

Navigating AI: Emerging Issues for Local Government

Data Centres in Canada .

September 17,
2026



URBAN CLIMATE LEADERSHIP, A PROJECT OF  MakeWay

About Urban Climate Leadership

Urban Climate Leadership, a project of Makeway, supports local governments in tackling obstacles to equitable climate action.

Since 2024, UCL has been researching AI, climate, and cities, convening dialogues with affected stakeholders, and publishing resources on this topic.



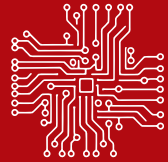
UCL's work so far:

- In late 2024, Urban Climate Leadership began researching and mapping the interactions between AI, cities, and climate in Canada and around the world
 - How is AI being used to support local climate work? What climate risks does it create?
 - How does AI infrastructure - i.e. data centres - interact with local government?
- UCL has convened 4 dialogues on AI, cities, and climate - including an April dialogue specific to data centres

What do data centres do?

Categorizing Data Centres by Workloads

Highest
Impact



AI Training Facilities: Large facilities that process large data sets over extended computing runs, characterized by the highest energy and cooling intensity due to continuous, demanding computational tasks.



Non-AI Hyperscale Centers: Very large and continuously operating facilities that are used for general cloud computing, storage, and enterprise workloads. Require significant, but less concentrated power needs than AI Training Facilities.



AI Inference Facilities: Smaller, distributed facilities that run optimized, pre-trained models for specific tasks. Require less power than training facilities and often need to be closer to users due to low latency requirements.

Lowest
Impact



Colocation Facilities: Multi-tenant sites with more variable energy load profiles and cooling needs. Feature the lowest relative intensity, housing diverse workloads.



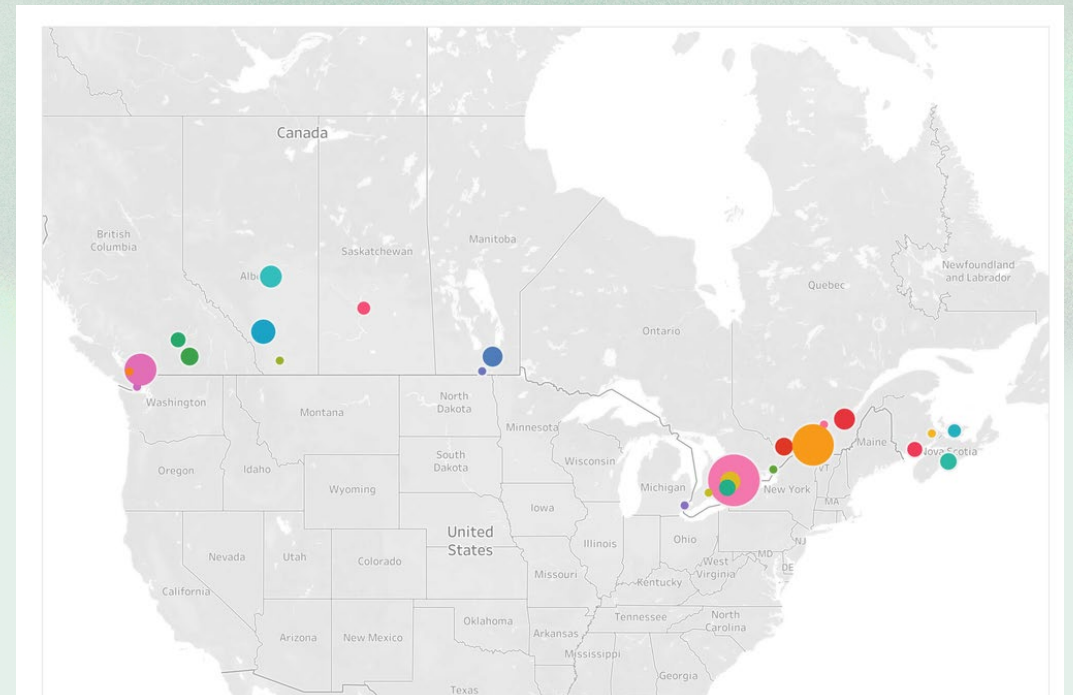
Canada's data centre landscape

As of April 2026, there were 5 Canadian data centres operational in the hyperscale range (at least 50 mw). There are 96 more in the announcement or construction stage.

