

#### Agenda for today's presentation

- State Auditor's Office portfolio of cybersecurity audits
- Continuing Opportunities to Improve State Agency IT Security Organizations – FY 2025
- Continuing Opportunities to Improve Local Government and Critical Infrastructure IT Security – FY 2025
- Additional cybersecurity-related services







## Protecting sensitive information



#### Confidentiality is key

#### RCW 42.56.420

#### Security.

The following information relating to security is exempt from disclosure under this chapter:

(4) Information regarding the infrastructure and security of computer and telecommunications networks, consisting of security passwords, security access codes and programs, access codes for secure software applications, security and service recovery plans, security risk assessments, and security test results to the extent that they identify specific system vulnerabilities, and other such information the release of which may increase risk to the confidentiality, integrity, or availability of agency security, information technology infrastructure, or assets;





## Delivery of detailed audit results

- Communicated detailed results of work as we completed it
- While policies and practices partially aligned with the selected controls, we consistently identified areas to improve
- Governments have already begun addressing significant issues we identified, and continue to make improvements



# Continuing to expand our audit reach



| Type of audit           | Who is served     | Total<br>completed | Year started | In this report period |
|-------------------------|-------------------|--------------------|--------------|-----------------------|
| Cybersecurity           | State agencies    | 46                 | 2013         | 7                     |
| Cybersecurity           | Local governments | 61                 | 2013         | 7                     |
| Critical infrastructure | Local governments | 83                 | 2022         | 39                    |
| Ransomware resiliency   | Local governments | 9                  | 2023         | 6                     |

#### Cybersecurity performance audits underway at:

• Six state agencies, 12 local governments, one critical infrastructure local government





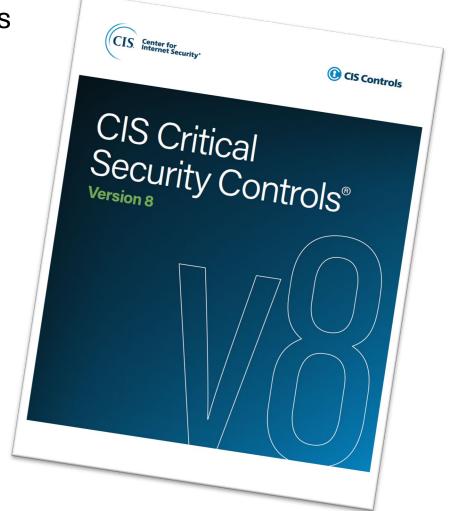
# Opportunities to Improve IT Security at State Agencies – FY 2025

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Audit work completed at seven state agencies

Audits focused on two areas:

- Compared agency practices to selected safeguards from the Center for Internet Security, version 8
- Performed penetration testing of internal network, external network, and selected applications using a vendor





### State cybersecurity **safeguard** results



- Scope based on size, maturity and specific concerns or efforts of each agency
- Assessed an average of 31 safeguards at each government, out of 153 possible safeguards

| Implementation |              |           |              |    |  |  |
|----------------|--------------|-----------|--------------|----|--|--|
| All systems    | Most systems | Partially | Not in place |    |  |  |
| 70             | 34           | 27        | 65           | 20 |  |  |
| 32%            | 16%          | 13%       | 30%          | 9% |  |  |

61%

#### State cybersecurity **penetration test** results



- Across these seven state agencies, penetration testing was conducted on applications and various network segments
- Identified 227 vulnerabilities of the following severity levels:

| Severity |      |        |     |                              |       |
|----------|------|--------|-----|------------------------------|-------|
| Critical | High | Medium | Low | Informational & observations | Total |
| 3        | 21   | 46     | 92  | 65                           | 227   |

 The 24 most severe vulnerabilities could more readily be exploited by hackers to cause a security breach



# Opportunities to Improve IT Security at Local Governments – FY 2025



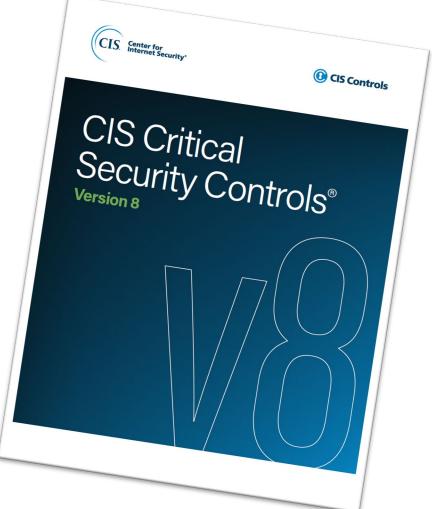
Audit work completed at 52 total local governments

- 7 cybersecurity audits
- 6 ransomware resiliency audits
- 39 critical infrastructure audits

## Local cybersecurity audits

- Completed during the fiscal year at seven local governments
- Included assessments work in two areas:
  - ✓ Compared local government practices to selected safeguards from the Center for Internet Security, version 8
  - ✓ Performed penetration testing of internal network, external network and selected applications using a vendor









