



**BUILD ON**

# 2017 INFRASTRUCTURE UPDATE

Ministry of Infrastructure



# CONTENTS

<b>Minister’s letter</b> .....	2
<b>Introduction</b> .....	4
<b>SECTION 1: Ontario’s Infrastructure Assets</b> .....	10
Economic benefits of infrastructure investment .....	14
Elementary and secondary education .....	17
Advanced education and skills development .....	20
Health care .....	23
Social infrastructure .....	26
Transportation .....	30
Justice .....	36
Northern infrastructure .....	39
Natural resources and forestry .....	43
Tourism, culture and sport .....	46
Energy .....	49
Broadband .....	51
Other government assets .....	52
<b>SECTION 2: Getting the most out of infrastructure investments</b> .....	54
Supporting Ontario’s transformation agenda .....	55
Combatting climate change and managing its impact .....	58
Supporting community hubs .....	61
21 <sup>st</sup> century delivery and funding models .....	62
Evidence and benchmarking .....	68
Integrated planning for better outcomes .....	71
Working in partnership .....	73
<b>SECTION 3: Looking Ahead</b> .....	78
Delivering on the <i>Infrastructure for Jobs and Prosperity Act</i> .....	78



## MINISTER'S LETTER

The Government of Ontario recognizes the integral role infrastructure plays not only in growing our economy, but also in strengthening our communities and protecting our environment. We are committed to providing modern and efficient infrastructure that will meet our province's needs because we understand that it deeply affects the lives of all Ontarians and the ways they live, work and travel.

Infrastructure investments are really about people. The investments we have made or supported over the past 15 years, and the investments we will continue to make, are working to improve the lives of every Ontarian. These investments will help ensure you get the health care you need, they will help you move effectively and efficiently in your community so you spend more time with your family, and they will ensure that you and your children will have the educational opportunities that will continue to drive economic and social growth that will benefit all Ontarians.

In 2011, the Government of Ontario released Building Together, an ambitious plan that introduced our long-term vision to create a legacy of world-class infrastructure for all Ontarians. Building Together improved the way we approached infrastructure planning and policy-making, and provided much-needed clarity, sustainability and predictability in our processes. As well, I am grateful to the leadership of Infrastructure Ontario for its role in advancing innovative infrastructure projects across our province in support of this plan.

The need for modern infrastructure has never been greater. Communities across Ontario, large and small, urban and rural, rely on a network of roads, bridges, water systems, telecom networks and other critical infrastructure to help keep our communities moving, create jobs, and grow local businesses. Experts report an unprecedented growth in demand that has begun putting pressure on infrastructure assets. It is becoming increasingly important to prioritize infrastructure activities that will respond to these trends. We must find bold and innovative ways to meet our future needs, while also making better use of existing public properties and assets, including through promising initiatives like community hubs. We also expect our infrastructure to help meet our ambitious goals for enhanced accessibility and greenhouse gas reduction. At the same time we must also be mindful of our funding commitments. Ontario has built a reputation for innovation through our Alternative Finance and Procurement model, but we must seek out new and sustainable ways of financing and funding infrastructure investments over the longer term.



The Government of Ontario recognizes these challenges and remains dedicated to modernizing public infrastructure in ways that enable economic growth, promote sustainable prosperity and support community development across our province. As we plan for our future, our transformation agenda will guide the government's next generation of infrastructure commitments.

For 12 years, starting in 2014–15 we are planning to spend more than \$160 billion, building and revitalizing critical infrastructure. Our planned investments will support more than 110,000 jobs annually, on average, as we invest in projects to build schools, hospitals, transit systems, highways, roads, bridges and other critical infrastructure across Ontario.

We will effectively utilize the newly enacted *Infrastructure for Jobs and Prosperity Act, 2015* to ensure our future activities reflect our commitment to infrastructure development and our priorities of improving productivity, creating jobs, enabling our communities and contributing to environmental and fiscal sustainability, while meeting the needs of Ontarians.

Lastly, we are very pleased to announce our new efforts to develop Ontario's next long-term infrastructure plan, to be released in 2017. The plan will lay out the Province's infrastructure vision for the next decade, while demonstrating how strategic capital investments can have a positive impact on productivity, growth and service delivery across Ontario.

This update serves as a first step to delivering on the next long-term infrastructure plan. I appreciate the efforts of Government of Ontario staff in bringing together this update, and I look forward to the important work that lies ahead as our government builds modern, efficient and effective infrastructure for the benefit of all Ontarians.

Bob Chiarelli  
Minister of Infrastructure

# INTRODUCTION

## A STRONG PROVINCIAL COMMITMENT TO INFRASTRUCTURE

Investment in public infrastructure – schools, colleges, hospitals, transit networks, highways, roads, bridges and other assets – is essential to providing services, growing the economy and ensuring prosperity and a high quality of life for all Ontarians, whether they live in large or small or urban or rural communities.

Ontario continues to be a global leader in infrastructure investment. The Province is currently implementing the largest infrastructure program in Ontario's history, investing more than \$160 billion over 12 years starting in 2014–15. These investments are expected to support more than 110,000 jobs on average each year.

Recognizing the importance of strategic infrastructure investments, the government enacted the *Infrastructure for Jobs and Prosperity Act, 2015*. Building on more than a decade of strong infrastructure investment, the act enhances Ontario's commitment to:

- Grow the economy and create jobs through investment decisions that are long-term, strategic, evidence-based and fiscally responsible.
- Respond to the changing needs of communities across the province.

- Build greater resiliency to the impacts of climate change and use resources more sustainably.
- Transform public services to deliver high-quality outcomes more efficiently with new and revitalized infrastructure.

In line with the act, the Province will be developing a long-term infrastructure plan over the next year. The plan's objectives include:

- Broadly defining Ontario's infrastructure needs and priorities and the government's strategy to address these needs.
- Demonstrating excellence in Ontario's asset management and infrastructure planning.
- Incorporating opportunities for innovation into a robust, evidence-based process for infrastructure planning.
- Setting the stage for technical analysis of asset management plans.

These objectives underscore the importance of strong asset management. Having in place plans for the long-term maintenance, renewal and replacement of assets is critical to striking the right balance between caring for existing assets and investing in expansion.



This document serves as an update to lay the groundwork for the long-term infrastructure plan. It looks at:

- The current capital spending outlook and key investment considerations across sectors.
- Accomplishments to date and projects already underway or soon to begin.
- Ontario's efforts to develop evidence-based processes for infrastructure planning and project execution, including opportunities for innovation.

- The evolution of important elements of infrastructure policy, including asset management planning, procurement and funding.
- The role of important partners, including municipalities, the federal government, Indigenous communities, delivery partners, and the private sector.

This update also outlines a number of key policy themes, such as how to best expand the use of data and analytics in infrastructure planning. Section two of this document discusses the policy lenses to guide infrastructure planning, laying the groundwork for the development of the next long-term infrastructure plan.

To learn more about Ontario's infrastructure investments,  
visit [ontario.ca/BuildOn](https://ontario.ca/BuildOn)

## ANOTHER STEP TOWARD BETTER PLANNING

The *Infrastructure for Jobs and Prosperity Act, 2015* represents an advancement of infrastructure planning and investment in Ontario.



For more than a decade, Ontario has been investing significantly to renew, upgrade and expand public infrastructure. In 2005, the provincial government released ReNew Ontario, a long-term infrastructure plan to invest \$30 billion over five years while enhancing long-term planning. ReNew Ontario was completed in 2008–09, a year ahead of schedule.

## BUILDING TOGETHER

In 2011, Ontario released its first 10-year infrastructure plan, Building Together. The plan provided a roadmap for plans announced in the 2011 Budget to invest more than \$35 billion in infrastructure over three years. With a strong commitment to align with such initiatives as the Growth Plan for the Greater Golden Horseshoe and the Poverty Reduction Strategy, the plan focused on transportation and public transit, education and innovation, health care, stronger communities and care for the environment.

The 2014 Ontario Budget, Building Opportunity, Securing our Future, renewed the Province's commitment to infrastructure investments and included making strategic investments in roads, bridges and public transit, modernizing infrastructure in communities across Ontario, as well as dedicated funding for transportation infrastructure. These signature investments paved the way for Ontario's current commitment of investing over \$160 billion in vital public infrastructure over the 12 year period.

## Commitment



Adopt a 10-year perspective for infrastructure planning, while making decisions to move ahead on specific projects through the Province's annual planning and budgeting process.



Consult with Ontario's public sector partners on developing asset management plans that would build on and consolidate existing requirements.



Work with the federal government, municipalities, neighbouring jurisdictions, and Indigenous peoples to address the challenges of the current infrastructure deficit and emerging needs.



Make greater use of Infrastructure Ontario (IO) to procure the Province's infrastructure. IO is a Crown corporation that provides a wide range of services to help modernize and maximize the value of Ontario's public infrastructure and realty.



Support a strong and competitive construction sector within Ontario and promote its products and services internationally.



## Progress

Ontario has adopted a 10-year outlook on infrastructure planning, which will culminate in the development of the first legislated Long-Term Infrastructure Plan, as mandated by the *Infrastructure for Jobs and Prosperity Act, 2015*. ✓

Ontario continues to consult with its partners on asset management. Today, more than 95% of municipalities have an asset management plan. To help improve the quality and consistency of these plans, Ontario has begun developing a municipal asset management planning regulation. ✓

The government is making the largest infrastructure investment in Ontario's history, more than \$160 billion over 12 years, beginning in 2014-15. The Province will continue to work closely with its funding and delivery partners to ensure infrastructure development meets Ontario's needs. ✓

IO is currently managing 90 Alternative Financing & Procurement (AFP) projects for the Government of Ontario valued at more than \$40 billion in capital construction costs. 96% of projects delivered under AFP were on-budget. IO manages 5,000 projects a year on average for the Government of Ontario via traditional procurement. Roughly 1,400 of these projects are valued at more than \$100,000. ✓

Infrastructure Ontario's AFP model and its work managing the government real estate portfolio have expanded Ontario's construction industry expertise. Over 50 jurisdictions have visited Ontario to learn about AFP. Many Ontario companies are now positioned to pursue projects around the world. ✓





The *Infrastructure for Jobs and Prosperity Act, 2015* builds on this solid foundation. Like earlier initiatives, the act promotes and encourages modern approaches to infrastructure that are designed to ensure projects achieve the greatest possible value for money as well as benefiting Ontario communities.

### **Principles of the *Infrastructure for Jobs and Prosperity Act, 2015***

The act articulates principles to guide infrastructure investments. These principles may be broadly summarized in the following list:

- Take a long-term view and be mindful of demographic and economic trends in Ontario, as well as budgets and other fiscal plans.
- Clearly identify infrastructure priorities.
- Ensure the continued provision of core public services, such as health care and education, while promoting economic competitiveness, productivity, job creation and training opportunities.
- Ensure that the health and safety of workers who build and maintain assets is protected.
- Create opportunities to use innovative technologies, services and practices, particularly those developed in Ontario.
- Base plans on evidence that is shared publicly, to the extent possible.
- Consider how infrastructure investments can support other important provincial and municipal plans and strategies.
- Promote accessibility for persons with disabilities.
- Reduce impacts on the environment, help maintain ecological and biological diversity, be resilient to the effects of climate change and make use of accepted recycled aggregates.
- Consider how infrastructure projects can result in benefits for the local community over and above the service the infrastructure provides.

Community Hubs in Ontario: A Strategic Framework and Action Plan, also released in 2015, included a range of recommendations for developing community hubs, which provide a central access point for a range of needed health and social services, along with cultural, recreational, and green spaces to nourish community life. Accepted by the government, the recommendations focused on making better use of public properties, promoting multi-use design and integrated planning across government ministries, sectors, and with local stakeholders. Supporting local community hub development requires an all-of-government approach that goes beyond traditional siloed or sector-focused strategies and processes and encourages innovation in design and partnerships in order to better serve communities.

In June 2016, The Government of Ontario established the Ministry of Infrastructure as a stand-alone ministry with a mandate to guide Ontario's infrastructure plan. The 2016 Premier's mandate letter to the Minister of Infrastructure identified the following priorities:

- Guide the current 12-year, \$160-billion infrastructure plan.
- Lead negotiations with the federal government on new infrastructure agreements.
- Develop the legislated long-term infrastructure plan, and publish the plan by the end of 2017.
- Help to integrate the province's commitments in the Climate Change Action Plan across the province's infrastructure plan.
- Manage the realty program to focus on program needs and consider the market value of provincially owned properties.
- Work with the Special Advisor to the Premier to lead the government-wide implementation of the Community Hubs Strategic Framework and Action Plan.

To read the full version of the Ministry of Infrastructure's mandate letter, please visit:  
<https://www.ontario.ca/page/september-2016-mandate-letter-infrastructure>

## SECTION 1:

# ONTARIO'S INFRASTRUCTURE ASSETS

Ontario is served by a large and diverse portfolio of public infrastructure with a replacement value of close to \$550 billion.

Ontario, with its partners, has built up a public infrastructure stock with a replacement value of close to

# \$550B

This infrastructure supports services that touch all aspects of our daily life, including:



**5,000**  
SCHOOLS



**24**  
COLLEGES



**140+**  
HOSPITALS



**16,900+**  
KM OF  
HIGHWAYS



**2,800+**  
BRIDGES



**3,000+**  
GO  
TRANSIT KM

*\*Note this includes assets that are directly owned by the province, by consolidated agencies, and broader public sector assets.*

They include almost 5,000 schools, 24 colleges, more than 140 hospitals, more than 16,900 kilometres of highways and more than 2,800 bridges, GO Transit's fleet and other transportation assets such as buses, rail cars, locomotives and ferries. These assets span communities across the province.

