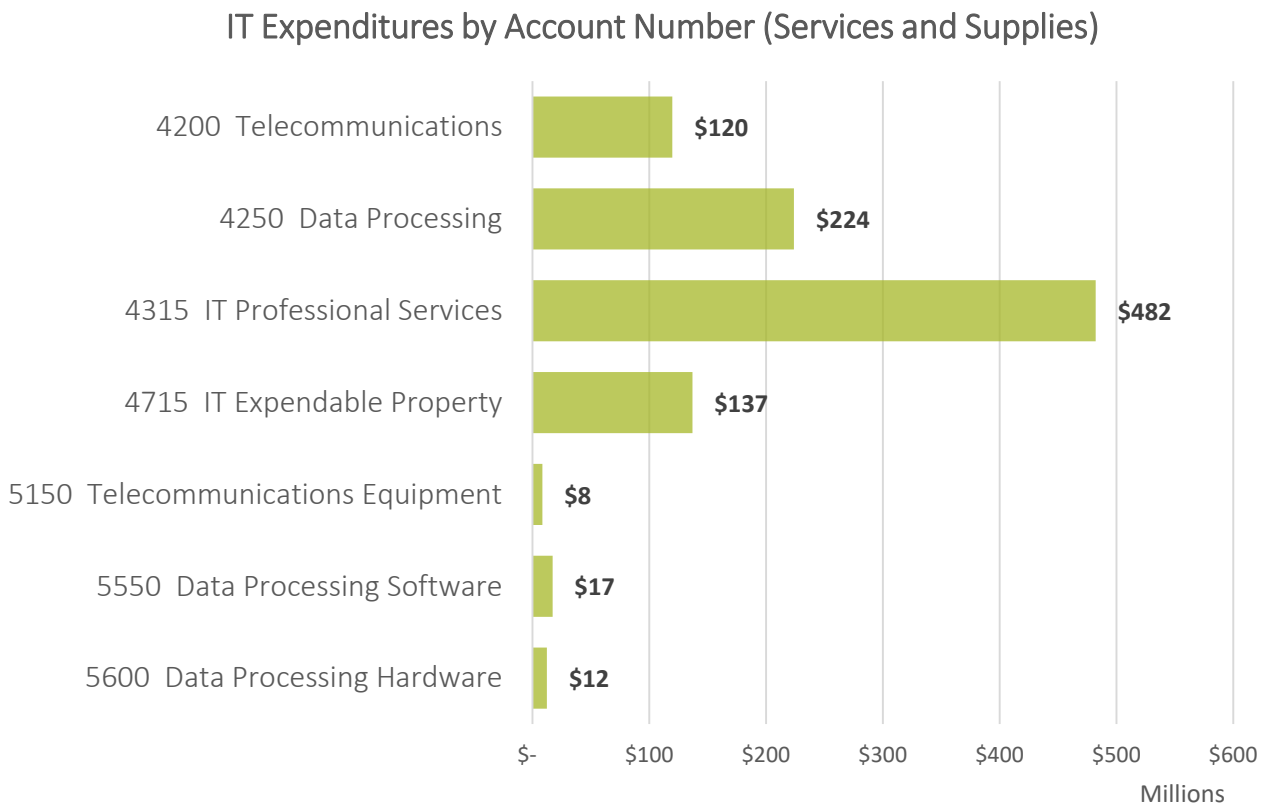
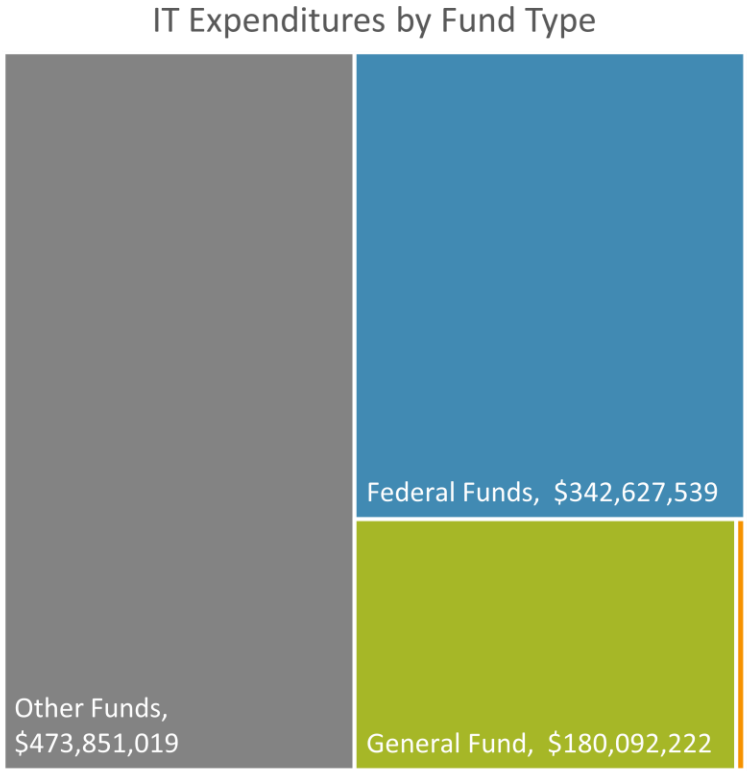
Statewide IT Expenditures. *2019–21 Leg. Approved Budget**

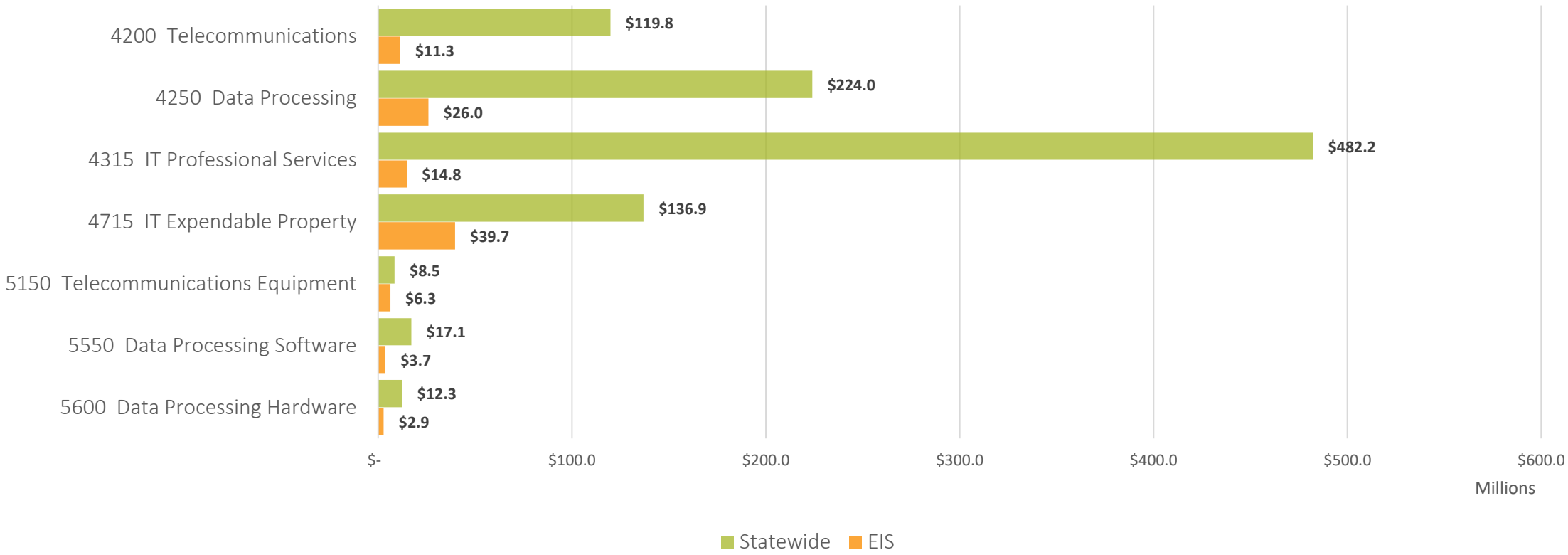
Total 2019-21 LAB* Expenditures within IT-designated Accounts for Executive Branch Agencies - $1,000,873,892





