



Ministry of
Citizens' Services

Staying Cybersecure in a Modern, Digital Organization

September 19, 2023

Presentation to UBCM

Speakers:



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Territorial Acknowledgement

We acknowledge with respect that the Public Service operates throughout B.C. on the traditional lands of Indigenous Peoples. We are deeply committed to true and lasting reconciliation with Indigenous Peoples in B.C.

Why Cybersecurity?

What is cybersecurity?



The threat is growing

Cyber attacks are increasing significantly in frequency and sophistication

15Y

There were more breaches and records lost in 2020 than the previous **15 years** despite 10% growth in cybersecurity spending

#2

Cybersecurity and climate change are the top two risks among global business leaders

20%

The total cost of a cyber breach in Canada **rose by 20%** in 2021, for a total of \$6.7M per breach



10X

The B.C. government faced a near tenfold increase in unauthorized access attempts in 2022 over 2015, with 496M/day or 6k/second today

Cybercrime is more profitable than the sale of ALL illegal drugs combined

Organizations are vulnerable

There is a significant talent shortage impacting cybersecurity organizations across the world

2.7M

The global cybersecurity workforce gap is estimated at 2.7M and it is expected to grow by 20-30% annually

25K

Canadian organizations are short an estimated 25,000 cybersecurity professionals

80%

80% of Canadian CEOs say they are concerned about cybersecurity as a threat to their growth prospects

**0.6
FTE**

Average number of IT staff in BC municipalities is 0.6 FTE – these individuals manage IT and all cybersecurity

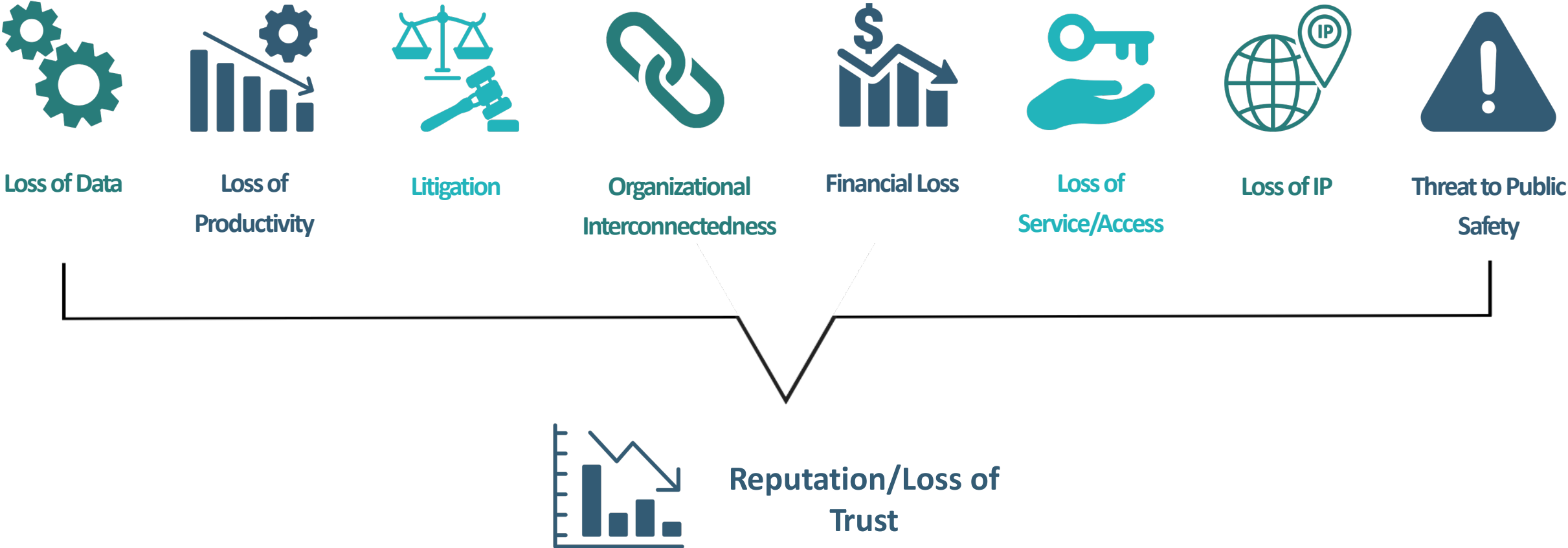
<1%

Among the 2,400+ BPS entities, only a fraction of one percent have a fulltime cybersecurity professional



