

State Interoperability Executive Committee

October 20, 2022
10:00 a.m. – 12:00 p.m.



Welcome

Introduction

- Review and modify agenda
- Member roll call
- News and Information Roundtable
- Approval of October, 2022 meeting minutes

WSDOT Land Mobile Radio Project Report Out – Dongho Change / Tim McDowell

SCIP Document – Bill Kehoe

- Draft review
- Motion to approve

SAW Group Updates – Anton Damm

Cybersecurity Grant Updates – Bill Kehoe

Good of the Order / Public Comment



ITS Communications & Wireless LMR System Replacement

SIEC Update

Tim McDowell
ITS Communications Manager

Dongho Chang
Director Transportation Operations

February 14, 2023

Roger Millar, Secretary of Transportation

Amy Scarton, Deputy Secretary of Transportation

WSDOT LMR History/Project

WSDOT evolving wireless program/P25 Preparation

- Installed trunking LMR analog system statewide (1991-1996)
- Conducted a Wireless Mobile Communications Needs Assessment (2005).
- SIEC Created a Statewide Communications Interoperability Plan (SCIP) and a Technical Implementation Plan (TIP). The TIP support the System of Systems approach (2008).
- Started preparing for digital radio system, upgrading analog paths to IP operation within existing allocations and small low-cost projects (2010).
- Washington State Business analysis – WSDOT/WSP consolidation study (2013).
 - Provided direction and supported the WSDOT approach
- Released RFI to gain information from the vendor community on system architecture, migration path and estimated costs to replace the existing system (2013).
- Completed FCC mandated rebanding (2015) (started in 2004)
- RFP was released and L3 Harris was the vendor of award to install a P25 trunking system Statewide (2017-2018).
- Project was placed in the OCIO Gated Funded Pool for OCIO oversight. This included adding additional Quality Assurance.

Progress to date



- Project Details
 - 136 sites, each site with redundant control channel capability.
 - 18 Dispatch consoles
 - 3095 subscribers
 - Premier core, and 6 regional connected cores, all geo redundant with each region having the ability to operate independently, emergency planning.
 - 4 years to design and install
 - Total L3Harris contract \$27,182,749
 - Total project budget \$37,038,000 (contingency, consultants, including IV&V, some site upgrades, and WSF installs)
- Project Status
 - All Infrastructure is installed or delivered.
 - WSDOT is responsible for the installation of Fifes Ridge and Granite Pass (2 conventional site, no commercial power)
 - 4105 subscribers deployed and installed (part of the contingency was intended for additional subscribers), In addition WSDOT organizations are still added radios due to project success.
 - Project staff still working on a few punch list items to close the project and allow L3Harris to submit for final closeout retainage payment.
 - Coverage was better than expected

Predicted vs Measured Coverage and DAQ Score

Olympic Region			South Central Region		
	Predicted	Measured		Predicted	Measured
BER	86.0%	97.6%	BER	88.0%	97.3%
RSSI	86.0%	96.2%	RSSI	88.0%	98.8%
DAQ		98.4%	DAQ		97.9%

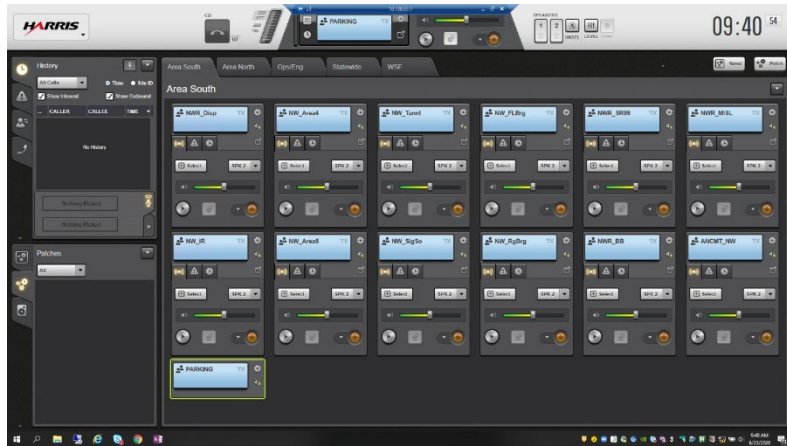
Northwest Region			North Central Region		
	Predicted	Measured		Predicted	Measured
BER	90.0%	95.8%	BER	86.0%	92.1%
RSSI	90.0%	94.6%	RSSI	86.0%	97.8%
DAQ		96.9%	DAQ		97.6%

