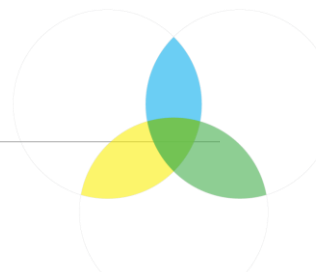


Kim Fowler M.Sc., MCIP

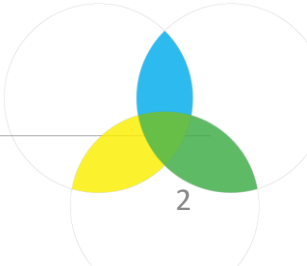
The Emperors Have No Clothes: How Do We Build Housing without Infrastructure?

AMBC Conference
November 6, 2025



The Emperors

Canada 



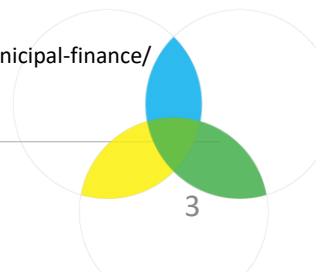
Risk

The **fiscal health** of cities in Canada comes at the expense of their overall health: municipal infrastructure assets have been deteriorating, and the quality of services is declining.

We said this 10 years ago and the situation worsens each year.

We have also repeatedly argued that cities need access to other revenue sources, such as income and sales taxes.*

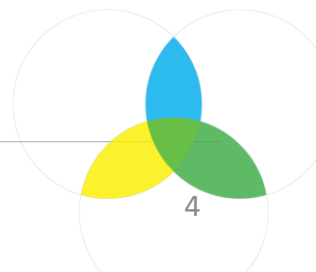
*Enid Slack, [Reflections on Municipal Finance over Two Decades and Thoughts for the Future – IMFG](https://imfg.org/essay/reflections-on-municipal-finance/) <https://imfg.org/essay/reflections-on-municipal-finance/>



Are Canadian cities fiscally sustainable?

“Toronto’s fiscal condition can be likened to the health of an aging Maple Leafs defenceman: he may be a solid performer on the ice and well cared for by training staff, but he is increasingly expensive and in need of major knee surgery. In other words, the City’s fiscal health is sound by most measures, but it faces cost pressures and its aging infrastructure and investment needs present a huge financial challenge.”*

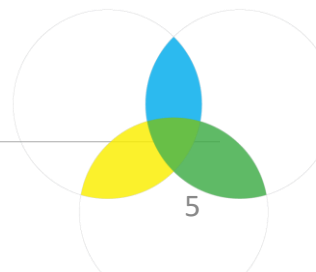
*Enid Slack and André Côté, [*Is Toronto Fiscally Healthy?*](#) IMFG Perspectives Paper No. 7, 2014, p. 19



Not Minding The Gap

- City of Toronto – infrastructure maintenance budgeted for next 10 years is \$14 million/year but \$40 billion needed to maintain existing service levels
- Falling behind on state of good repair is the least justifiable government screwup. It has big consequences, and there's no real excuse for it. There just isn't. Take care of your stuff.
- It's appalling. It is making us poorer and our lives worse. There is no excuse. Yet here we are.

*Matt Gurney, [We aren't taking care of our infrastructure — and it's not just a Toronto problem | TVO Today](#), TVO Today, May 16, 2024.

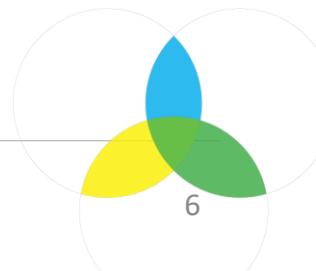


Horse/House before the Cart

“Municipal infrastructure is a prerequisite to building more housing,” said Scott Pearce, Mayor of Gore, Que. and FCM President.

“We cannot build new housing without putting in place the municipal water, wastewater, transportation and community infrastructure that provides the critical foundation for Canadians’ quality of life.”*

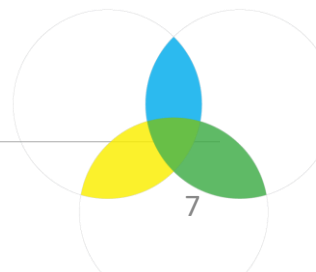
*Sean Meyer, [Canada’s housing battle is also an infrastructure challenge](https://www.municipalworld.com/feature-story/housing-infrastructure-challenge/), Municipal World, Jan 2024, <https://www.municipalworld.com/feature-story/housing-infrastructure-challenge/>



What We Heard: Planning for Canada's First NIA

While local governments build and maintain roughly 60% of Canada's core public infrastructure, they have access to a limited share of public revenue. In many jurisdictions, this constrains their ability to plan proactively, absorb financial risks and incur debt to finance long-term infrastructure investments. As a result, many communities rely on property taxes and development charges, which can make the business case for constructing new housing difficult and, in some cases, unfeasible.*

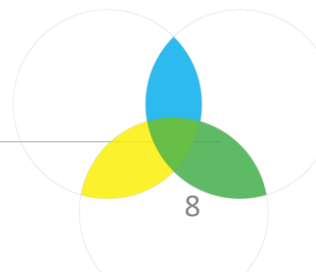
*Canadian Infrastructure Council, [What We Heard: Planning for Canada's first National Infrastructure Assessment](#), 2025.