**Includes any adjustments through the November 2020 E-Board. Please note that the data is limited to Executive Branch Agencies, does not include IT-related State Government Service Charges from EIS to all agencies, and does not include an estimate for IT-related Personal Services costs. See https://www.oregonlegislature.gov/lfo/Documents/Oregon%20IT%20Expenditure%20Report.pdf for additional background.*

Statewide IT Expenditures. *2019-21 Leg. Approved Budget**



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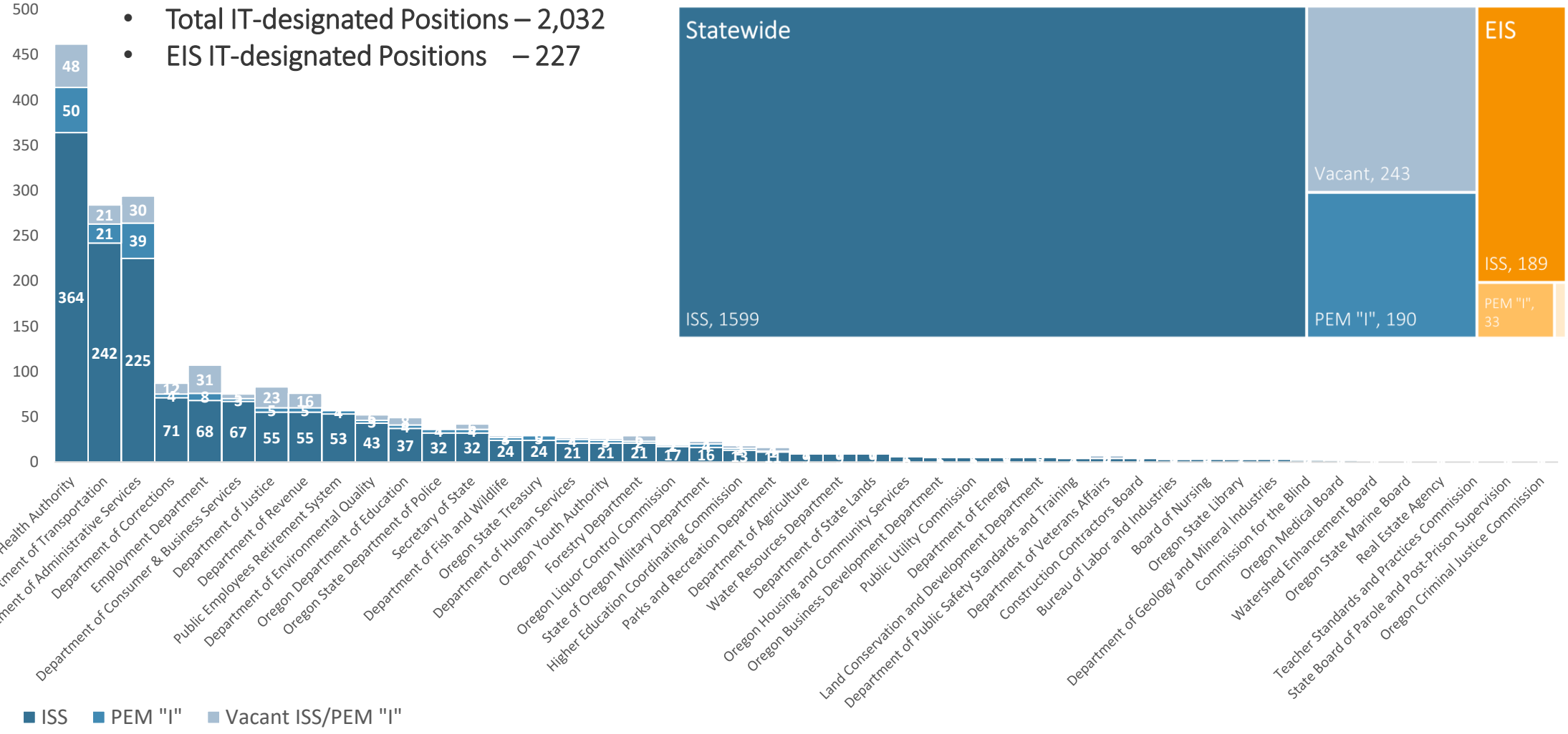
Statewide IT Workforce. *As of December 31, 2020**

- Total IT-designated Positions – 2,032
- EIS IT-designated Positions – 227



*Please note that the data is limited to Executive Branch Agencies

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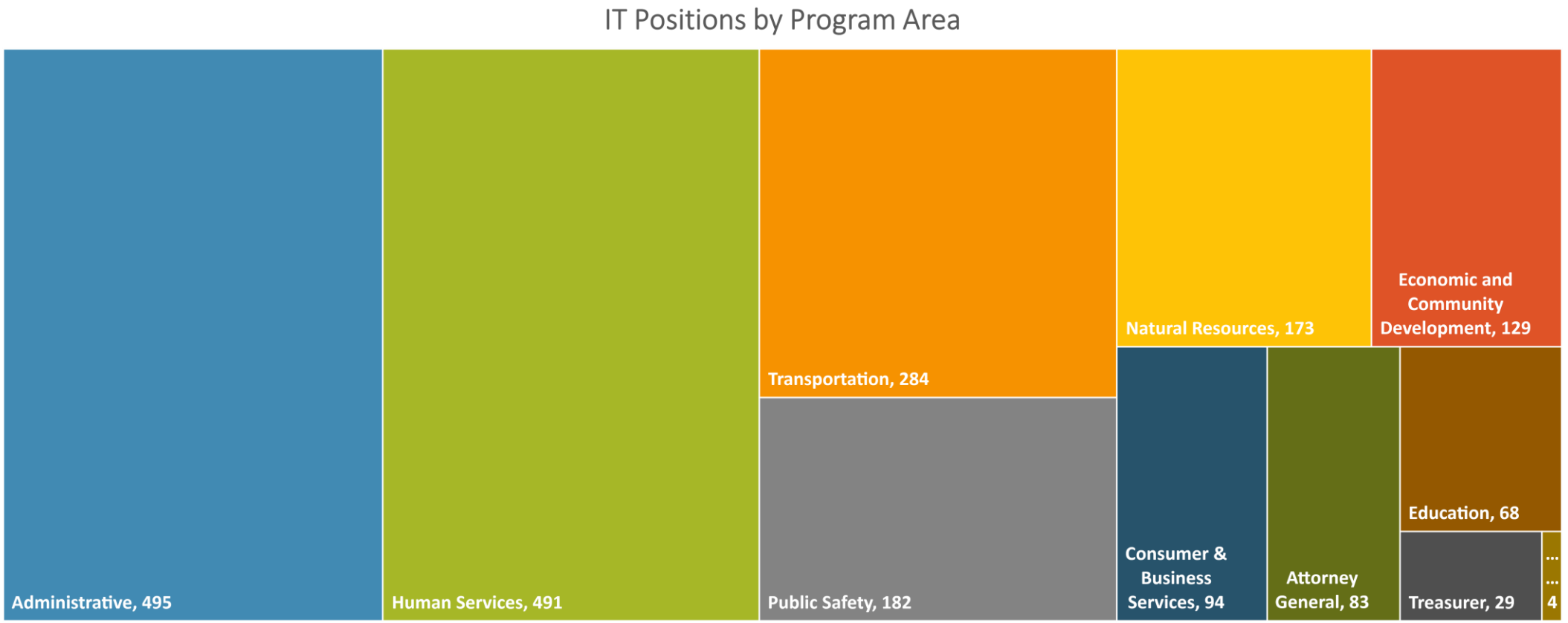
Statewide IT Workforce. *As of December 31, 2020**



