



Washington's Consolidated Technology Services Agency

Technology Services Board

Quarterly Meeting
September 14, 2021
9:00 a.m. – 12:00 p.m.

Agenda

TOPIC	LEAD	PURPOSE	TIME
Welcome and Introductions	Bill Kehoe	Introductions	9:00
Approve Minutes from June 8 Meeting	Bill Kehoe	Approval	9:04
Policy 122 – Administrative and Financial Systems Investment Approval – New policy	Nick Stowe Jason Anderson	New policy approval	9:05
Enterprise Security and Privacy Programs <ul style="list-style-type: none"> • Cybersecurity Roadmap – Vinod Brahmapuram • Security/Privacy Relationship – Vinod Brahmapuram/Katy Ruckle • NGA Academy on Cybersecurity Policy – Zack Hudgins 		Status of programs and discussion	9:15
Break			10:15
State Enterprise Architecture Strategy	Nick Stowe	Strategy update	10:20
Enterprise Cloud Computing Program	Robin Shen	Program update	11:00
Board Discussion <ul style="list-style-type: none"> • Subcommittee Structure • Strategic Retreat Proposal 	Bill Kehoe	Board member discussion	11:40
Public Comment			11:55

Current TSB Members

Industry Members

Butch Leonardson – Retired CIO
Paul Moulton – Retired CIO

Legislative Members

Rep. Matt Boehnke – House R
Rep. David Hackney – House D
Sen. Joe Nguyen – Senate D
Sen. Ann Rivers – Senate R

Executive Branch (Agency Directors)

Bill Kehoe – State CIO & Chair
David Danner – UTC
Tracy Guerin – DRS
Vikki Smith – DOR

Vacancies:

Industry Representative
Labor Union Representative

Other Government

Viggo Forde – Snohomish County

Members present

Members absent

Approve 06/08/2021 Minutes

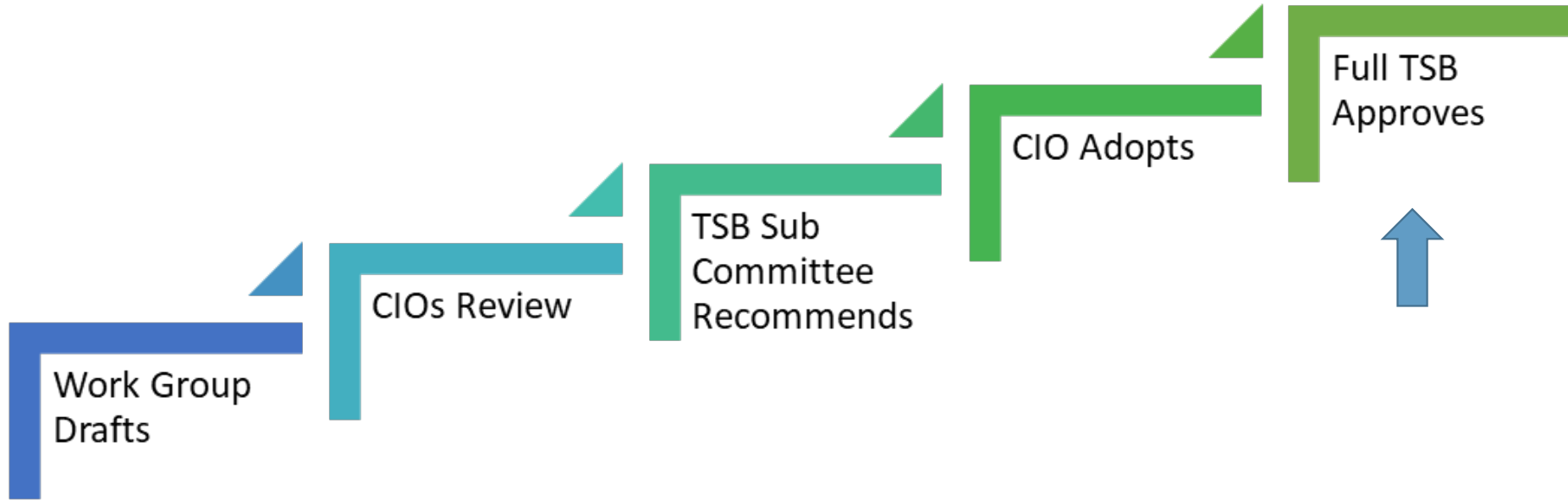
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Policy 122

Administrative and Financial Systems Approval

Technology Services Board Meeting
September 14, 2021

Where are we?



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Administrative and Financial Systems Approval



Purpose of action

- Request approval of a new policy.



Business case

- Decommission agency-specific “shadow” systems where business needs can be sufficiently met by an enterprise solution.
- Evaluate IT investments for potential re-use of existing deployed solutions.



Key objectives

- Maximize use of enterprise IT solutions, shared services, and master contracts.
- Reduce the number of disparate, agency-specific administrative and financial solutions.



Strategic alignment

- Consolidate common technologies and services.
- Identify common business practices that can be supported by shared solutions.



Implementation

- Threshold requirements for submitting an investment request are lower than the current IT Project Assessment request.
- A new investment request form will be used in place of the current ITPA form.



Success criteria

- Reduction in agency-reported administrative and financial applications.
- Increased use of enterprise solutions.

- Motion to approve Policy 122?

Enterprise Security and Privacy Programs

Technology Services Board Presentation
Office of Cybersecurity
Office of Privacy and Data Protection
September 14, 2021

Presenters & Topic Overview

- Vinod Brahmapuram, State Chief Information Security Officer
- Katy Ruckle, State Chief Privacy Officer
- Zack Hudgins, Privacy and Data Protection Manager

The State Office of Cybersecurity and the Office of Privacy and Data Protection are both advancing security and privacy programs collaboratively across the enterprise, including work with local governments.

Cybersecurity Roadmap



Cybersecurity Challenges

Are cyber attacks on the rise?



2021 Verizon DBIR – Key Takeaways

- 29,207 security incidents
- 5,258 confirmed breaches
- >80% of hacking vectors involved web applications in breaches
- 85% of breaches involved the human element
- 61% of breaches involved credential data
- 10% of breaches involved ransomware
- 17% involved errors

What is compounding the challenge?



Cybersecurity Challenges

- Recent high-profile cybersecurity incidents demonstrate that both U.S. public and private sector entities increasingly face sophisticated malicious cyber activity. [*WH Press Statement*]
- As threat actors add new tools, techniques and procedures to their arsenals, and form new alliances to bolster their strength and extend their reach, visibility and speed are more critical than ever. Security teams must become more versatile, more proactive and more productive to stay ahead of threats [*CrowdStrike*]
- COVID-19 has challenged continuity and amplified gaps [*Key takeaway#1 in 2020 NASICIO Cybersecurity Study*]

Cybersecurity Call to Action!

White House

- Expand Cybersecurity workforce
- Defend essential systems
- Design more secure technology products

NASCIO

- Cosponsor the technology modernization
- Secure the future of work
- Advocate for enhancing the local government cybersecurity
- Encourage the adoption of services provided by the state

Cybersecurity Challenges

What needs to be our response?



Cybersecurity Objective

We need to link the state's cybersecurity programs into decision-making processes that enable the state's leaders to understand and minimize the cybersecurity risks that our state faces.



Cybersecurity Roadmap

Our Strategy!



Cybersecurity Roadmap

➤ Risk Management

Status 20%, Target April 2022

➤ Infrastructure Protection

Status 10%, Target June 2023

➤ Security Operations Management

Status 70%, Target June 2022

➤ Enterprise Security Management

Status 5%, Target May 2022

➤ Workforce Development

Status 10%, Target December 2022

➤ Whole-of-state Cybersecurity



Cybersecurity Roadmap



ESSB 5432 – Concerning cybersecurity and data sharing in Washington state government

- Data governance report
- Data sharing agreements
- OCS creation in statute
- Catalog of services
- Incident response
- Independent security assessment

Cybersecurity Roadmap

Questions?