State of Clean Water and Sanitation Systems in Canada in 2025*

- **\$963 billion** - replacement value of all drinking water, wastewater, and stormwater assets in 2022
- **\$107 billion** - assets in poor or very poor condition, which are at risk of failure in the near-term with an additional \$109 billion of assets had an unknown condition rating.
- In 2020, the majority of municipalities were using Asset Management Plans to oversee their drinking water and wastewater services.

*Canadian Infrastructure Council, [State of Clean Water and Sanitation Systems in Canada: 2025 Technical Paper](#)



Poor Infrastructure Condition & Funding

CANADA'S INFRASTRUCTURE IS VULNERABLE

The poor state of Canada's aging infrastructure leaves all levels of government, especially municipalities, particularly vulnerable to the impacts of extreme weather events.² The increased risks of failure caused by climate change heightens the urgency for new or updated infrastructure.

~60% Amount of Canada's core public infrastructure owned/maintained by municipal governments³

35% Amount of municipal infrastructure in fair, poor or very poor condition⁴

CRITICAL PUBLIC INFRASTRUCTURE⁵



LAND
TRANSPORTATION



BUILDINGS



WASTEWATER
MANAGEMENT



MARINE
INFRASTRUCTURE



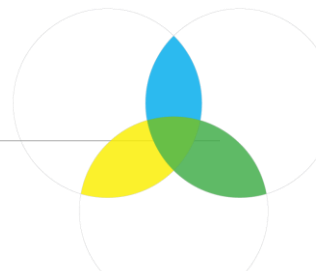
WATER
RESOURCES

- **5.8 million houses** are needed by 2030 to return to 2004 affordability levels (CMHC) - 3.5 million above the 2.3 million units projected based on current construction rates
- FCM determined a housing unit requires an average investment of **\$107,000** in municipally-owned capital assets for a total of over **\$600 billion in infrastructure funding** needed to service the needed housing²
- **\$1.4 trillion** needed to address current and future infrastructure needs³

Sources: *Canadian Infrastructure Report Card 2019*, canadianinfrastructure.ca¹

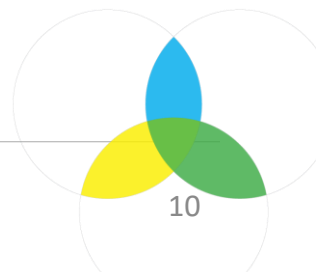
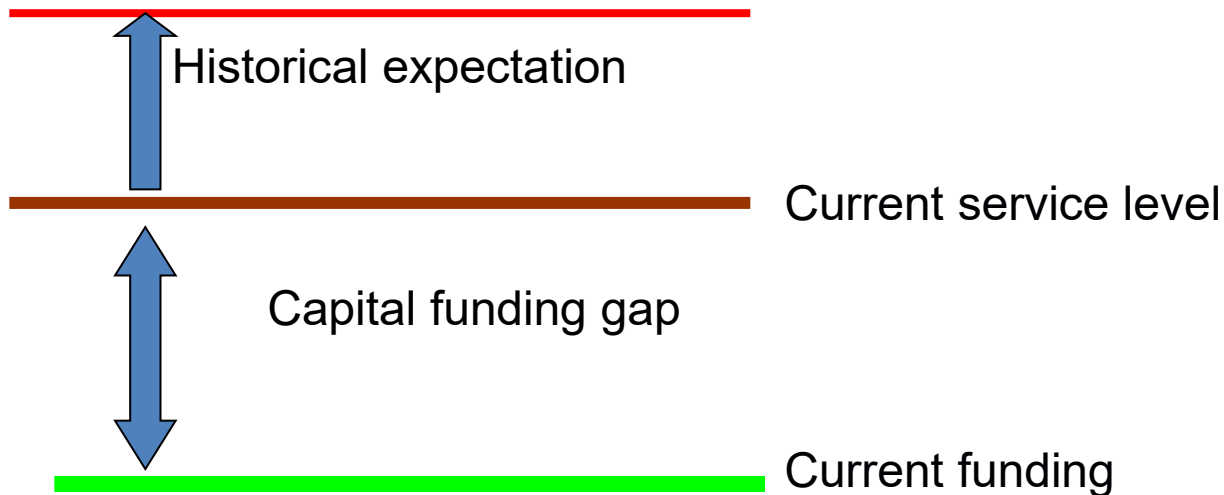
New research: *Canada's housing challenge is also an infrastructure challenge*, Federation of Canadian Municipalities, November 23, 2023²

Brett Forester, *\$349B needed now to close infrastructure gap by 2030, Assembly of First Nations says in report*, Apr 09, 2024, <https://www.cbc.ca/news/indigenous/afn-infrastructure-gap-estimate-report-1.7167220News>³



Debt Financing & Community Expectations

- Local government owns ~60% essential infrastructure funded by only 8 cents of tax pie & property tax based
- Several generations raised on debt financing of major social benefits – status quo isn't an option
- Citizens demand services but don't want to pay (and haven't fully paid) for them