Southwest Region			Eastern Region		
	Predicted	Measured		Predicted	Measured
BER	82.0%	97.0%	BER	88.0%	94.4%
RSSI	82.0%	98.8%	RSSI	88.0%	95.4%
DAQ		98.8%	DAQ		95.1%

Statewide		
	Predicted	Measured
BER	87.5%	95.7%
RSSI	87.5%	96.9%
DAQ		97.5%

* Measured coverage for NW, NC and SC didn't include, North Cascades, Cayuse, Chinook passes. If they were included measured percentages in those regions would go down. These are areas that are closed during winter operations.

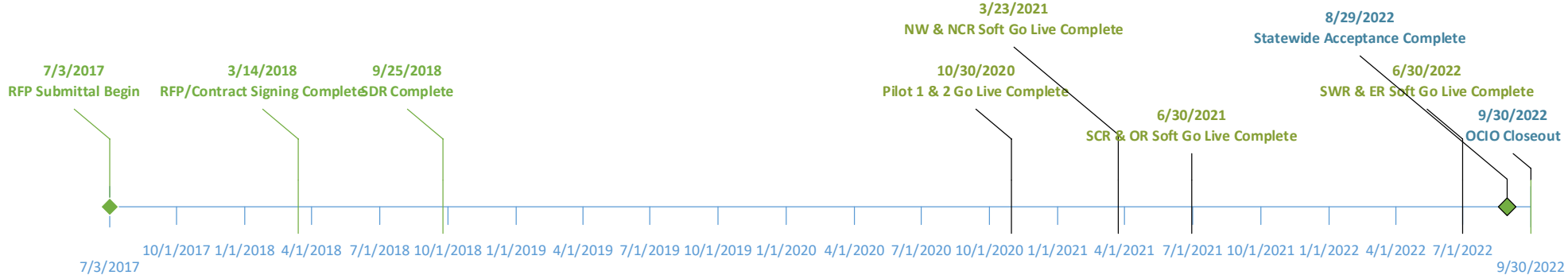
Project Schedule Impacts



- **Site Leases**
 - Some site leases cause the first schedule adjustment from 12/31/2021 to 2/2022.
 - Project staff and contractor were able to adjust project tasks as lease negotiations were underway to prevent significant project delays.
- **Pandemic impact**
 - Pandemic adjustment 8/2022
 - Project pause for COVID protocols
 - Product delivery delays
- **Supply Chain issues**
 - Executive Steering Committee, OCIO, and consultants approved moving the final Mobile installs into the Maintenance and Operations phase of the project.
 - Allowed the project to close in August from an OCIO reporting perspective for project "System Acceptance".
 - This approach avoided unnecessary costs for some consultants that were no longer needed.
- **Final Acceptance**
 - Moved to the M & O phase, once all punch items are complete, estimated 4/2023