Security/Privacy Relationship

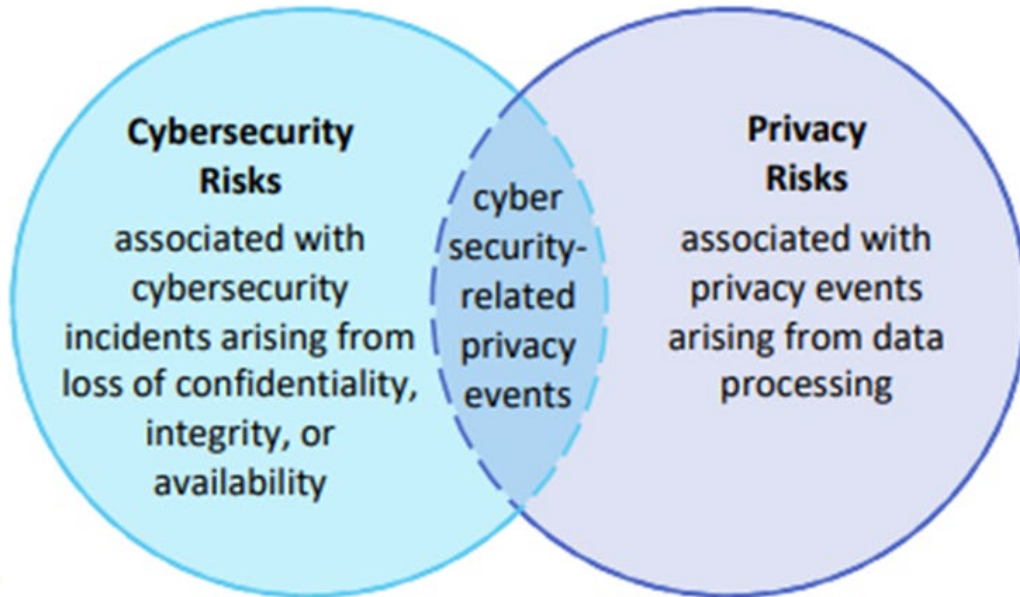


Privacy and Security Distinction

“Why do we need privacy training?
We already have security training.”



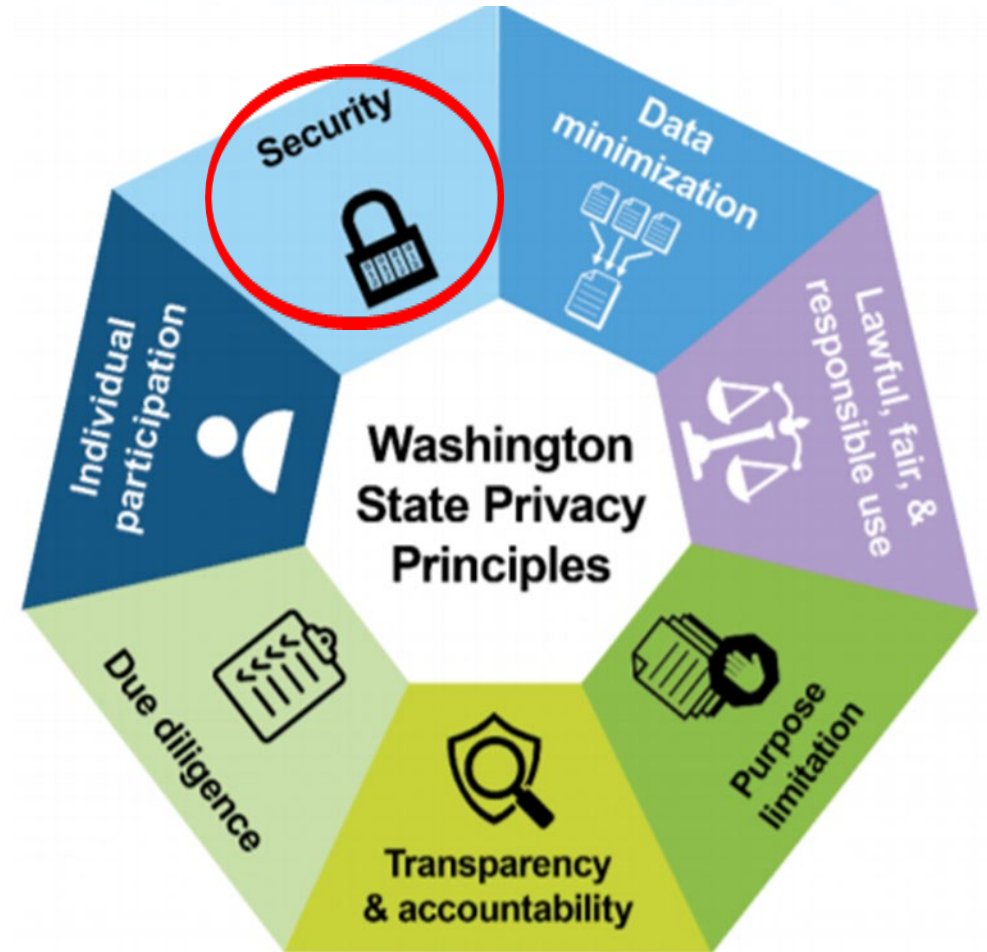
Coordinate Data Protection with the Office of Cybersecurity



- Collaboration on data security initiatives that overlap with data governance
- Security is one of the WA state agency privacy principles
- Initiative to perform privacy impact assessments as a part of the security design review process
- OCS Operational Plan coordination

Privacy Principles Creation and Implementation

- ❖ Lawful, fair, & responsible use
- ❖ Data minimization
- ❖ Purpose Limitation
- ❖ Transparency & accountability
- ❖ Due diligence
- ❖ Individual participation
- ❖ **Security**



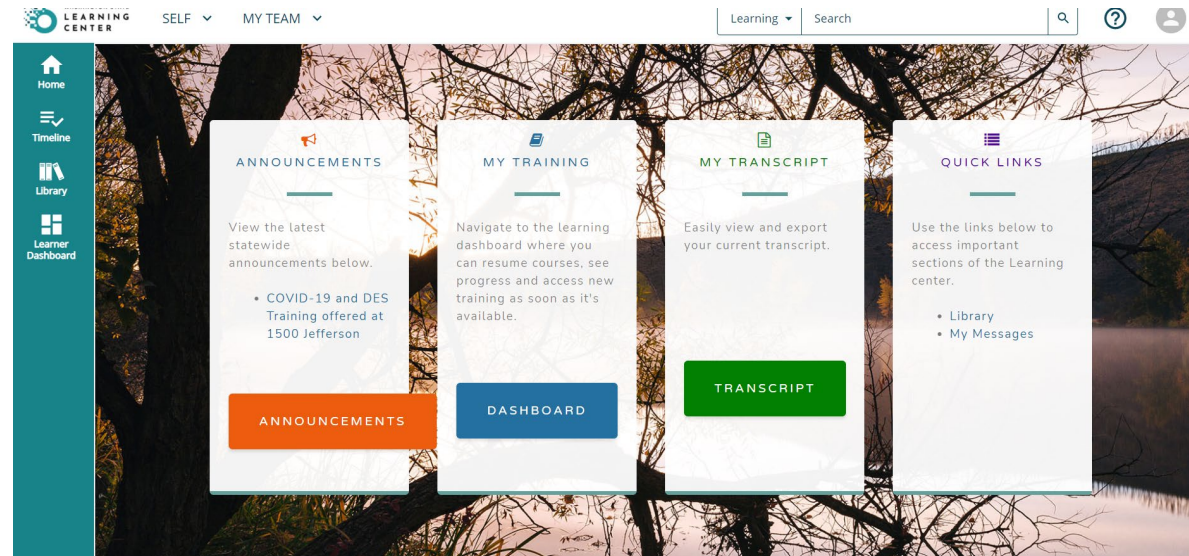
WaTech Strategic Roadmap for Privacy 2021-2023



- Privacy Framework Recommendations
 - Staffing Roles
 - Privacy training
 - Model policies
 - Privacy notice
 - PTA/PIA and Guidance

