

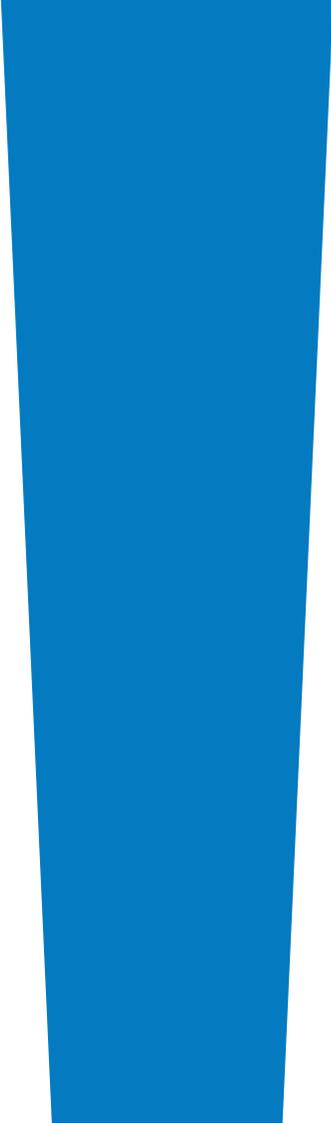
# INFRASTRUCTURE FOR TODAY & TOMORROW

Ensuring We  
Get It Right

September 2016

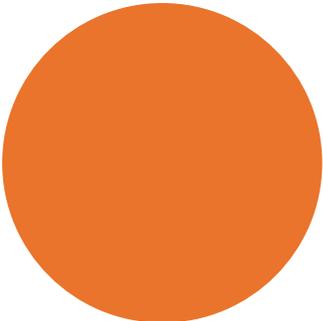
**CivicAction**

**Deloitte.**



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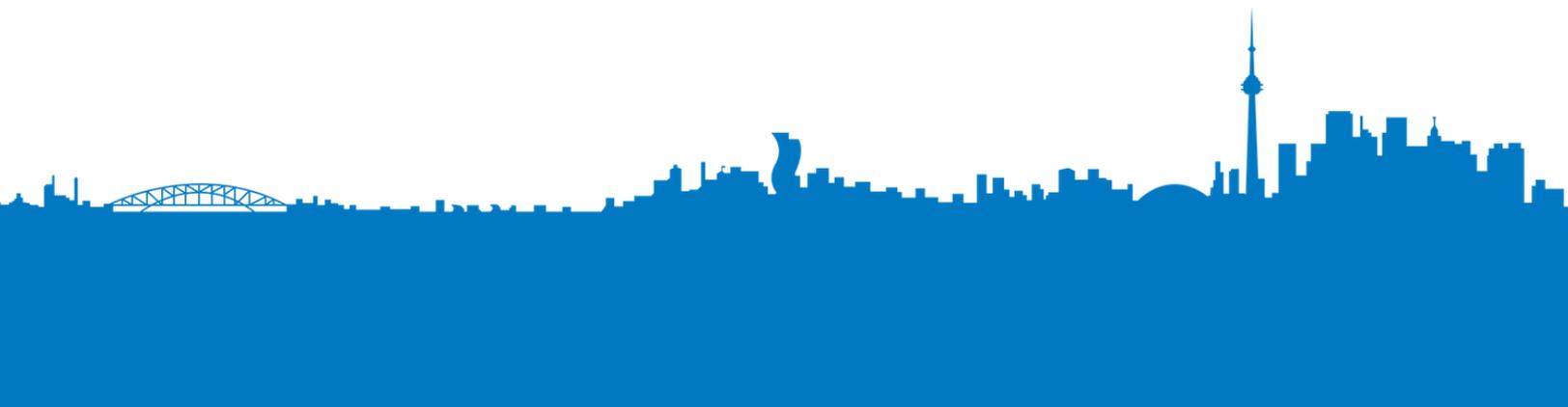
## About CivicAction:

For over a decade, CivicAction has played the role of neutral sandbox, bringing together senior executives and rising leaders from all sectors to tackle challenges facing the Greater Toronto and Hamilton Area. CivicAction builds partnerships and takes action through campaigns, programs and organizations that transform our region. To find out more visit [civicaction.ca](http://civicaction.ca) or follow us on twitter at [@CivicActionGTHA](https://twitter.com/CivicActionGTHA).