*Please note that the data is limited to Executive Branch Agencies

EIS-2020 Gartner Benchmark Studies

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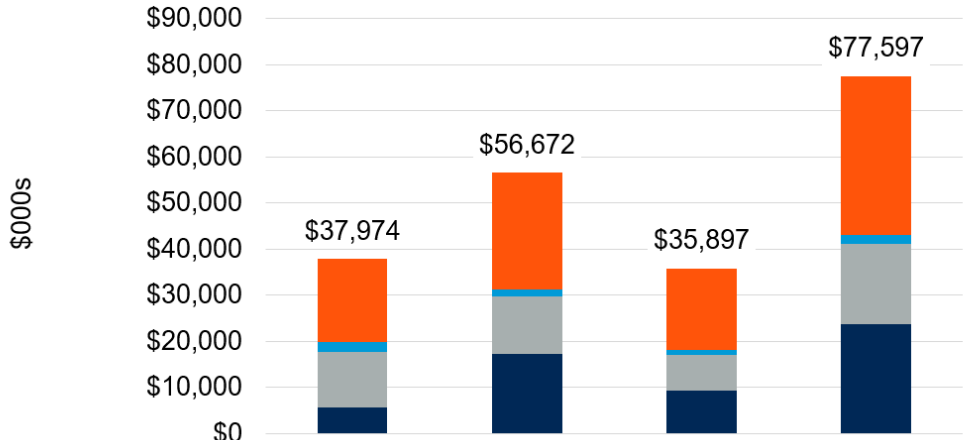
Data Center Services. *Lower Rates and Cost Recovery*

Executive Summary

Total annual costs recovered in FY20 by 2019-20 biennium rates is $18.7M less than peers

- Based on rates for the 2019-20 biennium, total cost recovered in FY 2020 for the benchmarked data center services is about **33% ($18.7M) less than the peer group average** for comparable services, $38.0M vs $56.7M.
- Lower cost recovery is driven primarily by lower Data Storage and x86 Server rates.
  - Data Storage is **67% ($11.7M) less**.
  - x86 Servers is **29% ($7.3M) less**.
  - Midrange is 41% ($0.6M) greater.
  - Mainframe is 3% ($0.4M) less.



	OR DCS	State Peer Avg	State Peer 25th	State Peer 75th
x86 Server	$18,016	$25,301	$17,818	$34,504
Midrange	$2,135	$1,515	$953	$1,874
Mainframe	$12,163	$12,515	$7,861	$17,477
Data Storage	$5,661	$17,341	$9,266	$23,741
Total Cost Recovered	$37,974	$56,672	$35,897	$77,597

Gartner

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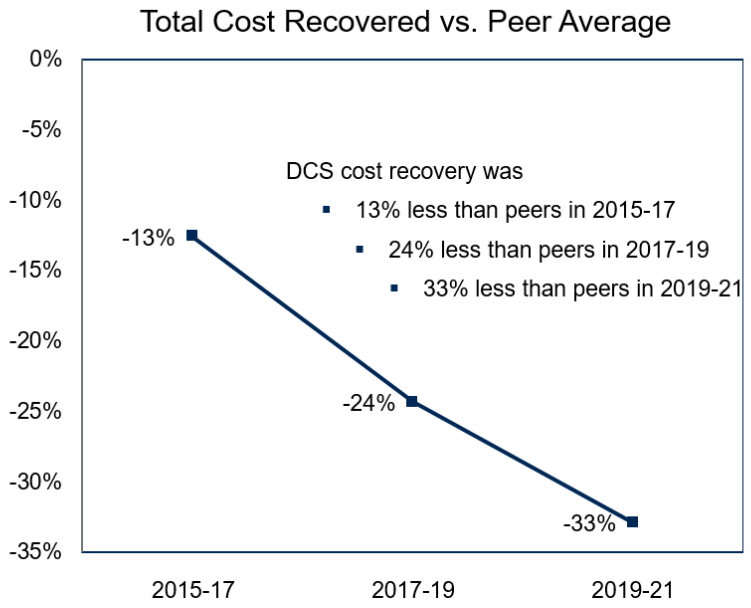
Data Center Services. *Declining Cost Recovery Over Time*

Executive Summary

Total cost recovery over the past three biennium is dropping faster than peers

- Gartner has conducted rate comparisons for DCS in the three past biennium.
- Compared to peer average, **total costs recovered are dropping faster than peer cost recovery** would for the same services and service volumes.
  - The rate structure and the scope of services included in these analyses has varied over the years, so a direct comparison of costs recovered is not possible.
- DCS has improved efficiency over the years, and has also worked to:
  - Improve its budget and forecast accuracy
  - Better align incurred cost with recovery
  - More closely align costs with specific service offerings.



Gartner

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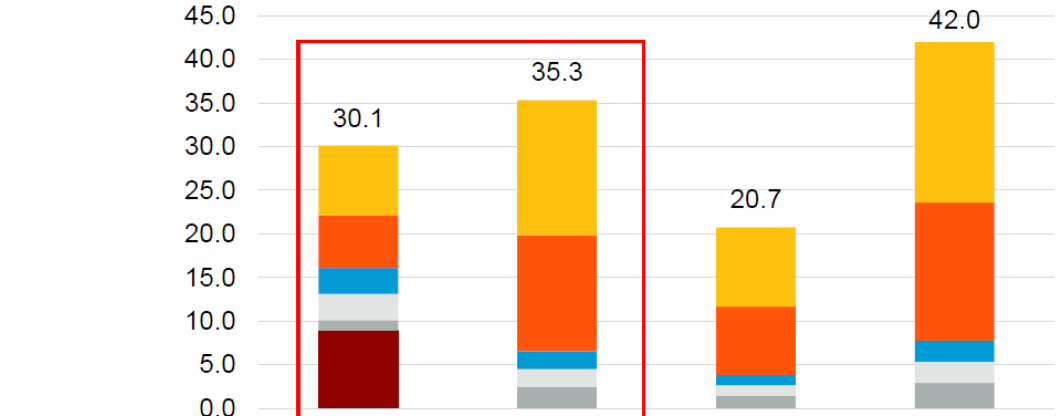
Data Center Services. *Staffing Efficiency (Mainframe)*

Mainframe Spending and Staffing Benchmark

Total Adjusted FTEs by Staff Category

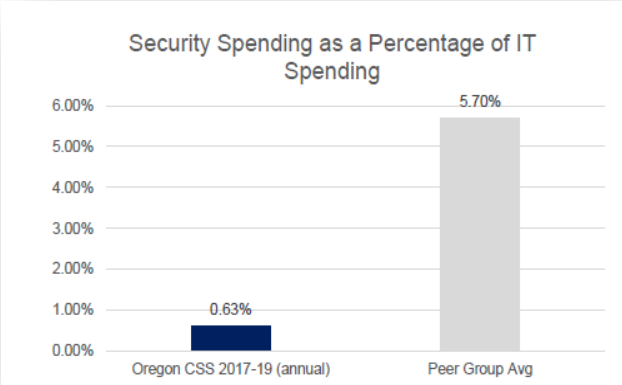
- Staffing levels overall are 15% (5.2 FTEs) lower than the peer group average, falling between the peer average and the peer 25th percentile.
  - This is what Gartner typically recommends as a best practice / target cost range for well-run support.
- Department FTEs could not be allocated to specific roles but are most likely in the Operations and Engineering roles – combined Operations, Engineering and Department staffing levels are 20% less than the peer average (8.0 + 6.0 + 8.9 = 22.9 vs. 28.7 FTEs).
- Planning & Process Management and Services Administration staffing are each 1.0 FTE higher than the peer average, and could result from having different groups supporting the environment (DCS Mainframe and Production Control groups).