Climate Change Trends

- Increasing frequency and intensity of extreme weather events creating more uncertainty
 - Extreme rainfall, prolonged drought and wildfire risk
 - Managing longer gradual changes (e.g. sea level rise)



More days **above 25°C** and more nights **above 16°C**



Longer, hotter, and more frequent **heat waves**



Less rainfall and longer dry spells in the summer

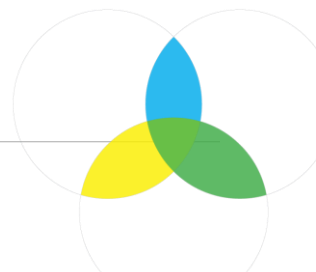
Less annual **snowfall**



More precipitation in the fall, winter, and spring



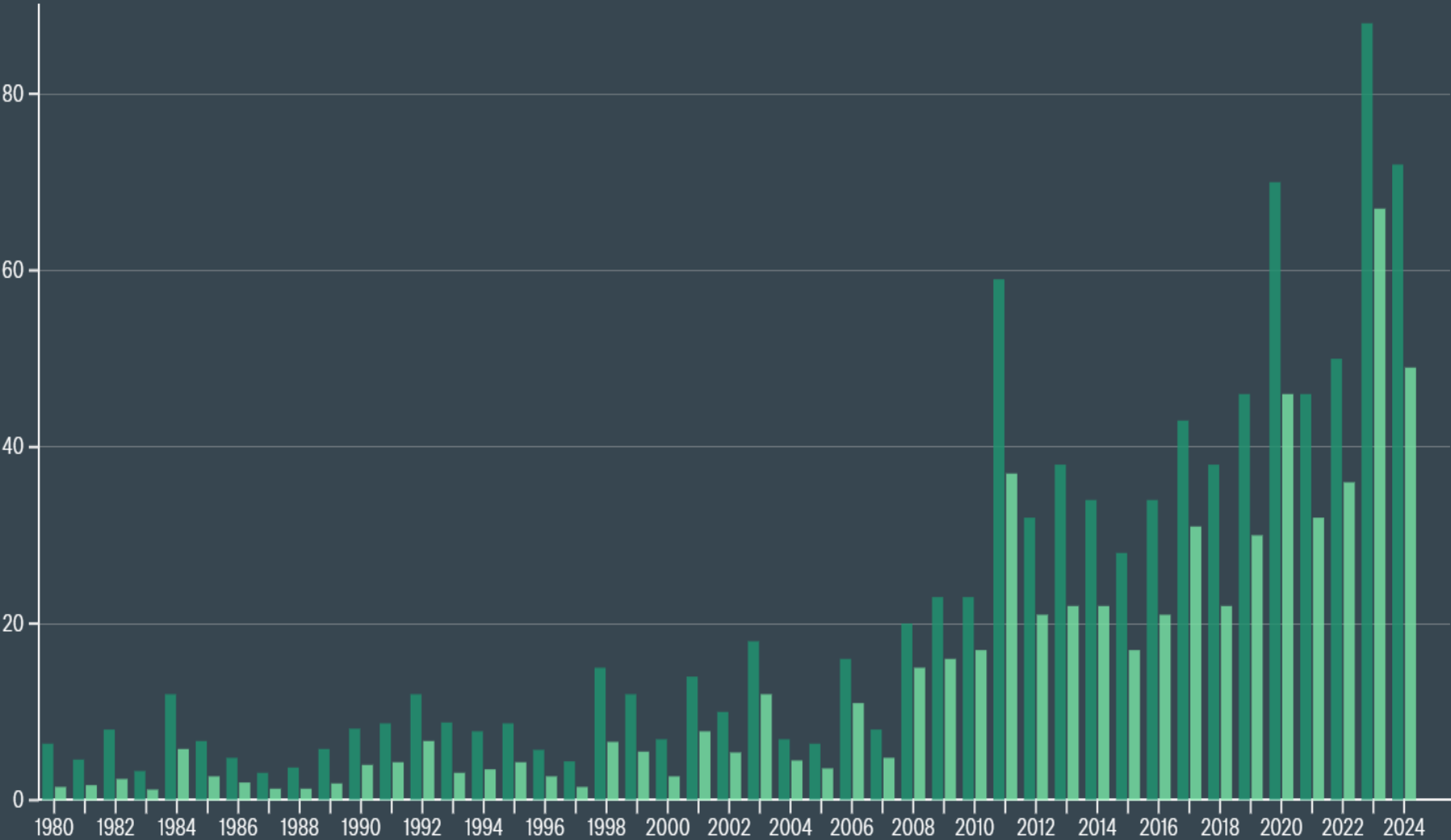
Larger amounts of rainfall occurring **in a single day**



Global losses from severe convective storms 1980-2024

(in US\$ bn, inflation-adjusted)