## About Deloitte:

Deloitte, one of Canada's leading professional services firms, provides audit, tax, consulting, risk advisory and financial advisory services. Deloitte LLP, an Ontario limited liability partnership, is the Canadian member firm of Deloitte Touche Tohmatsu Limited.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee, and its network of member firms, each of which is a legally separate and independent entity. Please see [www.deloitte.com/about](http://www.deloitte.com/about) for a detailed description of the legal structure of Deloitte Touche Tohmatsu Limited and its member firms.



# EXECUTIVE SUMMARY

In 2016, the federal government committed \$60 billion in new infrastructure funding over the next 10 years - a critically important investment in the future of Canada.

With interest rates at historic lows and demographic and climate shifts increasing the need for quality infrastructure, “getting it right,” in terms of where this money is spent, is critical. We have a once in a generation opportunity to change our communities: the way we work, play, and interact within our public spaces and the legacy we leave for future generations.

The federal government has created the conditions to do just that with its 2016 budget announcement by dedicating the funds across three priority areas (transit, green infrastructure and social infrastructure) and taking a two-phased approach to its investment strategy.

In the immediate term, Phase I has made approximately \$12 billion of funding available for “shovel ready” projects that will help lay the foundation for long-term impact and sustainable growth through its Phase 2 investment strategy. The investment strategy for Phase 2 funding will be announced as part of the 2017 Budget – following thorough conversations between all levels of government and other stakeholders.

**This staged and consultative approach provides a unique opportunity for the federal government to rethink how it approaches infrastructure, invest holistically and work better with other levels of government.**

The Greater Toronto and Hamilton Area (GTHA) powers 20% of Canada’s GDP; acts as an employment, financial and trade hub for the country; and houses a thriving not-for-profit sector. We are a region with great diversity of people, industry, and knowledge. However, we are also a region of pronounced socio-economic divides, high precarious employment and severe traffic congestion. Our ability to address the issues we face by fully

leveraging this historic federal infrastructure investment opportunity in local GTHA communities will have ripple effects across the nation.

**CivicAction partnered with Deloitte to gather leaders from the not-for-profit, private, labour, academic, and municipal and provincial government sectors to hear their voices and understand their perspectives on how the federal government’s infrastructure investment strategy might be designed to bring maximum economic, social, and environmental impact in the GTHA and across the country.**

This report is the outcome of this process, and provides a set of recommendations to help guide sound infrastructure investment decisions that will come with the federal government’s Phase 2 funding.

**The recommendations outlined in this report fall under 5 broad themes:**

- 1. To be globally competitive, we must be globally connected:** the GTHA can be globally competitive if we can strengthen our trade-enabling infrastructure, ease congestion, and increase international investment in local enterprise.
- 2. Build the skills to build the assets:** investing in the skills to drive Canada’s current and future infrastructure priorities will leave a dual legacy for our communities.
- 3. It takes a village:** community partners have diverse expertise and valuable resources to offer and can accelerate innovation and inclusion for quick wins and sustainable solutions
- 4. The need for speed:** we need to be more efficient in order to take advantage of current market conditions and more focused on minimizing disruption from changing political priorities.
- 5. The future begins right now:** investments in resilient infrastructure will allow our communities the flexibility to adapt and scale to shifting needs over time.

In the interest of unlocking the untapped potential of future investments, consultation participants reinforced some foundational concepts.

Firstly, **inclusiveness must be woven throughout the infrastructure investment process**. Promoting inclusive growth can lift more Canadians out of poverty by targeting local communities to break down barriers and facilitate economic development in underserved areas. For example, areas in Toronto with the lowest transit accessibility and highest working poor, correspond directly to struggling neighbourhoods in the city.<sup>1</sup> Conversely, increased access to transit can increase peoples' economic prospects, and help reverse a cycle of poverty.

Secondly, the federal government needs to empower **local leadership and autonomous decision-making**, directing funding to local needs that are in alignment with a broader coordinated strategy. Municipalities have on-the-ground knowledge of their needs and opportunities for impact and should have a say in where and how infrastructure investments are made.