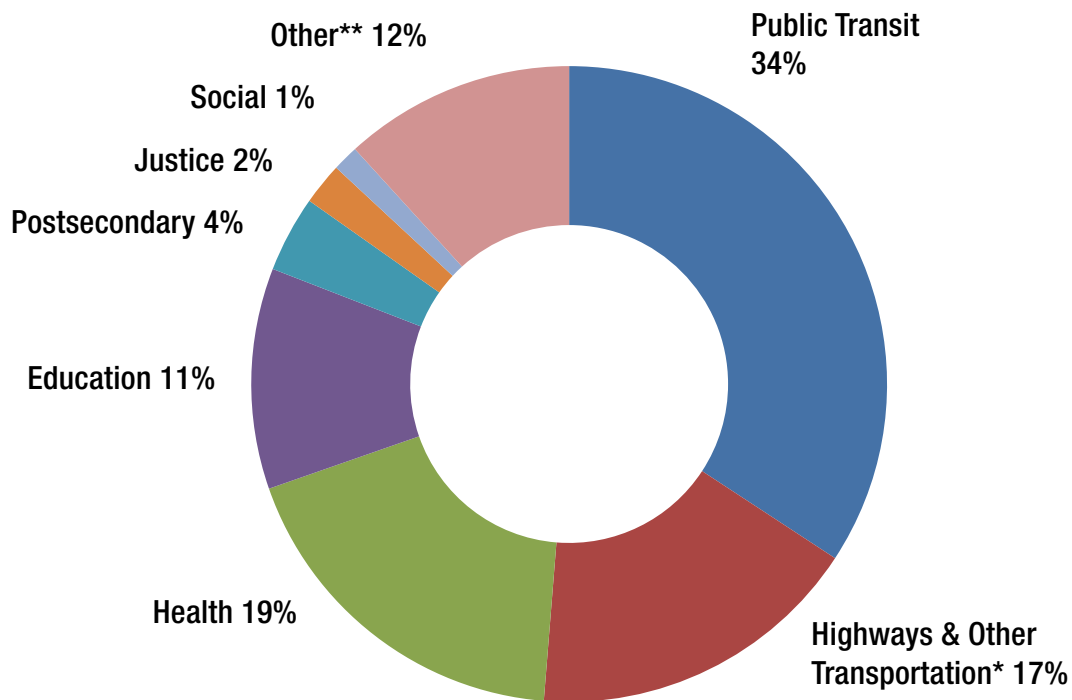
**Replacement value** represents the investments required to replace (purchase or construct new) infrastructure that provide the same level of service as existing infrastructure, expressed in today's dollars (adjusted for inflation).



## BUILDING ON A SOLID FOUNDATION

As announced in the 2016 Ontario Economic Outlook and Fiscal Review, the Province plans to invest more than \$160 billion in public infrastructure over 12 years, starting in 2014–15.

### The Province's 12-year Infrastructure Plan by Sector



*As of 2016 Ontario Economic Outlook and Fiscal Review. Figures subject to change.*

*The infrastructure plan includes investments in Moving Ontario Forward for public transit, highways and other priority infrastructure projects.*

*\*Other transportation includes highway planning activities, property acquisition and other infrastructure programs.*

*\*\*Other sector includes government administration, natural resources, culture and tourism sectors.*

**Note:** *Figures include third-party investments in hospitals, colleges and schools, and unassigned federal contributions to provincial infrastructure investments.*

The table below outlines the Province's infrastructure investments over 12 years, starting in 2014-15, and shows that they touch all key sectors:

Sectors (\$M)	2014-15 Actuals	2015-16 Actuals	Outlook 2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	12-Year Total
Public Transit	3,554	3,967	5,381	6,632	8,053	8,528	7,656	6,742	4,983	3,378	2,112	1,807	62,791
Highways & Other Transportation*	2,323	2,372	2,919	3,163	3,248	3,340	2,947	2,582	2,287	2,047	1,966	1,946	31,139
Health	3,568	3,225	3,192	2,745	2,774	2,775	3,062	2,243	2,339	2,816	2,952	1,914	33,603
Education	1,833	1,590	2,561	1,932	1,865	1,808	1,686	1,558	1,434	1,432	1,432	1,396	20,526
Postsecondary	519	624	1,091	1,035	593	450	466	467	468	464	459	456	7,093
Justice	144	150	255	314	566	626	573	396	230	217	216	216	3,903
Social	231	267	814	353	243	183	68	54	52	51	51	51	2,419
Other**	645	556	1,184	1,299	1,936	2,071	1,935	2,072	2,647	3,555	1,680	1,676	21,256
<b>Total Infrastructure Expenditure</b>	<b>12,817</b>	<b>12,751</b>	<b>17,396</b>	<b>17,474</b>	<b>19,277</b>	<b>19,779</b>	<b>18,393</b>	<b>16,113</b>	<b>14,440</b>	<b>13,960</b>	<b>10,869</b>	<b>9,463</b>	<b>182,731</b>
<i>Less: Other Partner Funding &amp; Federal Contributions</i>	<i>1,661</i>	<i>1,931</i>	<i>3,240</i>	<i>2,498</i>	<i>2,331</i>	<i>1,357</i>	<i>1,481</i>	<i>1,300</i>	<i>1,337</i>	<i>1,349</i>	<i>1,293</i>	<i>1,214</i>	<i>20,991</i>
<b>Total</b>	<b>11,156</b>	<b>10,820</b>	<b>14,156</b>	<b>14,975</b>	<b>16,947</b>	<b>18,422</b>	<b>16,912</b>	<b>14,812</b>	<b>13,103</b>	<b>12,611</b>	<b>9,576</b>	<b>8,249</b>	<b>161,740</b>

*As of 2016 Ontario Economic Outlook and Fiscal Review. Figures subject to change.*

*The infrastructure plan includes investments in Moving Ontario Forward for public transit, highways and other priority infrastructure projects.*

*\*Other transportation includes highway planning activities, property acquisition and other infrastructure programs.*

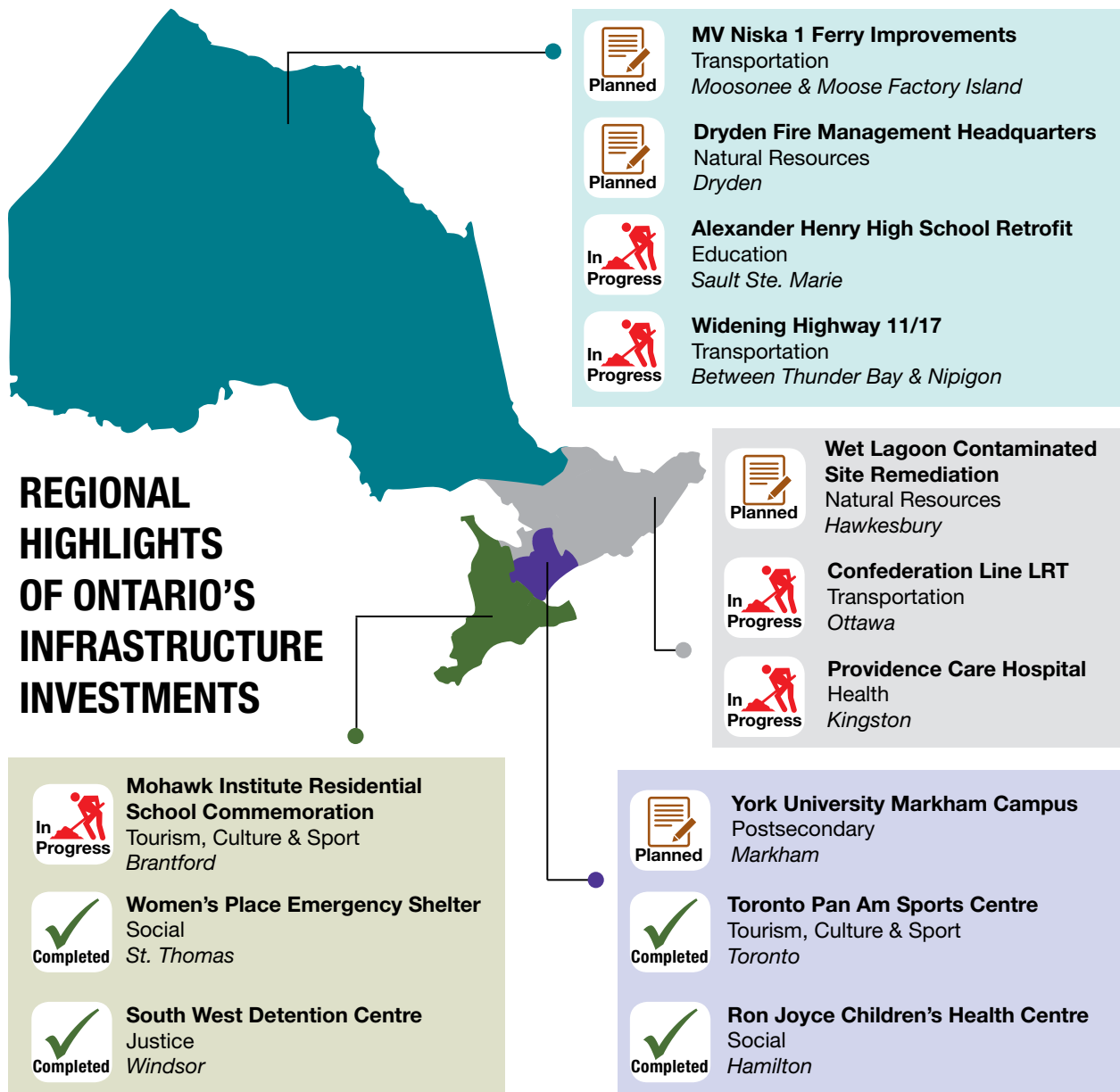
*\*\*Other sector includes government administration, natural resources, culture and tourism sectors.*

**Note:** *Other Partner Funding & Federal Contributions refers to third-party investments in hospitals, colleges and schools, and unassigned federal contributions to provincial infrastructure investments.*

## IN THE PIPELINE

Ontario has a robust plan to build and renew its infrastructure. The projects in the plan have been selected based on evidence and by considering such factors as service needs, economic impact, relationship to climate change and benefits to the local community.

Infrastructure projects are spread across the province, allowing communities from across Ontario to benefit from the opportunities investments in infrastructure can bring.



This map shows a sample of infrastructure projects underway. To learn more about infrastructure projects in your community visit [ontario.ca/BuildOn](http://ontario.ca/BuildOn)



## ECONOMIC BENEFITS OF INFRASTRUCTURE INVESTMENT

Investment in public infrastructure provides economic benefits over the short, medium and long term:

- In the short term, infrastructure investments support jobs in businesses that build, maintain and service assets and provide related services.
- Over the medium term, the main benefit is a productivity boost – for example, better roads and public transit provide more travel options and can get goods to market faster, reduce commute times and help manage congestion. These time savings translate into greater economic competitiveness and efficiency.
- In the long run, a more efficient economy that boosts competitiveness is likely to attract business investment and highly-talented people.

To increase the benefits of infrastructure, the Province is working with experts to better understand how investing in infrastructure enhances productivity.

The benefits of investment do not stop at economic activity, but extend to quality of life by providing:

- Accessible spaces where all Ontarians can realize their potential, receive needed services, contribute to their communities and enjoy rewarding cultural, recreational and outdoor activities.
- Better places to learn, teach and carry out research.
- More comfortable and seamless experiences for those receiving health and community services.
- Improved air quality and reduced greenhouse gas emissions, with greater assurance that assets are resilient to the impact of climate change.

## Evaluating infrastructure benefits

Many studies have shown the benefits of infrastructure investment:

- The International Monetary Fund found that increased public infrastructure investment raises output in both the short and long term. It suggested that where there is a need, the time is right for an infrastructure push. Source: International Monetary Fund, 2014. *2014 World Economic Outlook Report*. <https://www.imf.org/external/pubs/ft/weo/2014/01>
- On average, investing a dollar in public infrastructure in Canada raises gross domestic product by \$1.43 in the short term and by up to \$3.83 in the long term. Source: The Centre for Spatial Economics. “The Economic Benefits of Public Infrastructure Spending in Canada,” The Broadbent Institute, 2015.
- David Dodge, former governor of the Bank of Canada, has highlighted investing in specific types of public infrastructure as a key way to promote productivity growth. This would achieve real income gains for the middle class and help offset the impacts of adverse demographics on productivity. Source: Dodge, D., “Infrastructure Spending – Plan Now Needed.” *Intelligence Memo*. C.D. Howe Institute, 2016. [https://www.cdhowe.org/sites/default/files/blog\\_David%20Dodge\\_May%2018.pdf](https://www.cdhowe.org/sites/default/files/blog_David%20Dodge_May%2018.pdf)
- The biggest employment gains from public infrastructure investment are in business services, which include transportation, financial services, wholesale and retail. Source: Antunes, P. and Palladini, J., “The Economic Impact of Ontario’s Infrastructure Investment Program,” The Conference Board of Canada, 2013.



## **Moving Ontario Forward**

Through the government's Moving Ontario Forward plan, Ontario is supporting public transit, transportation and other priority infrastructure.

These include investments in roads, bridges, transit and other critical infrastructure outside the Greater Toronto and Hamilton Area. Major projects include Stage 2 of a light rail transit (LRT) line in Ottawa, new four-lane alignment on Highway 7 between Kitchener and Guelph, and continuing construction of a four-lane divided Highway 11/17 between Thunder Bay and Nipigon to support a strategic link in the Trans-Canada Highway system.

Also included are projects in the Greater Toronto and Hamilton Area, including the signature GO Regional Express Rail initiative that will provide faster and more frequent service on the GO Transit rail network. Plans include electrifying core segments, including the Union-Pearson Express, and more than doubling peak service and quadrupling off-peak service. As a result, train trips will grow from roughly 1,500 to nearly 6,000 a week.

The Ontario Community Infrastructure Fund (OCIF) is among investments being made through Moving Ontario Forward. The fund was created in 2014 to support critical infrastructure projects and improve asset management planning in small, rural and northern communities. To date, 137 projects totalling more than \$170 million in provincial funding have been approved through the application-based component. In addition, 426 communities are eligible to receive annual stable and predictable funding under the formula-based component. In 2015, the province consulted with communities on their local priorities to inform Moving Ontario Forward investments. In response to feedback and the progress that municipalities have made on asset management planning, the province is expanding the fund from \$100 million per year up to \$300 million per year by 2018-19, including \$200 million in formula-based funding.

## ELEMENTARY AND SECONDARY EDUCATION



Educating Ontario’s children is of critical importance for the province. Education is essential to good citizenship and enables people to better contribute to their communities and the world.

The Ministry of Education works with school boards to support the government’s priorities of achievement and well-being for all students. This includes ensuring that students are uniformly provided with safe, healthy and appropriate learning spaces.

The ministry supports school infrastructure through capital funding to address accommodation pressures, excess capacity, facility condition and government policy and program initiatives such as child care and community hubs.