Schedule



7/3/2017 - 3/14/2018
RFP Submittal/Contract Signing

3/14/2018 - 10/5/2018
System Design

4/5/2018 - 10/30/2020
Pilot 1 & 2 Deployment/Test/Training/Acceptance Complete

7/5/2018 - 3/23/2021
NWR & NCR Deployment/Test/Training/Acceptance Complete

10/1/2018 - 6/30/2021
SCR & OR Deployment/Test/Training/Acceptance Complete

4/1/2020 - 6/30/2022
SWR & ER Deployment/Test/Training/Acceptance Complete

11/20/2021 - 8/29/2022
Statewide Acceptance

11/20/2021 - 9/30/2022
OCIO Closeout

Legend

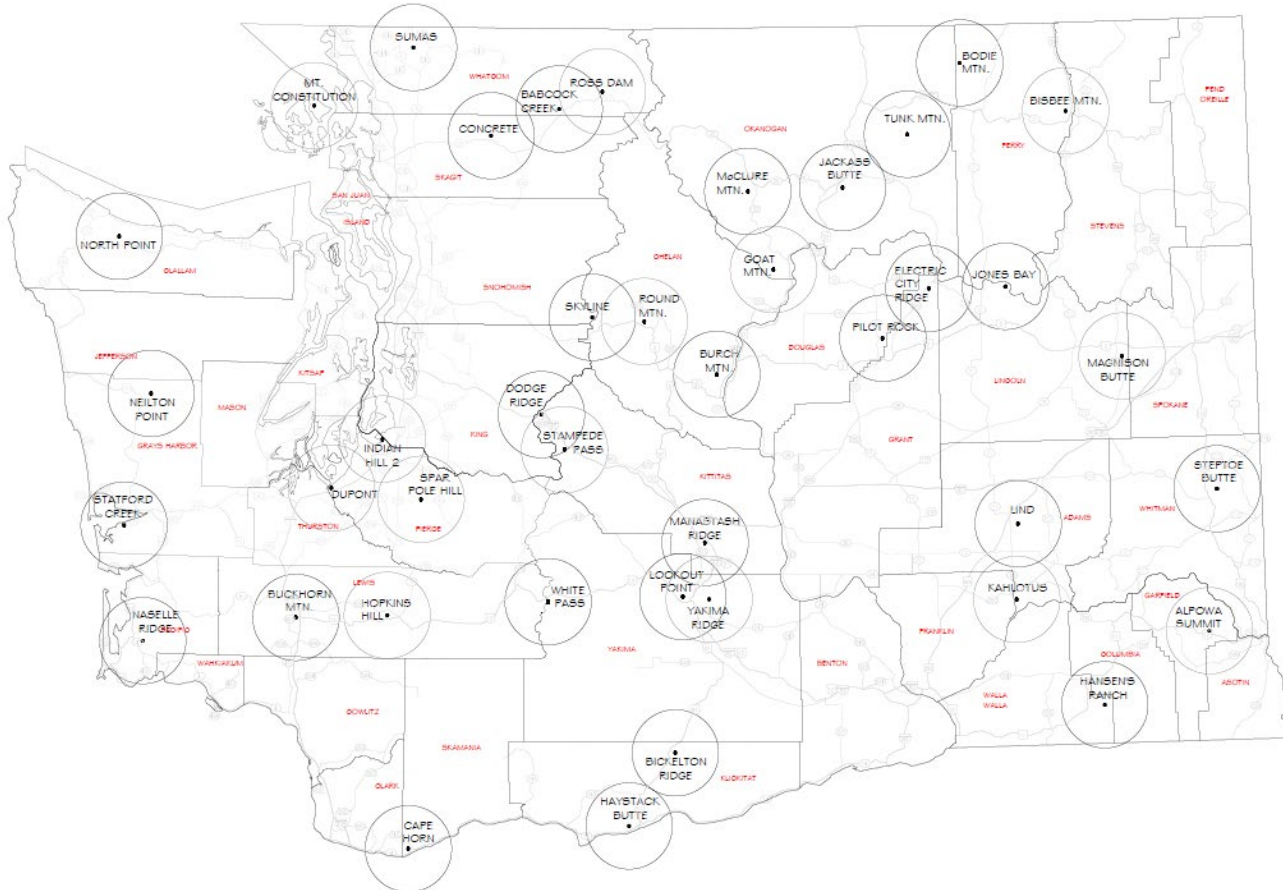
- Completed
- In Progress
- Not Started

Project Budget

Work Order Description	Baselined Project Budget	Planned Expenditures as of October 2022	Projected Variance	Total Project Actuals	15-17 Actuals	17-19 Actuals	19-21 Actuals	Planned 21-23 Expenditures	21-23 Actuals
Blue Wing - P25 Design & RFP Development Task AA (completed)	\$ 290,005	\$ 283,774	\$ 6,231	\$ 283,774	\$ 244,169	\$ 39,605	\$ -		\$ -
WSDOT State Workforce	\$ 566,112	\$ 632,287	\$ (66,175)	\$ 612,101	\$ -	\$ 227,480	\$ 384,575	\$ 20,232	\$ 46
Blue Wing - FCC Application Task AC	\$ 98,115	\$ 98,115	\$ -	\$ 98,040	\$ 45,616	\$ 46,737	\$ 5,687	\$ 75	\$ -
Stellar - External QA	\$ 215,040	\$ 439,886	\$ (224,846)	\$ 379,399	\$ -	\$ 178,960	\$ 143,489	\$ 117,437	\$ 56,950
Liberum - Project Management	\$ 460,800	\$ 596,345	\$ (135,545)	\$ 475,742	\$ -	\$ 244,031	\$ 173,251	\$ 179,063	\$ 58,460
APCO Licensing Fees (completed)	\$ 10,000	\$ 10,000	\$ -	\$ 10,000		\$ 10,000	\$ -	\$ -	
Blue Wing - Technical Coordination/Training Development/IV&V	\$ 1,258,006	\$ 1,118,006	\$ 140,000	\$ 838,343	\$ -	\$ 246,323	\$ 426,886	\$ 444,797	\$ 165,135
Harris Infrastructure	\$ 21,529,583	\$ 21,994,222	\$ (464,639)	\$ 21,619,164	\$ -	\$ 5,863,797	\$ 12,642,715	\$ 3,452,131	\$ 3,112,652
Harris Subscribers	\$ 5,653,166	\$ 7,073,182	\$ (1,420,016)	\$ 7,095,024	\$ -	\$ 1,786,354	\$ 1,584,056	\$ 3,702,772	\$ 3,724,614
Staff Charges	\$ -			\$ -					
Taxes (Harris)	\$ 2,425,027	\$ 2,425,027	\$ -	\$ 2,272,480		\$ 555,526	\$ 1,268,244	\$ 605,726	\$ 448,711
Ferry Vessel Installation	\$ 130,000	\$ 29,985	\$ 100,015	\$ 30,558	\$ -	\$ -	\$ 6,224	\$ 23,761	\$ 24,334
Site Prep and Equipment	\$ 1,946,906	\$ 1,823,086	\$ 123,820	\$ 1,806,071	\$ 161,210	\$ 287,406	\$ 1,285,214	\$ 89,256	\$ 72,241
Test Equipment	\$ 807,107	\$ 418,524	\$ 388,583	\$ 418,524	\$ -	\$ 418,524	\$ -	\$ (0)	
Project Subtotal	\$ 35,389,867	\$ 36,942,439	\$(1,552,572)	\$ -					
Contingency (Risk & Opportunities)	\$ 1,648,133			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Expected Contingency (Risk & Opportunities) Balance		\$ 95,561		\$ -					