Most of Canada's existing data centre capacity is Ontario, followed by BC and Quebec, but 90% of future capacity is planned for Alberta.

Federal Data Centre Principles on best practices and local benefits were released on September 3, 2026.

Figure 1: Data Centers in Canadian Cities



Fears are widespread about data centre impacts on Canada's water, environment: poll

By Anja Karadeglija • The Canadian Press
Posted July 18, 2026 7:52 am • 2 min read

Overall View on Building More AI Data Centres in Canada

Abacus Data • Canadian Public Opinion on Data Centres • March 2026

abacus
data

? As you may know, artificial intelligence (AI) systems rely on large data centres — facilities that house powerful computers and use significant amounts of electricity — to operate. Overall, do you think building more AI data centres in Canada is...

Overview

By Region

By Age & Education

By Vote

Methodology

38%

NET GOOD THING

9%

NEITHER

37%

NET BAD THING

15%

DON'T KNOW

12%

How do Canadians feel about AI?

AI Divide: Canadians worry technology will widen inequality

July 9, 2026 – Artificial intelligence is rapidly...

ANGUS REID INSTITUTE
Canada's Non-Profit Foundation Committed to Independent Research

ANGUS REID INSTITUTE
Canada's Non-Profit Foundation Committed to Independent Research

56%

Say AI is more likely to create inequality than equality in society

68%

Reject the idea that everyone has the same opportunity to benefit from AI

16%

Use AI several times a day, up from 10% in November 2025

67%

View AI negatively (43%) or critically (24%) overall



As the government's strategy acknowledges, Canadians' trust in AI is low even as compared to citizens in other countries. A study of 47 nations by KPMG and the University of Melbourne found that Canada ranked near the bottom when it came to trust in AI.

A Leger poll [released](#) last August found that 34 per cent of Canadians believed AI was good for society while 36 per cent believed it was harmful (the remainder were unsure). According to a [survey](#) by Abacus Data in 2025, 43 per cent of Canadians were concerned about AI being used for malicious purposes, 42 per cent were worried about the spread of misinformation and 38 per cent were concerned about a loss of privacy.



Why should local governments be interested?

UCL's dialogues and research have surfaced the following:

- Perceived opportunities associated with data centre development:
 - Tax revenue, job creation, community benefit potential, regional economic development and partnership, and waste heat recovery and re-use
- Perceived risks:
 - Water and wastewater system pressure, electrical demand and utility affordability, noise concerns, air quality problems, and land use conflict.



How do data centres use water?

Data centres use water in two ways: on-site operational use, usually connected to cooling, and in the production of the electricity needed to power them.

- Although cooling accounts for a significant portion of water use, the IEA estimates that indirect water usage accounts for more than 60% of the total (April, 2025)
- Researchers have estimated that by 2028, data centres' indirect water footprint - water consumed by power production and construction - could double.
- Closed-loop cooling uses less water than evaporative cooling, but more electricity - and both types of cooling may have operational implications for municipal water and waste-water systems.



How do data centres use energy?

AI data centres run continuously and have high power demands.

- According to the IEA, electricity consumption from data centres is set to double by 2030, and power use from those focused on AI is poised to triple.
- In some communities, notably in the United States, data centre energy demand has contributed to grid constraints and utility bill spikes as high as 300% in one year
- Many jurisdictions lack legislation requiring data centres to pay for infrastructure and transmission upgrades connected to their projects, which places pressure on utilities.
- Grid pressures are causing AI data centres to build their own power plants, and in some cases, their own micro-grids, or behind-the-meter power.