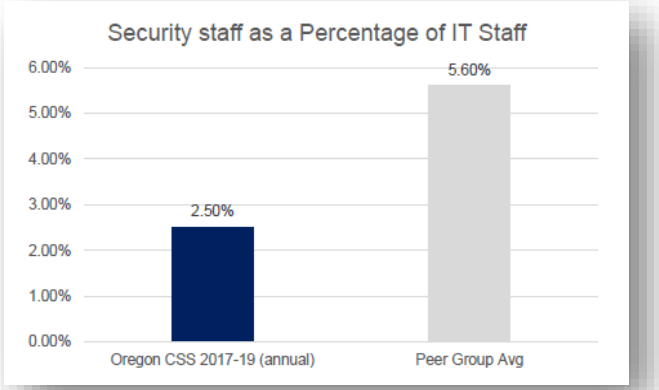
	DCS	Peer Avg	Peer 25th	Peer 75th
Ops / Maintenance	8.0	15.4	9.1	18.4
Eng / Tech Svcs	6.0	13.3	7.8	15.8
Plng & Proc Mgmt	3.0	2.0	1.2	2.4
Services Admin	3.0	2.0	1.2	2.4
Mgmt & Admin	1.2	2.5	1.4	2.9
Est Dept FTEs	8.9			
Total	30.1	35.3	20.7	42.0

Gartner

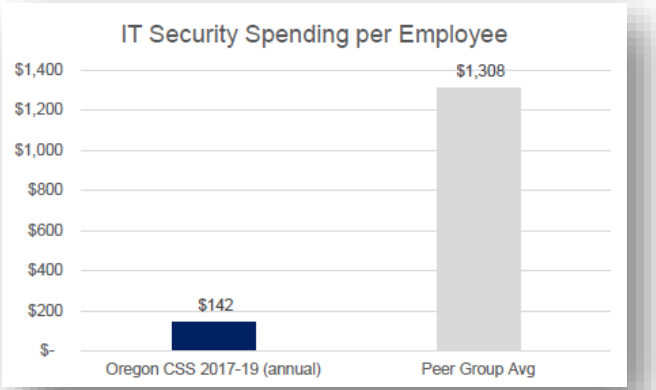
Cyber Security Services. *State and Local Benchmark**



- **Security as a % of Overall IT Spending.** *"CSS spending on security operations **[0.63%]** as a percentage of the overall IT budget is **significantly lower** than other State and Local Government Organizations **[5.7%]**"*



- **Security Staff as a % of IT Staff.** *"CSS's proportion of security staff **[2.5%]** as a percentage of total IT employees is **lower** than peers **[5.6%]**"*



- **Security Spending per Employee.** *"CSS security spending per employee **[$142]** is **significantly lower** than the peer group average **[$1,308]**"*

Developed in partnership with **Gartner; source: Gartner IT Key Metrics Data 2020: IT Security Measures – Analysis. Please note that these expenditures may not capture agency-specific security expenses embedded within IT-designated accounts, given the lack of granularity within the state's chart of accounts, inconsistencies in the use of agency object codes, and low maturity within IT Financial Management (e.g., absence of a common taxonomy like Technology Business Management (TBM)).*

EIS Organization Overview

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EIS Organizational Placement. *Within DAS*

Governor
Kate Brown

Director/Chief Operating Officer
Katy Coba

- Chief Operating Office
- Chief Financial Office
- Chief Human Resource Office
- Enterprise Human Resource Services
- Enterprise Goods and Services
- Enterprise Asset Management
- DAS Business Services
- DAS IT

State Chief Information Officer
Terrence Woods

Enterprise Information Services
*(Office of the State Chief Information Officer (OSCIO))**

- Project Portfolio Performance
- Cyber Security Services
- Shared Services
- Data Governance and Transparency
- Strategy and Design

Enterprise Information Services
*(Office of the State Chief Information Officer State Data Center (SDC))**

- Data Center Services

**Proposed legislation will replace statutory references to the Office of the State Information Officer (OSCIO) as an organization with "Enterprise Information Services"*

Enterprise Information Services. *Executive Team*

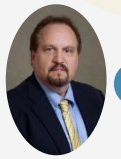
JAMES FOSTER
Data Center Services
Deputy Director

SANDY WHEELER
Data Center Services
Director

JENNIFER BJERKE
Deputy State Chief Information Officer

GARY JOHNSON
Cyber Security Services
Chief Information Security Officer

ANNALISE FAMIGLIETTI
Cyber Security Services
Deputy Chief Information Security Officer



DAVE SCHEUCH
Shared Services
Director

TERRENCE WOODS
State Chief Information Officer

BETTINA DAVIS
Project Portfolio Performance (P3)
Interim Director

KURTIS DANKA
Strategy and Design
Chief Technology Officer

KATHRYN HELMS
Data Governance and Transparency
Chief Data Officer

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EIS Strategic Framework 2020-2023

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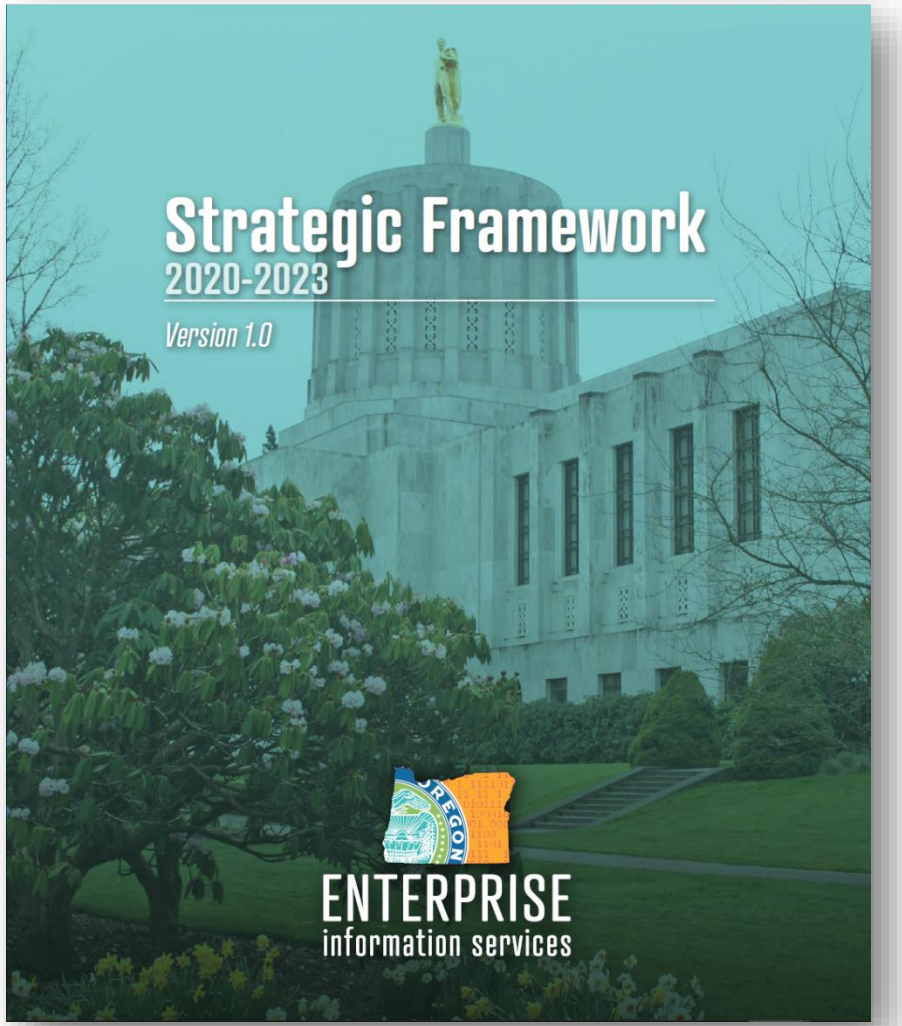
EIS. *Strategic Framework 2020-2023 - version 1.0*