Because the need for school buildings is driven by population make-up at the neighbourhood level, which can be highly dynamic, an ongoing challenge is to match available space to neighbourhood needs. In considering the need for new schools, the ministry closely tracks growth and demographic trends. The ministry also encourages school boards to reduce unused space, consolidate schools where necessary, and work jointly with other bodies, including other boards in the same area, to ensure all space is designed, built and used effectively.

In allocating funding for renewal, the ministry uses a Facility Condition Index to help determine repair and rehabilitation needs and balances the costs to maintain and repair older buildings against the long-term needs of the community. The ministry is now in the midst of its second five-year condition assessment cycle of school buildings across the province.

Ontario is investing in a modern child care and early-years system. To support co-location of licensed child care services in school buildings, which eases the transition of children to full-day kindergarten, the ministry is providing significant funds to school boards to make space suitable for the needs of child care.

## Education accomplishments

In the 2016–17 school year, Ontario’s school boards are opening 29 new schools, while 16 schools have undergone major additions and renovations. For example:

- Alexander Henry High School in Sault Ste. Marie was transformed into a new junior-kindergarten-to-Grade 8 school to relieve local enrolment pressures and, through partnership with the municipality, provide a public library to create a community hub.
- Two schools were consolidated into the new Greensville Public School in Hamilton, with 39 child care spaces and, through a partnership with the municipality, community space and a public library.
- The new École Secondaire Gaétan-Gervais was opened in Oakville and shares playing fields and parking with the Town of Oakville and a neighbouring school of the English public school board.
- In Sioux Lookout in northwestern Ontario, Queen Elizabeth District High School was replaced with a new community hub facility for 513 elementary and secondary students and space to bring together important community services provided by Firefly Child and Family Services, Meno Ya Win Health Centre and Confederation College.

As well, Ontario has now delivered on its 2015 commitment to invest \$120 million to create more than 4,000 new licensed child care spaces in local schools in areas of high demand.

## What's ahead

Over the next 10 years, the Province plans to provide \$12 billion in capital grants to school boards to help build new schools in areas of high growth, improve the condition of existing facilities and invest in projects to reduce surplus space through school consolidations, while expanding opportunities for local community access to surplus school locations.

There remains a need to maintain aging schools, which the Province is addressing through a major allocation of funding that totals \$5.7 billion over the next 10 years. School boards will use the funding for such important tasks as repairing roofs, updating heating and air-conditioning units, and modernizing electrical and plumbing systems. Funding will also significantly improve more visible elements of schools that affect students' learning and well-being, including flooring, walls, ceilings, playing fields and more.

Starting in 2017, the government will help to create another 100,000 licensed spaces for infants, toddlers and preschoolers, through a mix of school-based, community-based and

home-based expansion, by providing one-time capital funding and operating dollars. The Province is planning to invest \$65.5 million in the 2016–17 school year as part of a larger investment to create about 3,400 more child care spaces.

Ontario's nearly 5,000 schools offer ideal locations for community hubs, as many of them are at the heart of their community. New capital funding for school boards to support community hubs in schools includes:

- \$18 million to retrofit existing child care space in schools to open up more spaces for children under four years old.
- \$20 million to create space for new child care and child and family support programs through Ontario Early Years Child and Family Centres in schools.
- \$50 million to renovate excess school space to make it available for use by community partners and the public.



## ADVANCED EDUCATION AND SKILLS DEVELOPMENT

### Accomplishments

A new postsecondary campus in Markham is expected to serve **4,000** students

Ontario's **24** colleges and **20** universities offer modern and safe environments for more than **600,000** students

The *Lab Innovation for Toronto* project will renew **546** laboratories across three campuses



**\$1.9B** in federal and provincial funding for infrastructure at postsecondary institutions (including Aboriginal Institutes) through the Post-Secondary Institutions Strategic Investment Fund

Focusing on capital needs in an increasingly connected world where investments in technology are key

**\$100M** annually for maintenance of existing infrastructure at colleges & universities starting in 2019-20

### What's Ahead

Colleges and universities play a critical role in equipping people for success and preparing them to generate the ideas, products, services and jobs that will ensure Ontario's future prosperity. Between 2002–03 and 2015–16, the postsecondary education system in Ontario expanded substantially, with full-time, funding-eligible enrolment growing by about 174,000, more than in any comparable period in the province's history.

Ontario has been supporting this unprecedented enrolment growth with significant capital investments that help Ontario's 24 colleges and 20 universities offer modern and safe environments for more than 600,000 students and enhance and expand teaching and research facilities.

Given the significant investments needed, it is essential to ensure that the right spaces are created in the right places for Ontario's students. The ministry will continue to work with colleges and universities to support sound asset management planning. For example, a space inventory and a comprehensive facility condition assessment have recently been completed in the college sector with support from the province.

## Advanced education accomplishments

As part of its Major Capacity Expansion policy framework, the government announced plans in May 2015 for a postsecondary campus in Markham. A partnership between York University and Seneca College, it is expected to serve about 4,000 students.

The Province is funding additional capital projects, which include:

- A new state-of-the-art clinical learning building at the University of Guelph's Ontario Veterinary College - modern and flexible classrooms will use computer-based case studies, patient simulators and medical communications labs. Renovation of the existing veterinary hospital will provide space for advanced surgery and anaesthesia.

- A 200,000-square-foot expansion of Seneca College's King Campus in York Region to provide 25 new classrooms, a library and specialized laboratories for training health care practitioners, as well as a new recreational and athletic area partially funded by student groups.

## What's ahead

In October 2016, the Province announced plans to create new university-led postsecondary sites in both Brampton and Milton focused on science, technology, engineering, arts and mathematics. The government will launch a call for proposals in January 2017, and universities will be encouraged to work with local communities, businesses and other post-secondary institutions to develop innovative proposals.

These projects are part of the Province's plan to provide \$3 billion in capital grants to postsecondary institutions over the next 10 years.

As highlighted in the 2016 Ontario Budget, Ontario will be working with the postsecondary sector on a capital strategy, recognizing that capital investment must look to the future of a growing, connected world where investments in technology are critical to jobs and the economy.

The Post-Secondary Institutions Strategic Investment Fund is a time-limited program, announced in the 2016 Federal Budget, for infrastructure projects at institutions across Canada. The federal and provincial governments, institutions and private donors will together invest more than \$1.9 billion in Ontario's postsecondary education infrastructure. The fund will support investments in research,



innovation and training infrastructure. For example, the University of Toronto's Lab Innovation for Toronto project will renew 546 laboratories across the university's three campuses. All projects have to be substantially complete by April 30, 2018.

Ontario is also increasing its funding for maintenance of existing infrastructure at colleges and universities from \$40 million in 2016–17 to \$100 million a year, starting in 2019–20.


## HEALTH CARE

### Accomplishments

Since 2003, more than **23,500** long-term care beds have been created or redeveloped

**100** major hospital projects carried out, including **23** projects involving the full rebuild of a hospital facility

New funding of **\$50M/yr.** in the 2016 Budget to help hospitals keep their facilities in good repair



The Enhanced Long-Term Care Home Renewal Strategy aims to redevelop more than **30,000** beds in more than **300** long-term care homes

Ontario's *Patients First: Action Plan for Health Care* looks to ensure timely access to the right care, in the right place, at the right time by better integrating services

Approximately **35** major hospital projects are under construction or in planning

### What's Ahead

Provincial support for health care facilities is essential for delivering quality care. Ontario's roughly 150 hospitals represent a major part of the health care infrastructure. As well, there are more than 78,000 long-term care beds in roughly 630 long-term care homes licensed by the Province, and hundreds of community health partners working out of clinics and other facilities.





Ontario's Patients First: Action Plan for Health Care, released in 2015 and building on the initial 2012 plan, set out to transform how health care is delivered. Central goals of this new, patient-centred approach are to ensure timely access to the right care in the right place at the right time, and to better integrate services. A major feature will be providing more care in community settings.

In support of Patients First, the 2014 Budget provided \$300 million more over 10 years for community health infrastructure projects. These include community health centres, aboriginal health access centres, community-based mental health and addictions agencies, public health units, family health teams, and nurse practitioner-led clinics. The ministry also released a redesigned policy that expands eligibility and streamlines the approval process for certain projects, including those that integrate a range of services under one roof supporting the objectives of community hubs. Such arrangements are likely to grow with Patients First and the province's plans to develop and expand the use of community hubs.

A sustainable, high-quality health care system that can meet the needs of future generations requires long-term planning. To meet that goal, the government is moving forward with a comprehensive framework for capacity planning and is committed to providing health service providers with resources to plan and design health infrastructure.

Maintaining the existing stock of valuable health care assets is also an important priority. The 2016 Budget announced that the province is providing new funding of \$50 million a year to help hospitals keep their facilities in good repair, bringing the annual total investment in facility renewal to \$175 million to support projects in 135 hospitals through the Health Infrastructure Renewal Fund. This is more than triple pre-2014 levels.

## Health care accomplishments

Over the past decade, the Province has invested in health care infrastructure at historic levels. Accomplishments include carrying out more than 100 major hospital projects, including 23 projects involving the full rebuild of a hospital facility, and investing significantly in specialty psychiatric hospitals to support their transfer to local hospital corporations.

As well, since October 2003, more than 10,000 new long-term care beds have been developed and more than 13,500 older long-term care beds redeveloped, and work is underway to add to that total.

## What's ahead

In the hospital sector, the province plans to provide \$12 billion in capital grants to hospitals over the next 10 years to continue building essential infrastructure. Approximately 35 major hospital projects are under construction or in planning. Over the next five years, 18 hospitals across Ontario will complete major renovations or rebuilds. The Province is also working with hospitals to plan 19 more major capital projects to expand and renovate existing facilities.

Construction is close to complete on the new Providence Care Hospital in Kingston, which will consolidate existing long-term specialized mental health, complex continuing care and rehabilitation services into a 270-bed state-of-the-art facility.

A new four-storey patient care building at Milton District Hospital, which is part of Halton Healthcare, is expected to be open in 2017. It will expand emergency and medical-surgical services, with an increase in capacity from 63 to 129 inpatient beds.

Additionally, a contract has been awarded for the new Mackenzie Vaughan Hospital project in York Region, which will feature a state-of-the-art emergency department, modern surgical services, specialized ambulatory clinics, advanced diagnostic imaging and integrated smart digital technology.

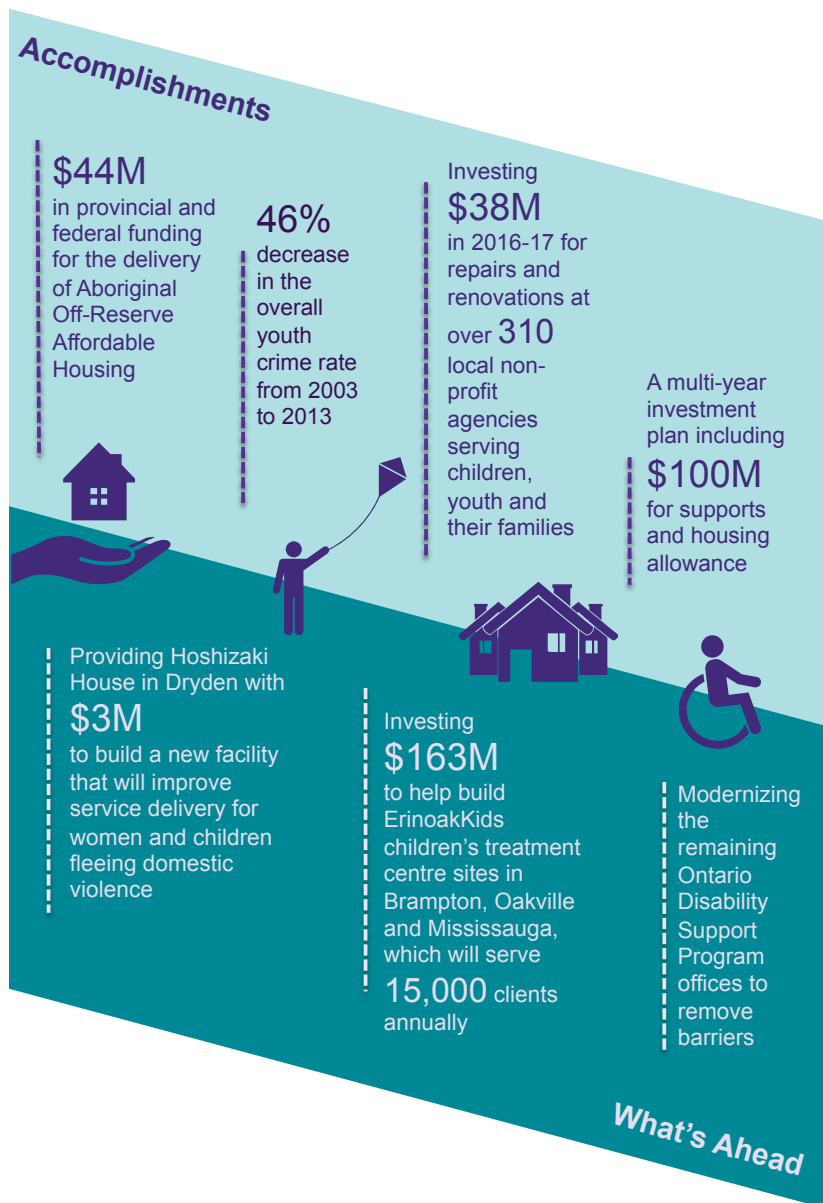
Planning grants are helping health care providers in communities across Ontario assess their existing assets and plan appropriately for the future, in line with the Patients First goal of an integrated health system.

The Province continues to work with community health providers to identify and support innovative models of service delivery. For example, the Ottawa Community Housing Corporation and the Carlington Community Health Centre are collaborating on a new four-storey building that will serve as a housing and community health hub, with an expanded community health centre facility on the ground floor and a 42-unit community housing apartment complex to be built above the clinic.

Announced in the fall of 2014, the Enhanced Long-Term Care Home Renewal Strategy aims to redevelop more than 30,000 beds in more than 300 long-term care homes to meet current design standards. The goal is to provide quality care and service in an environment that is comfortable, aesthetically pleasing, and as home-like as possible.