## Local cybersecurity **safeguard** results



- Scope based on size, maturity and specific concerns or efforts of each government
- Assessed an average of 31 safeguards at each government, out of 153 possible safeguards



| Implementation |              |              |           |              |  |
|----------------|--------------|--------------|-----------|--------------|--|
| All systems    | Most systems | Some systems | Partially | Not in place |  |
| 49             | 40           | 22           | 76        | 32           |  |
| 22%            | 18%          | 10%          | 35%       | 15%          |  |

**51%** 

# Local cybersecurity **penetration test** results



- Across these seven local governments, penetration testing was conducted on applications and various network segments
- Identified nearly 300 vulnerabilities of the following severity levels:

| Severity |      |        |     |                              |       |
|----------|------|--------|-----|------------------------------|-------|
| Critical | High | Medium | Low | Informational & observations | Total |
| 9        | 47   | 47     | 125 | 55                           | 283   |

• The **56** most severe vulnerabilities could more readily be exploited by hackers to cause a security breach





# Improving ransomware resiliency and critical infrastructure



Audit work completed in FY 2025 at **local governments** included:

- 6 ransomware resiliency audits
- 39 critical infrastructure audits



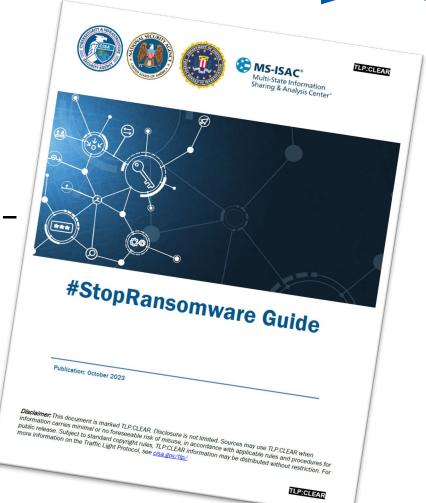




## Ransomware resiliency audits



- Completed during the fiscal year at six local governments
- Included assessment work in two areas:
  - Compared local government practices to recommendations from #StopRansomware – Joint Ransomware Task Force
  - ✓ Performed vulnerability and technical analysis tied to assessed best practices using Auditor's Office staff and tools





## Ransomware resiliency audit results



- Assessed the same 22 safeguards at each government
- Focused on technical safeguards that specifically address ransomware detection, response and recovery capabilities
- Due to the technical nature of the safeguards, they were assessed as: fully, partially or not implemented

| Implementation |           |              |  |  |
|----------------|-----------|--------------|--|--|
| Fully in place | Partially | Not in place |  |  |
| 32             | 52        | 48           |  |  |
| 24%            | 39%       | 36%          |  |  |







#### Critical infrastructure audits

Focused on local governments providing critical infrastructure, such as water, wastewater, and healthcare

- In response to continuing threat identified by federal authorities
- Primarily an external penetration test to identify external facing vulnerabilities
- Short interviews to compare practices to recommendations from the Cybersecurity
  & Infrastructure Security Agency







#### Critical infrastructure audit results



- Audited 39 local governments with critical infrastructure
- Includes high-level review of IT practices
- Primary focus on external penetration testing
- Identified 264 vulnerabilities, with the following severity levels:

| Severity |      |        |     |                              |       |
|----------|------|--------|-----|------------------------------|-------|
| Critical | High | Medium | Low | Informational & observations | Total |
| 1        | 26   | 33     | 128 | 76                           | 264   |



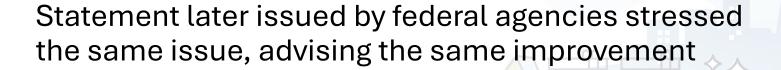


# Local audit work led to improvements by national vendor

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Audit research and penetration testing in Washington in FY 2025 produced a national effect

- Vendor supported many local and national water agencies
- Our testing demonstrated a risk, leading vendor to make significant improvements in IT security for all customers





## Common themes at audited governments

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#### Best results:

- Governments undergoing a repeat audit
- Those with dedicated IT security staff

Good IT security results elsewhere were inconsistent, not always related to IT staffing methods, which also varied:

- No IT staff
- Part-time IT staff
- Vendor-only IT support
- Small IT department without IT security staff



# **#BeCyberSmart Program**

#### The Center for Government Innovation's cybersecurity program offers:

- > Resources > Technical advice
- Training > Cyber checkups
- Presentations



# Additional resources, audits and coordination from our Office

• It starts with policy – a guide to jump-starting your cybersecurity program: Helps local governments create effective IT policies and jump-start their cybersecurity program

 Security attestation engagements (WaTech and Department of Licensing)

Cyber loss follow-up



#### Contact information



#### Pat McCarthy

State Auditor

Pat.McCarthy@sao.wa.gov

(564) 999-0950

#### **Quinn Peralta**

IT Security Assistant Audit Manager

Quinn.Peralta@sao.wa.gov

(564) 201-2953

Website: www.sao.wa.gov X: @WAStateAuditor

Facebook: www.facebook.com/WaStateAuditorsOffice

LinkedIn: Washington State Auditor's Office

#### **Scott Frank**

Director of Performance & IT Audit

Scott.Frank@sao.wa.gov

(564) 999-0809