Data centres and ‘behind-the-meter’ power

Behind-the-meter power is non-grid power generated to support data centres constant demand:

- In Canada, behind-the-meter power generation is increasingly common - especially in Alberta, where ‘bring your own power’ has been legislated as part of Bill 8
- 68% of data centres proposed in Alberta identify on-site gas-powered generation as a partial or complete power source for their projects (2024 data), and projects from New Brunswick to Saskatchewan plan to use on-site power generation
- Meta’s data centre planned for Sturgeon County, AB will require as much power as a city two-thirds the size of Calgary - and its massive LNG demands may spike utility costs by up to \$460 for Alberta residents.
- Behind-the-meter power can create land use challenges for municipalities because of noise, scale, and emissions.



BC Context

- Industrial Electricity Allocation Framework
 - Under this framework, the Province will require BC Hydro to use a competitive selection process during a two-year window to assess AI, data centre, and hydrogen for export projects of 10 MW or larger.
 - Projects selected through this process are able to advance into BC Hydro's interconnection process
- Moratoria or restrictions being discussed in communities like Vancouver and the Regional District of Kootenay Boundary
- Prince George and Mackenzie elected officials are calling for tax reforms that would tax data centres at a higher rate based on their impacts



What should local governments be asking?

- Does your community have policies in place - like land use and zoning definitions, design guidelines, or overlay districts - that would apply to hyperscale data centre applications?
- Has your community discussed end of life-cycle processes or responsibilities, including brownfield remediation, in the context of data centres?
- What kinds of tax abatements and incentives are in place for new commercial developments - both from the city, and how might these impact the property tax revenue from a data centre?
- If a proponent identifies new infrastructure needs (i.e. watermains, natural gas pipelines, energy transmission, or roads) to support the facility, would these be paid for by the proponent? The municipality/utility? Or both?
- Does your community have a community benefit framework that would require investments in local jobs, people, and infrastructure?



What can local governments do?

- Ask your administration to review policies, zoning definitions, and bylaws that might apply to data centre applications:
 - Land use definitions for hyperscale data centres
 - Noise pollution
 - Air quality
 - Accepted 'behind-the-meter' power production
 - Water use and wastewater needs
- Consider developing a public engagement policy respecting data centres.
- Engage with regional and provincial partners to better understand regional water and wastewater needs, grid capacity, and regional economic development planning.

Thank You

for your time and
attention!



COMMON GOOD

UBCM
2026



AI and Local Decision-Making: Risks, Opportunities, and Responsible Use

Ryan Smith

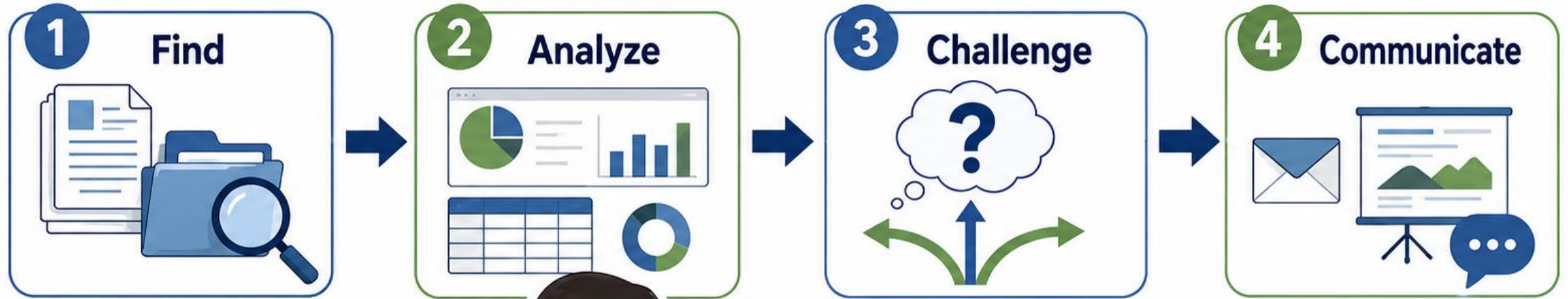
September 16, 2026



By a show of hands, how many of you are using AI today—not just experimenting with it, but in ways that are materially improving your own productivity and your organization's performance?

