

**Written Submission for the Pre-Budget
Consultations in Advance of the 2023 Budget**

By:



LIST OF RECOMMENDATIONS

Climate Resilient Infrastructure

- **Recommendation 1:** Expand funding opportunities for natural infrastructure projects.
- **Recommendation 2:** Encourage infrastructure investment strategies that recognize the value, and include the management and sustainability, of natural assets.
- **Recommendation 3:** Expand direct funding to local communities through an increase to the [Canada Community-Building Fund \(CCBF\)](#).
- **Recommendation 4:** Expand the [Canada Community-Building Fund \(CCBF\)](#) to include operations and maintenance activities.
- **Recommendation 5:** Include ZEVs in the [Canadian Collaborative Procurement Initiative](#).
- **Recommendation 6:** Fund professional development, skills training, and capacity building initiatives to support the adoption of ZEVs.
- **Recommendation 7:** Consider innovative financing programs to support municipalities with the upfront costs of ZEVs and fueling/charging infrastructure.

Emergency Management

- **Recommendation 8:** Expand access to emergency management training from the [Canada School of Public Service](#) to public works agencies and the broader emergency management community.
- **Recommendation 9:** Provide technical support, including training, testing, assessment, and audit programs, to municipal governments and public works agencies to enhance cybersecurity for computer networks and related critical infrastructure.
- **Recommendation 10:** Ensure the eligibility of expenditures to strengthen cybersecurity in federal funding programs, such as [Canada Community-Building Fund \(CCBF\)](#).

Water Resilience

- **Recommendation 11:** Adequately fund the proposed [Canada Water Agency](#).
- **Recommendation 12:** Fund workforce development, skills training, and capacity building initiatives to support career opportunities in the water sector.
- **Recommendation 13:** Dedicate federal funding to assist public works agencies in addressing the persistence of lead in service lines and plumbing fixtures.

INTRODUCTION

The Canadian Public Works Association (CPWA), or Association Canadienne des Travaux Publics (ACTP), was founded in 1986 to enhance the services of the American Public Works Association (APWA) to the Canadian public works community. Since that time, CPWA has become “the voice of public works in Canada.” Collectively APWA represents over 30,000 public works professionals in North America who work on both sides of the border to innovate and assure excellence in the public works profession.

RECOMMENDATIONS

Climate Resilient Infrastructure

[Infrastructure Canada’s Climate Lens](#) recognizes that infrastructure investments can more successfully address environmental pressures and climate change impacts by encouraging the incorporation of climate change considerations into the project development process.

Some public works agencies are also factoring into their capital and operations plans the value of natural assets that provide core municipal services, such as wetlands that improve water quality and provide protection from storm surges and vegetated spaces that stabilize soil and absorb stormwater. In June 2021, the Government of Canada launched the [Natural Infrastructure Fund](#) with \$200 million to support projects that use natural or hybrid approaches to protect the natural environment, support healthy and resilient communities, and contribute to economic growth and jobs. But the program closed on September 27, 2022.

Further, Canada’s Public Sector Accounting Board (PSAB)’s [Conceptual Framework for Financial Reporting in the Public Sector](#) excludes certain types of assets from recognition in financial statements, including natural resources. The PSAB is proposing to relocate these exclusions from the Conceptual Framework to its new standard for [Financial Statement Presentation, Section PS 1202](#), but to incentivize public-sector entities to recognize the value of their natural assets, the exclusion should be removed altogether.

- **Recommendation 1:** Expand funding opportunities for natural infrastructure projects.
- **Recommendation 2:** Encourage infrastructure investment strategies that recognize the value, and include the management and sustainability, of natural assets.

Local governments rely on the [Canada Community-Building Fund \(CCBF\)](#) to deliver public works and infrastructure projects across 18 different categories, including roads and transit, drinking water and wastewater infrastructure, solid waste management, disaster mitigation and broadband. This permanent source of funding, which flows through provinces and territories, is provided up front, twice-a-year and enables municipalities to plan capital infrastructure investments more quickly and effectively than application-based funding programs.

But routine repair and maintenance costs are ineligible expenditures. Public works agencies face challenges when it comes to managing aging public infrastructure in an era of increased and severe weather events and often do not have adequate resources for the operations and maintenance activities that keep existing infrastructure in good working condition. Short budget and funding cycles, inadequate asset management, insufficient data, and decades of underinvestment in preventative maintenance have contributed to a maintenance funding

backlog across infrastructure sectors, which is eroding quality and reliability and leading to higher costs for future asset maintenance and renewal. For instance, many water utilities face mounting costs to maintain, renew and upgrade aging water and wastewater assets, but limits on the rates that users pay, affordability for low-income earners, and shifts in usage are leading to declining reliability and quality, heightened risk of asset failure, and a mounting funding backlog. Investments in operating and maintaining existing infrastructure, like the [UK's Roads Maintenance Funding](#) is much needed as the Canadian public's expectations for level of service remain high and continue to rise, but municipal funding sources remain limited and revenues decline.

- **Recommendation 3:** Expand direct funding to local communities through an increase to the [Canada Community-Building Fund \(CCBF\)](#).
- **Recommendation 4:** Expand the [Canada Community-Building Fund \(CCBF\)](#) to include operations and maintenance activities.

The adoption of zero-emission vehicles (ZEVs) will require significant investment in fueling/charging infrastructure. Municipalities can transition their fleets to zero-emission vehicles and assist in the deployment of infrastructure, but municipal budgets may not accommodate the up-front costs. The [Zero Emission Vehicle Infrastructure Program \(ZEVIP\)](#) is a \$680 million initiative ending in 2027 to address the lack of charging and refuelling stations in Canada, one of the key barriers to ZEV adoption, by increasing the availability of localized charging and hydrogen refuelling opportunities.