Trainings

- Washington State Data Breach Notification Law for Government Agencies (The State Learning Center August 2021)
- Data Classification Webinar 4/29/21
- SB 5432 webinar 6/24/21
- Security Framework webinar 9/30/21
- In development: Privacy 101 Training for Washington State Employees



Project & Initiatives Engagement

- Provide subject matter expert support and guidance to the OneWa Project
- M365 Implementation
- Automated Decision-Making Systems (ADS) Workgroup Leadership
 - <https://watech.wa.gov/privacy/projects-and-initiatives>



National Governor's Association 'Whole-of-State' Cybersecurity Policy Academy



Contemporary snapshot: Security and Privacy focused on state government -- then threats shifted towards local governments



- ▶ Federated/stovepipe model disperses preparation, monitoring and responses
- ▶ Ad Hoc responses; inconsistent maturity levels on privacy and security
- ▶ Skepticism of state government
- ▶ Size, skillset, complexity varies

NGA policy academy lined up with goals of building outward for privacy and security



“Congratulations on joining us in the 2021 NGA Policy Academy to Advance Whole-of-State Cybersecurity. This year was our most competitive year yet, underscoring the strength of your application. We are thrilled to serve you in furthering Governor Inslee’s goal of enhancing Washington’s state-local cybersecurity resilience and partnerships.”

- ▶ Regular meetings, with follow up
- ▶ Amplify existing resources
- ▶ Identify needs within two tracks – workforce development and local government
- ▶ Build outward with local cities, counties, NGOs, Tribes, Education, state agencies, and other jurisdictions.
- ▶ Do you have a jurisdiction that should be part of the discussion?

Benefits: Better communication, better networking, better privacy, better defense



- ▶ Beginning of process
- ▶ Building trust
- ▶ Expanded Privacy Awareness
- ▶ Increased engagement
- ▶ Regular meetings, networking
- ▶ Expansion of resources
- ▶ As-is reports (in progress)
- ▶ List of requests created



Thank you!

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OCIO Enterprise Architecture (EA) Program Update

Technology Services Board
September 14, 2021

Agenda

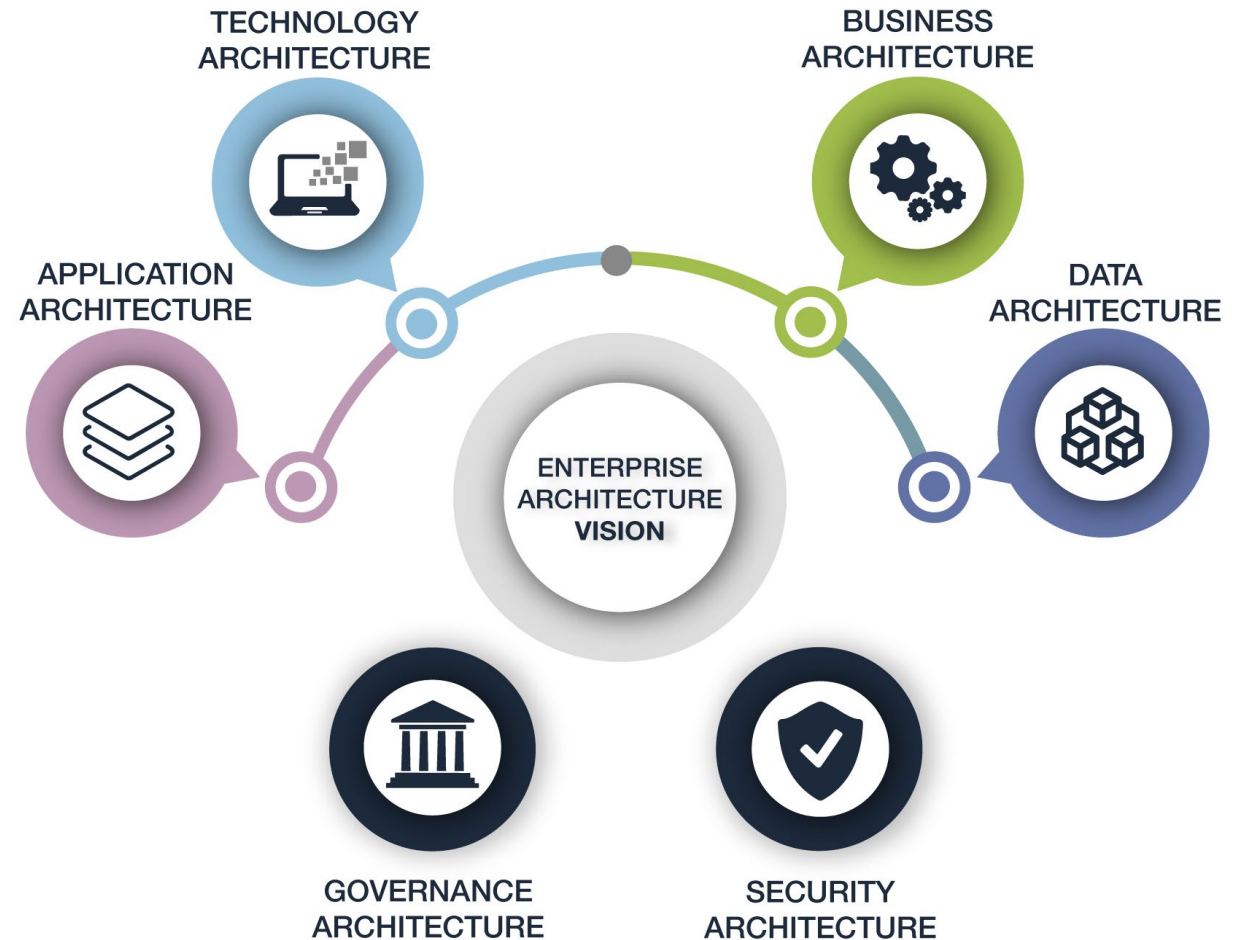
1. EA Program Overview
2. EA Foundational Priorities
3. Discussion – WA State Enterprise Architecture Principles
4. Identity and Access Management (IAM) Overview
5. Discussion – WA Identity and Access Management Strategy



Review: What is Enterprise Architecture (EA)?

RCW 43.105.20 (5)

(EA) is an ongoing activity for translating business vision and strategy into effective enterprise change... (EA) creates, communicates, and improves the key principles and models that describe the enterprise's future state and enable its evolution.



Review: Statutory Mandate for EA

1. Improve Efficiency
2. Manage Change
3. Reduce Risk

- [RCW 43.105.205](#) and [RCW 43.105.265](#) require the OCIO to lead and implement an ongoing enterprise architecture program for state government with the mission to:
 - a) Drive opportunities for greater enterprise efficiency;
 - b) Be the organizing standard for statewide IT;
 - c) Promote effective enterprise change; and
 - d) Improve the reliability, interoperability, and sustainability of common business processes.



Current Foundational EA Program Activities

- *EA Foundational Activities*
 - *Implement EA modeling tool – **Building reference architecture***
 - *Hiring dedicated solution architects to major enterprise programs (One Washington) – **Posted positions***
 - *Obtain support to build reference architecture in key domains (data/apps) – **Planning***
 - *Update State-wide EA Principles - **Planning***



Enterprise Architecture Principles Overview





Statewide Information Technology Strategic Plan 2021-2025

VISION

Better Government Through Technology

MISSION

Personalize and Optimized Government

PRINCIPLES

Leadership | Enterprise Focused | Agility | Transparency | Data Driven

GOALS

GOAL #1

Efficient & Effective Government



OBJECTIVES

- Advance digital government.
- Reduce barriers to access.
- Improve customer experience across channels.
- Expand integration between systems.

ENTERPRISE INITIATIVES

In progress or Planned

- Complete migration to cloud-based shared email service.
- Fully implement Enterprise M365 licensing approach.
- Implement One Washington.
- Increase access to broadband across state.
- Continue development of Master Person Index and Integrated Eligibility (HHS Coalition).

