CORE PROJECT TEAM

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INTERNAL PROJECT ADVISORY GROUP

Resilience & Futures
Emerging IT
Smart Cities
Performance, Budgets and Reporting
Service Improvement
Innovation Lab

INTERNAL CRITICAL INFRASTRUCTURE SECTOR - TECHNICAL SMES
Infrastructure Services: Prevention focus (capital decisions)
Operational Excellence: Tactical Prevention, Mitigation, Preparedness, Response, Recovery
Resilience & Futures, and Community Strategies:
- Social Resilience & Equity, Trust, Community Relational Needs
Innovation Lab: Facilitation Spaces, Coordination, Change Management
Corporate Analytics & Innovation: Open Data, Integration of technology

ACADEMIC PARTNERS

Urban Alliance
⊕ University of Calgary
Engineering,
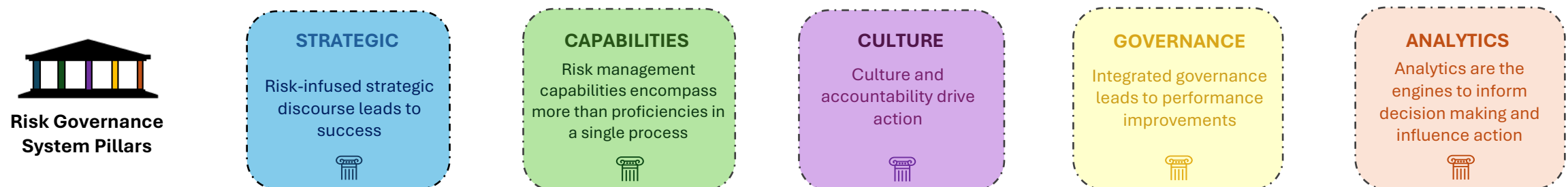Law,
Geology,
Urban Studies,
Architecture & Planning

Risk Implementation Skills Collective (RISC) Purpose

The objective of this program is to further the ERM RIMS Risk Maturity Pillars to move the City of Calgary's risk maturity score from a **2.9 (January 2025)** to the desired Advanced score of **4.0 (2027)**. By focusing on these areas, we can help the risk network quantify risk strategies to better support the risk owners. The pillars of the RIMS Risk Maturity model are **Strategy, Culture, Capabilities, Governance,** and **Analytics**.

Each pillar is vital to cohesive, systemic, and consistent risk governance within an organization's risk management practices. Examples of these practices that City of Calgary staff, cross-corporately, may have encountered in their service line delivery: service risk registers, service performance reviews and audits, operational resilience in the face of change and disruption, and strategic considerations for implementing policies that are investing in proactive risk-informed practices within our service delivery as a municipal government.

Figure 1 - RIMS Maturity Model Pillars (See RIMS for more information)

Risk Governance System Pillars

STRATEGIC — Risk-infused strategic discourse leads to success

CAPABILITIES — Risk management capabilities encompass more than proficiencies in a single process

CULTURE — Culture and accountability drive action

GOVERNANCE — Integrated governance leads to performance improvements

**ANALYTICS** — Analytics are the engines to inform decision making and influence action

This program strengthens the areas of practice identified via ERM's Risk Network and internal feedback. To do this, understanding the key interconnections between vital services that allow basic needs of our citizens to be readily met. This helps ground the risk management theory and **RIMs and Industry Standards of Practice** in Physical, Strategic, and Operational risk categories.

Forum Objective

Using ERM's Risk Survey, that draws from our cross-corporate Risk Network, this program will work to increase our collective score in the pillars of Risk Management Capabilities (**2.71**, weighted at **20%**), and Analytics (**2.85**, weighted at **12%**). Both areas are key realms where growth is needed to bolster these two areas' scores to match those of the other pillars in RIMS Risk Maturity model, captured in Figure 2:

Figure 2 – City of Calgary's chosen Risk Maturity model (See RIMS for more information)
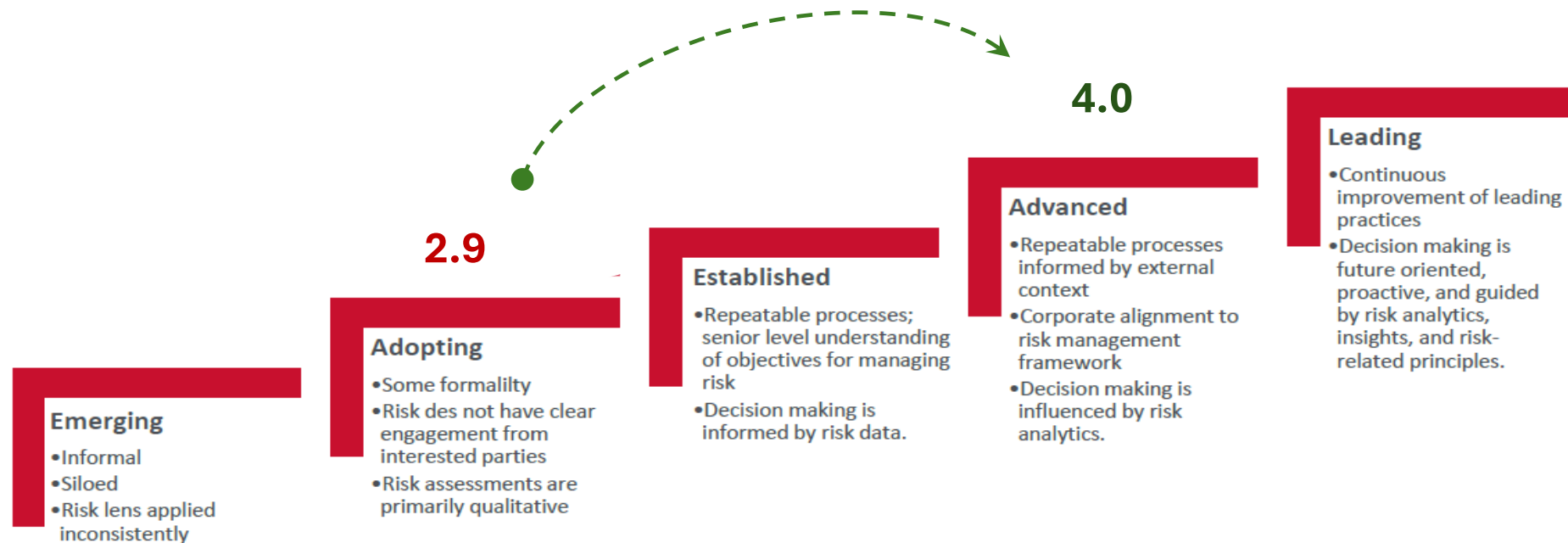
Areas of Focus

To support prioritization and decision-making in the program direction key service delivery needs for the public, partners, and other jurisdictions, a **Critical Infrastructure** lens is used. This lens helps to align with diverse scales of government, and coordinate priorities across scales and authorities. Public Safety Canada and internal Emergency Management urban system risk reduction best practices and policies are learning there is a need to understand better how to use design and systems' thinking strategies to reframe how infrastructure decisions can result in more sustainably resilient service for Calgarians. The methodologies that RISC is using are chosen specifically to removes siloes and interdisciplinary inefficiencies in existing processes by using risk-informed decision-making to ground in common needs and desired outcomes.

ISC: Unrestricted

What is Critical Infrastructure?

Critical Infrastructure are the urban systems that enable modern society to deliver an environment that can meet a densely populated jurisdiction. These infrastructure systems spread across multiple jurisdictional authorities and levels, public and private sectors, as well as international borders. This results in many of the decisions that are made to build and maintain these systems to be done with diverse disciplines involved often working within their respective silos and disciplines. The siloes exist, primarily, to manage the complexity of the interconnections and volume of unknowns. Recognizing that Critical Infrastructure operates much like an ecosystem that requires many interconnected functions to be working well to enable the urban environment to especially as the complexity of our modern world increases at exponential rates. Critical Infrastructure as defined by **Public Safety Canada** as:

"The processes, systems, facilities, technologies, networks, assets and services essential to the health, safety, security or economic well-being of Canadians and the effective functioning of government" - National Strategy for Critical Infrastructure, Page 4.

Scenarios will be driven by the risk owners, internal and external SMEs input, jurisdictional scans, case studies, grey and peer-reviewed literature from trusted agencies. The current themes for the design lab scenario design, and engagement scoping are priority Critical Infrastructure sectors. The sectors that are chosen are City of Calgary service lines that are seeing increased risk exposure and impacts in citizen quality of life via available feedback channels. These chosen sectors of focus are currently: **Food** (2024), **Transportation** (2025), **Water** (2026), and **Energy** (2027).