Overall losses Insured losses

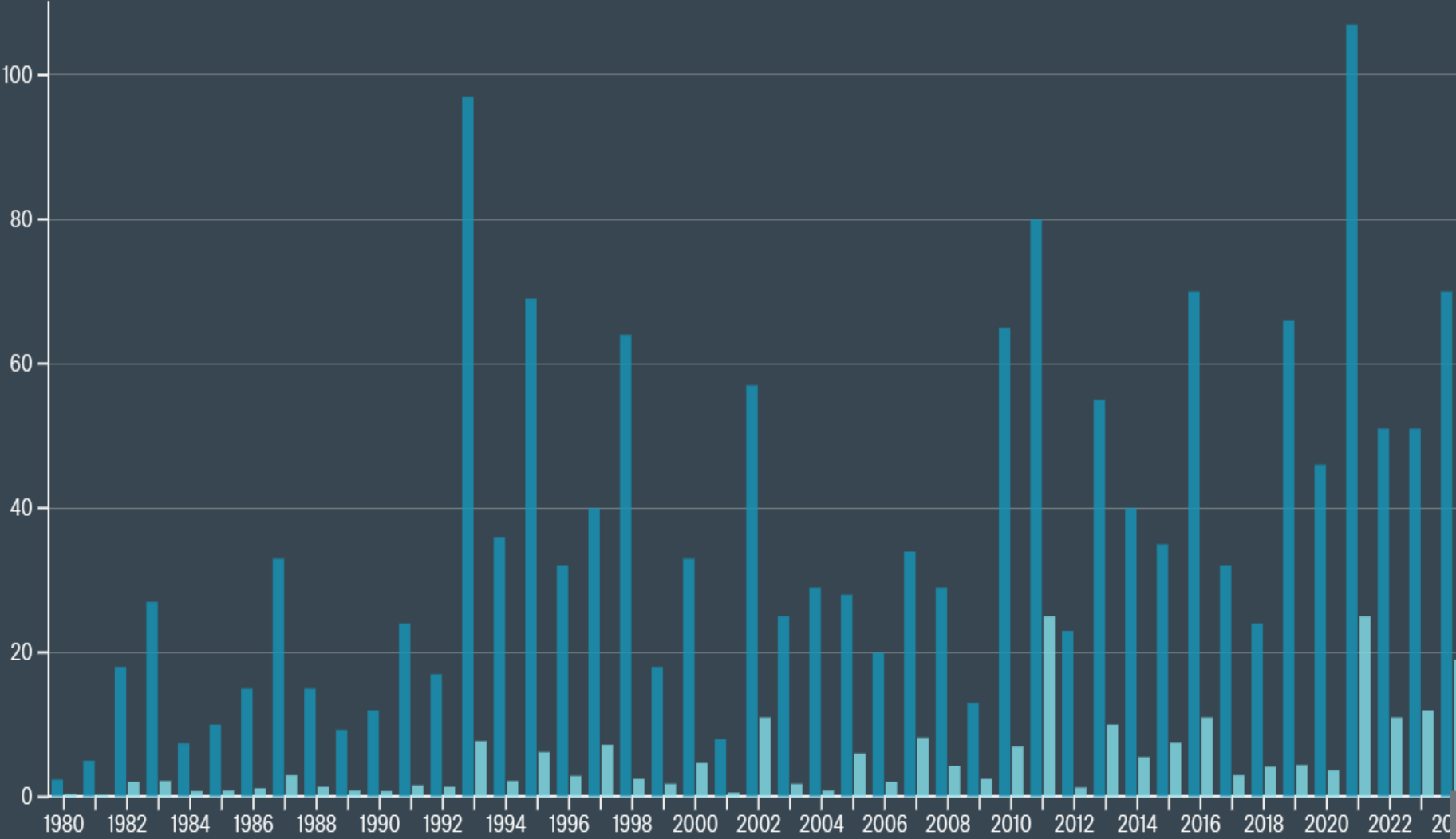


Source: Munich Re, NatCatSERVICE, May 2025

Global losses from floods 1980-2024

(in US\$ bn, inflation-adjusted)