Thirdly, **all investments should drive economic growth and improve quality of life**. According to Forbes, Canada is the best country in the G-20 to do business. Canada also has a highly educated workforce and for the eighth consecutive year the World Economic Forum has declared our banking system to be the soundest in the world.<sup>2</sup> However, economic growth in Canada faces several barriers, including an aging population, low private sector investment, weak innovation, and limited access to high growth markets.<sup>3</sup> Targeted investments in human capital, equipment, innovation, and gateways to new markets are a critical piece of the solution.<sup>4</sup>

Lastly, quality of life is often used as a measure of community vibrancy and resilience.<sup>5</sup> Consultation participants also highlighted the **ability of infrastructure to shape the way people interact**, promoting social connections between neighbors and increasing access to essential services. These interactions are vital to creating welcoming, healthy communities.

The billions of dollars that will come with the federal government's Phase 2 funding will provide an incredible opportunity for an improved future.

**Let's Ensure We Get It Right!**

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<sup>1</sup> Martin Prosperity Insights, Working Poor. [http://martinprosperity.org/media/Working%20Poor%20Insight\\_v0\\_1.pdf](http://martinprosperity.org/media/Working%20Poor%20Insight_v0_1.pdf)

<sup>2</sup> <http://www.international.gc.ca/investors-investisseurs/avantage-avantage/avantage-avantage.aspx?lang=eng>

<sup>3</sup> Dodge, D., Lynch, K., & Macklem, T. (May 13, 2016). For Canada's growth, a second phase of infrastructure investment is key. <http://www.theglobeandmail.com/report-on-business/rob-commentary/for-canadas-growth-a-second-phase-of-infrastructure-investment-is-key/article30000445/>

<sup>4</sup> Dachis, B. (2016). Getting more buildings for our bucks: Canadian infrastructure policy in 2016.

[https://www.cdhowe.org/sites/default/files/attachments/research\\_papers/mixed/e-brief\\_225.pdf](https://www.cdhowe.org/sites/default/files/attachments/research_papers/mixed/e-brief_225.pdf)

<sup>5</sup> For more information, see: <https://www.ontario.ca/page/ontarios-culture-strategy>; <http://www.oecdbetterlifeindex.org/countries/canada/>; <http://www.fcm.ca/home/programs/quality-of-life-reporting-system.htm>

# THE TIME IS NOW

With the Government of Canada's announcement of \$60 billion in new infrastructure investment over the next decade, the need to make smart, forward thinking infrastructure investments has never been greater.

The GTHA is home to half of Ontario's population, acts as an employment, financial and trade hub for the country; and houses a thriving not-for-profit sector. We are a region that has a great diversity of sectors and a great diversity of people that can and should be leveraged. Despite its strengths, the GTHA also faces unique challenges including: pronounced socio-economic divides, with half of our working population in precarious employment and some of the worst commute times in North America which costs our economy billions in lost productivity every year.<sup>6</sup>

What happens in our backyard has a ripple effect, positive or negative, on how we perform as a nation. We have the opportunity to help address our issues through smart infrastructure investments, driving positive impacts for communities facing similar issues across the country.

In response to this new chapter in our nation's infrastructure story, CivicAction - in partnership with Deloitte - has conducted a series of roundtables and interviews with civic and community leaders from across the GTHA, representing the not-for-profit, private, labour, academic, and municipal and provincial government sectors.

**Our aim is to provide multi-sector informed recommendations that will help ensure the federal government's long-term infrastructure strategy maximizes the economic, social, and environmental impact of its investments.**

As a neutral, non-partisan organization, CivicAction is uniquely positioned to bring together a variety of perspectives and present broadly-informed recommendations that will help ensure future infrastructure investment decisions provide

Canadians with a strong foundation for national economic growth and residents' health and well-being.

With this work, we join other leading organizations across the country in conversation on the need for smart infrastructure investment, including the Atkinson Foundation, the Hamilton, Ontario, and Canada Chambers of Commerce, the Hamilton and Toronto Boards of Trade, the Institute for Competitiveness and Prosperity, the Mowat Centre, the Metcalf Foundation, and many, many others.