Business impacts

Cyber attacks are costly and result in loss of trust in government



Cybersecurity in your organization

BC Auditor General recommends organizations...

- Define roles and responsibilities for cybersecurity
- Ensure annual training for board members and senior officials
- Create orientation materials for new staff and officials
- Have a plan and review it annually



Getting started



Where are you
today?



Where do you
want to be?



Do you have a
plan to get
there?



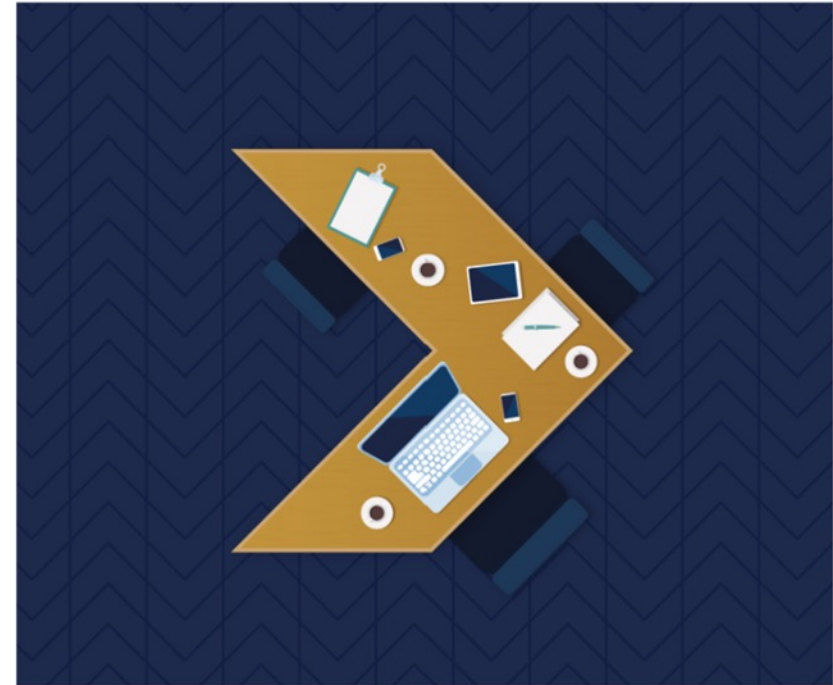
Are you
measuring your
progress?

Additional resources

- Create the right environment
- Get the right information to support decision making
- Take steps to manage those risks

Cyber Security Toolkit for Boards

Resources designed to help board members
govern cyber risk more effectively.



Who can help?

Federal Government

A complimentary one-day Cyber Resilience Review available to local governments

Canadian Centre for Cybersecurity will:

- join incident response calls and provide assistance
- take valuable information you share regarding incidents
- provide professional development opportunities for staff

Connect with Cyber.BC@gov.bc.ca to initiate a request



Provincial Government

- Information sharing
- Building capacity
- Advisory services
- Removing procurement barriers