Objective 1. *Mature Statewide IT Security Strategy*

RACI*

1. Accountability and execution across the 10 primary programmatic security capabilities
2. Recommended initiatives include enhanced ***agency support***, ***communications***, ***coordination*** and ***governance***
3. Cyber Security Services (CSS) is primarily accountable for ***governance*** and overall ***security program deployment*** and ***management***
4. Agencies primarily responsible for ***execution*** of ***security capabilities*** as defined by CSS

Cyber Security Services Catalog – Future-State Capabilities and Services*

37 centralized service offerings across 10 primary programmatic capabilities

Program Management

- Security Policy-Setting + Advisory
- Statewide Security Management Plan
- Security Program and Resource Management

Identity and Access Management (IAM)

- Identity Lifecycle Management + Advisory

Governance Risk & Compliance (GRC)

- Working Group(s) Sponsorship
- CISO Roadshow
- Requirements-setting + Advisory
- General Security Awareness Training

Security Administration

- Release Management Requirements + Advisory
- Change Management Requirements + Advisory

Security Architecture

- Standards-setting

Systems Integration

- Secure Technology Transformation Guidance

Vendor Management

- Vendor Contract Review
- Vendor Security Evaluation + Advisory

Security Consulting

- Security Risk Assessment
- Business Enablement + Advisory
- Business Case Security Consulting
- SOC Advisory (reference SOC capabilities)
- Configuration and Security Review

Data and Infrastructure and Operations (I&O)

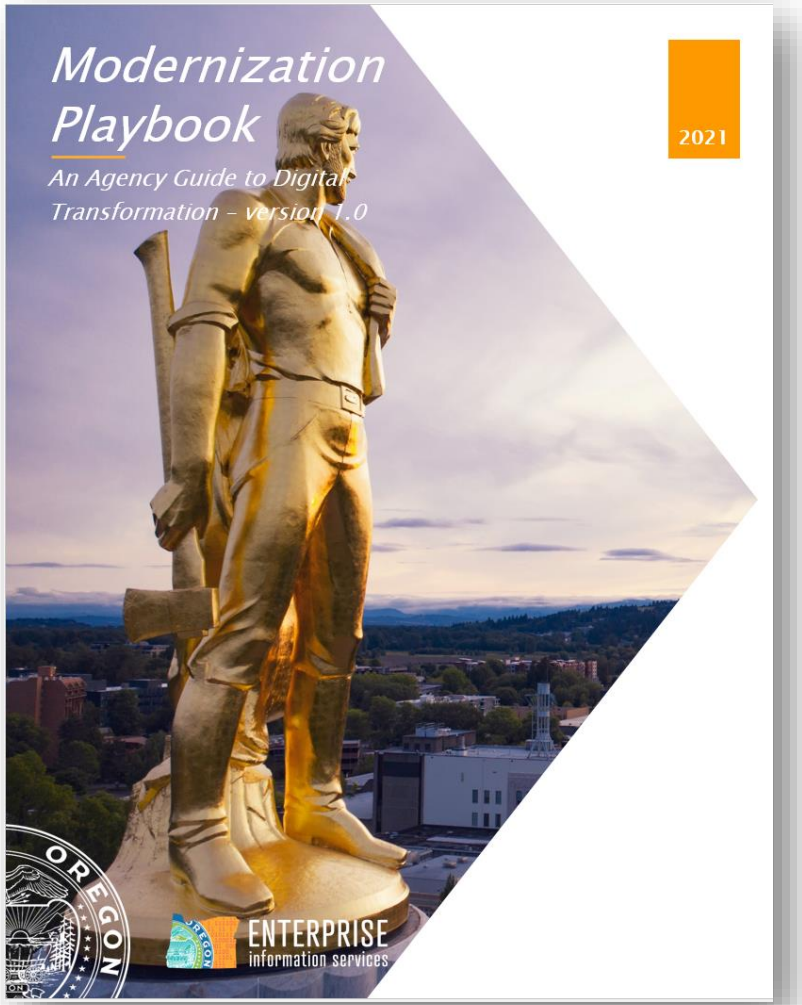
- Endpoint Security Baseline Guidance
- SDLC Process Framework + Advisory
- Data Protection Configuration Guidance
- Network Operations Consulting

Security Operations Center (SOC)

- NIDS Monitoring
- Firewall Log Monitoring
- Platform Log Monitoring
- Security Advisories
- Incident Recording
- Incident Consulting
- Incident Response
- IT Forensics
- Internal Vulnerability Scanning
- External Vulnerability Scanning
- Penetration Testing
- Threat Hunting
- Red/Blue Teaming

Developed in partnership with* **Gartner

Objective 2. *Legacy System Modernization Plans*



Modernization Vision. *"Optimizing essential services that the people of Oregon rely on through resilient, adaptive, secure and customer-centered digital transformation."*

Modernization – Guiding Principles

Put People First. Successful modernization starts and ends with people—the experience of people who rely on the essential services provided by the State of Oregon, the ability of state employees to effectively provide those services, and the ability of agency leadership to drive digital transformation

Aligned and Enabled. Alignment with the EIS Vision for user-friendly, reliable and secure IT systems and between agency business and IT leadership will enable agencies to fulfill their mission and strategic objectives, while continuing to deliver the core services that the people of Oregon rely on

Data- and Privacy-Informed. Modernization provides a unique opportunity to leverage data as a strategic asset across systems and programs, govern and manage that data throughout its lifecycle, enable data-driven decision-making and transparency by default, and to critically evaluate whether the collection and storage of sensitive personal information is truly necessary

Secure by Design. Secure by design embraces secure coding practices and the seamless integration of security policy and controls into the fabric of the IT system itself