In 2016, the federal government announced new infrastructure funding spread across three interdependent priority areas and in two phases:

**Social infrastructure:** *investing in Canada's communities by funding social infrastructure to promote inclusive growth and lift more Canadians, including children and seniors, out of poverty*

**Green infrastructure:** *supporting a resilient and strong Canadian economy by creating jobs and business opportunities, promoting sustainable development and reducing greenhouse gas emissions*

**Public transit:** *connecting people and supporting strong and sustainable communities by improving reliability, efficiency, safety and accessibility of public transit systems*

The federal government also put emphasis on improving the transparency and efficiency of funding application processes and on prioritizing "strategic and trade enabling infrastructure priorities"<sup>7</sup>

The first phase of funding dedicated approximately \$11.8 billion to rehabilitating and modernizing existing infrastructure over the next 5 years. Phase 2 funding is devoted to long-term investment, allocated according to an investment strategy to be announced as part of the 2017 federal budget.

<sup>6</sup> Toronto's Vital Signs Report 2015. <http://torontosvitalsigns.ca/>

<sup>7</sup> 2016 Minister of Infrastructure and Communities Mandate Letter. <http://pm.gc.ca/eng/minister-infrastructure-and-communities-mandate-letter>

Major federal infrastructure investment has most recently flowed through the New Building Canada Fund, made up of two funding blocks.<sup>8</sup>

**The Provincial-Territorial Infrastructure Component** provides each province and territory with a base funding amount as well as a per-capita distribution. As a result, funding is not always targeted according to need, disadvantaging those regions with more economic activity and therefore more need for supportive infrastructure.<sup>9</sup>

**The National Infrastructure Component** provides targeted, strategic funding for projects of national significance. This funding has traditionally been allocated incrementally at the discretion of the federal government.<sup>10</sup>

The challenge with this process is its limited capacity for holistic infrastructure planning that might drive value across sector and regional boundaries. Neither component has a consistent sector or objective of focus and coordination among different orders of government is ad hoc and project-specific.<sup>11</sup>

As such, previous rounds of funding may have missed opportunities to drive broader outcomes beyond individual project targets.

**The roll out of Phase 2 funding is a unique opportunity for the federal government to rethink how it approaches infrastructure investment.**

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<sup>8</sup> The 2014 New Building Canada Fund (NBCF) represents 26% of the 2014 New Building Canada Plan (NBCP). It was implemented by the previous federal government to support projects of national, regional and local significance that promote economic growth, job creation and productivity. It consists of two components, the \$10B Provincial-Territorial Infrastructure Component and the \$4B National Infrastructure Component.

<sup>9</sup> Infrastructure Canada. (2016). 2014 New Building Canada Fund:

Provincial-Territorial Infrastructure Component.

<http://www.infrastructure.gc.ca/plan/nic-vin-prog-eng.html>

<sup>10</sup> Infrastructure Canada. (2016). 2014 New Building Canada

Fund:

National Infrastructure Component.

<http://www.infrastructure.gc.ca/plan/nic-vin-prog-eng.html>

<sup>11</sup> Ibid.

# RECOMMENDATIONS

The need for infrastructure investment will always outstrip available resources: A 2013 study by the Canadian Chamber of Commerce estimated that the breadth of investment needed to address Canada's infrastructure deficit could be as high as \$570

Throughout our consultations, a **few key leading practices** emerged as fundamental to achieving this outcome:

**A clear business case to inform the federal government's decision making process**, with a combination of strategic, financial, economic and operational considerations that drives value and is accountable for delivery.

**Clear procurement criteria, aligned across all levels of government while still adaptable to various local contexts**, would help maintain rigour, consistency, and accountability throughout the building process while reducing red tape.

**Defined objectives and precise metrics** would ensure consistency and continuity in spite of a political or market change, while ensuring investments are comparable across priority areas.

**Coordinated engagement from all levels of government and a range of non-government partners**, built around a defined, transparent governance framework, would leverage diverse strengths, reduce duplicated efforts, and build trust

**Timely and regular communications throughout the entire planning and delivery process** would support the need for transparency and accountability after initial investment announcements are made.

billion.<sup>12</sup> To gain ground on this figure, funding must be invested to maximize the social, environmental, and economic return on dollars spent.

<sup>12</sup> [http://canada2020.ca/crisis-opportunity-time-national-infrastructure-plan-canada/#note\\_25](http://canada2020.ca/crisis-opportunity-time-national-infrastructure-plan-canada/#note_25)

**The investment strategy behind Phase 2 funding offers an opportunity to do things better, faster and with more impact than ever before. The following recommendations are a road map to get us there.**

These recommendations represent the views of consultation participants across the public, private, not-for-profit, and broader community sectors on how the federal government's new infrastructure investments might position Canada and the GTHA to grow and thrive for decades to come.