AI as a Planning Productivity Tool

Supports professional judgment — does not replace it



Best use case: processing information faster so planners can spend more time on judgment.

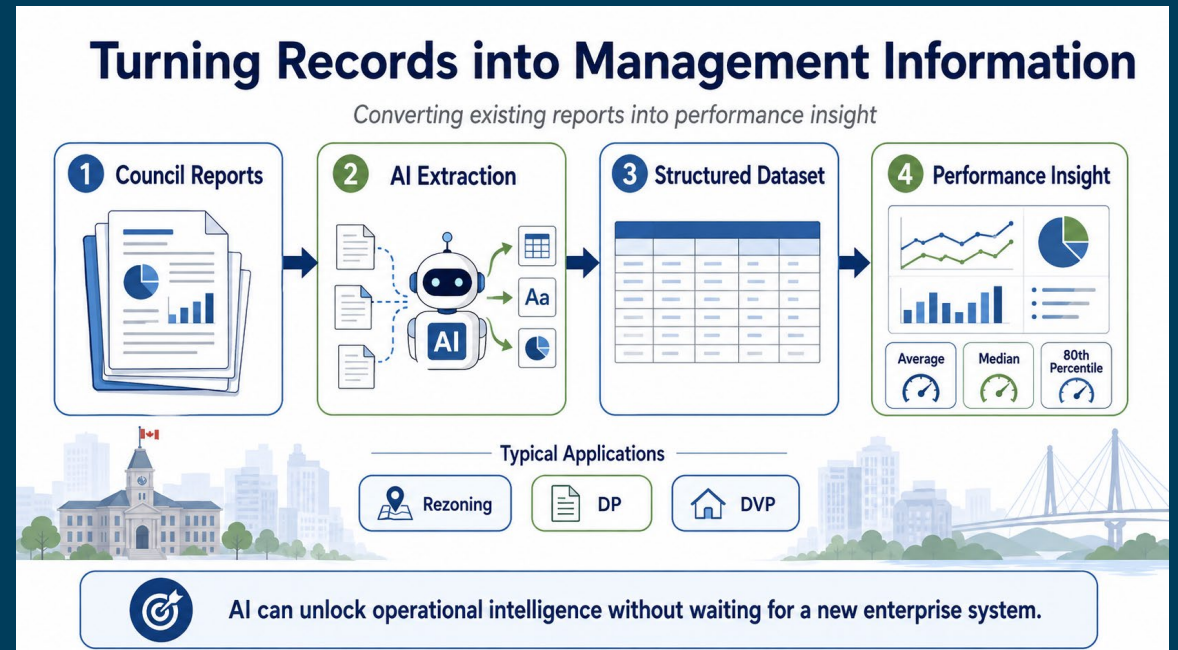


Turning municipal records into management information

I recently took years of Council reports (from the Planning Department) and used AI to extract:

- application type;
- application acceptance date;
- Council decision date;
- business days to Council;
- average;
- median;
- 80th percentile;
- trends by application type.