The maintenance of zero-emission vehicles and training of maintenance technicians and operators must also be factored into municipal budgets and decision-making. Skills training and capacity building should be included in federal funding programs meant to support the adoption of ZEVs. Innovative financing similar to energy performance contracting and green bonds could support upfront costs paid back through expense avoidance savings.

- **Recommendation 5:** Include ZEVs in the [Canadian Collaborative Procurement Initiative](#).
- **Recommendation 6:** Fund professional development, skills training, and capacity building initiatives to support the adoption of ZEVs.
- **Recommendation 7:** Consider innovative financing programs to support municipalities with the upfront costs of ZEVs and fueling/charging infrastructure.

Emergency Management

Public Safety Canada provides guidance to federal government institutions on how to develop emergency management plans. The Emergency Management Planning Guide provides the framework for federal government institutions to undertake mandate-specific all-hazards risk assessments and planning activities within all four integrated functions of emergency management: [mitigation/prevention](#), [preparedness](#), [response](#) and [recovery](#). Public Safety Canada provides leadership in emergency management training to federal employees through a learning partnership with the [Canada School of Public Service](#).

Many public agencies, particularly in small and rural communities, need assistance developing and implementing all-hazard emergency preparedness plans, pre-disaster mitigation plans and long-

term hazard mitigation measures.

- **Recommendation 8:** Expand access to emergency management training from the [Canada School of Public Service](#) to public works agencies and the broader emergency management community.

According to the [National Cyber Threat Assessment 2020](#), Canadian organizations of all sizes, such as small- and medium-sized enterprises, municipalities, universities, and critical infrastructure providers, face a growing number of cyber threats. As municipal governments and public works agencies increasingly use internet-connected systems, adopt ‘smart’ technologies, and offer more municipal services online, their vulnerability to cyber threats also rises. Public works agencies are responsible for many of the cyber systems that control traffic management, water and sewage treatment facilities, emergency services/communications, and other vital operations and services – 24 hours a day, 365 days a year. These agencies hold sensitive data, including financial records and personally identifiable information. They must be open and transparent and provide access to public records. They may not have qualified staff dedicated to implementing cybersecurity safeguards. And they typically have limited budgets for upgrading networks and security systems, sometimes relying on outdated technology.

It is important that municipal governments and public works agencies have access to the tools and resources they need to ensure these cyber systems are hardened and resilient to the increasing threat of malicious acts, as well as to damage and disruption from natural or technological disasters.

- **Recommendation 9:** Provide technical support, including training, testing, assessment, and audit programs, to municipal governments and public works agencies to enhance cybersecurity for computer networks and related critical infrastructure.
- **Recommendation 10:** Ensure the eligibility of expenditures to strengthen cybersecurity in federal funding programs, such as [Canada Community-Building Fund \(CCBF\)](#).

Water Resilience

Over 20 federal departments and agencies have unique responsibilities for fresh water, with Environment and Climate Change Canada often acting as a lead department. Many public works agencies supply drinking water and follow the [Guidelines for Canadian Drinking Water Quality](#) established by [Health Canada](#) in collaboration with the [Federal-Provincial-Territorial Committee on Drinking Water](#). As well, many public works agencies treat wastewater and are subject to [Environment and Climate Change Canada’s Wastewater Systems Effluent Regulations](#), which impose minimum standards for municipal effluent quality nationwide and include [requirements for reporting](#). Further, public works agencies may be eligible for funding for water and wastewater infrastructure projects through the [Green stream](#) of [Infrastructure Canada’s Investing in Canada Plan](#).

The Government of Canada is working to establish a [Canada Water Agency](#) to work with provinces, territories, Indigenous communities, local authorities, scientists, and others to find the best ways to keep Canada’s fresh water safe, clean, and well-managed. Coordination of water

policy and regulations at the federal level could improve compliance and result in significant benefits for all orders of government. The proposed Canada Water Agency, functioning as a single point-of-contact, could play a cross-functional leadership role, focusing on outcomes and leading the development of policies and guidelines that benefit all Canadians.

A key function of the proposed Canada Water Agency should be to consolidate and share data across departments and all levels of government. Municipal governments in particular need easy access to web-based data and calculations such as upstream tributary flows, amounts to be drawn by other partners (including the U.S.), and events that can disrupt projected amounts.

- **Recommendation 11:** Adequately fund the proposed Canada Water Agency.
- **Recommendation 12:** Fund workforce development, skills training, and capacity building initiatives to support career opportunities in the water sector.

In 2019, Health Canada’s [Guidelines for Canadian Drinking Water Quality: Guideline Technical Document – Lead](#) reduced the maximum acceptable concentration of lead in a sample taken from the tap from 0.01 mg/L, set in 1992, to 0.005 mg/L. The challenge for public works agencies is that their responsibility extends from the municipal treatment plant to the system of water mains and service lines in the public right-of-way that deliver drinking water to residents and businesses up to a private property line, but not to the service lines on private property or the plumbing fixtures and pipes inside those properties. Lead service lines are primarily an issue for buildings constructed before 1960, but public works agencies often do not have comprehensive records of where lead pipes are located – or the resources to cover the excavation and construction costs of replacement. Where they do, public works agencies may coordinate and provide incentives to property owners for full replacement of lead service lines, but property owners are not obligated to replace service lines or plumbing fixtures on their property and it is the public works agency or municipal utility that is accountable for the quality of the water tested at the tap. Robust federal funding is required to replace aging infrastructure, maintain newer infrastructure, expand existing capacities, and implement new technologies to provide people and businesses with needed water services now and into the future.

- **Recommendation 13:** Dedicate federal funding to assist public works agencies in addressing the persistence of lead in service lines and plumbing fixtures.