## SOCIAL INFRASTRUCTURE



Social infrastructure supports such important goals as giving children the best possible start in life, fostering resilient, inclusive communities, supporting people with disabilities and ensuring affordable housing options are available. Four ministries – Children and Youth Services, Community and Social Services, Municipal Affairs, and Housing – support social infrastructure in Ontario by investing directly in government-owned assets and by providing transfer payments to partner agencies and municipalities for their assets.

Evidence of what works for clients can drive changes in infrastructure. For example, the Ministry of Children and Youth Services is transforming youth justice programs and services through greater use of community-based rehabilitation programs to improve outcomes for both the young people in the system and the community.

Programs within the Ministry of Community and Social Services and the Ministry of Children and Youth Services help agencies receiving transfer payments maintain their buildings and meet fire code requirements so programs and services are delivered in a safe, healthy and secure environment.

Housing gives people the foundation they need to find jobs, raise families and build strong communities. Publicly-funded programs help people who could not otherwise afford stable, long-term housing. Roughly 55 per cent of Ontario's affordable/social housing rental stock is owned by municipalities and the balance by non-profit housing organizations. The Ministry of Housing does not own housing itself, but supports these partners through certain initiatives as:

- The federal-provincial Investment in Affordable Housing program, which funds the construction and repair of affordable housing units and provides rental and down-payment help to households in need. (In 2014, the program was extended for five years, and in June 2016 the provincial and federal governments doubled funding for it over two years.)

- A multi-year investment plan, including \$100 million for supports and housing allowances, under an update to the Long-term Affordable Housing Strategy. (This update also includes a commitment to build up to 1,500 supportive housing units over the long term.)
- A Green Investment Fund that includes \$82 million to be used for retrofits in high-rise social housing apartment buildings of 150 units or more, and \$10 million to improve electricity efficiency in social housing single-unit homes.

For social infrastructure, targeted strategies supported by business data – such as utilization rates, wait lists and facility condition – help drive investment planning. A key goal is to look for opportunities to make infrastructure investments that enhance service, whether by improving existing approaches or transforming the delivery model. Other important goals involve maintaining the capacity needed to deliver services and supports and achieving greater value for money by making the best possible use of assets.

## Social infrastructure accomplishments

In the youth justice sector, key achievements between 2003 and 2013 include a drop in the number of youths in secure custody from more than 1,000 to fewer than 400, and a 46-per-cent decrease in the overall youth crime rate. This has allowed the government to close or downsize several youth custody facilities and build smaller, strategically-located facilities to better address the needs of young people in the justice system.

Ontario is also building new facilities to provide vocational or other employment training for these young people, based on research showing the benefits. Examples include trades-training facilities at William E. Hay Centre in Ottawa and at Justice Ronald Lester Youth Centre in Thunder Bay. A shift of this type reduces the costs of more intrusive criminal justice interventions, better prepares youth to contribute economically to society as adults, and results in safer communities.

To further support vulnerable people, the Province:

- Is investing \$38 million in 2016–17 for repairs and renovations at over 310 local non-profit agencies across Ontario.
- Helped fund construction of the Ron Joyce Children’s Health Centre in Hamilton, completed in June 2016. (The new, fully accessible children’s treatment centre brings together programs previously in multiple locations. These include autism spectrum disorder services, the child and youth mental health program, the developmental pediatrics and rehabilitation program, and prosthetics and orthotics services.)

- Provided funding for a new shelter in Elgin County to better meet the needs of local women and children who have experienced violence in their homes. (The facility, which opened in September 2016, replaced a 98-year-old building and increased the size and capacity of the shelter from 1,700 square feet with 14 beds to 7,250 square feet with 26 beds.)
- Contributed to a new multi-service building in eastern Ontario that will make it easier for residents in the United Counties of Prescott-Russell to access a wide range of services and programs in one place. (The new Valoris for Children and Adults of Prescott-Russell community hub will be completed in 2016.)
- Renovated 34 Ontario Disability Support Program offices to remove physical barriers between clients and staff, enhancing the client experience and improving accessibility. (Plans are underway to modernize the remaining offices.)
- Continuing to make better use of space, including co-locating with other government and municipal offices.

Another federal commitment, under the Social Infrastructure Fund, is providing Ontario with \$209.4 million in 2016–17 for energy and water efficiency retrofits and renovations to existing social housing projects.

## Housing for Indigenous households

The Investment in Affordable Housing (IAH) for Ontario program included a \$2.6-million Off-Reserve Aboriginal Housing component.

In 2014, the IAH program was extended by five years. A total of \$44.1 million in federal and provincial funding was set aside for the delivery of the Off-Reserve Aboriginal Housing component.

The Province is working in partnership with two organizations to administer the funding. Ontario Aboriginal Housing Services is delivering the program outside the Greater Toronto Area (GTA), while the Miziwe Biik Development Corporation has responsibility within the GTA.

The funding covers new affordable rental units and home ownership loans. Outside the GTA, it also includes repair funding to help low- and moderate-income Indigenous homeowners repair their homes.

## What's ahead

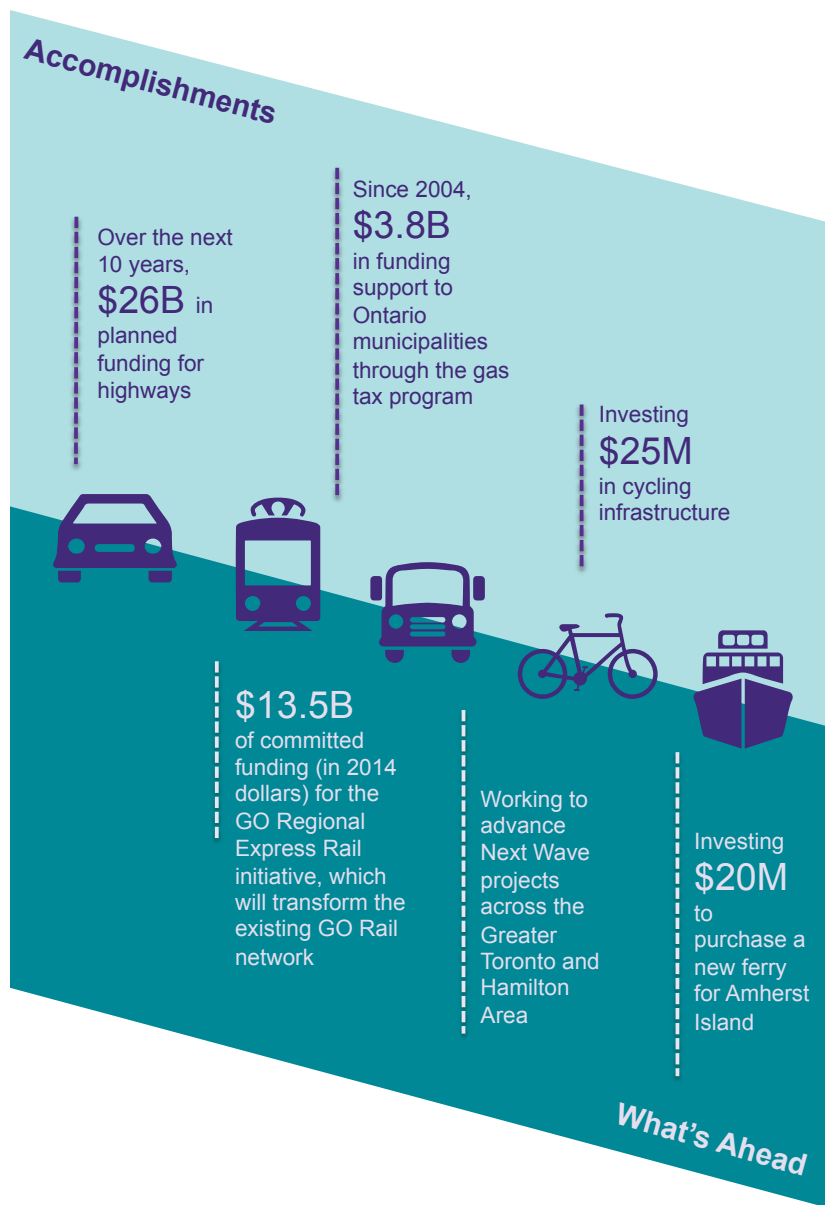
Ontario is investing \$163 million to help redevelop the ErinoakKids Centre for Treatment and Development locations in Brampton, Oakville and Mississauga. These facilities will offer a range of services for children and adolescents with special needs. When complete in 2017, the three sites will serve nearly 15,000 clients a year.

The Province will receive almost \$28 million of the \$89.9 million committed by the federal government under the Social Infrastructure Fund over the next two years to build, renovate and repair shelters and transition houses for victims of family violence. Selection criteria are being developed. As part of this fund, the province is providing Hoshizaki House in Dryden in northwestern Ontario with roughly \$3 million in funding to improve service delivery for women and their children fleeing domestic violence. The current century-old building will be replaced by a new facility that will be more than twice its size.





## TRANSPORTATION



Investments in transportation infrastructure aim to move people and goods within and between communities. These investments help manage congestion and ensure Ontarians can get to and from work and goods can get from factory to market.

The Ministry of Transportation strives to be a world leader in moving people and goods safely, efficiently and sustainably to support a globally-competitive economy and a high quality of life. Its key priorities are providing a multi-modal transportation network, increasing transit ridership and improving Ontario’s highway, bridge, and border infrastructure.

Metrolinx, an agency of the Government of Ontario under the *Metrolinx Act, 2006* reports to the Minister of Transportation. It was created to improve the coordination and integration of all modes of transportation in the Greater Toronto and Hamilton Area. Metrolinx works closely with provincial ministries, municipalities and transit providers, as well as civic, academic, business and community partners, to implement the collective vision for the region's transportation system as described in the Regional Transportation Plan. The backbone of Metrolinx's directly-owned network is GO regional transportation rail and bus service. Metrolinx is also responsible for the PRESTO electronic fare payment system and the Union-Pearson Express airport rail link.

In the north, the Ministry of Transportation works with the Ministry of Northern Development and Mines on comprehensive multi-year highway improvements and related initiatives, including a multimodal transportation strategy for the north. The Ministry of Northern Development and Mines is also responsible for two provincial transportation agencies that together provide rail, bus and ferry services, mainly in the north. They are the Ontario Northland Transportation Commission, which offers bus, Polar Bear Express passenger train and rail freight services; and the Owen Sound Transportation Company, which operates the MS Chi-Cheemaun and MV Niska 1 ferries and provides vessel management and operation services for the Ministry of Transportation for the MV Pelee Islander and MV Jiimaan and Pelee Island winter air services.

The portfolio of assets directly owned by the Ministry of Transportation has a current replacement value of roughly \$82 billion, with highway surfaces and bridges accounting for about 88 per cent of that figure. The balance is made up of other assets in highway rights-of-way, such as land, lighting, noise barriers, overhead signs, patrol yards, truck inspection stations and service centres, as well as ferries and remote northern airports.

The assets of Metrolinx, which have a current replacement value of about \$19.6 billion, include GO Transit's fleet of more than 500 buses and 650 passenger rail cars and 75 locomotives, as well as stations, parking lots, maintenance facilities, vehicles, rail corridors, land, information technology equipment and fare systems. The reported assets of the two transportation agencies reporting to the Ministry of Northern Development and Mines total about \$350 million.

An important part of stewardship is managing assets to ensure a high level of service over the expected period of service. The Ministry of Transportation bases its need to invest in renewing a highway, bridge or other asset on an assessment of the asset's physical condition. These assessments are carried out regularly. When the ministry is considering an expansion – for example, a new or widened highway to relieve congestion and/or reduce travel time to markets – it must justify the need through an environmental assessment process.

**Multimodal** refers to the way people and goods use multiple forms of transportation in everyday activities. For example, road (car, bus, truck), rail (GO train, freight train), marine (ferries, ships), air, and human-powered, such as walking and cycling. A well planned transportation system considers all modes.





## Transportation accomplishments

Over the next 10 years, the Province plans to provide \$26 billion for highways and other highway planning activities, property acquisition and other transportation programs. Major highway initiatives in the south include:

- Expanding the high occupancy vehicle (HOV) network in Toronto, Brampton and York Region.
- Rehabilitating and expanding Highway 417 in Ottawa.
- Rehabilitating Highway 401 in Toronto.
- Extending Highway 407 eastward from Oshawa.

The Ministry of Northern Development and Mines and Ministry of Transportation are delivering the following projects in the north:

- Making Highway 11/17 four lanes between Thunder Bay and Nipigon.
- Making Highway 69 four lanes south of Sudbury.

Over the next 10 years, the Province will continue to fund the development of an integrated transportation network:

- Ontario municipalities will receive ongoing, stable support through the gas tax program to expand and improve their public transit systems. Since 2004, the Province has committed a total of \$3.8 billion in funding from this source, including a planned \$334.5 million in 2016–17. In 2015–16, 97 transit systems in 132 communities across the province benefited from this program.
- The Community Transportation Pilot Grant Program helps Ontario municipalities partner with community organizations to coordinate existing local transportation services and share resources to improve transportation options and service.

- In the GTHA, key Metrolinx-led transit projects - such as GO regional express rail as well as light rail transit and bus rapid transit expansion projects - are transforming the commuter experience.
- Outside the GTHA, the Province has made and continues to make significant investments in municipal rapid transit expansion projects, including Waterloo Region Rapid Transit and the City of Ottawa's LRT plan.

## The Big Move

The Regional Transportation Plan outlines a shared vision for multimodal regional transportation in one of the largest and fastest-growing urban regions in North America: the Greater Toronto and Hamilton Area (GTHA). Developed through intensive public consultation and collaboration with stakeholders, municipal leaders and professionals, it was the first regional transportation plan for the GTHA. The Big Move was adopted in 2008 by the Metrolinx board of directors. The plan envisioned expanding rapid transit, enlarging Union Station as a key mobility hub and connecting it by rail to Pearson Airport, integrating transit fares, and creating more mobility hubs, as well as other strategic priorities to transform the region's transportation system. The Province committed \$11.5 billion as the Big Move's foundational investment. The scope has since grown to more than \$16 billion in transit expansion, and improvement projects are completed or currently underway across the area. The network being created encompasses GO Transit and the GO Regional Express Rail initiative, the Union Pearson Express, priority regional rapid transit projects such as the Eglinton Crosstown LRT line, and the PRESTO integrated fare payment system. Metrolinx is carrying out a legislated review and update of the Big Move. As the Regional Transportation Plan must conform to the Growth Plan for the Greater Golden Horseshoe, the review and update of the Big Move aligns with the review of the Growth Plan. The adoption of an updated Regional Transportation Plan is planned for 2017 with an implementation plan to follow.