## 1. To Be Globally Competitive, We Must Be Globally Connected

*Canada's global economic competitiveness relies on robust trade-enabling infrastructure that can connect communities and open access to foreign markets.*

### Key recommendations:

- Revitalize trade-enabling infrastructure by adding multi-modal capacity and strengthening the region's access to international networks
- Take a partnership-based approach to connect the supply chain within Canada and across borders
- Invest now to create long-term value and leverage new and innovative technologies to accelerate planning and implementation

Canada is a trade-dependent country: exports and imports account for over 50% of the national GDP. As such, quality of life and economic growth across the country rely on efficient and effective access to foreign markets. Canada is doing well: the 2016 A.T. Kearney Foreign Direct Investment (FDI) Confidence Index ranked Canada 3<sup>rd</sup> globally for attractiveness as an FDI destination, up one spot from the previous year.<sup>13</sup>

<sup>13</sup> 2016 A.T. Kearney Foreign Direct Investment Confidence Index. <https://www.atkearney.com/gbpc/foreign-direct-investment-confidence-index>

In their 2015/16 American Cities of the Future report, fDi ranked 16 Ontario cities in the top ten of one or multiple categories of FDI attractiveness, including economic potential, business friendliness, human capital and lifestyle, cost-effectiveness and connectivity.<sup>14</sup>

We need to recognize the growing importance of city-regions in defining the future of our country globally and make the required investments now. There is real opportunity - due to a lower dollar and higher U.S. demand, Ontario exports are expected to grow 7% this year.<sup>15</sup>

However, for Canada to take full advantage of its strong global position, it needs to revitalize its trade enabling networks. Canada has fallen from 9<sup>th</sup> to 23<sup>rd</sup> on overall infrastructure quality over the past seven years, as ranked by the World Economic Forum's Competitiveness Index. Specific trade enabling assets, including roads, rail, and port infrastructure have also declined, particularly troubling as roads and rail account for 50% of overall exports and 65% of exports to our major trading partner, the United States.<sup>16</sup> Growing freight, road, port, and air transportation will increase the pressure on aging infrastructure.<sup>17</sup> The need and potential impacts are significant: in addition to boosting global competitiveness and facilitating FDI, robust trade networks can create employment, connect communities, and provide dividends for social services.

Building on the investments of previous federal administrations, consultation participants encouraged support for trade networks, connecting the supply chain within Canada and across borders and multiplying the social and economic impact of each new investment. Facilitating private sector partnerships would allow public sector initiatives to leverage increased capacity for innovation, timely project delivery, access to capital, sophisticated analytics, and business intelligence capabilities.

<sup>14</sup> Ontario cities recognized as "FDI Cities of the Future". (May 2015). <http://www.investinontario.com/spotlights/ontario-cities-recognized-fdi-cities-future>

<sup>15</sup> Flavelle, D. (26 April 2016). Ontario exports boom as lower dollar boosts U.S. sales. <https://www.thestar.com/business/2016/04/26/ontario-exports-boom-as-lower-dollar-boosts-us-sales.html>

With interest rates at historic lows, there has never been a better time to invest. These rates will inevitably increase, as will the cost of operating and continuing to fund future phases of infrastructure development. As such, investments in initiatives with a longer time to value should be made now, with an eye to how new technologies might be leveraged to accelerate planning and implementation.

## 2. Build the Skills to Build the Assets

Integrating infrastructure and skills planning can strengthen both processes, with infrastructure, supported by a skills pipeline, creating job and development opportunities.

### Key recommendations:

- Align infrastructure investments with labour market strategies to accelerate job creation and infrastructure development
- Work with other sectors in the creation of broader workforce development planning and targeted training programs to feed current and future infrastructure growth while supporting local job training
- Incentivize more equitable economic development through tools such as Community Benefit Clauses

Just as infrastructure must be built to support our needs now and into the future, governments at all levels should consider investing now in the skills needed to support infrastructure throughout its lifecycle, from planning to delivery to operation. Infrastructure initiatives may rely on available expertise in alternative financing models, skilled trades, modular construction, and high tech fields.