Information sharing

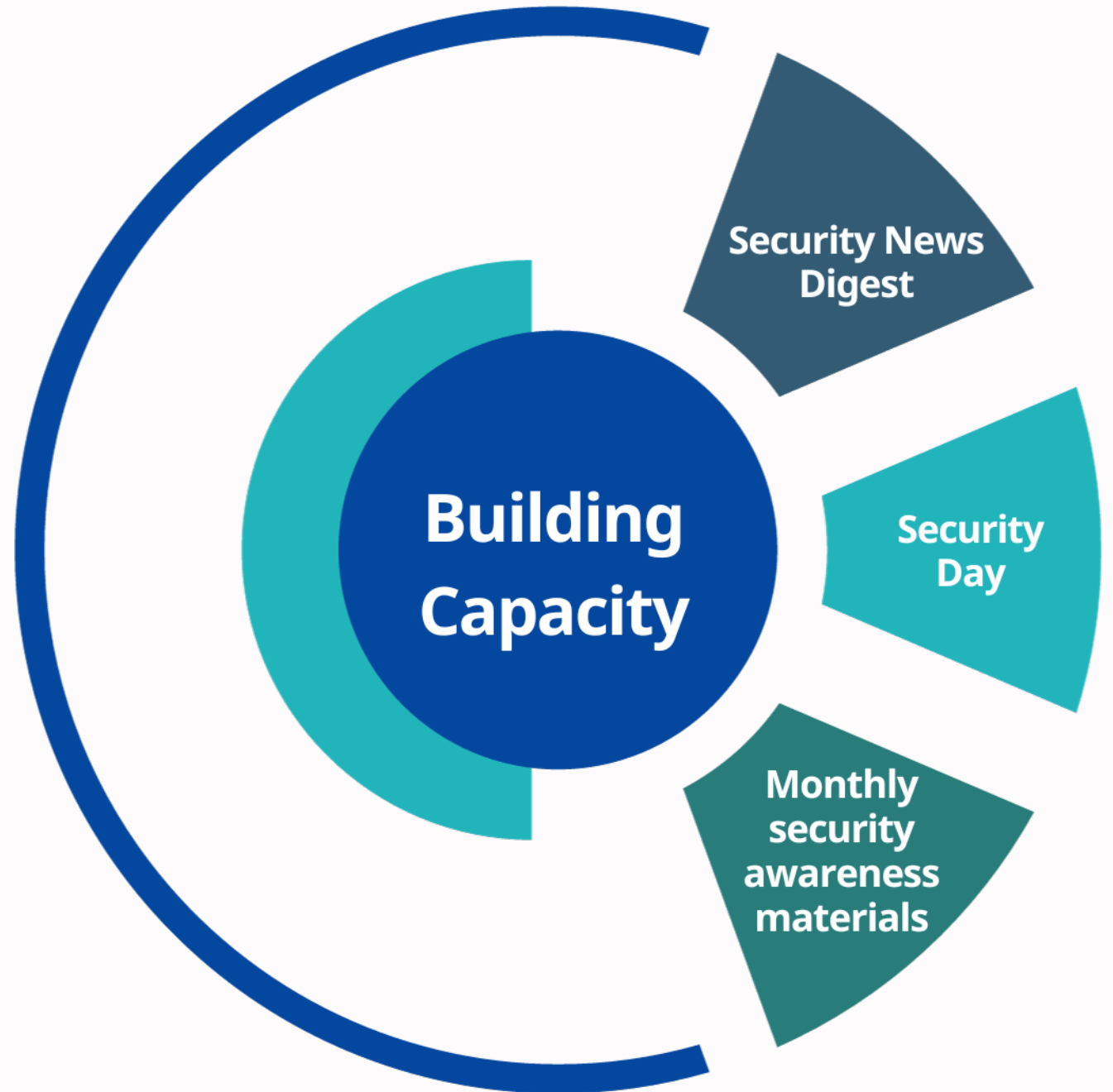
- Monthly newsletter
- Email notifications
- Virtual information sessions
- Connections to cybersecurity contacts