## #CycleON

Investments that create more opportunities for Ontarians to choose cycling and walking over driving can reduce greenhouse gas emissions while at the same time improving public health and making Ontario communities more vibrant. The outcomes are more sustainable communities and higher quality of life. Through #CycleON: Ontario's Cycling Strategy, the Province recognizes the importance of improving cycling infrastructure. Getting people to see cycling as a daily activity requires more bike paths, cycling routes and cycling-friendly transit connections. Ontario is investing \$25 million— providing \$15 million for cycling infrastructure on Ontario highways and \$10 million to the Ontario Municipal Cycling Infrastructure Program – to help municipalities build new, and improve existing, cycling infrastructure. Thirty-seven projects in various municipalities were approved for funding. Ontario has also streamlined the process for municipalities to submit trail and path proposals for environmental assessment.

## What's Ahead

GO Regional Express Rail (RER) is a transformative change that is crucial to all of southern Ontario. It will provide two-way, all-day service with 15-minute frequencies in both directions during weekdays, evenings and weekends, with electrification in core areas along five of the seven GO rail corridors. Through Moving Ontario Forward, the Province will invest \$13.5 billion to implement GO RER. This is in addition to existing commitments of \$7.8 billion for state of good repair, optimization and expansion across the GO network. This total investment of \$21.3 billion makes the GO capital program the largest commuter rail program in Canada.

In addition:

- In June 2016, the Metrolinx board of directors recommended 12 new GO stations (including six stations that correspond with the integrated GO RER/SmartTrack concept) for additional planning and design on the Kitchener, Barrie, Stouffville and Lakeshore East GO corridors, subject to funding and confirmation of municipal support for station locations.
- Metrolinx has secured an agreement in principle with Canadian National Railway that will allow for two-way, all-day GO Regional Express Rail beyond Bramalea to Kitchener.
- Subject to final agreement with its freight rail partners, the province will expand and extend GO Transit rail service to Bowmanville, in Durham Region, and in Niagara Region.

Metrolinx is also:

- Advancing procurement of the Finch West LRT line, with plans for procurement of the Sheppard East LRT to follow.
- Expanding bus rapid transit (BRT) in York Region.
- Implementing new LRT projects along the Hurontario corridor in Mississauga and southern Brampton, which includes 22 stops over 20km of dedicated rapid transit.
- Working to advance other key projects, including the Toronto Relief Line, Yonge North Subway Extension, Durham-Scarborough BRT, Brampton Queen Street rapid transit, and Dundas Street BRT.

The Province will continue working with regions, communities, other levels of government and private partners to design and select the next generation of transportation investments that will improve the competitiveness of Ontario's communities, enhance productivity, promote innovation and develop new economic opportunities, such as the Ottawa LRT Stage 2 and a regional transit hub in downtown Kitchener.

Ontario has also appointed the Honourable David Collenette as a special advisor to assist the Province in bringing high speed rail to the Windsor, London, Kitchener-Waterloo, and Toronto corridor. The Special Advisor is expected to provide recommendations to the Government on the delivery of high speed rail in Southwestern Ontario. These recommendations will inform the government's and the Ministry of

Transportation’s approach to the undertaking of an environmental assessment for the high speed rail project.

Infrastructure Ontario is working closely with Metrolinx to analyze and move forward with a portfolio of projects. In particular, work has begun on procurements for the first tranche of RER projects, which includes track work, redeveloping GO stations and improving rail crossings.

The Province continues to make strategic investments in the Ontario Northland Transportation Commission’s assets to support economic growth in the north. These include more than \$23 million over three years to purchase new motor coaches, as well as refurbishing passenger rail coaches for the Polar Bear Express.

Ontario and the federal government have signed a memorandum of understanding with the goals of improving the delivery of the winter roads program, which serves Indigenous communities, and working together to identify opportunities related to developing all-season roads in the Far North.

To support ferry travel, the Province will:

- Invest \$20 million to purchase a new ferry for Amherst Island near Kingston, in an area where several ferries operate, ensuring the availability of a backup vessel when needed.
- Invest in upgrades to the MS Chi–Cheemaun ferry running between the Bruce Peninsula and Manitoulin Island, and in river dredging for the MV Niska 1 ferry’s navigation routes between Moosonee and Moose Factory Island, on Moose River, to improve the services provided by the Owen Sound Transportation Company in the north.





## JUSTICE



A strong justice system that reflects our values and attitudes, that protects rights and that allows for effective ways of resolving challenging issues, is integral to society. Within the justice sector:

- The Ministry of the Attorney General, through the court system and its agencies and tribunals, prosecutes crime, administers criminal, family, civil and small claims courts, protects victims and vulnerable people, and provides expert legal services and Legal Aid.

- The Ministry of Community Safety and Correctional Services makes Ontarians safer in their communities through strong law enforcement, crime prevention and effective rehabilitation.

Justice sector assets are typically costly and take many years to plan, build, commission and bring into service. As well, they are highly varied and complex to meet needs that are often extremely specialized. Above all, assets need to be safe, modern and functional.

Because justice infrastructure must also respond to the changing needs of society, projecting the level and nature of future demand is critical. The ministries in the justice sector continue to review current and expected needs and respond appropriately. Likewise, the ministries are attuned to new and innovative approaches that may present opportunities to improve outcomes for people and communities.

Courthouses are a key part of the justice system. The courthouse portfolio of the Ministry of the Attorney General includes 74 main or “base” court locations, as well as several satellite courts providing select services in conjunction

with base courts. In total, there are 748 courtrooms across the province. Newer facilities include state-of-the-art courthouses built to consolidate older facilities, provide services to an increasingly diverse public and help create a more modern and effective justice system.

Additional facilities of the Ministry of the Attorney General include heritage courthouses, administrative spaces and hearing rooms that support the work of the ministry’s agencies, boards and commissions, and a wide spectrum of locales, including office buildings and legion or municipal halls, that house ministry operations.

The infrastructure of the Ministry of Community Safety and Correctional Services consists of more than 450 facilities across the province. They include 26 correctional facilities, more than 120 probation and parole offices, more than 150 Ontario Provincial Police detachments and communication/command centres, 13 community safety buildings for such services as forensics and coroner/pathology, three colleges (police, fire and correctional) and nine corporate offices.

## Justice accomplishments

Since 2005, the Ministry of the Attorney General has invested more than \$1.7 billion in capital projects to strengthen the justice system and help build safer and stronger communities for Ontario. This includes building, significantly renovating, or expanding 27 courthouses across the province. As part of these investments, new courthouses have been built in Belleville, St. Thomas, Thunder Bay, Kitchener and Oshawa.

Government is continually investing in upgrades and renewals to existing court facilities, including renovation and capital investment projects in Ottawa, Barrie, Newmarket, Sioux Lookout, Pembroke, Cornwall, Cobourg, Brantford, Brockville, London, Sarnia, Sudbury, Chatham, Owen Sound and Parry Sound.

Opened in the first half of 2014, the South West Detention Centre is part of the government's strategy to replace older facilities that no longer meet operational requirements. The new maximum-security facility accommodates both male and female inmates. Its 315-bed capacity includes general population, infirmary and special-purpose beds.

The state-of-the-art Forensic Services and Coroner's Complex, which opened in October 2013, enhances collaboration and efficiency by housing in one site the Office of the Chief Coroner, the Ontario Forensic Pathology Service, the Centre of Forensic Sciences and the Office of the Fire Marshal and Emergency Management. The 663,000-square-foot building has the capacity for more than 2,500 autopsies and 15,000 forensic science cases a year.

## What's ahead

The Province will expand the A. Grenville and William Davis Courthouse in Brampton to respond to current pressures and expected population growth in Peel Region over roughly the next 25 years. A new six-floor addition will be built, with the first two floors slated for completion in September 2018. The new addition will contain new courtrooms, support spaces and judicial chambers.

A new courthouse will bring most of Toronto's Ontario Court of Justice criminal courts together at a site on Armoury Street. This is expected to reduce costs, make court administration more efficient and better serve the community.

Future courthouse projects are expected to offer additional opportunities for consolidation, efficiencies, innovation, accessibility and modernization.

The justice sector is undergoing long-term transformation to become more modern, client-centred, community-based and focused on prevention. For example, the province is repurposing the underutilized Roy McMurtry Youth Centre into a facility that will meet the unique environmental and programming needs of adult female offenders, including those who require specialized mental health services. The government will be constructing smaller, strategically located and program-appropriate facilities to effectively and efficiently support the programming needs of the youth justice system.

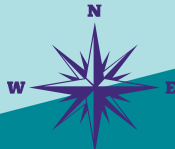
# NORTHERN INFRASTRUCTURE

## Accomplishments

**\$5M** provided to Laurentian University to support its initiative to build out mineral exploration capacity

Since 2003, **\$1.1B** contributed to **7,717** projects

**\$32M** to help build a **2,300-kilometre** fibre loop connecting **25** First Nation communities and **17,000** inhabitants to modern broadband services



**\$1B** committed for strategic transportation infrastructure development in the mineral-rich Ring of Fire region

Developing a multimodal transportation strategy that will include recommended improvements for the movement of people and goods over the next **25** years

Investing in a **36-acre** industrial park, that includes a rail spur line, in Timmins

## What's Ahead



Northern Ontario makes up about 90 per cent of the land mass in Ontario. Efficient, modern infrastructure is critical to Northern Ontario's future. Transportation, education, health, energy, water and wastewater infrastructure, information and communications infrastructure, and community infrastructure are the building blocks for economic growth. Aligning and co-ordinating infrastructure investments to support northern economic development priorities



are key to meeting the needs of residents, including the North's skilled and knowledgeable people and innovative businesses and entrepreneurs. This requires working closely with partners across government.

The Ministry of Northern Development and Mines has a regional mandate. As part of that mandate, the ministry promotes northern economic and community development, oversees the provincial mineral sector and helps deliver programs and services in the North. The ministry also provides strategic planning for northern infrastructure, working with other ministries, municipalities and Indigenous partners to expand and maintain highways and roads across Northern Ontario.

The Growth Plan for Northern Ontario provides a 25-year strategic framework that includes policies to guide and support coordinated infrastructure investments across government for Northern Ontario. The Ministry of Northern Development and Mines works closely with partner ministries to ensure that infrastructure investments in the North align with the policies of the Growth Plan. Specific infrastructure-related needs in the north include:

- Modernizing, expanding and renewing transportation infrastructure.
- Stimulating economic development and mineral investments.
- Building community capacity to promote economic initiatives.
- Improving local and regional socio-economic conditions.
- Promoting environmental stewardship through, for example, rehabilitation of abandoned mines.

The ministry works closely with the Ministry of Transportation on projects to improve highways and other transportation infrastructure in Northern Ontario. The ministry also oversees two provincial transportation agencies: the Ontario Northland Transportation Commission and the Owen Sound Transportation Company.

In the Far North of Ontario, an area of roughly 450,000 square kilometres south of James and Hudson bays, development is subject to the *Far North Act, 2010*. For areas without joint First Nations-Ontario community-based land-use plans, an order under the act is required to allow most types of development to proceed.

## Northern infrastructure accomplishments – Northern Ontario Heritage Fund Corporation

The Northern Ontario Heritage Fund Corporation (NOHFC) is a crown agency of the Ministry of Northern Development and Mines. Since 2003, the province has committed more than \$1.1 billion through the NOHFC to 7,717 projects, including several involving broadband.

As part of those investments, the NOHFC has helped fund infrastructure projects by providing:

- \$5 million to Laurentian University in Sudbury to support its more than \$100 million initiative to build mineral exploration capacity.
- \$2 million to Confederation College to build a 44,200-square-foot Technology Education and Collaboration Hub at its Thunder Bay campus.
- \$5 million more to the Northwestern Ontario Broadband Expansion Initiative (NWOBEI) as part of a total provincial contribution of \$34 million to help build a 2,000-kilometre fibre loop connecting 21 First Nation communities to modern broadband services.

### Improving travel in Northern Ontario

In collaboration with the Ministry of Northern Development and Mines, the Ministry of Transportation is developing a Northern Ontario Multimodal Transportation Strategy, a key commitment of the Growth Plan for Northern Ontario. It will adopt an integrated multimodal approach that considers highway, marine, air, rail and other modes of transportation, and will include recommended improvements for the movement of people and goods over the next 25 years.

The foundational work on the strategy is complete, with the release of a series of technical papers and a discussion paper in October 2016 on transportation planning issues and opportunities for Northern Ontario. They are available on the strategy website at [www.NOMTS.ca](http://www.NOMTS.ca).



## What's ahead

Ontario has committed up to \$1 billion for strategic transportation infrastructure development in the mineral-rich Ring of Fire region, located about 540 kilometres northeast of Thunder Bay. The Ring of Fire will support economic development in Northern Ontario and benefit Indigenous communities, Ontario and Canada as a whole. The Ring of Fire Infrastructure Development Corporation has been set up to help ensure smart, sustainable and collaborative development in the region.

The NOHFC is providing:

- \$1 million to the Thunder Bay Port Authority to expand dock-side operations and build a new storage facility at its Keefer Terminal; and
- \$2.5 million to the City of Timmins to develop an industrial park that will include a rail spur line to accommodate a new anchor tenant.

Additional northern infrastructure projects are featured throughout this document, as other ministries are also investing in northern infrastructure as part of their overall provincial mandates.

## NATURAL RESOURCES AND FORESTRY



A healthy and naturally-diverse environment is crucial to enabling and contributing to sustainable development in Ontario. Managing the province's natural resources and forestry infrastructure in an ecologically sustainable way will ensure that future generations are able to enjoy them.

The Ministry of Natural Resources and Forestry works across the province to protect Ontario's biodiversity while promoting economic opportunities in the resource sector and providing outdoor recreation opportunities.





Ontario Parks, for which the ministry is responsible, is the province's largest provider of outdoor recreational opportunities. It ensures the protection of more than 8.2 million hectares of land and in 2015, generated more than \$80 million in revenue from more than 9.5 million visits.

The ministry relies on a variety of assets to support its mandate. These include:

- Roughly 1,349 owned and leased buildings in more than 330 provincial parks, with a replacement value of \$833 million.
- A complex portfolio of 451 owned and leased buildings to manage forest fires and emergency situations, with an estimated replacement value of \$251 million.
- Numerous other operational, administrative and research facilities.