Proposed

- Develop digital citizen strategy to support "one government" view.
- Create shared accessibility community of practice and repository.
- Develop a statewide data management and integration solution.

GOAL #2

Accountable IT Management



OBJECTIVES

- Promote reuse with in-creased visibility into IT assets.
- Reduce technical debt.
- Align portfolio to statewide architecture.
- Improve project out-comes with better practices.
- Support value-based analysis of IT spend.

ENTERPRISE INITIATIVES

In progress or Planned

- Provide updated view of legacy applications and modernization needs.
- As part of One Washington, implement improvements to detailed technology spend data and analysis.

Proposed

- Design and implement enterprise configuration management strategy.
- Develop methods to identify business impact of IT spend to support savings or investment.

GOAL #3

IT Workforce



OBJECTIVES

- Support a diverse, resilient workforce.
- Implement an enterprise workforce development strategy.
- Improve support for re-mote work.
- Maintain a competitive classification and compensation structure.

ENTERPRISE INITIATIVES

In progress or Planned

- Develop a workforce training plan for cloud adoption.
- Create an organizational change management strategy and training plan to address new technology adoption.
- Increase availability of communities of practice.

Proposed

- Monitor and adjust ITPS to better support career paths and evolution of technology.
- Identify and implement inclusive recruitment and retention practices.
- Identify holistic organizational change management.

GOAL #4

Enterprise Architecture



OBJECTIVES

- Advance adoption of modern, cloud-based technologies.
- Support use of common, shared technologies across agencies.
- Align with WA Government service domains.

ENTERPRISE INITIATIVES

In progress or Planned

- Establish Enterprise Cloud Computing Program.
- Update enterprise identity management strategy.
- **Develop state's enterprise architecture framework.**
- Create shared enterprise data sharing platform.
- Implement IPv6 across the enterprise.

Proposed

- Develop an enterprise integration strategy.
- Develop an enterprise data management and governance strategy.
- Assess state network in support of cloud strategy.
- Identify components and tools that can be standardized or shared across agencies.

GOAL #5

Security & Privacy



OBJECTIVES

- Invest in proactive cyber solutions and practices.
- Recruit and develop cyber and privacy talent in state government.
- Deploy statewide privacy framework.
- Strengthen privacy capacity in state and local government.

ENTERPRISE INITIATIVES










In progress or Planned

- Create a catalog of standard security services.
- Update cybersecurity incident response processes and associated policy.
- Implement a privacy framework for agencies.
- Collaborate with local government to improve practices.
- Improve security operations and governance.

Proposed

- Improve disaster recovery practices.
- Develop cyber workforce initiative and associated measures.

EA Principles - Examples

Standards Based 	Simple 	Scalable 
Service Oriented 	Strategic 	Reliable 
Data Driven 	Sustainable 	Secure 

Source – University of Washington EA Principles

Architecture Guiding Principles Illustrative

1. Prioritize User Centricity

Understand end-user needs, skills, and ambitions. Inculcate user feedback in the product creation process. Prioritize self-service.

2. Design for Composability

Create modular, loosely coupled capabilities that are interoperable, yet can evolve rapidly and individually based on changing needs.

3. Promote Capability Reuse

Reuse where possible, build new when differentiation is needed, buy those that are commoditized.

4. Manage Enterprise Data as an Asset

Clearly articulate policies and best practices for data ownership, quality and governance.

5. Cloud-Agnostic Preferred

Build and provision cloud-agnostic strategic capabilities, so services can run on any cloud environment or infrastructure.

6. Adaptive, Business-Led Governance

Governance mechanisms are structured for policies to evolve based on business leaders' risk tolerance and demand for innovation.

7. Plan for Continuous Improvement

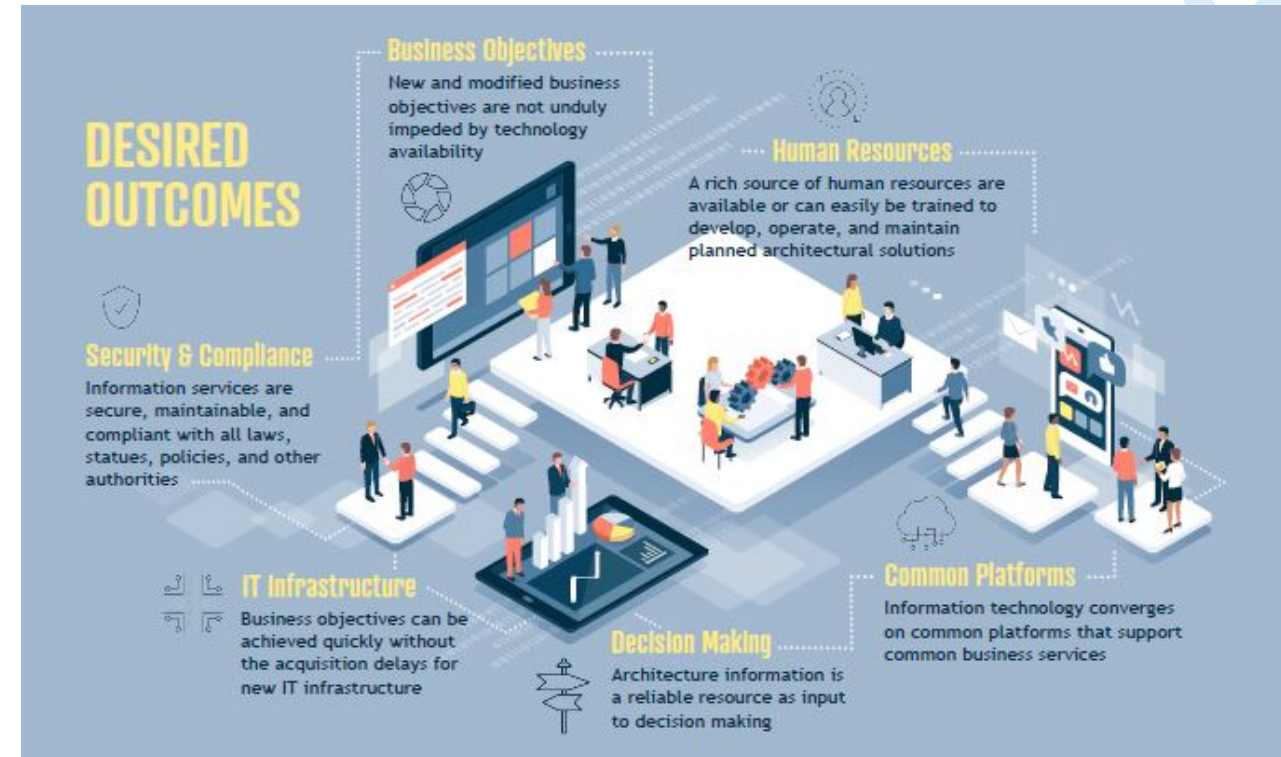
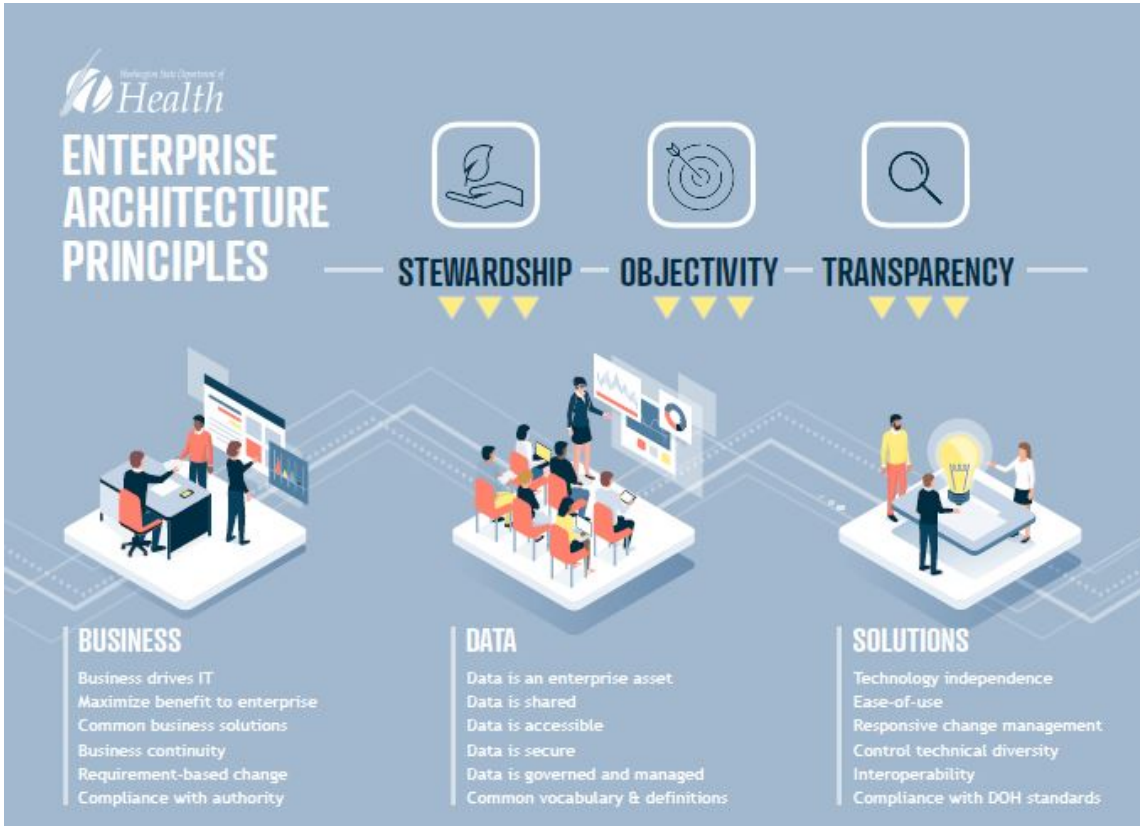
Ensure all new capabilities introduced have a planned evolution path, balancing innovation, maintenance and simplification.