Council reports → AI extraction → structured dataset → performance insight

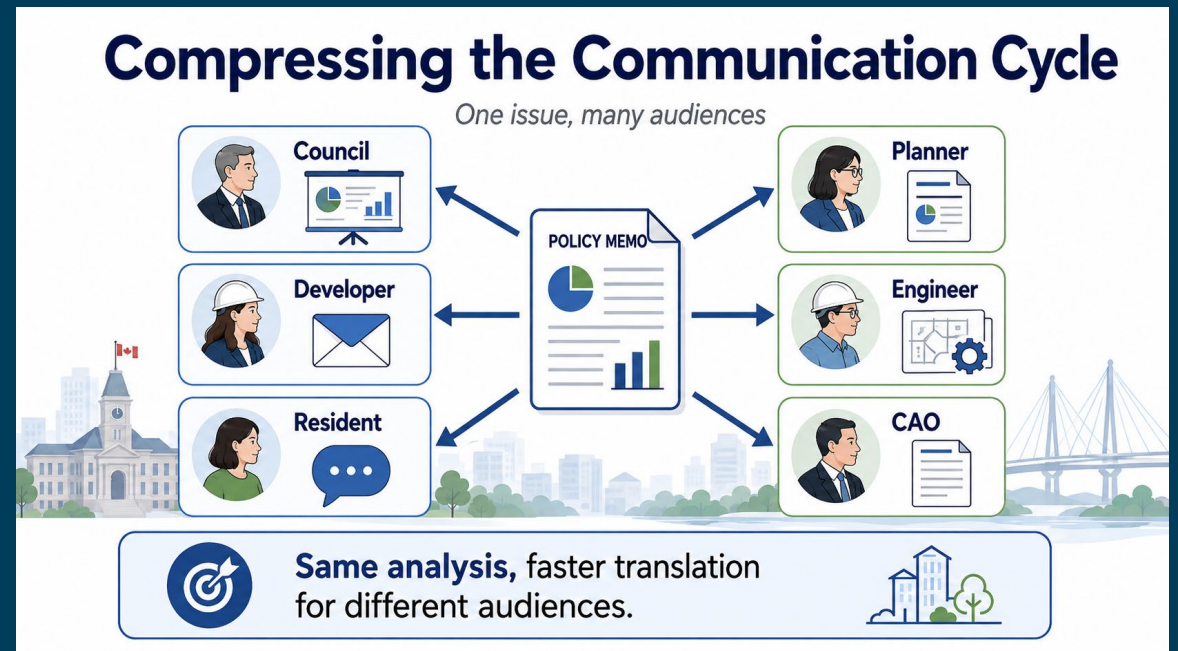


A second set of eyes on complex planning problems – Constructive Challenger

- zoning definitions and interpretation;
 - provincial housing legislation versus municipal bylaws;
 - building code changes such as single-egress stair buildings;
 - engineering requirements imposed through development approvals;
 - DCCs, transportation infrastructure and servicing requirements.
- *"Argue the other side."*
 - *"What assumptions are we making?"*
 - *"What precedent would this create?"*
 - *"What other municipal functions would be affected if we adopt this position?"*

Compressing the communication cycle

- Council → developer → resident → planner → engineer → CAO
- *Council briefing material;*
- *technical staff direction;*
- *developer correspondence;*
- *public-facing explanations;*
- *executive summaries;*
- *presentation material.*