Total	\$37,038,000	\$37,038,000		\$ 35,939,220	\$ 450,995	\$ 9,904,741	\$ 17,920,342	\$ 8,635,250	\$ 7,663,143

Includes final invoice of 10% of the infrastructure costs minus retainage
 Final install costs and retainage pending, some additional site and consultant work needed to close.
 Project is projected to close with-in budget

Project Interoperability STAEN



700 MHz Regional Planning Committee

- Required WSDOT to install 39 interoperable repeaters focusing on area that don't have existing resources.
- The 37 of the 39 are deployed per the NiFOG on 7TAC71, 7TAC72, and 7TAC75.
- The final repeater will be deployed this summer.

State Agency Emergency Network (STAEN)

- STAEN was developed in late 90's for state agencies to communicate with State EMD in the state campus area.
- In the deployment of new system STAEN was change to statewide operation focusing on COOP planning and increasing resources in the Yakima and Spokane areas.

Interoperability Opportunities

- Migration planning provided several interoperable gateways
- ISSI capabilities

Project Lessons Learned

WSDOT Self Assessment

- On-board project team members, sponsors, and key subject matter experts.
- Use maintenance trainers as part of the Organizational Change Management (OCM) effort
- Need accurate asset inventory information
- Invest in site improvements
- Eliminate ambiguity in vendor contracts as much as possible
- Need flexibility in the gated funding and investment plan processes
- Find a common tool for a document repository when working with vendors outside the state firewall
- Find or develop a project schedule tool that can be shared with vendors outside of the state firewall

Quality Assurance

Project Strengths

- Limiting the schedule delays by being creative in the midst of a global pandemic
- Right mix of team members created a collaborative environment that allowed effective problem solving
- Capable project managers kept the project team motivated and focused
- Using IV&V consultant eliminated some of the churn
- The state team had a high level of knowledge and technical detail of what was required
- Good project management and document management processes

Opportunities for Improvement

- Value of OCM and communications may have been underestimated
- Need flexibility in the gated funding and investment plan processes
- Project authority needs to be established to ensure accountability
- Need an integrated project schedule managed by the state project team
- Finding a common tool for a document repository when working with vendors outside the state firewall

Questions?