Cyber.BC@gov.bc.ca

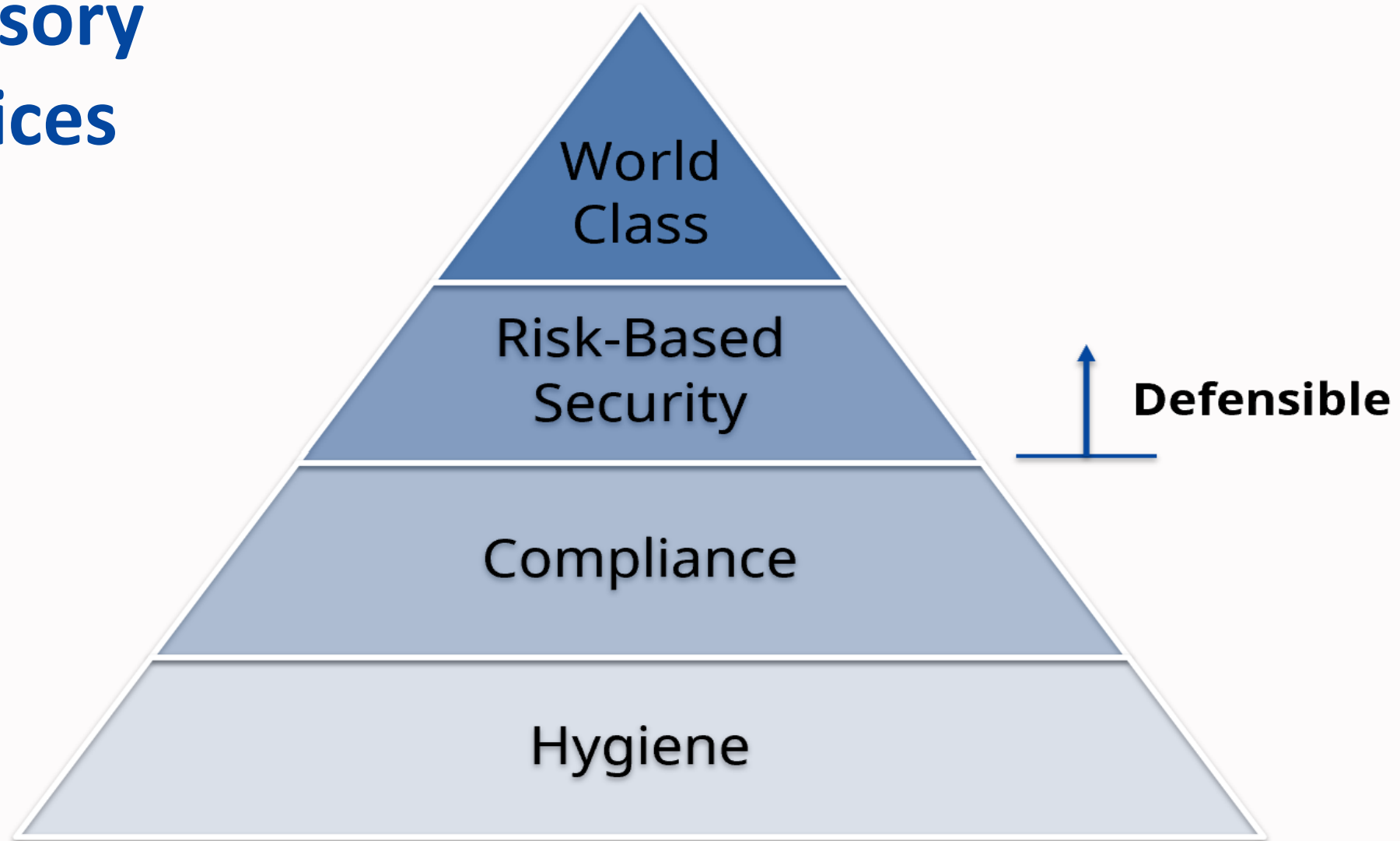


Building capacity

Learning from industry leaders,
building our community, and
increasing our skills and awareness