8. Measurable Business Value

Track the usage rates and business value generated for all capabilities to ensure they remain relevant to the end users.

Source: Gartner

EA Principles – Department of Health



EA Principles – Historical OCIO Examples

The Business Alignment Principle

Should align projects and investments based on Priorities of Government (POG)

Rationale:

The State has articulated a set of priorities that guide where to focus our efforts. Information technology decisions need to be driven by these business priorities.

The Customer Viewpoint Principle

Should be designed around the customers viewpoint and provide a consistent customer experience

Rationale:

State government is increasingly required to be viewed as a single enterprise.



TSB Discussion – Washington State Enterprise Architecture Principles





Washington's Consolidated Technology Services Agency

Identity and Access Management Update

Technology Services Board
September 14, 2021

Identity and Access Management Overview

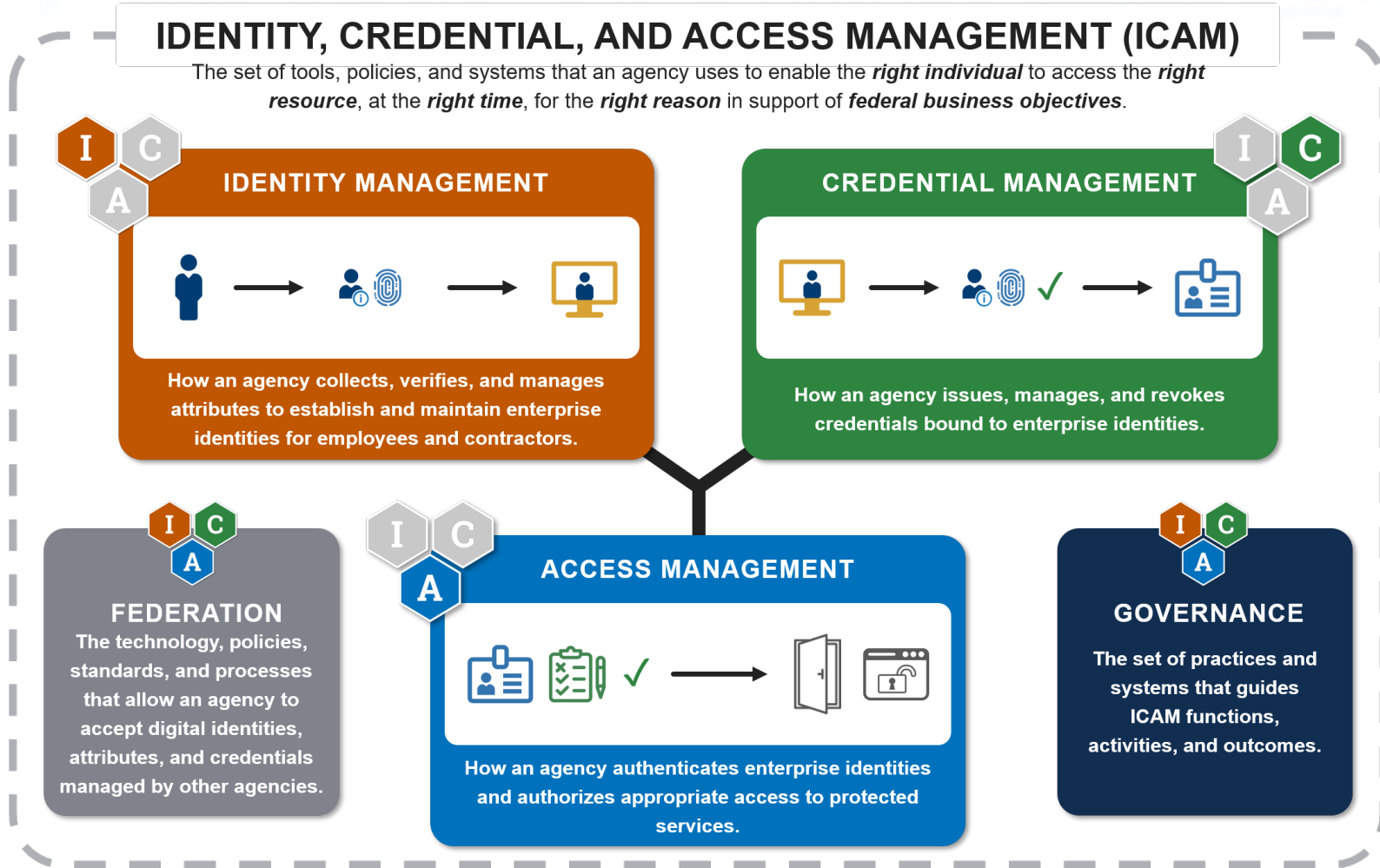


What is Identity and Access Management (IAM)?