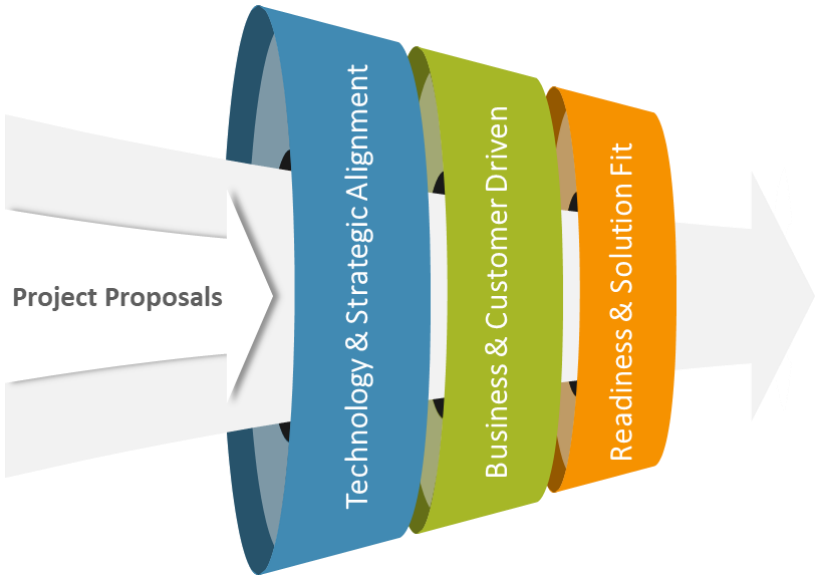
Agile and Continuous Improvement. Modernization requires sustained investment in our people, the formation of empowered teams and embrace of agile practices, and a culture of continuous improvement encompassing people, processes and technology

Objective 3. *Mature Project Transparency and Accountability*

Effective IT governance and project and portfolio management maturity are critical for ensuring alignment between business and IT and prioritizing agency-specific and enterprise investment decisions.

- **IT Resource Management**. Initiated as part of the biennial budget development process. Agencies are required to submit an IT prioritization matrix for all proposed Major IT projects (generally >$1M)—enabling prioritization of enterprise and agency IT project based on business alignment, cost, return on investment, and risk https://www.oregon.gov/das/OSCIO/Pages/OSCIO-templates-and-forms.aspx

- **Project Status Transparency.** Project data pertaining to all IT initiatives overseen by EIS is now publicly available via Oregon's Open Data Portal (https://data.oregon.gov). First published on October 19, 2020, and updated monthly in partnership with Data Governance and Transparency at https://data.oregon.gov/Administrative/Enterprise-Information-Services-IT-Project-Portfol/hjrz-mzrm



Objective 4. *Establish Statewide Cloud Strategy*

Vision – *Oregon will strive to conduct 75% of its business via cloud-based services and infrastructure by 2025—leveraging these platforms to modernize state IT systems and make Oregon a place where everyone has an opportunity to thrive*

Cloud-First. Cloud will be the first and preferred option for all new IT investments.

Agility Counts. Cloud migration decisions will be driven by considerations of business agility and overall cloud value

SaaS, please. Software-as-a-Service (SaaS) will be targeted as the preferred cloud tier

Lift-and-Shift Last. Re-hosting will only be considered when there are no other feasible alternatives.

Multicloud. Embracing multicloud positions the state to leverage the unique value propositions and capabilities offered by leading cloud service providers.

Upskilling. As a state we are committed to upskilling our existing IT workforce and preparing them for a cloud-defined future.

Business Enablement. Embracing the cloud frees up IT organizations to enable their business and program units through strategic use of data, business intelligence, integrations, and agile development.

Objective 5. *Establish Statewide Data Strategy*

Three Guiding Themes

GOVERNANCE AND EFFECTIVE MANAGEMENT
Documenting and governing our data in order to receive value from it.

ETHICAL USE
Ensuring that the State utilizes its data in service of Oregonians

DATA-INFORMED CULTURE
Working to educate employees, partners, and Oregonians about the use of data to make decisions

Build a strong foundation

DATA PRINCIPLES AND PRACTICES
Shared strategic vision and a 10 year horizon

BIENNIAL ACTION PLAN
Direct actions to mature Oregon's data enterprise

CORE ACTIVITIES
Priorities for 2021-2023 include Statewide Data Governance Policy, Geospatial Data Sharing and collaboration, and Oregon's Open Data Program

Create value by focusing on use cases

- COVID-19 Recovery
- Public Safety and Criminal Justice
- Housing and Homelessness
- Workforce Development and Economic Opportunity
- Health
- Education
- Environment and Natural Resources
- Good Government

EIS Program Area Overview

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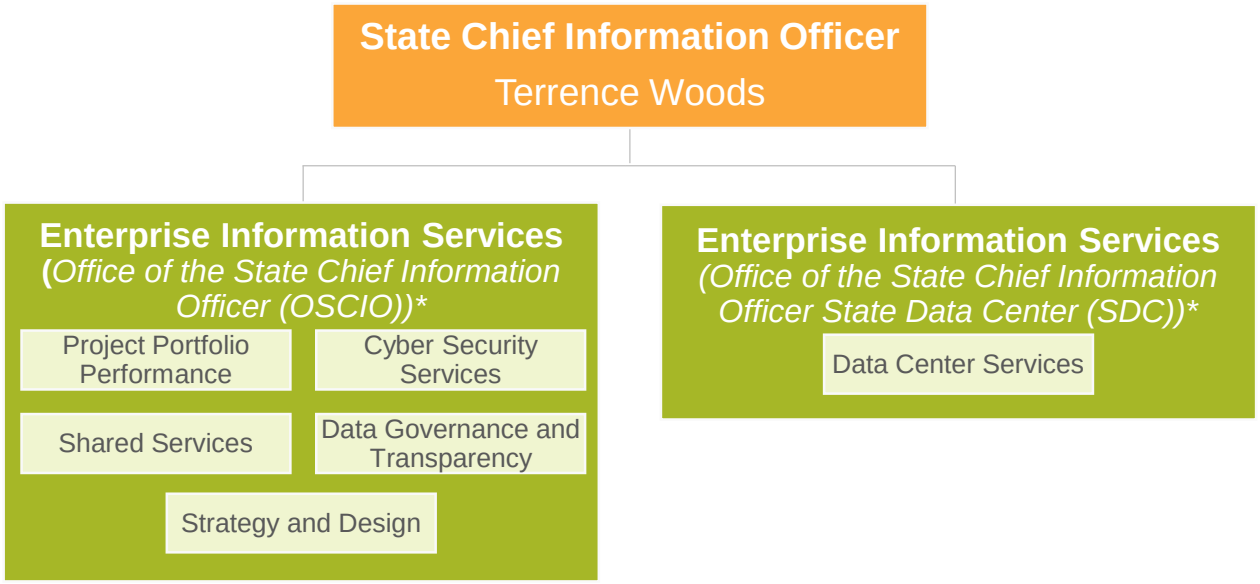
EIS. *Program Areas*



**Proposed legislation will replace statutory references to the Office of the State Information Officer (OSCIO) as an organization with "Enterprise Information Services"*

Project Portfolio Performance. *Overview*

BETTINA DAVIS
Project Portfolio Performance (P3)
Interim Director

Project Portfolio Performance (P3) works to mature IT resource management and maximize the value of technology investments, providing oversight and portfolio management for all major IT investments

- **Senior IT Portfolio Managers.** Align enterprise and agency strategies and architecture, ensuring that IT Investments are justified with a sound business case and provide measurable impact and value
- **Senior IT Oversight Analysts.** Ensure that agency investments are implemented utilizing proven project management methodologies, focusing on alignment with policy, procedure, and the Project Management Body of Knowledge (PMBOK)
- **Enterprise Business Analysts.** Administer the Portfolio Project Management (PPM) tool and provides business analysis leadership for P3 and agency investments

Project Portfolio Performance. *2019-21 Accomplishments*

Oversight Model Refresh

- Refreshed the *Information Technology Investment Oversight* statewide policy 107.004.130 effective June 1, 2020
- Introduced tiered Stage Gate Model with 3 oversight levels
- Transparent oversight level assignment based on project complexity and agency project management maturity
- Project Manager level assignment based on project complexity
- Published Project Oversight Guide