Advisory services

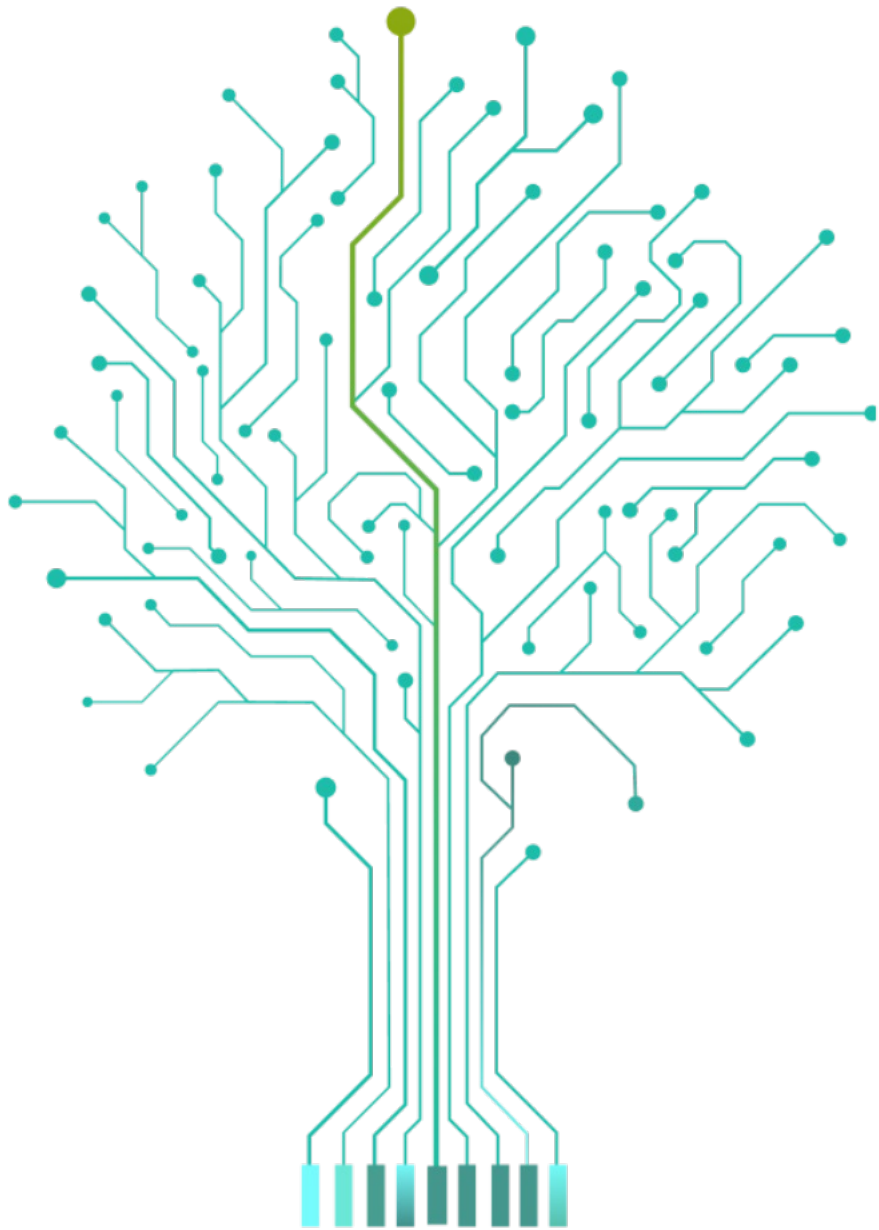


Connect with us at Cyber.BC@gov.bc.ca

Removing procurement barriers

- Access to specialized resources and talent through the BC Corporate Supply Arrangement (CSA) for IM/IT Security Services
- 12 cybersecurity related services CSAs
- Available to all local governments