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SCIP Document



SAW Group Updates



Cybersecurity Grant Updates



Washington State Planning Committee

Bill Kehoe – CIO WaTech	Robert Ezelle – Dir EMD	Eli King - COM
Sheri Sawyer – GOV	Jie Tang – OFM	Nick Benfield - SAO representative
Dan Wordell - Assoc of Washington Cities – Spokane	Craig Adams – Washington State Association of Counties - Kitsap County IT	Grant Rodeheaver – Higher Ed, SBCTC
Chief John Batiste – WSP/Fusion Center	Katy Ruckle - Chief Privacy Officer, WaTech	Tanya Kumar – TSB member, (Private Sector)
DOH – Goldsby, Callie - DOH	Bre Urness-Straight – OSPI	<p><u>Additional support:</u> Zack Hudgins – OPDP WaTech Alisha King – EMD Allen Avery – WSP/Fusion Center Ian Moore - CISA (non-voting)</p>

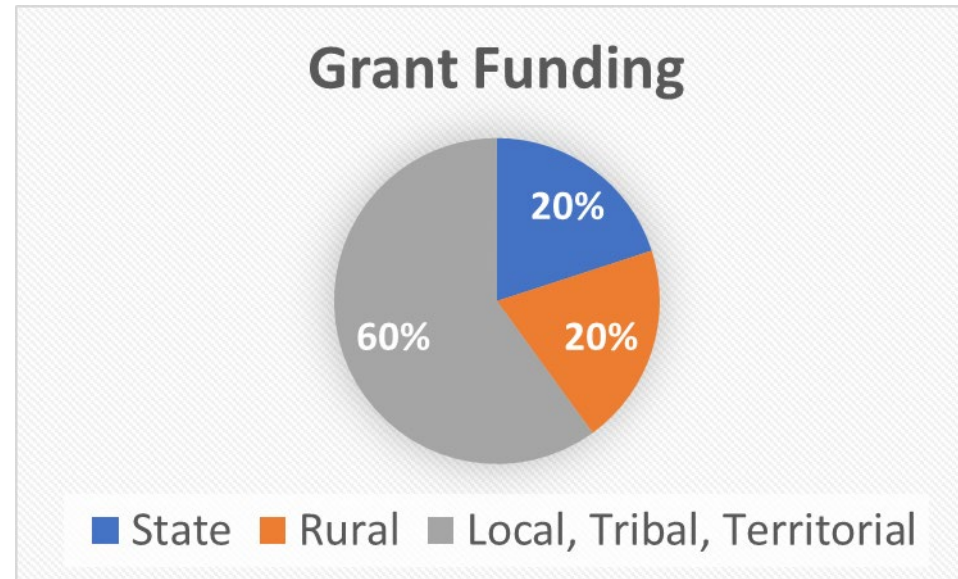
1. Assist with the development and implementation of the cybersecurity plan
2. Approve of the cybersecurity plan
3. Assist with the project selection and funding priorities for the grant

Composition of Planning Committee: Representatives from the state, counties, cities, institutions of public education and health with no less than half members having professional experience related to cybersecurity or IT.

Cybersecurity Grant Program

\$1 Billion nation-wide grant to address cybersecurity threats and risks.

Washington funding:
FY22: \$3,667,735



Cybersecurity Plan Basics

- Strategic plan to reduce cybersecurity risks and increase capabilities.
- State-wide scope covering 2-3 years.
- Individual plans must align to the Cybersecurity Plan.
- Must include 16 required elements.
- Existing State, Local, or Tribal plans can be utilized.
- Cybersecurity Committee and CIO/CISO/Equivalent must approve the plan.
- CISA approves for DHS.
- Plans approved for 2 years; annually thereafter.

Timeline/Milestones

- Dec 6, 2022 Planning Committee Meeting – Discuss Charter; Elements 1-3 (preparation, access management)
- Jan 3, 2023 Planning Committee Meeting – Elements 4,5,10,11,14 (ongoing, mitigate risk, best practices)
- **Feb 7 Planning Cmte mtg – Elements 7,9 (continuity of operations)**
- March 7 Planning Committee – Element 5
- April 2023 Meeting – Element 6, 12, 15
- May 2023 Meeting – Element 8,13
- June 2023 Meeting – Element 16
- June 30, 2023 Target deadline for State Plan completion.
- Plan to be drafted, circulated, discussed, adopted



Prepare your IT Infrastructure: Elements 1-3



Manage – Update IT infrastructure inventory.

Track – Know the status of IT infrastructure components.

Monitor – Know the traffic flowing through, and processed by, the IT infrastructure.

Audit – Test to find indicators of undesired activity.

Harden – Enhance resilience of IT infrastructure against cybersecurity risks.