The Toronto Region Board of Trade has previously indicated that billions in new infrastructure spending will create a significant demand for new skilled and

<sup>16</sup> Canadian Chamber of Commerce. (June 2016). The Infrastructure that Matters Most. [file:///C:/Users/sawilson/Downloads/160628\\_The\\_Infrastructure\\_that\\_Matters\\_Most.pdf](file:///C:/Users/sawilson/Downloads/160628_The_Infrastructure_that_Matters_Most.pdf)

<sup>17</sup> Ibid.

professional workers in the construction industry. Better aligning regional skill building priorities, labour market capabilities, and the federal infrastructure investment strategy could leverage the skills we have, accelerate job creation and infrastructure development.

While there are existing job training initiatives at all three levels of government<sup>18</sup>, there is an opportunity to work more closely with the not-for-profit, business, education, and other sectors in the creation of improved workforce development mapping and targeted training programs. Supporting this work will help feed current and future infrastructure growth and revitalization. By focusing on local labour we can ensure new knowledge and skills are returned as benefits to the community, leaving a legacy of both buildings and skills that can be redeployed for future endeavours.

The federal investment strategy could further incentivize local economic development, including local workforce development, through its terms of investment and procurement, encouraging the use of tools such as community benefits both directly in federal procurements and indirectly through provincial procurements.

In Canada, the federal government, the province of Ontario, and the City of Toronto together spend over \$20 billion per year procuring goods and service, including construction. A joint report by the Atkinson Foundation and Mowat Centre<sup>19</sup> suggests that by embedding community and social benefits criteria into public contracts, governments can support socio-economic priorities including poverty reduction.

Community benefits clauses (also called social procurement) require bidders on public projects to submit, as part of their response to a request for proposal, plans for targeted recruitment and hiring, local business opportunities, public realm improvements, and other benefits as determined through engagement with the local community. Community benefits leverage dollars already being

spent to do "double duty", meeting a range of public policy goals with little incremental investment.

As an example, Metrolinx incorporated community benefits into its procurement for the Eglinton Crosstown LRT project. The province has worked with The Atkinson Foundation and the United Way on the creation of a workforce pathway to train and deploy jobseekers to support this project. This workforce model could be expanded to support other infrastructure and development projects.<sup>20</sup>

### 3. It Takes a Village

*Extracting knowledge and expertise from across the community increases the value of each investment and can lead to far-reaching impacts.*

#### Key recommendations:

- Prioritize investments backed by multi-sector partners and support, including community organizations, industry, and not-for-profit
- Consider new financing vehicles, such as P3s, commissioning, and infrastructure bonds, to enhance available funding and incentivize innovation
- Set clear priorities at the federal level and empower local governments to inform infrastructure investment decisions that will impact them

No one organization can deliver end-to-end expertise and services. The federal government and national organizations have a broad view of the national ecosystem and of international priorities; provincial organizations can set priorities and coordinate strengths across a region; municipal governments, local organizations, and local industry are often most aware of the needs and opportunities in their communities.

End outcomes and value for money will be stronger if multiple partners are allowed to play to their strengths. The federal government can unlock these

<sup>18</sup> For more information, see: <http://www.esdc.gc.ca/en/jobs/training/initiatives.page>; <https://www.ontario.ca/page/get-skills-training>; <http://www1.toronto.ca/wps/portal/contentonly?vgnextoid=b3e964445c780410VgnVCM10000071d60f89RCRD&vgnextchannel=2fe08fb738780410VgnVCM10000071d60f89RCRD>

<sup>19</sup> <https://mowatcentre.ca/tag/the-prosperous-province/>

<sup>20</sup> Graser, D. (2016) Community Benefits in Practice and in Policy: Lessons from the United States and the United Kingdom. To be published.

resources by prioritizing investments that involve multi-sector partners, industry support, or aspects of community engagement. For example, investment dollars should be available to not-for-profit organizations who contribute enormously to the community within constrained fiscal resources. Not-for-profits are “accidental giants” that play a key role in promoting social, economic, and environmental equity while employing over a million individuals in Ontario alone.<sup>21</sup>

These organizations have not always been engaged or included in major infrastructure planning in the past, resulting in missed opportunities for creative solution-building.