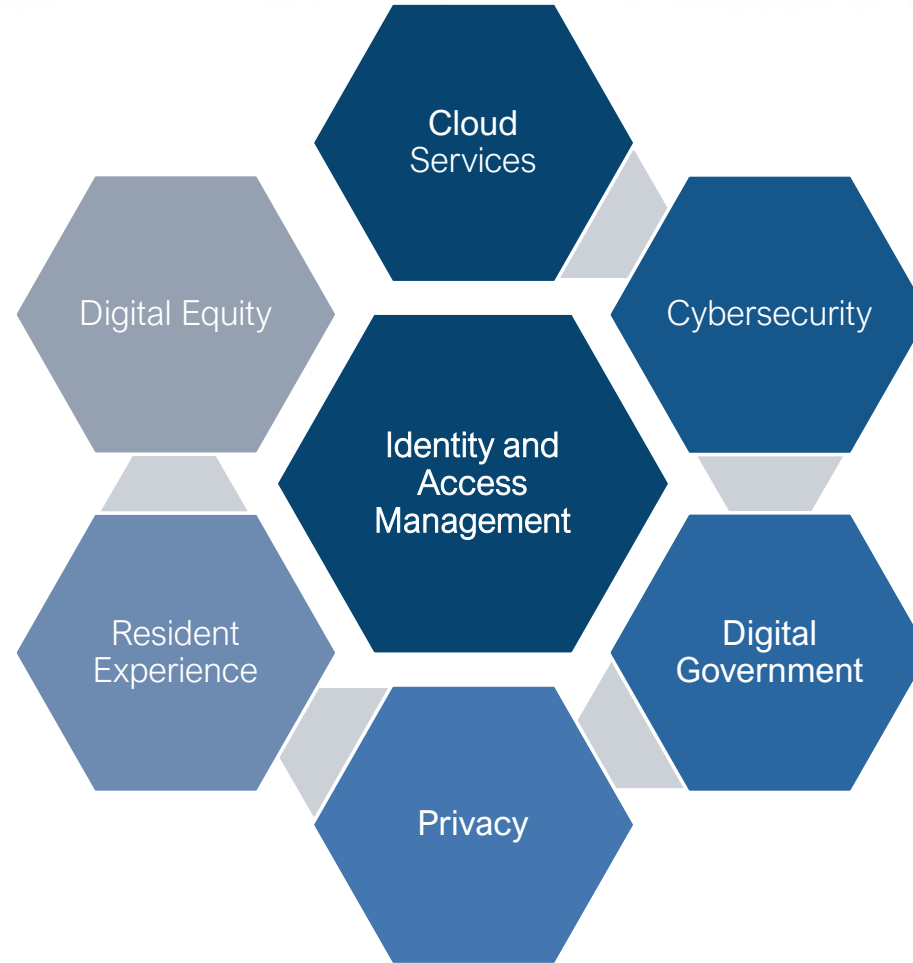
Identity and access management (IAM) is the discipline that enables the **right individuals to access the right resources at the right times** for the right reasons. (Gartner 2021)

Identity and Access Management is a fundamental and critical cybersecurity capability. Simply put, with its focus on foundational and applied research and standards, NIST seeks to **ensure the right people and things have the right access to the right resources at the right time**. (National Institute of Science and Technology (NIST))

IAM Foundational Architecture Example – General Services Administration



IAM is an enabling element for key initiatives



Identity and Access Management – The Washington Story



How did we get here?



Identity Management User Authentication Standards

Policy 183.20.10 designates WA State Enterprise Active Directory, Secure Access Washington, and Transact Washington (retired) as Enterprise ID Services

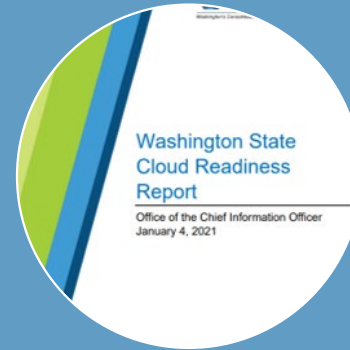
July 10, 2008



Establishment of Internal Enterprise Identity Service

Policy 185.10 establishes enterprise service and business processes for internal identity management

September, 2016



State Cloud Readiness Report

“Design and implement a modern identity infrastructure that is optimized for secure and seamless access to cloud solutions.”

December, 2020



Emergent Drivers

- Updated State Strategy (May 2021)
- COVID Lessons Learned
- NASCIO Priorities
- IAM Market Evolution

Present Day



Statewide Information Technology Strategic Plan 2021-2025

VISION

Better Government Through Technology

MISSION

Personalize and Optimized Government

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GOAL #4

Enterprise Architecture



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ENTERPRISE INITIATIVES

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- Establish Enterprise Cloud Computing Program
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- Develop state's enterprise architecture framework.
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- Develop an enterprise data management and governance strategy.
- Assess state network in support of cloud strategy.
- Identify components and tools that can be standardized or shared across agencies.

GOAL #5

Security & Privacy



OBJECTIVES

- Invest in proactive cyber solutions and practices.
- Recruit and develop cyber and privacy talent in state government.
- Deploy statewide privacy framework.
- Strengthen privacy capacity in state and local government.

ENTERPRISE INITIATIVES

In progress or Planned

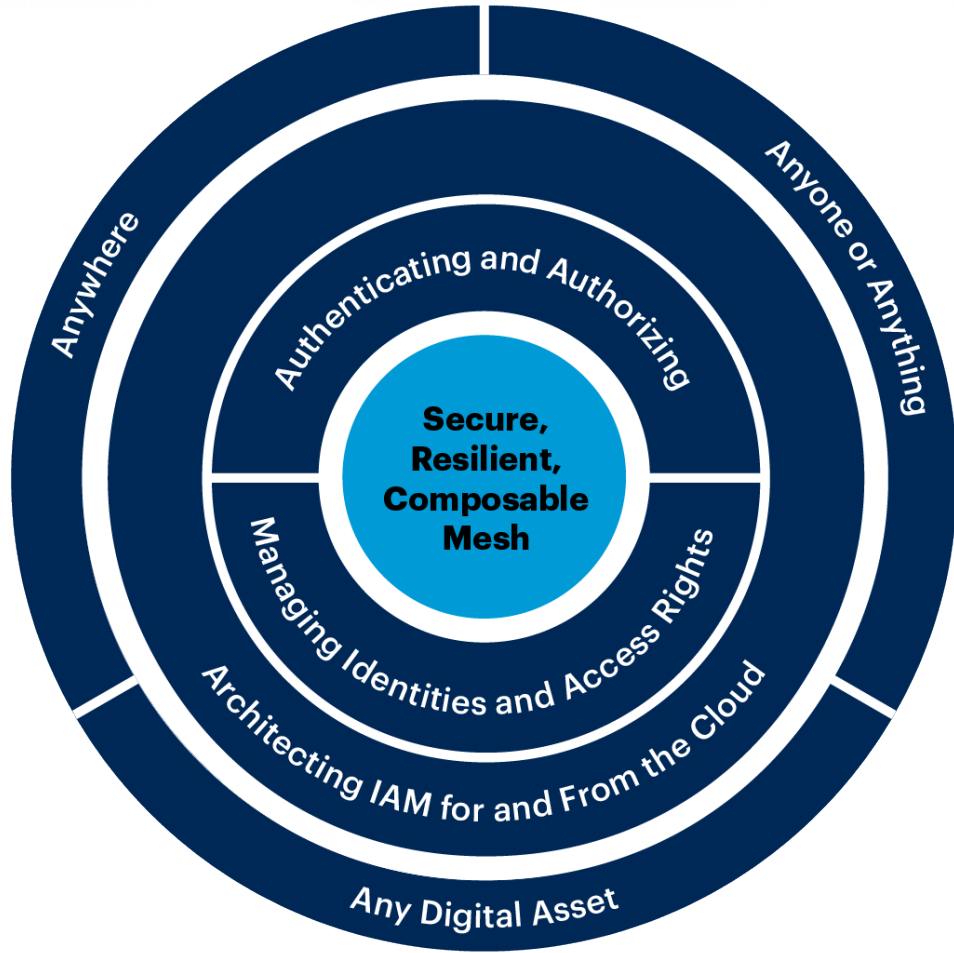
- Create a catalog of standard security services.
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- Implement a privacy framework for agencies.
- Collaborate with local government to improve practices.

- Improve security operations and governance.