The team will observe and support internals in better understanding the problem and risks; and will guide the application of risk analysis practices to manage risks. Effective risk management implementations are mindful of the contextual and emerging risk drivers relevant to the scope of work. This project methodology works in step with the current council priorities, and needs identified by the risk owners, Calgary's Critical Infrastructure Network, University of Calgary SMEs, peer-reviewed and grey literature, internal identified parameters, and constraints.

The project will leverage findings to strategically bolster coordination that furthers our City of Calgary risk analytics and capabilities for the intended audience(s). These efforts will work help partners feel confident they are capable to undertake the necessary action(s) to mature and reinforce their risk governance within the local urban context to more effectively and efficiently to address Critical Infrastructure operational resiliency.

Frequently Asked Questions: Findings Report & Learnings

What will be included in the Design Lab report?

The summary report will be in a placemat format (see Appendix A), and will include:

- Executive Summary on the project and draw the connection it to the Food Resilience work;
- Methodology & Facilitation process that was used for the food design lab
- Considerations when applying this facilitation technique (advantages/benefits and Limitations/Impactions for Practice)
- Overall Findings
- References & Acknowledgements.

All outputs of the risk owners (e.g., indices, processes, tools, etc.) will remain under the authority of the relevant risk owners and local authorities for that sector. The project deliverables that will be shared via the communication channels are all coordinated in advance.

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What is the purpose of the report?

The purpose of the summary report is to connect back to our Enterprise Risk Management objectives for advancing the organization's risk maturity; in addition to showcasing the great work that all involved partners, Design Lab participants, and key identified SMEs for additional feedback. The report will be posted on the project website (in development), to make it readily available for the academic, private, and other public partners who would be interested in applying risk management practices to their work.

The Enterprise Risk Management team is mandated to help guide The City in managing our corporate risks, while also furthering The City's Risk Maturity and reaching an Advanced level by 2026. To achieve this mandate, we focus on **RIMS' five Risk Governance Pillars** (*Strategy, Culture, Capabilities, Governance,* and *Analytics*) to further the risk experience in The City. In this case, the summary report helps to improve risk capabilities in the organization and will share how to apply this facilitation/discussion technique to engage in problems/situations with diverse partners and priorities.

Who is the intended audience for the report?

Our collaborative partners are part of the audience of this report (i.e., including the students, university professors, or interested regional and rural jurisdictions) that are interested in applying risk management practices and approaches. All partners will be credited for participation, but they will be referenced at a high-level. The landing page will leverage this opportunity to direct internal and external visitors to the respective risk owners' Calgary.ca webpages. The focus is on the findings that ERM will share from a general risk-informed practitioner perspective. We will not be connecting this summary report to the other work that has been done by the specific sector risk owners and operators.

In the future we will share learnings with our risk network, distilled for our service line's area of focus. The observations will narrow in on the underlying risk discourse. The aim is to identify how internal risk owners and partners can apply and weave more mature risk analytics and capabilities in more accessible and useful ways. Each **Design Lab** provides a formal case study, for added rigor, of how the approach and facilitation in these containers can continue to strengthen.

Depending on the audience, what is the value in sharing it publicly vs. with specific partners?

We will share the project deliverables publicly in alignment with council priorities to be a leader, share our learnings with others to benefit, and build upon with their own insights. This applies a design thinking, and systems' lens that is mindful of the many scales of influence at play in our local critical infrastructure systems' risk exposure. The communications of key outputs will follow best practice for risk knowledge sharing in conjunction with relevant internal standards and lenses (e.g., equity). The primary objective of all communications related to this project is to champion the risk owners tackling their risk exposure internally, and build common understanding of risk management, within the context of how to navigate competing priorities, finite resources, and complex concepts.

How will risks that are relevant to sharing of the project findings report and learnings on a public platform be managed?

No major risks have been identified with sharing this information publicly. The project landing page will provide additional context focused on risk and mitigate limitations for technical and interconnections that could be sensitive or require additional consideration. Partners will also be asked to identify what risks, if any, that they may perceive. The project team will incorporate additional SME and cross-corporate feedback relevant to the scope into the communications planning.

The project landing page will contextualize the project, and subsequent findings, outputs, etc. We will engage all involved and contributing partners of the draft of the report via multiple circulations, depending, prior to any public release. We are working with our communications team and leadership to navigate this process and will engage other partners on the summary report prior to public release.

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