Overall losses Insured losses

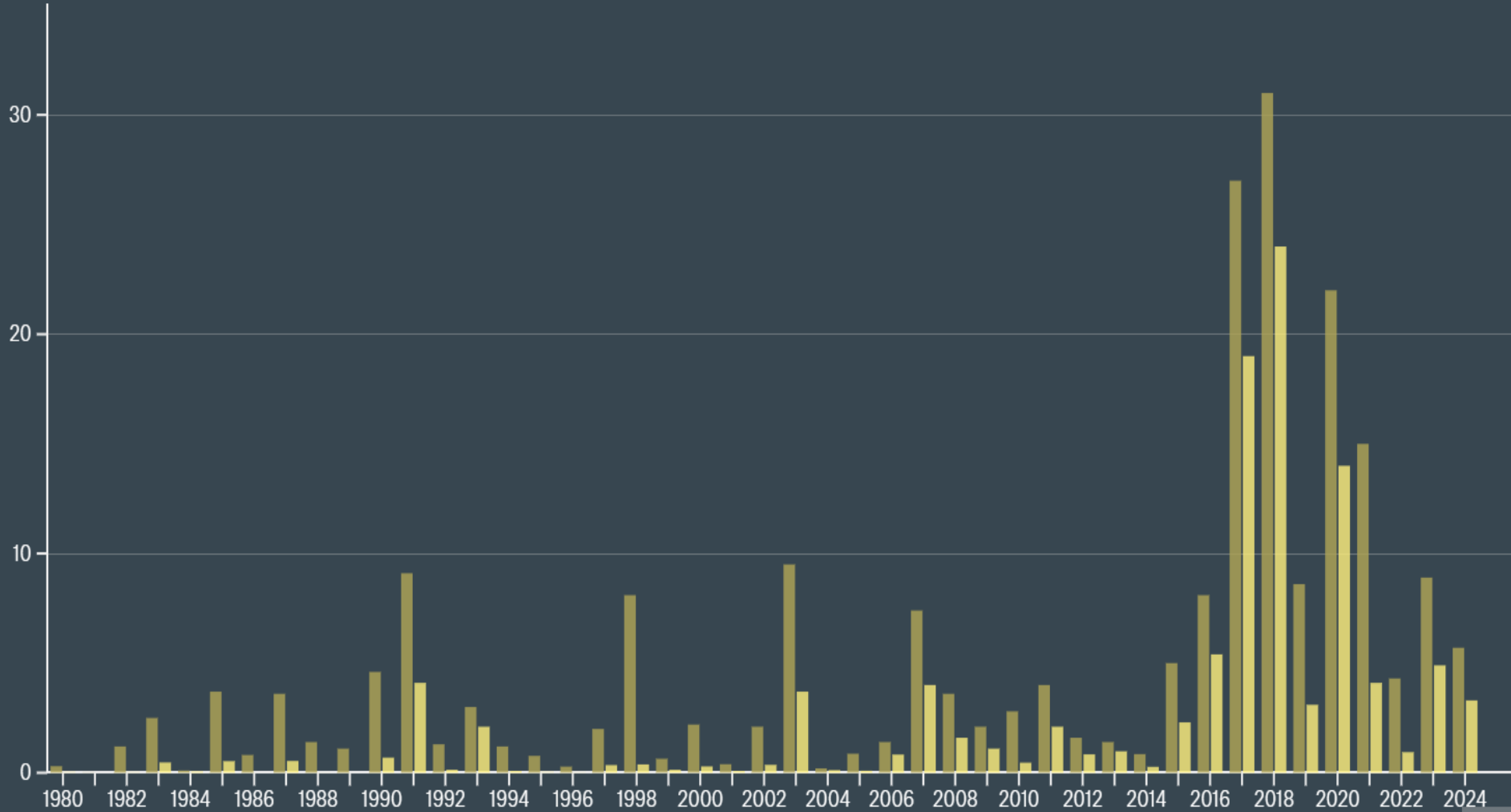


Source: Munich Re, NatCatSERVICE, May 2025

Wildfire losses worldwide 1980-2024

(in US\$ bn, inflation-adjusted)

Overall losses Insured losses



Source: Munich Re, NatCatSERVICE, May 2025



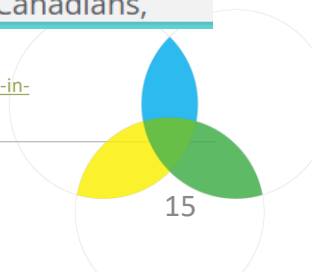
Canada's Top 10 Highest Insured Severe-Weather Loss Years on Record (loss and adjusted expenses in 2022 dollars)

Rank	Year	Total loss (\$ billion)	Notable severe weather events
1	2016	5.96	Fort McMurray, Alberta, fire
2	2013	3.87	Alberta floods; Greater Toronto Area (GTA) floods; December GTA ice storm
3	2022	3.4	Multiple events
4	2023	3.13	Okanagan and Shuswap, BC, area wildfires; Nova Scotia flooding
5	1998	2.83	Quebec ice storm
6	2021	2.48	Calgary hailstorm; British Columbia floods
7	2020	2.46	Fort McMurray flood; Calgary hailstorm
8	2018	2.40	Multiple events: Ontario and Quebec rainstorms and windstorms
9	2011	1.97	Slave Lake, Alberta, fire and windstorm
10	2012	1.65	Calgary rainstorm