Training Online

- New self-service PPM training - https://www.oregon.gov/das/OSCIO/Pages/ppm-tool.aspx
- Recorded webinars on the Oversight Model refresh - https://www.oregon.gov/das/OSCIO/Pages/OSCIO-templates-and-forms.aspx

Project Transparency

- Collaborated with Chief Data Officer to publish IT project data on data portal
- First published October 19th and is updated monthly

2021-2023 Budget Development Process - IT Project Prioritization

- Prioritization provides a structured decision-making process by establishing a platform for conversations about what is important / critical - https://www.oregon.gov/das/OSCIO/Pages/OSCIO-templates-and-forms.aspx
- Provides a consistent method for evaluating and quantifies decisions with numeric rankings
- Facilitates reaching agreement on priorities across state government initiatives

Project Portfolio Performance. *2021-2023 Planned Initiatives*

Mature Project Transparency and Accountability Strategy

- Improve project on-budget performance for Executive Branch portfolio
- Improve project on-time for Executive Branch portfolio
- Measure maturity of IT Governance for Executive Branch agencies

Continue improving Oversight Model

- Improve oversight model training program
- Continuous oversight model improvement (as needed)

Outreach

- Develop more robust strategic stakeholder engagement & communication approach, i.e. six policy area agencies, LFO IT Analysts, EITGC-Enterprise IT Governance Committee, CIO Council, OPMAB-Oregon Project Management Advisory Board incl. PMUG-Project Management User Group, and BANG-Business Analyst Network Group, PPM user group, PPM Change Control Board, EIS program areas

Cyber Security Services. *Overview*

Cyber Security Services brings together enterprise security - governance, policy, procedure and operations - under a single, accountable enterprise organization. This allows for end-to-end direction setting and execution for enterprise security.

GARY JOHNSON
Cyber Security Services

Chief Information Security Officer

ANNALISE FAMIGLIETTI
Cyber Security Services

Deputy Chief Information Security Officer

- **Policy.** Setting enterprise security policy and standards
- **Solutions.** Partnering with Strategy & Design to drive enterprise security architecture
- **Services**. Delivering on day-to-day enterprise security operations
- **Security Operations Center.** Providing dedicated, real-time security monitoring and response for enterprise operations
- **Consulting.** Provide cyber security consulting services to executive branch agencies

Cyber Security Services. *2019-21 Accomplishments*

Statewide Security Strategy

- Partnered with Gartner and Executive Branch agencies to clarify security roles and responsibilities (i.e., RACI matrix)
- Worked with Gartner to establish a framework for the development of a future Cyber Security Services catalog
- Worked with Gartner to assess the maturity of security operations and develop recommendations (e.g., vulnerability management)

Election Security

- Partnered with Secretary of State to deploy Albert Sensors to 30 Oregon Counties enabling enhanced visibility statewide and sharing of threat intelligence

Firewall replacement

- Implementation of Next-Gen firewall

Security incident and event management (SIEM) - QRadar

- Added “Network Threat Detection” capability
- Lifecycle replacement upgrade
- Expanded to include DHS | OHA’s Integrated Eligibility (IE) system

Proof of Concepts

- Web Application Firewall pilot
- Network monitoring

Other

- Network Intrusion project
- Compliance Logging
- Information Risk Management
- DNS Filtering

Cyber Security Services. *2021–23 Planned Initiatives*

Maturing the Enterprise Vulnerability Management Program (POP 126 - $4.1M / 12 FTE)

- Enables Cyber Security Services to implement Gartner recommendations for an enterprise- and risk-based approach to vulnerability management (VM)
- Provides additional staffing to support the enterprise VM program (12 FTE) including 8 FTE to be embedded within agencies with high-security demands, complex IT operating environments, and stringent compliance mandates
- Expands the scope of enterprise vulnerability scanning
- Adds web application scanning

Cybersecurity Assessments

- Center for Internet Security (CIS) Controls focusing on the Basic 6 Controls (and its sub-controls)
- Finalized the 2021 assessment schedule covering 30 Agencies, Boards and Commissions

Web Application Firewalls (WAFs)

- Expand WAF proof of concept across the enterprise

Shared Services. *Overview*

DAVE SCHEUCH
Shared Services
Director

Shared Services works to align existing enterprise programs and focuses on the development of shared service models and management of long-term vendor relationships.

- E-Government
- Quality Assurance
- Basecamp
- Telecommunication Services
- Project Management Office
- Statewide Interoperability

Shared Services. *2019-21 Accomplishments*

E-Government

- Improved E-Government SLAs through a contract amendment covering Websites, Applications, and E-Commerce
- Transitioned Oregon.gov to SharePoint 2016 improving stability and usability

Interoperability

- Completed Statewide Interoperability Communication Plan (SCIP)
- Completed pilot implementation of OR-Alerts (Office of Emergency Management, Office of the Governor, and Klamath County)
- FirstNet implementation

Basecamp – IT Supply Chain Management

- Added IT Vendor Managed Services, Wireless Management Services, and Digital Subscription Management Services to the IT contracts portfolio
- Matured vendor performance evaluation process

EIS Project Management Office (PMO)

- Established an EIS Project Management Office (PMO) and staffed it with experienced and certified project managers
- Implemented PMI-based (Project Management Institute) standards, methods, best practices and job functions
- Developed a prioritized project portfolio and implemented EIS project governance

Telephony

- Completed IBM agreement ensuring stability and flexibility and improved Service Level Agreements (SLA)
- Introduced new features and functionality to existing telephony systems; e.g., IBM Watson voice/chat features for contact centers

Shared Services. *2021-2023 Planned Initiatives*

E-Government

- Develop a 3-year Strategic plan to re-envision the E-Government Program—aligning future service offerings with best practices in human-centered design, customer experience (CX), and agile practices
- Re-negotiate the E-Government contract with NIC Oregon to improve current service offerings, align with contracting best practices, and implement vendor performance metrics
- Establish new lines of business service offerings as a determined in 3-year Strategic Plan.

Interoperability

- Partner with state local, and tribal emergency managers to govern best practices for alerts, warnings and notifications as part of OR-Alert
- Develop and foster the Communications Unit Leader/Info Tech Service Unit Leader/Communication Unit Program through the statewide implementation of OR-Alert
- Update the Tactical Interoperable Communications Field Operations Guide and the accompanying digital application.
- Update the Emergency Support Function 2- roles for DAS.

Basecamp – IT Supply Chain Management

- Develop dynamic Vendor Management scorecards and 3-year Vendor Management program plan
- Expand stakeholder engagements through on-line training videos, buyers guides and customer development materials

EIS Project Management Office (PMO)

- Continue the maturity of PMO processes, with the establishment of measurable performance targets
- Improve project resourcing to ensure the right resources are on the right project at the right time
- Mature performance measurements for the evaluation of project success
- Develop and report regularly on progress of establishing of a “Culture of Professional Project Management”

Quality Assurance

- Develop program tools for QA IT project life cycle management and expand use of technology to provide workshops and trainings to agencies.
- Provide and expand consultation on agency-level IT quality initiatives and develop consultation role to expand agency access to Quality Assurance best practices
- Focus on key areas of expressed need, such as acceptance testing, risk management and contract management.

Strategy & Design. *Overview*

KURTIS DANKA
Strategy and Design

Chief Technology Officer

The Strategy and Design team works to instantiate strategic technology initiatives, enterprise technology standards and processes, and policy which align technology vision with business strategy.