Engaging with local governments to expand and modernize cybersecurity services

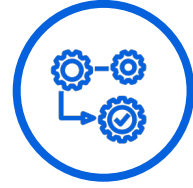
Engagement themes



Cybersecurity talent

Foster cybersecurity talent and engage the workforce

Create opportunities for people to build their cyber career



Public sector cybersecurity ecosystem

Build capacity and share intelligence and learning across B.C.'s public sector cybersecurity community

Create a partnership so we can support one another



Cybersecurity risk profile and awareness

Raise the profile of cybersecurity as a business risk within the public sector

Create a community to raise cybersecurity to a defensible level

Cybersecurity talent

Grow with Us:

- Cohort / community model
- Learning the basics of each of the cybersecurity domains
- Resume building project that each participant owns from start to finish
- Developing leadership, mentoring and public speaking skills



Cybersecurity talent

Issues and opportunities:



Talent shortage



Cyber career path

Cybersecurity ecosystem

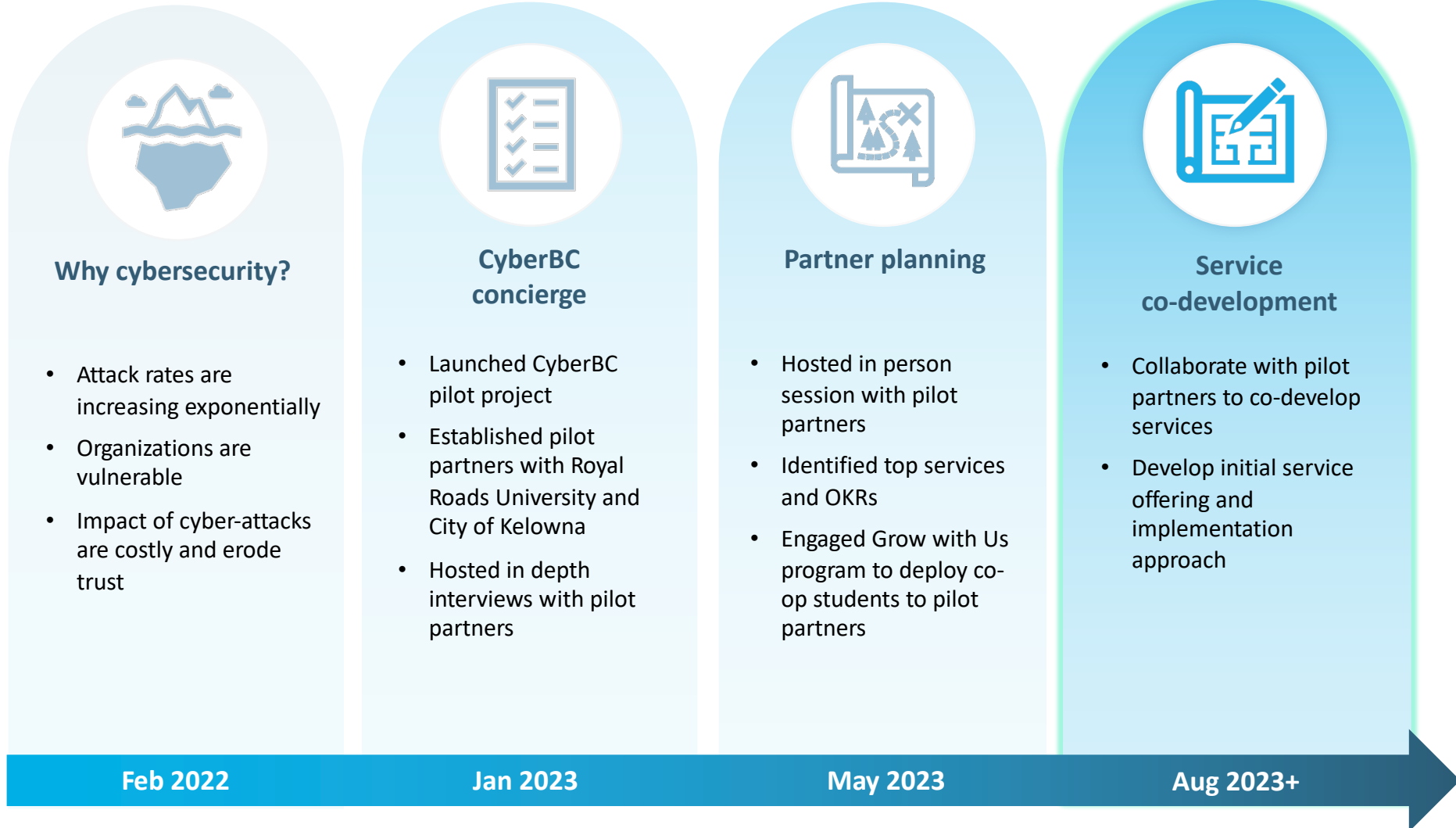
CyberBC pilot:

Partnership with the City of Kelowna and Royal Roads University

- Identify actions to meet their needs
- Co-develop prototype services/supports
- Iterative, user-centric, and collaborative approach
- Leverage lessons learned to inform scaling options



CyberBC project timeline

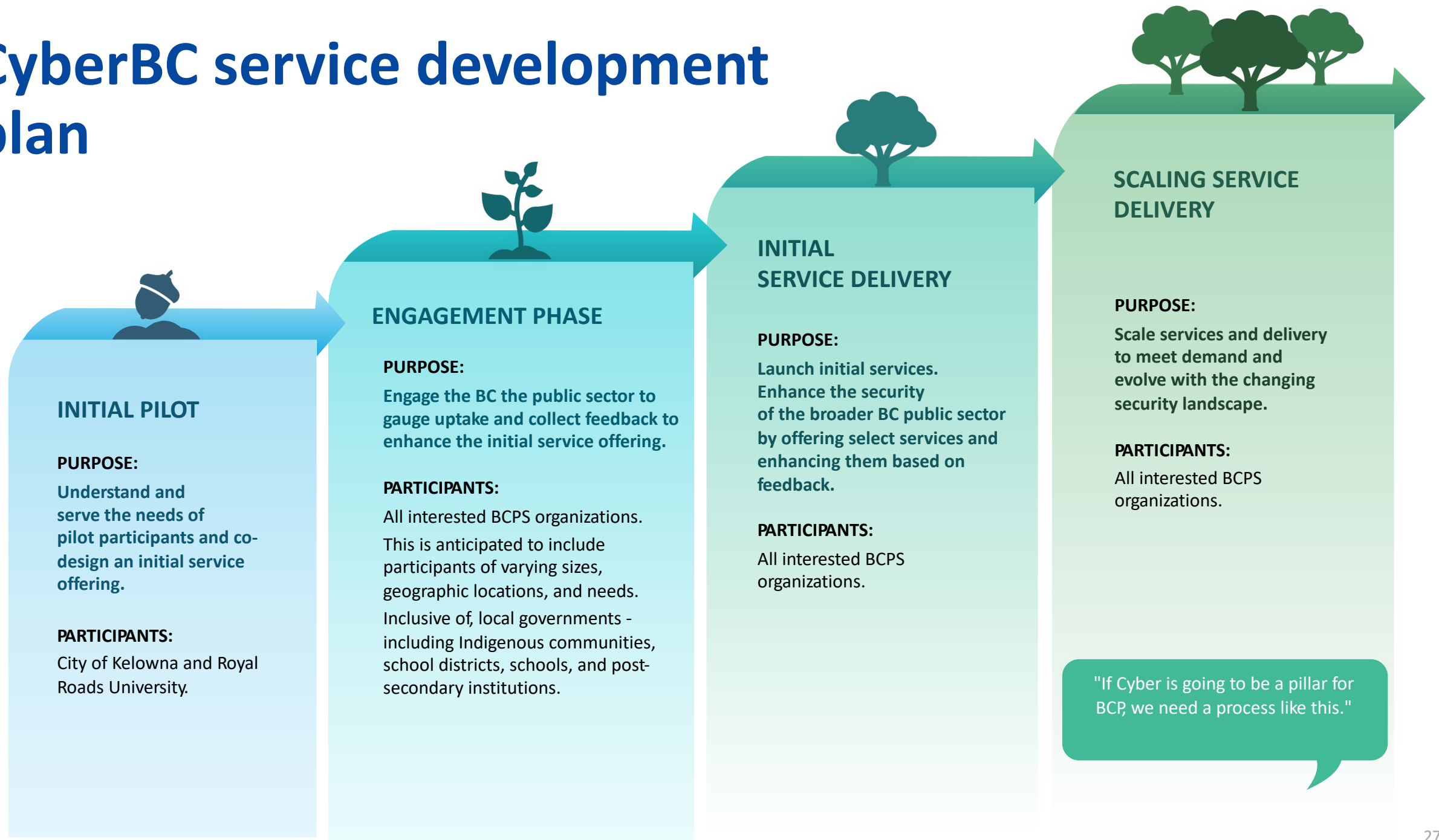


CyberBC pilot services

Our pilot partners have highlighted five areas where the OCIO can meaningfully bolster the BPS. We have collectively established objectives and key results (OKR's) to address and measure our progress against these joint priorities.

Priorities	Foundational Polices and Framework	STRAs & PIAs	Cloud Security	Collaborative Procurement	Incident Response Service
Objectives	Implement foundational policies, guiding principles and supporting standards	Establish a process to create and share STRAs and PIAs	Improve cloud security posture	Establish a common procurement platform for BPS to onboard security services	Establish defined services available to pilot partners
Key Results	<ul style="list-style-type: none"> • Agree on framework • Develop foundational Policies • Develop supporting standards 	<ul style="list-style-type: none"> • Provide training materials • Develop mechanism for the Province to share STRAs to the BC Public Sector • Develop mechanism to share STRA among BC Public Sector peers 	<ul style="list-style-type: none"> • Review and share existing best practices for cloud security • Support partners to leverage and implement a selection of provincial and federal solutions 	<ul style="list-style-type: none"> • Provide procurement training and guidance 	<ul style="list-style-type: none"> • Province to provide draft of service • Successful adoption by both partners