Also, the ministry owns and maintains a significant portfolio of dams and engineering structures, as well as roughly 160,000 kilometres of non-forestry roads, numerous crossings (including bridges, culverts and rail crossings), and other transportation-related assets.

In developing and revising its 10-year capital investment plan, the ministry uses financial metrics to make effective decisions and set infrastructure priorities across program areas and business portfolios. It also uses legislated principles and criteria and best practices in asset management planning (for example, ensuring public safety, meeting legislated changes and renewing existing infrastructure).

## Natural resource and forestry accomplishments

A new consolidated fire management headquarters at the Stanhope airport in Haliburton in central Ontario opened in August 2016 to bring together aviation, forest fire management and emergency response operations.

The ministry is reinvesting in dams to maintain a consistent level of infrastructure quality. It continues to participate in the Building Canada Fund, receiving \$2.75 million in federal funding towards the \$7.3-million project costs for expanding the Ivanhoe Lake Dam stilling basin.

The ministry is one of several ministries that own or have responsibility for remediating contaminated sites. It is nearing completion of the remediation of two of its three highest-priority sites – the Mid-Canada Line Radar sites and the Hawkesbury Wet Lagoon site – while advancing the plan to remediate the third, the Steep Rock Mine site near Atikokan.

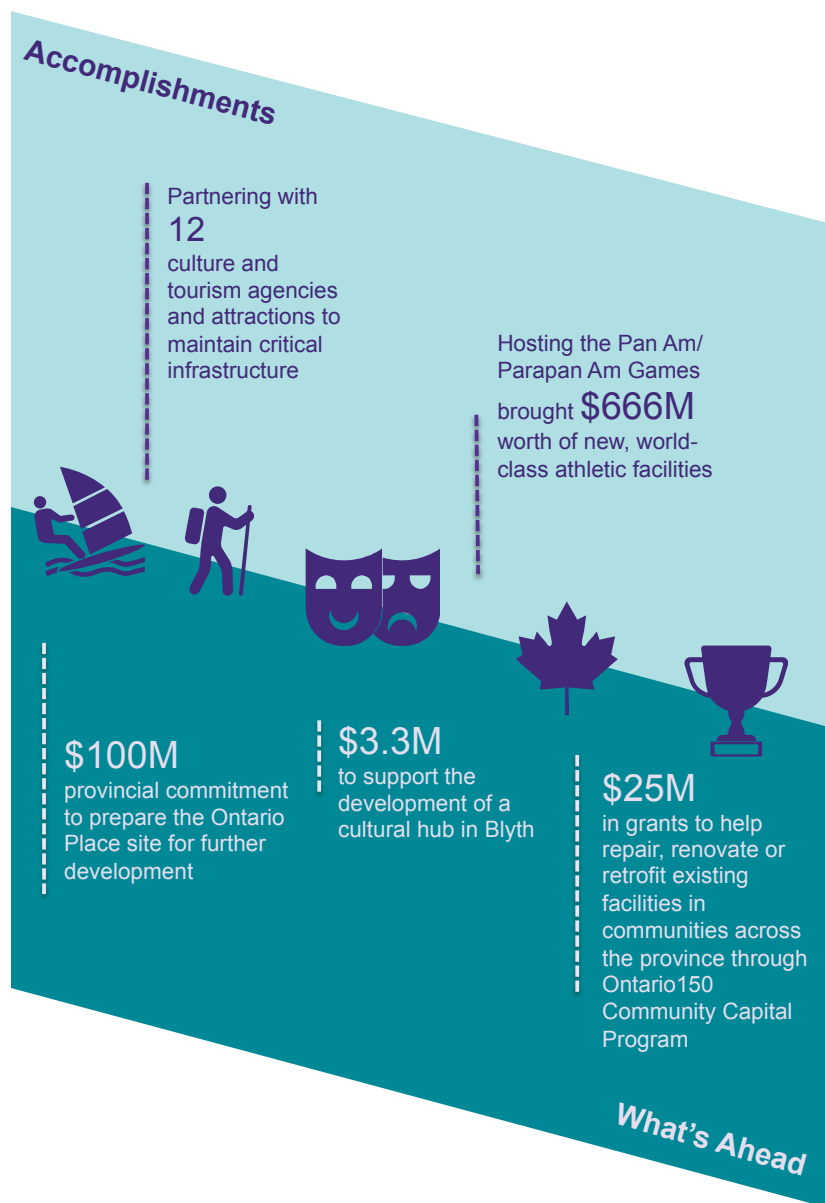
## What's ahead

The ministry is continuing to invest in expanding or renewing fire management headquarters and centres in Thunder Bay, Dryden and North Bay, with total planned investments of \$25 million, \$28 million and \$8 million respectively.

As well, the ministry is maintaining its long-term annual transfer payment program funding of \$5 million to conservation authorities for water and erosion control infrastructure.



## TOURISM, CULTURE AND SPORT



Investments in culture, tourism and sport infrastructure build community pride and help Ontario attract and retain a highly talented and skilled workforce. The Ministry of Tourism, Culture and Sport supports organizations and attractions that promote economic growth and job creation by making Ontario a world-class destination while enhancing Ontarians' quality of life.

Heritage sites, museums, art galleries, science centres, convention centres, historical parks and other land-based attractions are part of the asset portfolio that delivers tourism and culture programs. Annual investments from the ministry help to keep agency and attraction assets operational, accessible and safe.

The ministry also works with other levels of government and industry partners to support broader infrastructure needs within the tourism, culture, sport and recreation sectors and deliver major government priorities.

Ontario's Culture Strategy includes a commitment to inform the development of Ontario's long-term infrastructure plan to work toward better understanding of and address the needs of the culture sector. As the Culture Strategy notes, all parts of the culture sector contribute to a strong economy. Two elements of the wider creative industries - architecture and design - contribute directly to the *Infrastructure for Jobs and Prosperity Act's* goal of incorporating design excellence into infrastructure planning.

## Tourism, Culture and Sport accomplishments

The Pan Am/Parapan Am Games brought the Greater Toronto and Hamilton Areas about \$666 million worth of new, world-class athletic facilities, including 10 new internationally certified sports venues and 15 upgraded venues.

Ontarians are already benefiting from this infrastructure investment.

The new Toronto Pan Am Sports Centre, in the east end of the city, saw more than 100,000 visits in its first three and a half months of operation after the games. By the end of 2015, some 2,300 fitness members had registered and more than 30 high-performance and community sport groups were training at the facility. These included five Team Canada swimmers, three of whom won medals at the Rio Olympics in summer 2016.

In 2015, more than 20,000 sport enthusiasts participated in cycling sessions at the new

Mattamy National Cycling Centre (velodrome) in Milton.

The new Athletics Stadium at York University will expand its high-performance programs to support Athletics Canada.

As well, Infrastructure Ontario and Waterfront Toronto oversaw the development of a new, award-winning community that served as the Athletes' Village during the games. It has since been transformed into a mixed-used community with 810 townhomes, condominiums and affordable home ownership units, 253 affordable housing rental units, an 82,000-square-foot YMCA, a 500-bed student residence and an 18-acre park. Unlocking the economic potential of this former brownfield site is translating into jobs, increased property tax revenues and more investment in the future.

**The Royal Botanical Gardens**, a National Historic Site and world-class attraction in the Hamilton and Burlington area, reopened its historic Rock Garden to the public in May 2016, after a multi-year rejuvenation project supported by Ontario and the federal government. This significant investment will help drive tourism to the region.

Through its capital repair and rehabilitation program, the ministry has distributed about \$21 million a year in capital funding over the past five years to 13 of its agencies and attractions. This funding helps to maintain assets in a state of good repair, which protects the health and safety of visitors and staff, enables the delivery of programs and experiences, and ensures the physical security of important collections and sites. Investment priorities are based on asset condition and needs that reflect the unique mandates of tourism and culture agencies and attractions.





## What's ahead

The ministry is moving forward on several important projects:

- The Province is building on Ontario Place's legacy of innovation, fun and live music by revitalizing the site into a year-round, vibrant waterfront destination. The first step of revitalization is the Urban Park and William G. Davis Trail, expected to open in 2017. The government has set aside \$100 million to prepare the site for further development, including conducting integrated land-use and environmental planning and early capital work, such as demolition and soil remediation.
- Ontario is investing \$3.3 million in 2016–17 to help develop the performing arts facility in Blyth, a community in southwestern Ontario known for its annual theatre festival, into a cultural hub. The project will help revitalize and renovate existing buildings, and prepare for the new Canadian Centre for Rural Creativity.
- Through The Journey Together: Ontario's Commitment to Reconciliation with Indigenous Peoples, Ontario is investing \$1.4 million in 2016–17 to fund repairs to the roof of the Mohawk Institute Residential School in Brantford to limit damage to this historically important building.
- Administered by the Ontario Trillium Foundation, the Ontario150 Community Capital Program is providing \$25 million in grants to mark the 150th anniversary, in 2017, of the Confederation of Canada and creation of the Province of Ontario. Grants ranging from \$5,000 to \$500,000 will repair, renovate or retrofit existing facilities and spaces in communities across Ontario.

As well, the ministry will continue to invest in capital repair and rehabilitation projects at tourism and culture agencies and attractions.

## ENERGY



A clean, reliable and affordable supply of electricity is key to creating sustainable jobs, fighting climate change and growing the economy. Since 2003, significant investments have been made in the province's electricity system, including more than \$35 billion in cleaner generation, as well as other critical infrastructure upgrades. Although energy planning is not subject to the *Infrastructure for Jobs and Prosperity Act, 2015* and is additional to the Province's more than \$160 billion infrastructure investment commitment, it nonetheless represents crucial infrastructure for the province.



Ontario continues to promote investments in an energy system that is highly reliable, while maintaining leadership in a transition to clean energy technologies.

Major support for the evolution to clean energy comes through the well-established long-term planning process in the sector. The Long-Term Energy Plan (LTEP), with a strong focus on integrated policy, is the energy sector's road map.

Work is currently underway on the next LTEP, which is expected to be released in 2017. The LTEP will be developed through a highly collaborative process that directly engages energy sector stakeholders, Indigenous communities and the public. Besides engagement, other guiding principles in its development include cost-effectiveness, reliability, clean energy and emphasis on conservation and demand management.

Examples of key energy infrastructure projects include the following:

- An investment of \$12.8 billion will be made by Ontario Power Generation Inc. to refurbish the Darlington nuclear station between 2016 and 2026.
- Bruce Power plans to invest \$13 billion for the refurbishment of six nuclear units at the Bruce nuclear station.

- Priority transmission projects will go forward to support electricity needs in the northwest, as identified in the 2013 LTEP. These include reinforcement of the East-West Tie, a new northwest bulk transmission line, the connection of remote indigenous communities, and related infrastructure that includes a new line to Pickle Lake and transmission upgrades in the Red Lake area. Together, these projects represent about \$2.2 billion in investment.

Ontario Power Generation has delivered several projects in partnership with Indigenous communities, and is currently building a generating station at New Post Creek, in partnership with the Taykwa Tagamou Nation, that would provide enough renewable electricity to power up to 25,000 homes.

Local distribution companies, which deliver electricity to homes, businesses and other end users, are investing in their networks. These investments are based on multi-year system plans submitted to the Ontario Energy Board as part of the rate application process.

## BROADBAND

To fully participate and compete in the digital economy, Ontarians need reliable, fast and affordable broadband Internet connectivity. In this sense, broadband is a crucially important form of 21st century infrastructure.

Since 2007, the Province has committed close to \$280 million to upgrade broadband infrastructure in rural and remote communities across Ontario. The Province is creating tools to help Ontario's communities implement local broadband projects while taking part in nationwide regulatory consultations.

In 2015, after a four and a half year build, municipalities that make up the Eastern Ontario Warden's Caucus completed the Eastern Ontario Regional Network (EORN), a \$170 million project that featured a new scalable Gigabit fibre backhaul network and last-mile infrastructure to improve access to high speed internet services. Together, this group of municipalities was able to access \$110 million in federal and provincial funding under the Building Canada Fund to build the network with. EORN is over 5,550 kilometers of fibre optic cable covering 50,000 square kilometers of eastern Ontario with 160 new optical access points for Internet Service Providers to connect and utilize. Over 423,000 homes and businesses, 63 business

parks, and three First Nations communities are connected on the network. EORN continues to pursue opportunities to improve and to evolve connectivity in the region post-build. The network currently has a municipal fibre project underway and is looking at a mobility cell project to close the gaps in cellular capabilities in Eastern Ontario.

Similarly, a new initiative in Southwestern Ontario reflects the Province's commitment to working with federal, provincial, municipal and private sector partners to expand and enhance connectivity. The Southwestern Integrated Fibre Technology network, or SWIFT, is a \$281-million project that will make key investments in broadband infrastructure. The initiative aims to promote private-sector development and bring ultra-high-speed broadband to all businesses and residences in the region by 2040. Provincial and federal contributions will total up to \$90 million each.

The Ministry of Infrastructure is committed to continuing its work with the Ministry of Economic Development and Growth, the Ministry of Agriculture, Food and Rural Affairs, and others on expanding broadband infrastructure and improving connectivity in communities across the province.



## OTHER GOVERNMENT ASSETS

A key objective of government-owned real estate is to enable public services that are efficient, client-centred and take community needs into consideration. The government has accepted recommendations from *Community Hubs in Ontario: A Strategic Framework and Action Plan (2015)* to review its internal processes for disposition of surplus provincial properties and to consider broad economic and community benefits when making decisions that could include sale at fair market value or support for local acquisition for community use.

As part of Ontario's transformation agenda, the Province is making more efficient use of its real estate and has committed to shrinking its office footprint by 1.3 million square feet by 2022. The government has achieved more than 55 per cent of that target in Toronto and 91 per cent in the remainder of the province, decreasing the government's office space by over 820,000 square feet and resulting in a cumulative savings to date of \$24 million that can be invested in other priorities for the benefit of all Ontarians.

The government will continue to sell properties and demolish buildings that are no longer required and have ongoing costs and liabilities. The portfolio square footage has been reduced by 13 per cent over the last 10 years through both sales and demolition. Since 2007, the sale of surplus properties has generated more than \$400 million in net revenue. This activity is being balanced with consideration of whether surplus properties could be used to address local needs and benefit communities, including potential use as community hubs.