Similarly, many participants stressed the potential of public-private partnership arrangements to finance infrastructure. Depending on the needs, alternative funding models (e.g., P3 or P2 arrangements), private investment capital, commissioning, and infrastructure bonds, among others, can deliver high value for money, incentives for innovation, and a broader resource pool for quality delivery.

Participants noted that successful partnerships establish objectives from the outset to ensure a shared focus on long-term outcomes, community engagement, and mutual accountability for delivery.

Clearly defining the roles and responsibilities of all partners, particularly the three orders of government, can minimize duplicated efforts and prevent differing priorities from blocking progress.

The federal government can provide leadership and governance by setting “conditions” for funding, acting as a catalyst for change, and monitoring outcomes without dictating regional or municipal decisions. Municipalities can help inform the decision-making process based on their on-the-ground knowledge and the complexities and opportunities for impact.

Shared accountability between governments will increase consistency between investments while allowing flexibility at the local level.

<sup>21</sup> The Mowat Centre. (2015). Change work: valuing decent work in the not-for-profit sector. [https://mowatcentre.ca/wp-content/uploads/thatpublications/111\\_change\\_work.pdf](https://mowatcentre.ca/wp-content/uploads/thatpublications/111_change_work.pdf)

## 4. The Need for Speed

*Efficient approval, planning and delivery processes would allow communities to capitalize on available resources, building momentum and minimizing disruption as political priorities shift.*

### Key recommendations:

- Establish a transparent investment process that balances short and long-term impacts, limiting the influence of partisanship and shifting political priorities
- Create smart but manageable procurement and environmental assessment processes, aligned across all levels of government, to help maintain rigour, consistency and accountability - without unduly slowing down the building process
- Support modular construction to allow rapid, more cost-effective building and enhanced adaptability

Effective infrastructure investment relies on efficient approval, planning and delivery processes, as well as increased availability and awareness of the range of financing and funding tools. Some of the current processes make it too slow to build. The federal government left more than \$616 million in infrastructure spending unspent at the end of fiscal 2014-15, including \$290 million earmarked for “national priorities” such as water treatment facilities, transit and green energy programs.<sup>22</sup>

In order to generate and maintain momentum, the investment process should be designed to limit the extent to which political partisanship can influence investment. Many participants noted that a shift in political priorities may cause government to revisit and / or delay decisions meaning that community needs may already have evolved by the time a project is built. Similarly, investments in fundamental services such as sewage facilities may be underfunded due to a lack of political value. A federal investment strategy with defined short,

<sup>22</sup> Press, J. (February 1, 2016). \$616 million in unspent federal infrastructure money could help speed up approvals. <http://www.cbc.ca/news/politics/unspent-infrastructure-money-economy-1.3429654>

medium, and long-term objectives will balance “quick wins” with value creation beyond the electoral cycle.

Speed is needed to capitalize on current market conditions and available resources, to build momentum for sustained growth, and to safeguard investment against political and environmental shifts.

Smart but manageable procurement and environmental assessment processes with direct, demonstrable relevance to initiative delivery and that are consistent across levels of government will help speed up the building process, while balancing the need for due diligence.

Support for modular construction and similar innovations will help build momentum in the short-term and support adaptive re-use over the long-term. Modular construction, where project components are pre-built offsite and assembled onsite, allows rapid building and adaptive expansion or re-use of materials as local needs evolve. For instance, building a nine-story New York apartment using modular construction techniques was 10% more cost efficient and 25% faster than traditional construction.<sup>23</sup> The modular approach is also a strategic way to “build smarter” by allowing for trial and error: the streets of Amsterdam, made entirely of modular elements, adjust as the needs of residents evolve.

A flexible approach to large multi-year projects is important as game-changing innovations may surface in the time it takes to complete a project. For example, Uber did not exist when the Union Pearson (UP) Express project was approved. Some consultation participants felt that Uber’s sudden rise in popularity may have been one of the factors in the challenge UP Express faced in reaching projected ridership numbers.