	DELIVERY TARGETED FOR FALL		DELIVERY TARGETED FOR WINTER		

CyberBC service development plan



CyberBC next steps

Summer 2023

- Deliver initial services to Royal Roads University and City of Kelowna
- Co-develop service lines

Fall 2023

- Co-develop implementation plan
- Formalize service agreements
- Begin BCPS engagement
- MVP delivery for initial services

Winter 2023

- Evaluation period; formalize OKRs, baselines, and onboard new clients

Spring 2024

- Expanded MVP service delivery and continuous service improvement

City of Kelowna



City of Kelowna

- City of Kelowna is the local government representative for B.C. on NCCIP (National CISO Committee on Information Protection)
- The City of Kelowna participated in the federal government's City Secure project and has built a Cyber Security Strategic Plan to address the findings
- OCIO has had a healthy ongoing working relationship with City of Kelowna on cybersecurity
- Information Services Director engaged with Province team for assistance in achieving goals of their strategic plan
- Impact to the City's Strategic to date has been positive
- Talent and cost of cyber is going up, is the biggest challenge
- Gearing up for AI!



What can cities do now?

- Base level of technology
- Focus on awareness training, policy and procedures
- Invest in Cybersecurity
- Engage CyberBC and Cyber Centre Canada

Let's keep the conversation going

Visit our UBCM booth #721 to:

- register for the Fall 2023 Security Day - **“AI: Are You Ready?”**
- sign up for our weekly Security News Digest
- learn more about our services and programs



Thank you!

Cyber.BC@gov.bc.ca