Across all government real estate, the Province is targeting investments to ensure its buildings meet health and safety standards and all relevant codes. New buildings added to the portfolio as well as major renovations are designed to improve accessibility, respect heritage features and carry out energy retrofits. An example includes the retrofit of 222 Jarvis Street in Toronto, which brought together 2,600 government employees from a dozen locations into one efficient office building while obtaining LEED Gold certification. Close to 40 government buildings have received LEED certification.

## The Queen's Park Reconstruction Project

The Queen's Park Reconstruction Project is an initiative that involves the rehabilitation of the Whitney Block and the extensive reconstruction of the Macdonald Block Complex, which includes the Macdonald Block Podium, Hearst, Hepburn, Mowat and Ferguson Towers.

The Whitney Block rehabilitation includes the installation of new energy-efficient windows, improvement of building operating systems and the restoration of the exterior building envelope.

The 45-year-old Macdonald Block Complex is home to the largest concentration of Ontario public servants. It has never undergone a major renovation, and the building's core systems – including electrical, water, cooling and heating – have reached the end of their useful life. The project will take eight years to complete. The Macdonald Block Complex will then be a modern, efficient and environmentally-responsible workplace that supports greater collaboration and innovation. The new workspace will be accessible and accommodate employees of all abilities. It will continue to serve as a critical hub of Ontario government operations for years to come.

Besides improving buildings, the government is transforming land to increase its value and support communities. For example, the West Don Lands that became the Athletes' Village for the Pan Am/Parapan Am Games needed intensive soil remediation and flood protection to realize its true value. Corktown Common, which was established as a new park on provincial land, is an example of an innovative transformation project, incorporating flood protection features that made development possible on 80 acres owned by the province as well as 520 acres of adjacent land.

## Optimizing real estate assets

Unlocking value through the sale of property that is surplus to needs or not being fully used provides funds to reinvest in modern infrastructure. The government continues to move forward with its strategy to unlock the value from its real estate assets. For example:

- The sale of the Liquor Control Board of Ontario's head office lands was completed in June, through an open and competitive procurement process, raising \$246 million in net proceeds.
- The sale process for Seaton Lands in Pickering and the head office building of Ontario Power Generation has begun and will result in significant returns to the province.
- Further progress is being made with respect to the site of the former Lakeview coal-fired generating station in South Mississauga.

The government is committed to dedicating the net revenue gains generated from these sales to the Trillium Trust to help support investments in transit, transportation and other priority infrastructure projects under Moving Ontario Forward.

## SECTION 2: GETTING THE MOST OUT OF INFRASTRUCTURE INVESTMENTS

Well-thought-out approaches and policies are critical to ensuring that investments in infrastructure achieve the greatest possible benefits, both economically and in terms of service delivery and quality of life. This section discusses the policy and other frameworks that guide the Ministry of Infrastructure in delivering and executing the legislated long-term infrastructure plan.

As showcased in Section 1, the Province has made tangible progress since our last long-term plan was released, and has achieved several key results. It has:

- Passed the *Infrastructure for Jobs and Prosperity Act, 2015*, which enshrines evidence-based, long-term infrastructure planning in Ontario.
- Ensured new major provincial infrastructure assets built by Infrastructure Ontario (including hospitals, courthouses, colleges and detention centres) use alternative financing and procurement, including value-for-money and full life-cycle costing assessments.
- Continued to support strong communities across Ontario by expanding the Ontario Community Infrastructure Fund from \$100 million to \$300 million a year by 2018–2019, to be invested in roads, highways and water infrastructure projects in Ontario’s small- and mid-sized communities.
- Announced support for more than 500 projects since 2015 that will keep people and goods moving, connect communities, support new jobs every year across the province and improve quality of life.

Infrastructure issues are wide-ranging and involve numerous partners at all stages, from planning through to construction and operation. Decisions have major impacts on the services Ontarians receive and the shape of their communities. Key policy lenses that guide Ontario’s infrastructure planning include:

- Supporting transformation to improve service delivery.
- Using 21st century delivery and funding models.
- Making decisions based on solid evidence and benchmarking.
- Ensuring planning is integrated and aligned with other provincial plans and strategies.



## SUPPORTING ONTARIO'S TRANSFORMATION AGENDA

Service needs constantly grow and change, while the infrastructure that delivers services is costly to build and often lasts for decades. Making the right investments is critical to enabling the public sector to deliver new and enhanced services over the long term while making better use of public resources.

### A growing and changing population

Ontario is continuing to grow, with growth rates and patterns differing over time and across the province. Provincial population growth is projected to be 4.2 million by 2041, and is expected to be concentrated in the Greater Toronto and Hamilton Area. This growth will include all age groups and will affect demand for infrastructure across the age spectrum, from early-years child care and places to learn through to hospitals and community care facilities.

Throughout the province, the age make-up of Ontario's population will change as the baby boom generation ages, with many workers retiring and a larger number of seniors living on their own.

Population growth will also drive the need for more transit options. The province is addressing this need through its unprecedented transit investments. The new economic activity associated with growth will also call for a robust transportation network that provides easy access to international markets.

Land-use planning can help create communities and neighbourhoods that respond to changing needs. Especially in rapidly growing areas, the goal is to have complete communities where people can live, work, go to school and pursue other activities in the same place. Complete communities also provide convenient access to public transportation and options for safe, non-motorized travel.

In many areas, population will remain stable or even decline. In those areas, maintaining existing infrastructure systems is a financial challenge. Serving an older and smaller population will call for innovative solutions in education, health care and community services.

The ministries responsible for these services are already working with partners in their sectors to explore and develop new approaches. These solutions will need to be delivered using the right infrastructure. In addition to traditional investments, elements of support are likely to include community hubs, which bring together a range of public services, and new technologies that can better access and share information across communities, businesses and institutions.



## Greater Golden Horseshoe Transportation Plan

The Ministry of Transportation is preparing a long-range transportation plan for the Greater Golden Horseshoe, to ensure Ontario has a forward-looking plan for the movement of people and goods. It will look beyond the ministry's current planning horizon, to understand and prepare for potential futures with very different technology and social, economic and environmental conditions. A scenario-planning process will ensure that the transportation investments the ministry makes will be resilient and adaptable.

## Accessibility

Roughly 1.8 million Ontarians – from every income bracket, age group, racial or ethnic background and geographic region – live with disabilities, according to 2006 census data. As the population ages, the number of Ontarians with disabilities will increase.

People with disabilities may face barriers to achieving full inclusion in society. Embedding accessibility into infrastructure planning and design gives people with disabilities more opportunities to work, shop, travel and play independently. Understanding the types of barriers that exist can help identify, prevent and remove barriers, enabling the full participation of persons with disabilities.

Good public spaces are planned and designed with access in mind. Universal design occupies the principles that underpin national and regional planning priorities and can therefore add value at all levels in the planning system, creating responsive, functional, inclusive and sustainable cities and towns. It also reduces the need for expensive changes or retrofits in the future. In infrastructure planning, it is good practice to determine the needs of all potential users as early as possible and to check the practicality and usability of possible design solutions with a diverse user panel.

### ***Accessibility for Ontarians with Disabilities Act, 2005***

The *Accessibility for Ontarians with Disabilities Act (AODA), 2005*, aims to identify, remove and prevent barriers for people with disabilities with the goal of creating an accessible Ontario by 2025. The act supports the development and implementation of accessibility standards. Currently, it covers customer service, information and communications, employment, transportation, and the design of public spaces. The standards apply to all organizations with one or more employee(s) in Ontario, including the Ontario Public Service, broader public sector, and the not-for-profit and private sectors. Transportation and the design of public spaces have a strong link to infrastructure, as they aim to ensure that people with disabilities can access public transportation, buildings and other public spaces.

### **Design of Public Spaces Standard**

As a major employer and service provider, the government is leading by example in reducing barriers for people with disabilities. Amendments to the Building Code, made effective January 2015, work together with the Design of Public Spaces standard to complement the government's commitment to an accessible built environment. The new requirements apply to newly constructed buildings and existing buildings that are to be extensively renovated.

## The opportunities and challenges of technology

The increased pace of technological change must be taken into account in infrastructure planning, as all sectors are seeing both challenges and opportunities for innovation arising from it. For example, in the education sector, students in remote areas who have access to broadband can take courses online that could not be offered locally. In the health sector, the new Humber River Hospital is Ontario's first fully digital hospital and an innovative technological showcase. Features include supplying patients with touchpads that allow them to access their medical information, adjust the room's thermostat and even make phone calls.

Based on a 2016 report from Canada's Public Policy Forum, technology as a share of total public infrastructure stock has risen to 20 per cent today from just over 5 per cent in 1970.

Technological changes are often sector-specific. They can create planning and fiscal challenges because new investments are needed more often compared to brick-and-mortar assets, and they often have less mature standards and practices. On the other hand, technology can often improve services while allowing them to be delivered more cost-effectively.

Another major benefit of technology is that it can collect and analyze large amounts of data to identify trends and needs and ensure services are achieving their intended goals and meeting rising public expectations about accessing information.

## What's next?

Ontario will be increasing the ways in which it uses infrastructure as a tool to support Ontario's transformation agenda. Analysis of Ontario's infrastructure needs will include a focus on the services that infrastructure helps provide – and the role of these services in responding to some of the province's greatest challenges, both today and into the future.

The *Infrastructure for Jobs and Prosperity Act, 2015* mandates 10-year infrastructure plans that are updated every five years. Transformational efforts, however, call for thinking over an even longer time horizon to take into account emerging ideas and technologies. Better understanding infrastructure trends over the very long term to support transformation continues to be a foundation of infrastructure planning in Ontario.

## COMBATTING CLIMATE CHANGE AND MANAGING ITS IMPACT

Climate change threatens the natural and built environment and the long-term sustainability of Ontario's economy. It is bringing increasingly volatile weather such as flooding, ice storms and drought. In northern and Indigenous communities, thawing permafrost coupled with unique socio-economic conditions, present additional and significant challenges.

Ontario's infrastructure is an increasingly interconnected network of high value assets with long operational lifetimes. Integrating climate change considerations into infrastructure planning can ensure better value for money and prevent carbon lock-in. It can also build community resilience and address climate-related infrastructure failures.

Ontario's Climate Change Strategy encourages integrating climate change considerations, such as environmental impacts and resiliency, into infrastructure planning and decisions. It builds on Climate Ready: Ontario's Adaptation Strategy and Action Plan, released in 2011, which had as a goal assessing the vulnerability of key infrastructure.

The strategy sets out a provincial vision for combatting climate change and reducing greenhouse gas emissions to 80 per cent below 1990 levels by 2050. It envisions greenhouse gas reduction going hand-in-hand with a growing, efficient, competitive and productive economy. The strategy is supported by the Climate Change Action Plan, which sets out the actions Ontario will take over the next five years.

Infrastructure plays a critical role in social, economic, and ecological well-being. Incorporating climate resilience into infrastructure planning can

yield significant cost savings in the long-term but will require best practices, guidelines, and standards. Infrastructure investments can also help mitigate climate change by reducing greenhouse gas emissions. Greater use of green infrastructure is emerging as a cost-effective way to achieve this.

**Green infrastructure** uses natural elements, whether already in place or developed by human intervention, to carry out ecological and hydrological functions. It can include, for example, vegetation and landscaping, street trees and other urban forest elements, and green roofs.

The benefits of green infrastructure include better managed stormwater, decreased energy use for heating and cooling, and increased capture and storage the carbon from carbon dioxide (a major greenhouse gas) in trees and other vegetation. Additional benefits include improved air and water quality, preserved biodiversity and health of pollinators, and reduced flood risk. Ontario's Climate Change Strategy encourages using more green infrastructure solutions.

Buildings that are more energy efficient also reduce greenhouse gases. The Climate Change Action Plan commits Ontario to a 50 per cent reduction of greenhouse gas emissions from government buildings between 2006 and 2030. It also calls for a long-term strategy to ultimately make all government operations carbon neutral.

Infrastructure Ontario is exceeding targets set by the Ministry of Infrastructure for reduced energy use and greenhouse gases in the government's real estate portfolio through such investments as energy-efficient technologies, improved control and monitoring of systems,

and energy-saving design guidelines and standards for capital projects. It is also working with the Independent Electricity System Operator on developing electricity conservation and demand-management projects. If eligible, projects would also benefit from electricity conservation programs delivered by local distribution companies.

The Province is also helping schools, social housing buildings, hospitals, universities and colleges retrofit their facilities with energy-efficient and renewable technologies. Because effective public transit takes other vehicles off the road, Ontario's major investments in transit also contribute to reducing greenhouse gas.

In support of greater energy efficiency across the broader public sector, a Ministry of Energy regulation requires municipalities, universities, colleges, school boards and hospitals to report their annual energy consumption and develop five-year conservation and demand management plans.

As well, the government has established a broad energy policy of putting conservation first,

which means that energy conservation will be preferred, where cost-effective, before building new generation and transmission facilities. Incentive programs funded through electricity and natural gas rates have been enhanced and will continue to encourage energy-efficiency retrofits and low carbon technology in all sectors of Ontario.

Ontario is the first Canadian province to sell green bonds to help finance infrastructure projects with environmental benefits across the province. Investing in infrastructure is an economic priority that will help make the province more competitive and productive while improving quality of life.

## What's next?

As part of the Long-Term Infrastructure Plan, the Province will seek to ensure that infrastructure priorities align with provincial priorities related to the Climate Change Action Plan. Moreover, the province will continue efforts to incorporate life cycle assessment and life cycle cost assessment into the capital planning process.

### saveONenergy

Built in 1976, Bradford District High School was one of the largest consumers of electricity in the Simcoe County District School Board. A \$27,652 saveONenergy incentive from the local electric utility PowerStream, as well as funding from the Ontario Ministry of Education, helped reduce the school's annual electricity consumption by 19 per cent.

The retrofit project, which was completed in January 2012, involved replacing thousands of older, inefficient fluorescent bulb fixtures and ballasts in the school's classrooms, cafeteria and gymnasium.