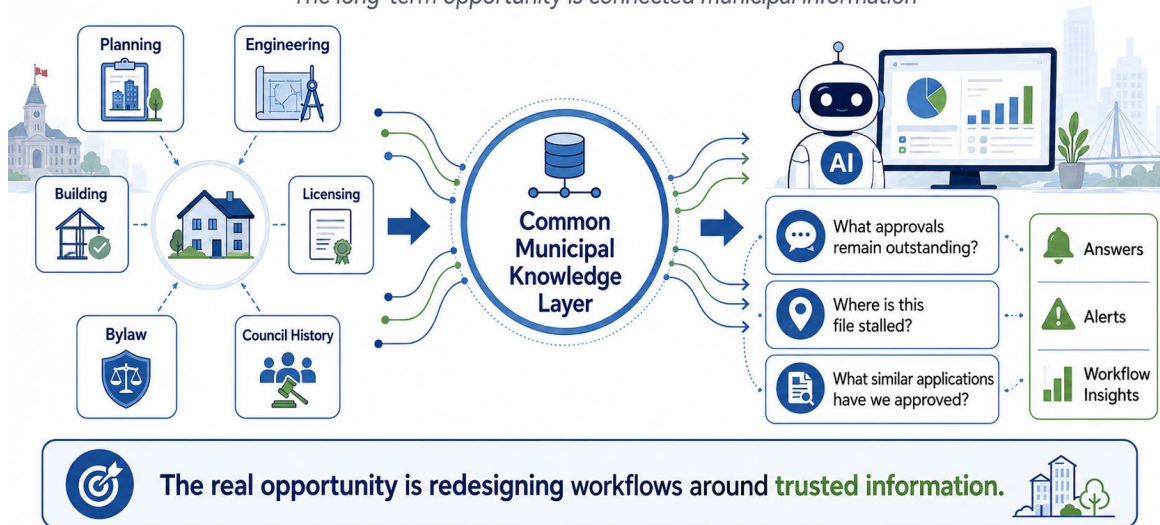


The next frontier – Municipal Streamlining

- A common municipal knowledge layer

From Productivity to System Transformation

The long-term opportunity is connected municipal information



- What approvals remain outstanding on this property?
- Does this building permit conflict with an unresolved planning condition?
- What similar applications have we approved?
- What servicing requirements were imposed previously?
- Where is this application stalled?
- Which applications are approaching service-standard thresholds?
- Draft the first version of the Council report using the actual file record.
- Compare this civil submission against the City's servicing standards.

Responsible Use

- Organizations should have policies related to the responsible use of AI
- Ethics and accountability implications of not using the tools and information now readily available



Acceptable Use Policy

Information & Technology Resources

April 13 2016

PURPOSE

To define the acceptable use of City of Kelowna Information and Technology Resources for all users.

DEFINITIONS

Information & Technology Resources are all computer and communication facilities owned, leased, operated, contracted or provided by the City of Kelowna that are used to store, process and transmit data and information and include, but are not limited to: computers, computer hardware and equipment including mobile computing and/or communication devices such as laptops, smartphones, cell phones, cellular modems and tablets and any other mobile device; storage media such as CDs, USB memory sticks, archival systems, hard drives, and portable hard drives; communications gateways and networks including internet and intranet access, modems, servers, local and wide area and Wi-Fi communication networks; telephone and other voice systems including voicemail; printers, Multifunction Printers (MFP's), fax machines, scanners; all software, including software running on both desktops business applications and database systems; office automation tools and electronic mail (e-mail); social media accounts and other accounts.

Users include, but are not limited to, City employees, vendors, contractors, consultants and any other individuals who have access to or use the City's Information & Technology Resources.

Incidental personal use is any minor non-work related use on non-work time of the City's Information & Technology Resources by a User that **does not**:

- incur the City any unauthorized additional cost;
- interfere with work performance;
- expose the City to risk;
- contribute to unauthorized activity;
- violate the City's Code of Ethics or No Discrimination, Harassment or Bullying Policy; or
- contribute to the commercial or personal profit of the User or others.

Mobile communication devices are portable communication devices that use a combination of hardware, software, and wireless network carrier connectivity to deliver voice and/or data transfer capabilities to the user. This includes mobile computing and/or communication devices such as laptops, smartphones, cell phones, cellular modems and tablets and any other mobile devices.

POLICY SCOPE

This policy applies to all Users and all City Information & Technology Resources, whether individually controlled or shared, stand-alone or networked including Mobile communication devices.



AI doesn't fix a bad process. It can make the bad process easier to see and understand...



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2026



The Rural Coordination Centre of BC

In appreciation of our speakers today and with thanks for your contribution, UBCM has made a donation to the Rural Coordination Centre of BC. Since their inception in 2007, RCCBC has grown into a network of hundreds of people - rural physicians and other healthcare providers, healthcare administrators, community members, policymakers, educators, researchers, and non-profit and business leaders – guided by the principles of cultural safety and humility.