Vulnerability Assessment and Threat Mitigation: Elements 4, 5, 10, 11, and 14

- IT and supply chain risk management.
- Vulnerability management and remediation.
- Threat mitigation.
- Sharing of cyber threat indicators.



Incident Response: Elements 7 and 9

Incident response program, including exercises, focuses on:

- Continuity of operations.
- Continuity of communications and data networks.



Cybersecurity Best Practices: Element 5

- Multifactor Authentication.
- Enhanced Logging.
- Encryption at-rest and in-transit.
- End use of unsupported Internet-facing hardware/software.
- Prohibit use of default passwords and credentials.



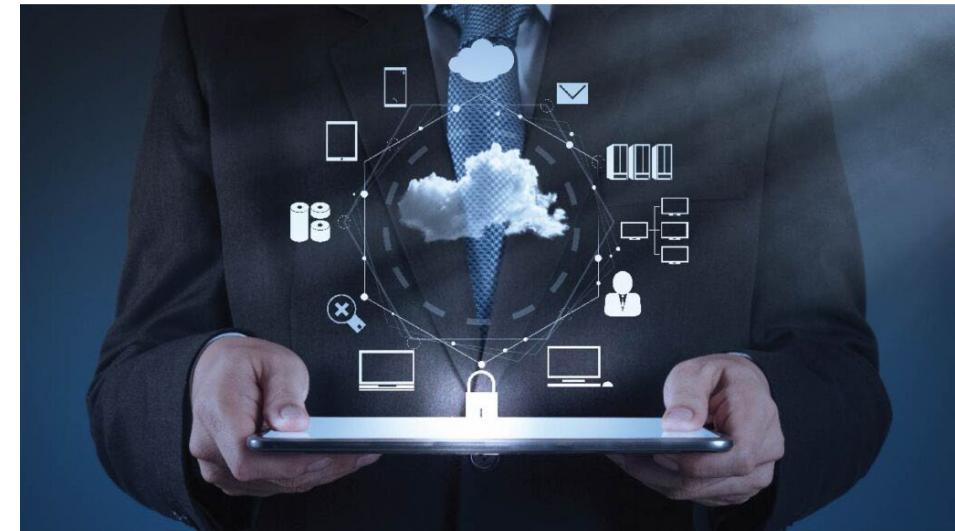
Delivery of Online Services: Elements 6, 12, and 15

- Ensure delivery of secure state or local government online services, especially to rural areas in the state.
- Leverage CISA-required services
 - ◆ Web Application Scanning
 - ◆ Vulnerability Scanning
 - ◆ Nationwide Cybersecurity Review



Enable IT Modernization and Attract Talent: Elements 8 and 13

- Implement and review alignment of IT modernization and operational cybersecurity objectives.
- Use the National Initiative for Cybersecurity Education (NICE) Workforce Framework for Cybersecurity to identify and mitigate gaps in the cybersecurity workforce.



Putting the pieces together: Element 16



Washington State must distribute any of the following:

- Grant funds to facilitate projects.
- Items or activities to enhance cybersecurity capabilities.
- Service to create new, or supplement existing, capabilities.

Program Goal	Program Objectives
1.Improve the cybersecurity posture of all local governments	1.1 Define “Baseline” cybersecurity posture – risk assessments, scans, MFA, .gov 1.2 Define “Baseline PLUS” cybersecurity posture- specific tools, response plans, training 1.3 Assist implementation of Baseline and Baseline PLUS across state
2.Increase cybersecurity and privacy awareness and capacity across governments	2.1 Standardize and make accessible at cost (or less) cybersecurity and privacy training to all levels of government
3.Find, fund, implement sustainable cyber and privacy projects that last beyond the grant	3.1 Stand up funding process for local government projects that fit SLCGP goals, or objectives. 3.2 Require sustainability in all projects with view beyond life of current grant funding.
4.Find, fund, implement solutions that can be applied broadly across the state	4.1 Ensure an equity lens is applied to funded projects 4.2 Work across funding sources to maximize impact of projects. 4.3 Encourage cross jurisdiction collaboration and implementation efforts
5.Leverage existing work and money for maximum impact and efficiency	5.1 Continue to improve and refine SLGCP Cybersecurity Plan and integrate with other efforts across state and local governments to consistently improve the resiliency against cybersecurity attacks.
6.Establish Cybersecurity Partnerships	Washington’s CIO and Local Government IT Directors group is developing additional connections and opportunities to work with state higher education institutions to improve workforce development and resources across Colorado



Good of the Order / Public Comment