Proposed

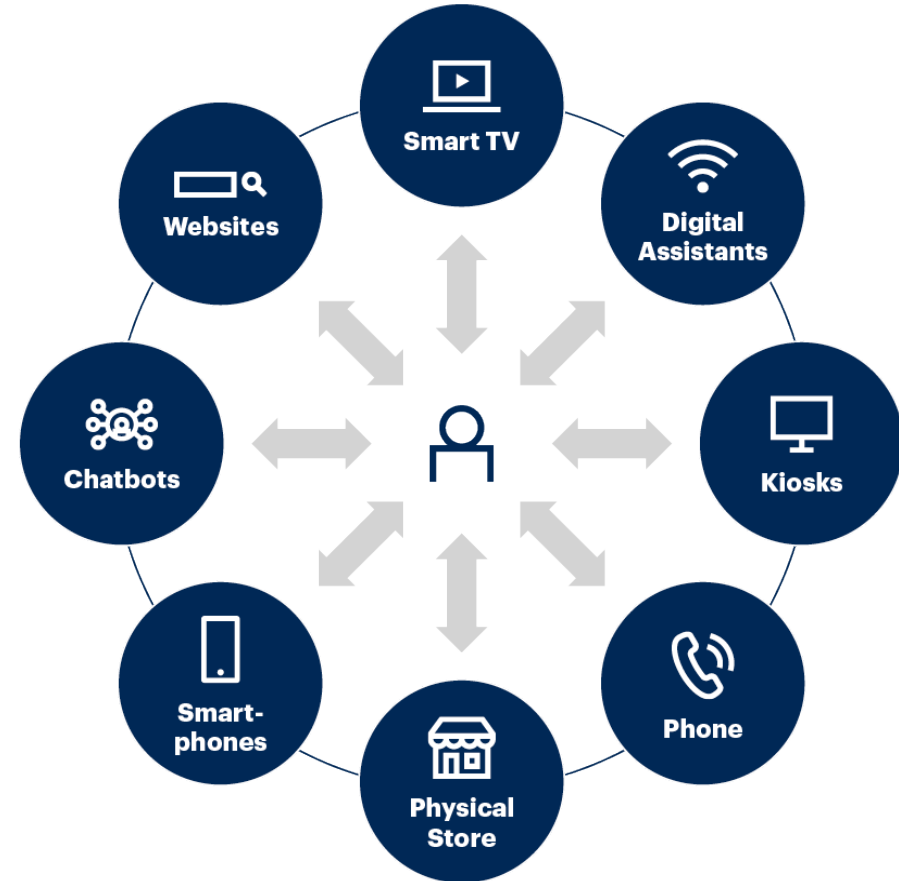
- Improve disaster recovery practices.
- Develop cyber workforce initiative and associated measures.

Where are we going?



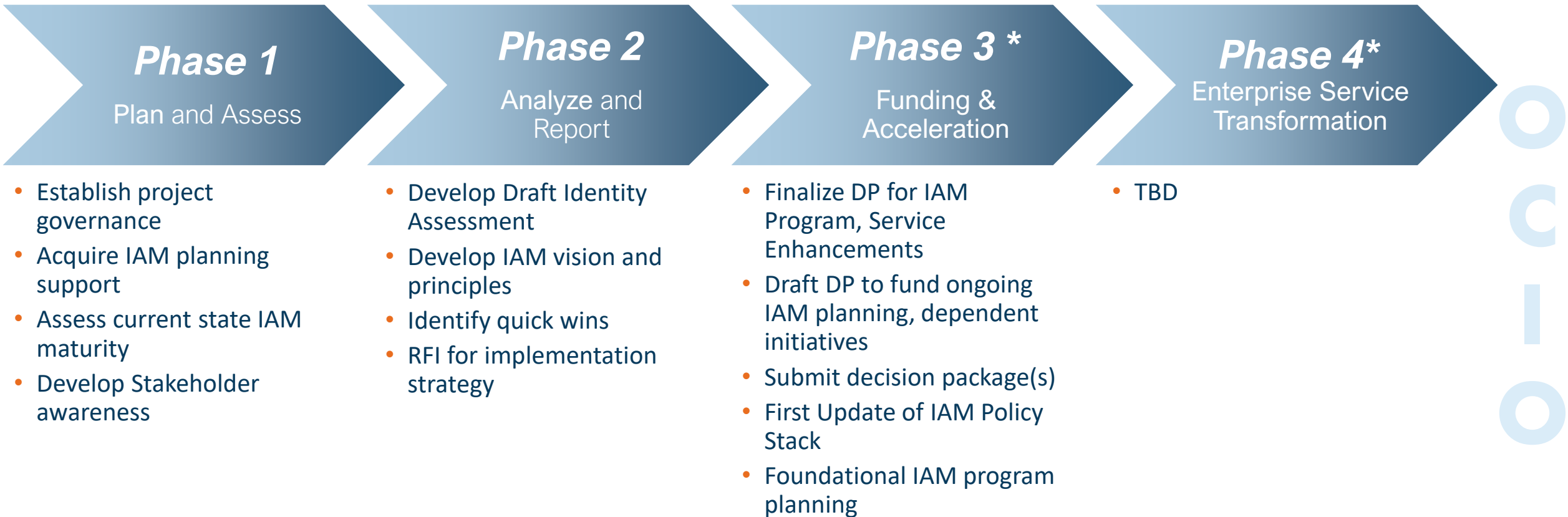
Source: Gartner

Expected Omnichannel Access



Source: Gartner

How are we going to get there?



* Dependent on Phase 2 and 3 Outcomes

Our ask of the TSB

- ▶ Guide the strategic direction of Washington Identity and Access Management Strategy
- ▶ Advise and Approve policies and standards
- ▶ Act as Sponsors & Champions of Identity Management
- ▶ Next Update in December 2021



TSB Discussion – State Identity Strategy Outcomes



Enterprise Cloud Computing Program Update

Technology Services Board
Sep 14, 2021


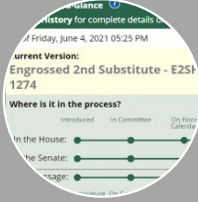


Agenda

- Program overview from last update
- Cloud supplemental decision package update
- RFP update
- Next steps
- Discussions: Cloud Service Broker and Cloud Center of Excellence



Program Overview from Last Update

June Program Update

 <p>State Cloud Readiness Report Recommends a central organization to accelerate migrations and other preparatory projects</p> <p>Jan 1, 2021</p>	 <p>E2SHB 1274 "The Legislature intends to migrate the state's information technology toward cloud services..."</p> <p>Jun 8, 2021</p>	 <p>WaTech Kickstarts Cloud Strategy Internal funds used to initiate some projects identified in the Cloud Readiness Report</p> <p>Jun 8, 2021</p>	 <p>Accelerating Cloud –Funding Dependent</p> <ul style="list-style-type: none"> • Central organization to accelerate migrations • Migration vendor RFP <p>Jun 8, 2021</p>
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Program Manager Onboarding
Robin Shen joined July 16