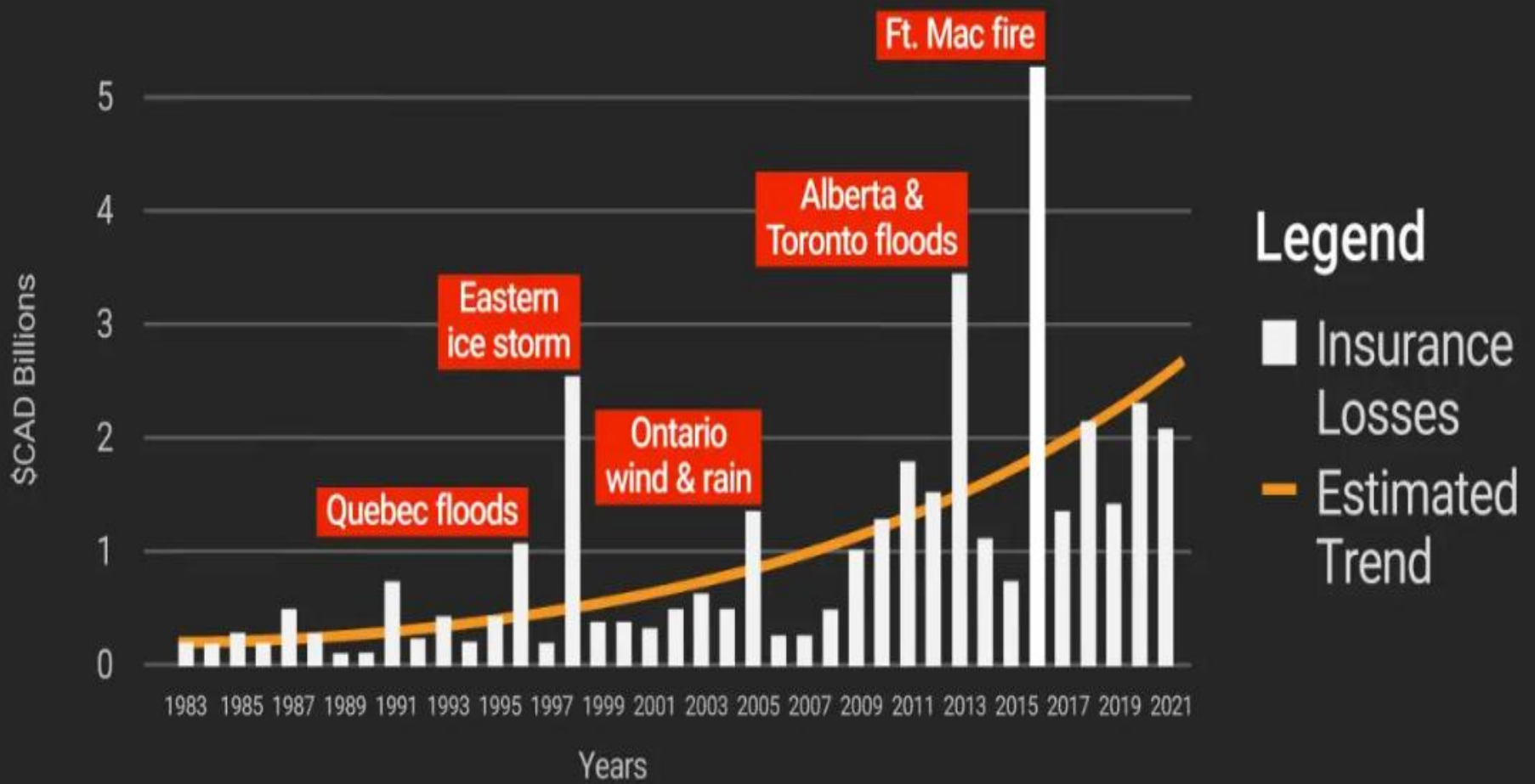
Sources 1983–2007: IBC, PCS Canada, Swiss Re, Deloitte. 2008–2021: CatIQ

"The increasing frequency and severity of climate-related disasters should be of concern to all Canadians,

*Insurance Bureau of Canada, Severe Weather in 2023 Caused Over \$3.1 Billion in Insured Damage, Jan 8 2024, <https://www.ibc.ca/news-insights/news/severe-weather-in-2023-caused-over-3-1-billion-in-insured-damage>

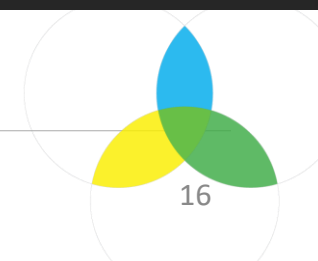


The Costs of Extreme Weather



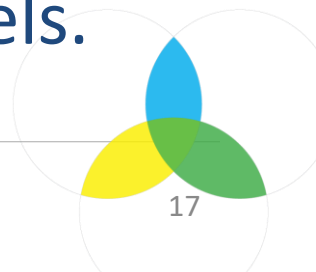
Source: IBC / CatIQ

*Razavi, Kamyar, Global News: Home insurers aiming for 'climate risk' rating system to deal with extreme weather events, Oct 23, 2023.



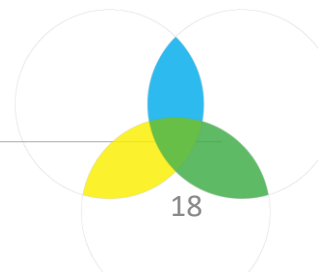
Poor Development Processes

- Canada has dropped from 4th to 23rd in OECD rankings for ease of doing business & one of the lowest rankings for time to obtain a general construction permit.
- Canada's infrastructure financing and funding programs tend to favour established design standards, delivery models and risk-averse practices. This dynamic can stifle innovation in areas such as modular construction, low-carbon materials, new technologies, nature-based solutions, and new financing models.



Land Overvalued

- Land is overvalued as it hasn't fully paid for the local government services which it uses
- One cause of high costs making land development unfeasible
- Utilities and user-based fees & charges



Build Canada Homes - Downsview, ON

- \$283 million of Build Canada Homes infrastructure funding to reduce flooding risks, protect water quality, and the Black Creek Sanitary Trunk Sewer project will support up to 63,000 new homes.
- The City is investing \$425 million of infrastructure funding.

1st of 6 housing developments on federal lands - phase 1 will create 540 new homes, with 40% affordable.