<sup>23</sup> Andersson, J. (November 27, 2015). Three great examples of permanent modular construction. <http://blog.lindab.com/three-great-examples-of-permanent-modular-construction>

## 5. The Future Begins Now

*Resilient and adaptable infrastructure helps ensure assets can evolve to meet future community needs and environmental pressures.*

### Key recommendations:

- Prioritize resilient investments that offer the ability to withstand increased extreme weather events, scale to accommodate growing urban populations, and a clear long-term funding model
- Facilitate bundled investments to create holistic value, leverage economies of scale, and achieve triple-bottom line benefits
- Support infrastructure investments that provide flexibility for multiple uses over its life cycle to accommodate current and future needs

The requirements of new and existing infrastructure are shifting and will increase over the coming decades due to more frequent extreme weather events and population densification. Storms that used to occur every 40 years are now occurring every six years. In 2013, these extreme weather events contributed to a record number of insurance claims that totaled \$3.2 billion across Canada. Adding to this pressure is a growing population with 100,000 to 150,000 people coming to the GTHA each year<sup>24</sup> and more than 70,000 babies born annually in our hospitals.<sup>25</sup>

Investing in resilient infrastructure can help “future-proof” communities, providing a greater ability to absorb climate-related shocks while unlocking economic potential. For example, all three levels of government recently announced they are teaming up to spend \$65 million to protect the Toronto Port Lands area from severe flooding. This investment is crucial to developing a new part of the city.

Including resilience as a consideration in the decision-making process stands to save the current and future federal governments significant costs in

<sup>24</sup> 2015 CivicAction Summit Report.

<sup>25</sup> Data collected by BORN Ontario between April 1, 2012-March 31, 2014, and Statistics Canada from the 2011 census.

maintenance and rebuilding. Every dollar invested in adaptation today will yield anywhere from \$9 - \$38 in avoided damages in the future.<sup>26</sup>

The historical infrastructure investment approach has supported project-specific funding and has under-funded capital and maintenance costs. As a result projects may have met specific local needs, but not necessarily scaled impact across the community or over the long-term. It has also led to a state of disrepair, decreased asset returns and pushing the burden to future generations.<sup>[4]</sup> The funding that comes with Phase I of the federal government's investment strategy helps to ease this burden.

Facilitating bundled or "network" initiatives would create holistic "echo" impacts, enhancing existing infrastructure, leveraging economies of scale, and building capacity for growth. For example, mixed-use developments increase affordable housing stock, accelerate green technology, contribute to the local economy, and create assets with real market value. Similarly, integrated transportation networks leverage cross-sector resources to connect people and create livable communities.

Balanced investment considers the full lifecycle of a project so funding can meet upfront building requirements while shoring up adequate reserves to adsorb shocks from market, political, or climate shifts.

Participants emphasized the importance of infrastructure with the flexibility to serve multiple purposes over its lifetime and scale according to need. Infrastructure that enhances present development while accommodating future growth patterns should be a priority. For example, planning transit around current and future institutional, community and economic hubs<sup>27</sup> or leveraging the community hubs model, and the multiple services it can provide a community, when considering investment in much needed childcare.

## BUILDING ON WHAT WE HEARD

The federal government's new infrastructure funding provides an opportunity to re-think what targeted, transparent, and effective infrastructure looks like. We have an important opportunity to change the way our communities work and create an infrastructure legacy for future generations.

We would like to see the federal government use these multi-sector informed recommendations to help ensure its long-term investment strategy maximizes the economic, social, and environmental impacts.

We also encourage all levels of government to work together and partner with private, public, and third sector organizations, and the community members they serve. Success will come from a willingness and enablement of all sectors working together to build the future we collectively aspire to.

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<sup>26</sup> Federation of Canadian Municipalities. (2015) Cities and Communities: Partners in Canada's Future, The First 1000 Days of Government. [https://www.fcm.ca/Documents/reports/FCM/Cities\\_and\\_Communities\\_Partners\\_in\\_Canada\\_Future\\_EN.pdf](https://www.fcm.ca/Documents/reports/FCM/Cities_and_Communities_Partners_in_Canada_Future_EN.pdf)

<sup>27</sup> Transit Investment Strategy Advisory Panel. (2013). Making the Move: Choices and consequences. <http://www.vivanext.com/files/TransitPanel/TISAP%20Making%20the%20Move.%20Choices%20and%20Consequences%20Full%20Report.pdf>

# OUR CONSULTATION PARTICIPANTS

A broad cross-section of representatives from organizations across the GTHA, including not-for-profits, academic institutions, community organizations, private industry, and municipalities.

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