July 16, 2021




Cloud Transition Task Force
In progress

July 16, 2021



Vendor RFP
Released Aug 5 and due Sep 16

July 16, 2021



Supplemental Decision Package
In review

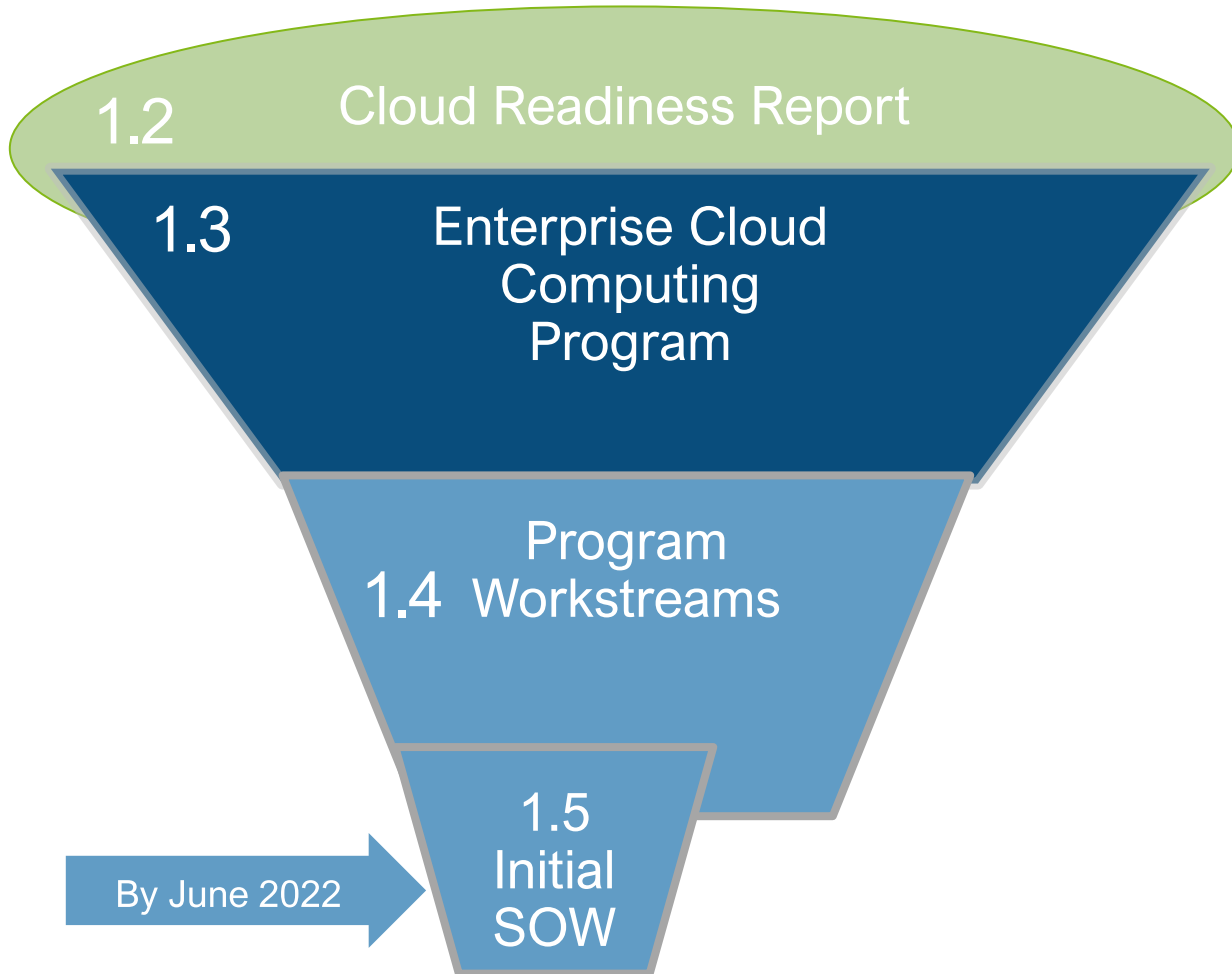
Sep 14, 2021

Cloud Supplemental Decision Package Update



Workstreams		FY2022	FY2023	FY2024	FY2025
Foundational	Cloud Service Broker & CCOE	Initial funding by WaTech to build up the program and organization	Sustaining investment		Future DP for full program funding
	Cloud Management Tools				
	Cloud Ready Ops				
	Cloud Migration Projects				
WaTech	Identity Management	Will be addressed in separated DP			
	Network Assessment		One-time assessment	No future investment planned	
	Cybersecurity	Cloud security governance & standards			
Enabling	Workforce Development	Based on E2SHB-1274, Cloud Transition Taskforce will deliver a report by Nov 30, 2021 Funding requests are not included in this DP			
	Organizational Change Mgt				
Total		\$3.9M	\$4.3M		\$4.3M

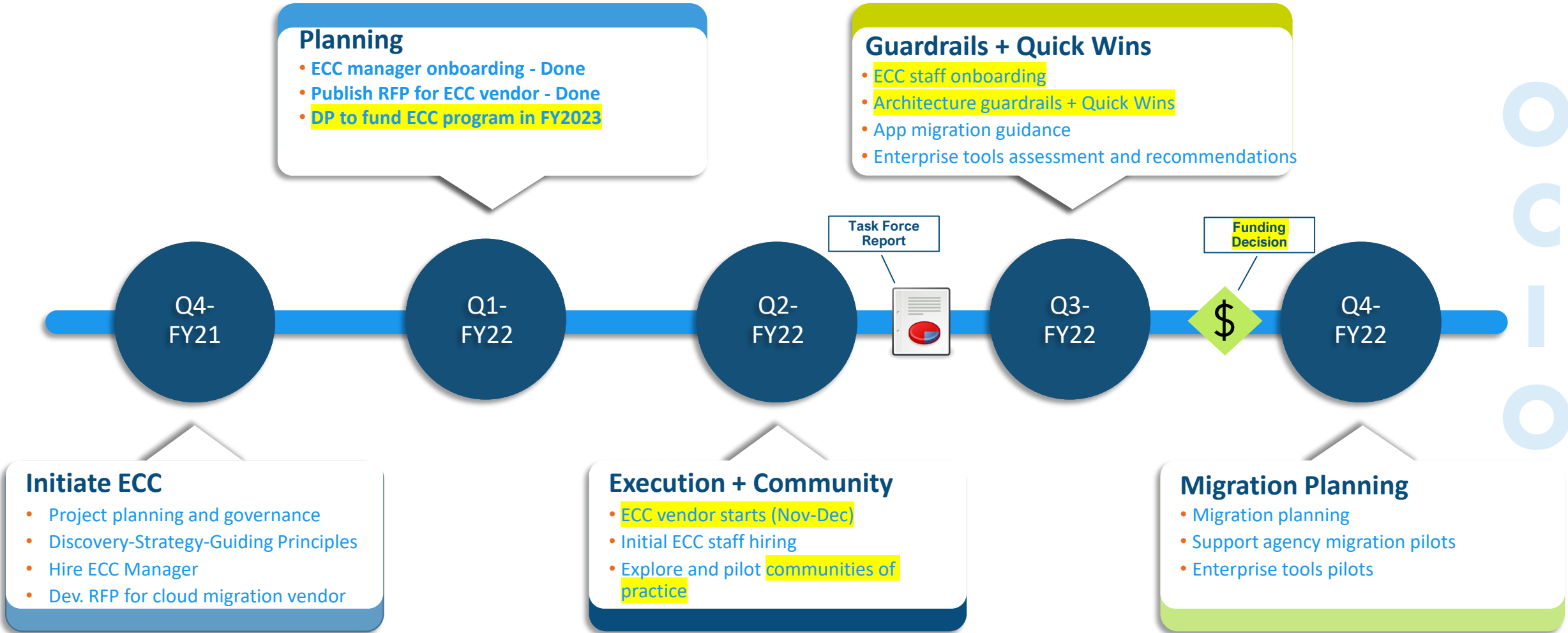
RFP Structure & Approach



Current Timeline

Date	Activity
August 5, 2021	RFP Issued
August 12	Pre-proposal bidders conference
September 16	Responses due ← We are here
September 17 – Oct 1	Evaluation period
October 18	Announcement of ASV 
November 15	Contract available

Next Steps



Potential Future State of Cloud Service Broker & Cloud Center of Excellence

Value Driven



More...

Cloud Service Marketplace Find - Order - Provision - Manage - Report						
Catalog	Backup & DR	Business Applications	Infrastructure	Comm & Collaboration	Security	Services and more ...
	Iterations					
Functions	Storefront Mgmt <ul style="list-style-type: none"> Featured Recommendation Catalog mgmt More 	Product Mgmt <ul style="list-style-type: none"> Product listing Service listing Solution listing & bundle design Best practices More 	Billing Mgmt <ul style="list-style-type: none"> Cart Order Payment Coupon/Discount More 	Delivery Mgmt <ul style="list-style-type: none"> Provision Deploy Manage Service More 	Manage <ul style="list-style-type: none"> Account Order Customer Reporting More 	Customer View Admin View
	Catalog Only			Partial Automation		Full-service Marketplace



More...



People & Resource

- Hire and develop cloud specific roles and skills
- Build strong virtual community across agencies
- Training and education



Tools & Service

- Cloud Management
- Cloud Finance Mgmt
- Cloud Assets Mgmt
- Cloud Migration Guidance & Support



Governance & Guardrails

- Cloud Ready Ops
- Cloud Security Roadmap
- Cloud Governance

Office of Chief Information Officer

*Reference: Washington State Cloud Readiness Report

Board Discussion

Technology Services Board
September 14, 2021

Subcommittee Structure



Strategic Retreat Proposal



Public Comment