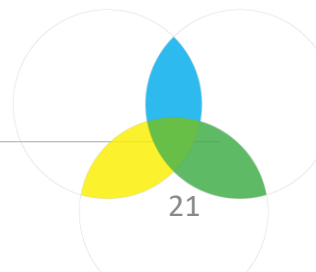
2444 Eglinton Ave. E., Scarborough

- 69-day approval for RZ in City of Toronto
- Largest new co-op project over 30 years
- Government, for-profit developers and non-profits work together incl. funding



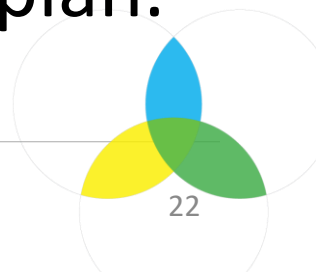


- Introduced concierge permitting to fast-track affordable and modular projects
- Created a priority stream that moves housing applications to the top
- Redesigned the sequencing of reviews by bringing building-permit thinking to the very start of the process to accelerate timelines.



City of Kelowna AI

- Building Permit Digital Assistant – The first municipality in Canada to launch this AI tool, it answers complex bylaw and technical info & provides guidance on the permitting process.
- AI Chatbot – automates permit applications and answers questions about the city’s zoning bylaws and official community plan.

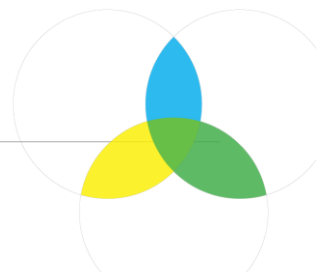
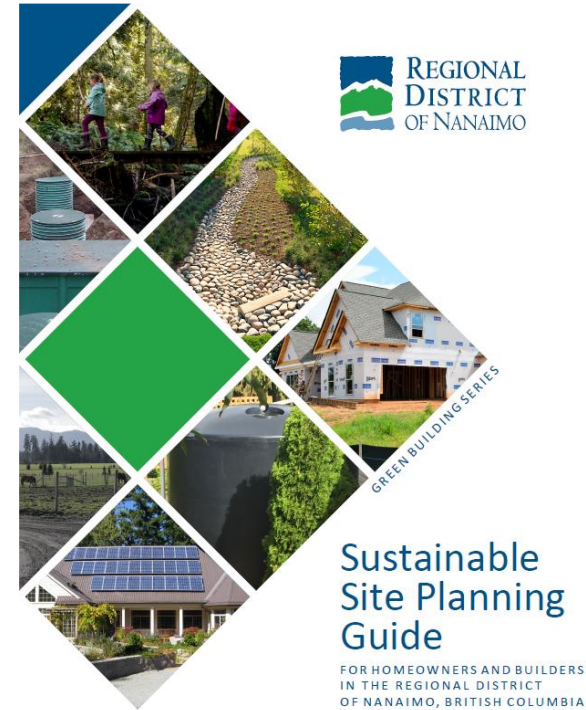




Dockside Green Waterway, Walkway, Garden Flats & Apartments

Sustainable Site Planning Guide & Checklist

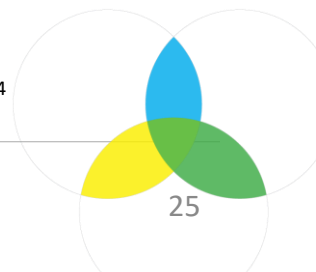
- Planning tool for homeowners and builders to minimize or restore natural environmental impacts of construction, landscaping, and major renovation projects.
- Site planning develops a thorough understanding of local area characteristics, such as its water, soil and climate before site design begins.
- Increase home comfort & reduce long-term O&M costs



Business Case for Nature-based Solutions

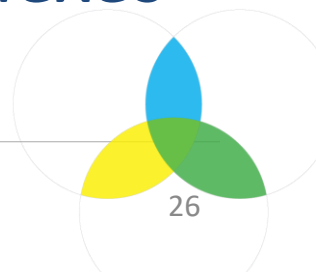
- The ecosystem-based interventions most frequently found effective in mitigating hazards are associated with mangroves (80 %), forests (77 %), and coastal ecosystems (73 %).
- Studies comparing the cost-effectiveness of NbS and engineering-based solutions for mitigating certain hazards showed that NbS are no less effective than engineering-based solutions.
- Among these studies, 65 % found that NbS are always more effective in attenuating hazards compared to engineering-based solutions and 26 % found that NbS are partially more effective.

Source: "On the cost-effectiveness of Nature-based Solutions for reducing disaster risk", [Science of The Total Environment](#), Volume 947, 15 October 2024, 174524



Federal Government - Underway

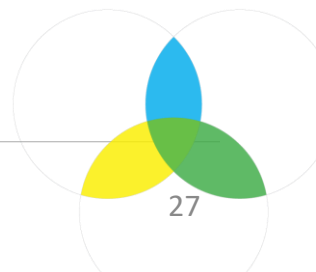
- \$13 billion in the first phase of investment by **Build Canada Homes**, focused on scaling up modular construction, empowering nonprofits, and forging partnerships across the public and private sectors.
- Using federal lands for new housing.
- Canada Housing Design Catalogue contains standardized house models for accessory dwelling units, rowhouses, four & sixplexes



