



From the office of the Chief Executive Officer / Du cabinet du chef de la direction

April 23, 2021

Infrastructure Canada
Communications
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To whom it may concern:

Re: Engineers Canada's comments on Canada's National Infrastructure Assessment: "Building the Canada We Want in 2050"

Thank you for the opportunity to provide comments regarding Canada's [National Infrastructure Assessment: "Building the Canada We Want in 2050."](#)

Well-designed, properly built, continually maintained, and reliable infrastructure is critical to public safety, quality of life, and a competitive economy. Much of Canada's core public and private infrastructure requires significant immediate and future investments to ensure its sustainability for its complete life and service cycle. The unbiased expertise of the engineering profession is available to work collaboratively with you and your department to achieve evidence-based, long-term infrastructure planning that supports a net-zero emissions future while growing the national economy and connecting communities.

Engineers Canada is the national organization that represents the 12 provincial and territorial engineering regulators that license the more than 300,000 members of the engineering profession in Canada. Our organization has a long-standing history of working and collaborating with the federal government to help inform and develop legislation, regulations, and policies. Engineers are integral to many infrastructure projects, from the [Investing in Canada Plan](#) to Canada's first National Infrastructure Assessment.

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Engineers Canada is supportive of the federal government's infrastructure investments focused on promoting economic growth, job creation, and competitiveness; tackling climate change and increasing resilience; and improving social inclusion and quality of life for all Canadians. We also support the framework's three priorities of assessing infrastructure needs and establishing a long-term vision, improving coordination among infrastructure owners and funders, and determining the best way to fund and finance infrastructure.

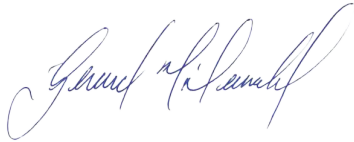
To support the priorities outlined in the *National Infrastructure Assessment*, specifically in assessing Canada's infrastructure needs and establishing a long-term vision, it is imperative that engineers be consulted throughout the life cycle of federal infrastructure projects to allow for a comprehensive, evidence-based, and expert-driven assessment of infrastructure needs in the short- and long-term. Whether the federal government is investing in assessments that will consider the infrastructure needed to support the transition to a net-zero economy, or improving access to affordable, clean, safe and efficient transportation options, or considering how public buildings, local service facilities and other public spaces can better bring communities together, reduce barriers, promote well-being, and offer important services, it is imperative that professional engineers be involved. Individuals performing assessments under the *National Infrastructure Assessment*, as well as projects under the *Investing in Canada Plan*, do so with high levels of technical expertise and accountability. Public safety and confidence are at risk when engineers are not involved in the development and implementation of a wide range of regulations that require the application of engineering principles.

Engineers Canada also believes that broadband connectivity must be reliable, sustainable, secure, protected, and accessible to all Canadians, particularly for those residing in rural, remote, and northern communities. The viability of many of these communities will in some measure be dependent on this access, as is therefore their ability to contribute to Canada's overall success. Incorporating engineers' accountability into federal legislation and initiatives related to broadband infrastructure weaves the engineering regulatory process into the fabric of government and thereby keeps Canadians and their data safe, secure, and protected.

Finally, building new infrastructure or rehabilitating existing infrastructure across Canada without considering climate change and extreme weather events has the potential to cause service disruptions and premature failures in the future, thus negatively impacting public safety, increasing business and social disruptions, and increasing costs to government, public, and business sectors. As the *National Infrastructure Assessment* works to consider the impacts of extreme climate events now and into the future, it is imperative that engineers be consulted to provide evidence-based environmental assessments to support climate adaptation, mitigation, and rehabilitation of climate impacts on public infrastructure. Additionally, climate vulnerability assessments on public infrastructure need to be a consideration for funding approvals, accepting environmental impact assessments, and approving designs for infrastructure projects involving new construction, rehabilitation, re-purposing, maintaining, and decommissioning existing infrastructure.

The engineering profession is ready and willing to support the federal government to strengthen and shape Canada's first National Infrastructure Assessment with our unbiased expertise and evidence-based decision making. Our subject matter experts would be happy to meet with you to further discuss these issues and the nature of our involvement.

Yours sincerely,

A handwritten signature in blue ink, appearing to read "Gerard McDonald". The signature is fluid and cursive, written over a light blue horizontal line.

Gerard McDonald, MBA, P.Eng., ICD.D
Chief Executive Officer, Engineers Canada

C.c.: Jeanette Southwood, FCAE, FEC, LL.D. (h.c.), P.Eng., IntPE, Vice-President, Corporate Affairs and Strategic Partnerships
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