- Develop enterprise IT vision, strategies and architecture across all of EIS and the Enterprise
- Establish enterprise technology capabilities, standards and processes
- Support strategic alignment within the enterprise portfolio
- Achieve results in support of the EIS Strategic Framework and priorities established by the Governor, State CIO and Legislature

Strategy & Design. *2019-21 Accomplishments*

Microsoft 365 (M365)

- Consolidated 40,000+ M365 licenses across all executive branch agencies.
- Defined the tenant architecture
- Established a require baseline for multifactor authentication (MFA)
- Migrated 45+ agencies to M365 environment during pandemic period
- Acquired and implemented enterprise management tools; i.e., CoreView

Cloud Forward

- Published *Cloud Forward. A Framework for Embracing the Cloud in Oregon – version 1.0*

Link Oregon Partnership

- Completed Link Oregon State Connectivity – Phase 1: Migration of circuits to the Link Oregon network

Network and Security Modernization

- Identified intended program scope including target business capabilities
- Business drivers and priority program objectives
- Key stakeholders, problems and opportunities
- Business benefits and potential measurements
- Program assumptions, dependencies and constraints
- Procurement and contracting strategy (for Program Planning and Execution phase)
- Architecture development strategy and draft Scope of Work

Other

- Azure Express Route (initial foundation)
- Azure Firewall Upgrade
- F5 Firewall Upgrades / Mitigation
- Network Monitoring proof of concept

Strategy & Design. *2021–2023 Planned Initiatives*

Microsoft 365 (M365)

- Complete Baseline Architecture and Agency Implementations
- Decommission CenDIR as a critical component of State infrastructure (CenDIR is an aging system used for current Global Email Address Directory and email address translation/routing)
- Federate across Enterprise Tenants
- Establish Architecture Governance

Network and Security Modernization Program (NSMP)

- Develop a baseline program for Network and Security Enhancements

Implement *Cloud Forward: A Framework for Embracing the Cloud in Oregon*

- Establish Cloud Center of Innovation (CCoI)
- Establish Cloud Services Advisory Council (CSAC)

Data Governance & Transparency. *Overview*

KATHRYN HELMS
Data Governance and Transparency
Chief Data Officer

The Data Governance & Transparency team works to enable the utilization of data as a strategic asset—improving service delivery, facilitating cross-agency collaboration, identifying cost savings, and enhancing transparency.

- **Open Data.** Enabling the state to unlock the value of public data through standards that enable the public to search, extract, organize and analyze high-value datasets
- **Data Strategy.** Coordinating an enterprise approach to data management that promotes the availability of consistent, secure, accurate, timely, and accessible information
- **Geospatial Framework Data.** Collaborating with local governments to collect, disseminate, and steward trusted data elements
- **Data Analytics.** Collaborating to identify common and shared data to analytic solutions

Ensuring public access to high quality, authoritative data:

- Oregon's Open Data Portal
- Oregon Spatial Data Library
- Oregon Transparency Website

Data Governance & Transparency. *2019-21 Accomplishments*

Statewide Data Strategy

- First enterprise Data Strategy for the State of Oregon
- Establishes mission, vision, and biennial action plan for leveraging data as a strategic asset
- Focuses on three critical themes: governance, ethical use, and data-informed culture

Open Data Program and Standards Launch

- Open Data Standard, Technical Standards manual produced
- Guidance for agencies in complying with Open Data Standard
- Purpose of program is to increase transparency, improve efficiency, and make data sharing more effective

Data Governance Policy

- Sets baseline for data governance within the State and provides guidelines for agencies as they govern data assets
- Creates first statewide data maturity model for data governance within the State
- Agencies expected to complete maturity assessment and establish data governance plan on biennial basis

Geospatial Data Sharing Initiative, GeoHub

- Enables agencies to share high priority framework datasets in both secured and open formats
- Improve coordination amongst agencies during emergency response, e.g. wildfire, COVID-19, Cascadia
- Project endorsed and vision established through Oregon Geographic Information Council and ORS 276a.500-515
- StageGate 1 endorsement received

Data Governance and Transparency. *2021–2023 Planned Initiatives*

Executing Statewide Data Strategy

- Develop a biennial action plan and roadmap, identifying critical actions in the areas of governance, ethical use, and data literacy
- Expanding Chief Data Officer Advisory Group to govern execution

Open Data Program

- Publish the first enterprise data inventory during Year 1
- Partner with agencies to prioritize and begin publishing data in 2022
- In process of making aesthetic updates to data.oregon.gov to improve navigation and usability/accessibility

Data Governance

- Establish a Resource Library for vital data governance and management artifacts, such as open standards, data dictionaries, executive governance charters
- Ensure agencies complete maturity assessments and develop Data Governance Plans by end of 2021

Data Center Services. *Overview*

SANDY WHEELER
Data Center Services
Director

JAMES FOSTER
Data Center Services
Deputy Director

Data Center Services is the utility services provider for computing and network infrastructure, relied on by State agencies and some local government entities.

- Managed Computing Services
- Data Storage Services
- Data Network Services
- IT Professional Services
- Enterprise Email Services
- Colocation Services*

Data Center Services. *2019-21 Accomplishments*

DCS Power Buildout – $18 million data center infrastructure expansion project

- This project managed through DAS facilities increased the electrical, HVAC and resiliency of the data center.
- The project added a third generator and additional battery backup capacity.
- It built out hot/cold aisle containment in the colocation space to increase our power and cooling efficiency, and also upgraded our HVAC system to a more efficient system
- Motion-active LED lighting provides greater efficiency on the data center floor
- DAS was awarded a $500,000 rebate from Energy Trust of Oregon--the largest signal payment made since the rebate program was established.

Co-Location Services – now available

- rack level monitoring and management using our new data center information management system
- Each rack will have two environment sensors and each rack is sitting on ISO-base platforms for earthquake protection.
- Each rack will have dual power feeds and dual network drops for redundancy.
- Magnetic locks with electronic badge access for each individual rack
- Increased camera surveillance and badge logging each time the rack door is opened or closed.

DCS Projects

- IT Service Management Implementation (replacing three legacy tools)
- Replacement of DCS Billing System
- X86 Platform Upgrade (Lifecycle Replacement)
- Revision of DCS Service Level Agreements and Operational Performance Measures
- Completed engagement with third party consulting firm to perform a Mainframe assessment and develop a 5-Year Roadmap
- Completed engagement with third party consulting firm to provide an assessment of the data center rates.

Network Bandwidth Improvements

- Internet facing bandwidth from 3G to 10G
- Upgraded the network core backbone from 1G to 10G at all of the State's Points of Presence (PoPs) with capability to increase to 100G in the future

Major Agency Initiatives

- Go-Live for DHS/OHA for the Integrated Eligibility/ONE System
- ODOT DMV Service Transformation Program OLIVR System (Drivers and Vehicle Licensing

New Agency migrations

- Oregon Youth Authority
- Oregon Liquor and Cannabis Commission
- Water Resources
- State Library
- Board of Dentistry
- Health Related License Board

ENTERPRISE information services

Data Center Services. *2021–2023 Initiatives*

- Establish Cloud Brokering Services
- Complete an evaluation and enhancement of Disaster Recovery Site
- Continue to increase ITIL (IT Infrastructure Library) maturity and operational efficiencies made possible through new ITSM (IT Service Management) tool
- Improve DCS system monitoring capabilities
- Complete migration of the state network backbone to Link Oregon
- Implement Immutable Backup Solution (additional recovery layer in the event of a ransomware attack)

Thank you.