Provincial Government - Underway

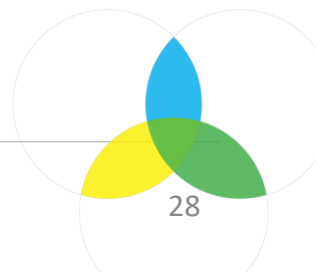
- Missing Middle Housing Legislation
- Funding to update development processes
- Some changes to development finance
- Local Government Data Entry – new requirements for 2025*
 - Current replacement value
 - Annual replacement value amortization
 - Average expected life
 - Average age
 - Average remaining useful life (calculated)
 - Physical condition (% breakdown by value)
 - Capacity vs. demand utilization (% breakdown by value)
 - Functionality (% breakdown by value)

*<https://www.assetmanagementbc.ca/provincial-asset-management-data-collection-2025>



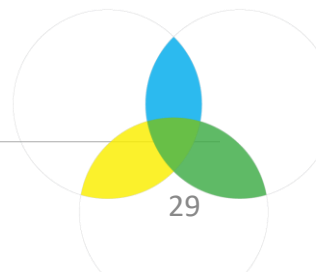
Federal Government – Recommendations

- Recalibrate GST relief to apply to all new homes below a local affordability threshold— not just for first-time buyers
- Introduce tax incentives for green infrastructure and building certification
- Favour renewable/green/sustainable infrastructure in all projects to save \$
- \$51 billion over 10 years for local infrastructure is a slow start



Federal & Provincial Recommendations

- New revenue sources for local governments
- Rationalization of intergovernmental functions
- Think tank on infrastructure funding gap solutions, including how to attract private investment
- Triple order (or more!) partnerships
- Add at least one, preferably two zeros to funding offers & simplify standards/process

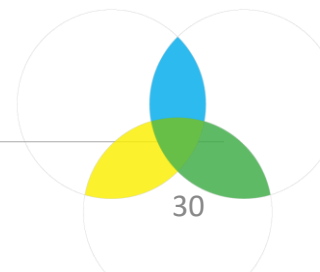


Federal & Provincial Recommendations



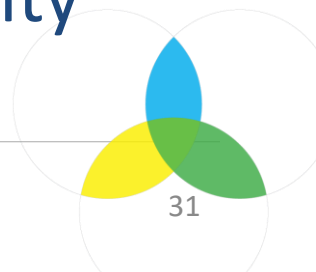
Stop treating local governments like Mikey in the 1970s cereal commercial

- Stop downloading without full cost (and then why bother?!)



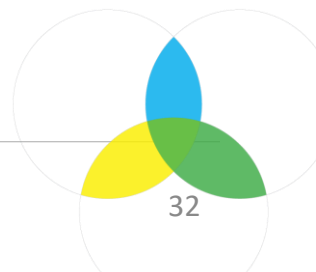
Provincial Government Recommendations

- Mandatory annual reporting of funding gap
- Regulate 50% PP tax to housing infrastructure
- Continue mandatory energy efficiency standards
- Large-scale government contracts for prefab/modular housing
- Decouple housing supply from local government development processes
- Infrastructure funding IS your responsibility



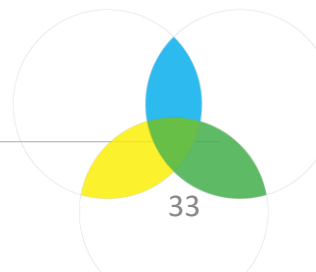
Local Government Recommendations

- Take care of your stuff; there's no excuse.
- Fix/modernize development application processes & use performance zoning.
- Create utilities & development fees that incent sustainable practice.
- Engage with your community about asset management options.
- Improve lobbying outcomes & consequences (push the cereal bowl back).



Developers

- Stop asking to reduce DCCs
- Increase partnerships with governments & non-profit housing providers
- Increase use of prefabricated or modular housing
- Continue to lobby for improved development application processes



Property Rights, Future Generation Advocates & General Public

- Where have you been?!!
- Substantial subsidization of new development costs isn't sustainable
- Must be part of discussion of diverse **community engagement**

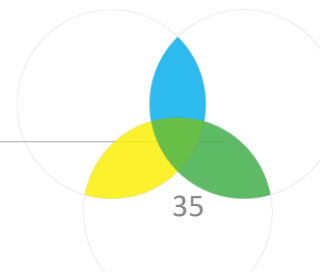


Learn from First Nations

- Marry reconciliation with resilience
- Two-eyed seeing & 7 generation planning



* Matthew Fox, Mount Royal University, [A model of reconciliation and resilience: Elder and human rights activist Doreen Spence granted an Honorary Doctor of Laws](#) June 1, May 27, 2022

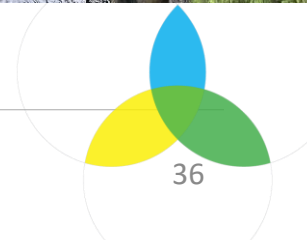


Renewed Municipal Growth Framework

- The housing challenge is also an infrastructure challenge that municipalities are grappling with every day. It underscores a need for new municipal revenue tools that grow as Canada grows.

*Enid Slack and André Côté, [Is Toronto Fiscally Healthy?](#) IMFG Perspectives Paper No. 7, 2014.

- New revenue sources & community engagement provide a route forward.



Questions?

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