The retrofit program is one of several saveONenergy incentive programs available to institutions such as school boards. The program provides up to 50 per cent of the cost of installing high-efficiency lighting and other equipment that reduces electricity use. Source: [https://saveonenergy.ca/Business/Case-Studies/CaseStudyLinks/CaseStudy\\_BradfordHighSchool\\_HR.aspx](https://saveonenergy.ca/Business/Case-Studies/CaseStudyLinks/CaseStudy_BradfordHighSchool_HR.aspx)

## Climate Change Action Plan

The Province is committed to reducing greenhouse gas emissions. Through its Climate Change Action Plan, it will invest up to \$8.3 billion in projects supporting that goal, such as building infrastructure for cycling, charging electric vehicles, retrofitting public buildings and supporting Regional Express Rail. Additional areas of focus include:

- Connecting remote communities to the electricity grid.
- Using public properties and buildings to demonstrate low-carbon technologies.
- Ensuring low-carbon procurement.
- Addressing climate change in environmental assessments.

For further information on Ontario's five-year plan to fight climate change, reduce greenhouse gas pollution and transition to a low-carbon economy, visit <https://www.ontario.ca/page/climate-change-action-plan>

## Energy savings through the roof

In 2009, Toronto became the first city in North America to adopt a green roof bylaw. The bylaw requires green roofs on new industrial, commercial, institutional and residential developments over a certain size. The green area must cover between 20 and 60 per cent of the roof, depending on the size of the building. Adoption of the bylaw has already led to 1.2 million square feet of new green roof area, saving an estimated 1.5 million kilowatt-hours of energy.

## Taking the LEED on sustainability

Ontario is putting its Climate Change Strategy into action by building and retrofitting existing facilities to greater energy efficiency and sustainability standards, with close to 40 of its buildings now meeting a Leadership in Energy and Environmental Design (LEED) standard. LEED buildings focus on healthy indoor environments, reduced greenhouse gas emissions and efficient use of energy, water and other resources.

- In 2014, Canada's Green Building Council awarded the Ministry of Natural Resources and Forestry with the first LEED Platinum designation for existing building operation and maintenance in Canada. The award was for its Robinson Place building in Peterborough.
- The Ron Joyce Children's Health Centre in Hamilton is a LEED Silver facility that includes an integrated energy-metering system to track building performance. It is expected to achieve more than 40 per cent energy cost savings compared to the Model National Energy Code for Buildings.
- The design and construction of the South West Detention Centre in Windsor adheres to guidelines and sustainability principles, and received LEED Silver certification in August 2016. More than 75 per cent of site construction waste was diverted from landfill; adhesives, paints, carpet and sealants were selected for low emissions of volatile organic compounds; and native, drought-resistant plant species were used for landscaping to reduce outdoor water use by 50 per cent or more.
- The Forensic Services and Coroner's Complex facility in Toronto has been built to, and will be maintained to, LEED Gold certification.

## Charged up

The Province is investing \$20 million from Ontario's Green Investment Fund to build nearly 500 fast-charging electric vehicle stations at more than 250 locations in 2017. It is working with 24 public and private sector partners to create the network, which will provide stations in cities, along highways and at workplaces, condominiums and public places across Ontario.

## SUPPORTING COMMUNITY HUBS

Community hubs bring services together in underused spaces to better serve Ontarians and the communities they live in.

Ontario is delivering on its commitment to support the development of community hubs by moving forward on the recommendations presented in *Community Hubs in Ontario: A Strategic Framework and Action Plan*. The report was prepared by the Premier's Advisory Group on Community Hubs, chaired by Karen Pitre. Released in August 2015, and based on extensive consultations, the report includes recommendations on how the province can support community hub development.

A key goal of the Community Hubs Strategic Framework and Action Plan is to increase the use of public property for community benefit. In line with the Action Plan, the government is reviewing its processes to look at broad economic and community benefits when making decisions on disposition of surplus provincial properties. The Province will also be looking at ways to promote local community hub development by highlighting integrated planning across government and with local partners, integrated service delivery, and multi-use design as part of long-term infrastructure planning.

### Encouraging community hubs

Community hubs, which bring together a variety of government and community programs and services in one facility, make effective use of public buildings and related assets while providing better service to residents. *Community Hubs in Ontario: A Strategic Framework and Action Plan* sets out how the province can better support and facilitate the creation of hubs.

A community hub can be a school, neighbourhood centre or other public space. The Province is working to promote hubs through a “whole-of-government” approach. Examples of recent progress include:

- Making it easier to get access to surplus provincial and school space for public/community use.
- Streamlining applications and expanding eligibility under the Community Health Capital Programs policy for funding to co-locate and integrate health and social services under one roof.
- Increasing capital funding for schools, including some funding targeted for the use of schools as community hubs, and expanding eligibility in ways that will support replacement space for community hubs if schools are closed or sold.
- Supporting postsecondary proposals that strongly align with the community hub model, such as the Mohawk College City School initiative funded in the 2016 Budget.

## 21<sup>ST</sup> CENTURY DELIVERY AND FUNDING MODELS

### Innovative delivery models

The Province currently employs two major infrastructure delivery models: traditional procurement and Alternative Financing and Procurement (AFP), which is delivered by Infrastructure Ontario for the province.

Under the simplest form of traditional procurement, each component is put out for tender separately. In more advanced versions, a single proponent is selected to both design and build the asset. In all cases of traditional delivery, private sector firms, such as general contractors, engineering and architectural firms, work on the project. The government is normally responsible for the financing and pays the proponent on a regular basis as the project progresses. Under traditional delivery, most risks remain with the province. The government also assumes responsibility for operating and maintaining it once it is complete.

Traditional procurement works well on smaller, less complex infrastructure projects. However, in traditional procurement for large, complex projects, the government assumes significant risk because it has limited leverage to ensure the proponent delivers on time, on budget, or to specification. As well, there is limited opportunity for bidders to suggest cost-saving innovations by looking at the project as a whole over its life cycle.

All major infrastructure projects require both financing and funding. **Financing** is the source of money to pay upfront for the construction of an infrastructure project. Usually this involves borrowing. **Funding** is the revenue source used to repay the financing over time.

The made-in-Ontario AFP model has been developed to address these challenges for large and complex projects by transferring risk to the private sector. AFP involves a competitive process to select a private-sector proponent that is generally an integrated group of companies. The proponent designs and builds the asset, finances it, often maintains it, and sometimes operates it as well. Combining more aspects, such as maintenance and operations, into the bid gives proponents more opportunities to innovate and find savings. On all AFP projects, the government retains ownership of the asset. Infrastructure Ontario is the delivery agent for the AFP in Ontario.

A key feature of the AFP model is that the proponent must provide its own financing to transfer risk and drive performance. Generally, the government pays for performance when the proponent achieves certain milestones and meets prescribed quality and performance standards. This gives the proponent an incentive to complete the project on time, on budget and to specifications.

All major public infrastructure projects with a capital cost of \$100 million or more are assessed for delivery under the AFP model. The decision as to whether to use AFP is based on an analysis of the technical complexity, potential to integrate design, construction and/or maintenance, and potential to transfer risk to the private sector.

Infrastructure Ontario is continually looking for ways to build upon and improve the AFP delivery model. Recent enhancements include local knowledge, health and safety requirements, a pilot project to encourage apprentices on projects, and new approaches to drive vendor

performance. A new Value for Money Methodology Guide reflects best practices in evaluating the business case for AFP delivery.

The Province will continue to work with municipalities and other partners to identify when Infrastructure Ontario can help them on projects, including delivering projects under the AFP model.

In developing the long-term infrastructure plan, the government will look at delivery models in use in Ontario and elsewhere in an effort to ensure value for taxpayers, meet key policy goals, and support high-quality public works.

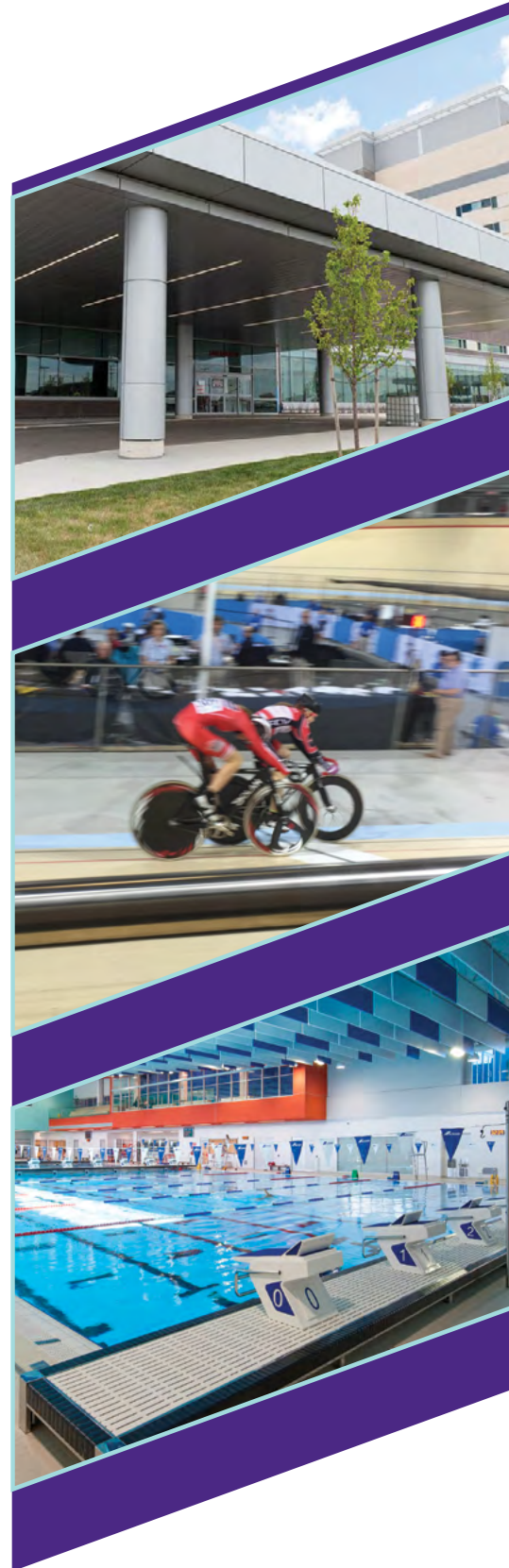
## Infrastructure Ontario

Using the AFP model, Infrastructure Ontario has delivered 55 infrastructure projects, including hospitals, roads, transit systems, courthouses and detention centres. According to a 2016 track record report that assessed 51 AFP projects, 96 per cent were delivered on budget and 73 per cent were delivered on time.

Recently opened hospital facilities like the Humber River Hospital and the Oakville Trafalgar Memorial Hospital are providing leading-edge public health care. Since 2014, five of Infrastructure Ontario's AFP health care projects have won awards for their excellence in design and innovation. The new sports facilities built for the Pan Am/Parapan Am Games – such as the Milton Velodrome, Scarborough Aquatics Centre, Markham Pan Am Centre and Etobicoke Olympium – are benefiting elite athletes and recreational users alike. New courthouses and other justice sector facilities are providing safer and more modern services.

Infrastructure Ontario is helping deliver many of the new projects identified in this document, including the courthouse in Toronto, the Mackenzie Vaughan Hospital in York Region and the Macdonald Block Reconstruction Project.

Over 50 jurisdictions have visited Ontario to understand the province's approach to infrastructure investments. Infrastructure Ontario continues to share best practices with federal and provincial government counterparts to showcase successes and opportunities for collaboration in both real estate and infrastructure.





## Innovative funding and financing approaches

Jurisdictions around the world are looking at how best to fund infrastructure. A mix of funding sources and tools is often used. General government revenues have been a traditional source of infrastructure funding and financing. User fees such as transit fares are also common in many jurisdictions, including Ontario.

Land value capture is gaining interest as a way of recognizing the increase in the value of privately owned land as a result of public investments like transit and roads. Land value capture is a general term that encompasses a range of tools intended to capture a portion of the increase in property values associated with investments in infrastructure, thus contributing to the funding of those investments or otherwise incentivizing investments. While such tools can help fund projects, accurately forecasting the increases in property values associated with particular investments is a complex undertaking, and careful design is required to manage risk. Joint development, where the private sector funds an asset in exchange for other development rights, is another tool. In making efficiency-boosting upgrades and retrofits, asset owners can also earmark future operational savings to pay for the initial investments.

Ontario is also unlocking the value of existing assets to invest in new infrastructure. Under the *Trillium Trust Act, 2014*, all net revenue gains from the sale of designated assets are to be credited to the trust to support the province's key infrastructure priorities.

The Infrastructure Ontario Loan Program offers Ontario municipalities and other eligible public sector clients affordable, longer-term loans to renew and build public infrastructure. Infrastructure Ontario has advanced over \$7.7 billion in affordable long-term financing to public sector clients throughout Ontario, representing 374 clients (89 clients in Northern Ontario and 285 clients across all other regions) and over 2,169 infrastructure renewal projects with a total project value of more than \$13.6 billion.

In November 2016, the federal government announced the creation of the Canada Infrastructure Bank. The Bank presents an exciting opportunity for Ontario as it seeks to provide innovative funding and financing options that help more projects get built. While details on the structure and investment approach of the Bank are still forthcoming, Ontario will continue to work with federal counterparts to ensure that any Bank lending does not replace long-term predictable grant funding for critical provincial and municipal infrastructure projects, and aligns with Ontario's existing approach to infrastructure procurement.

Ontario is assessing its current approaches to funding, as well as innovative approaches from other jurisdictions. The ultimate mix of tools will reflect key public policy goals as well as the nature of the assets themselves.

## Update on Moving Ontario Forward

In the 2014 Budget, the Province announced that nearly \$29 billion would be made available for investment in its Moving Ontario Forward plan for public transit, transportation, and other priority infrastructure projects, of which \$3.1 billion represented dedicated funds projected to be provided as part of the government's asset optimization strategy. In the 2015 Budget, the government announced it was moving forward with broadening the ownership of Hydro One as part of its asset optimization strategy, and increased its asset optimization target by \$2.6 billion. Investments in Moving Ontario Forward increased by an equivalent amount, from nearly \$29 billion to \$31.5 billion. In fall 2015, the government moved forward with the first phase in broadening ownership of Hydro One, and the Province remains on track to generate net revenue gains of \$5.7 billion from asset optimization over time.

### Trillium Trust Update – Progress So Far

In August, the government dedicated \$3.2 billion in net revenue gains to the Trillium Trust from the sale of Hydro One shares in 2015. In October, the Province credited to the Trillium Trust \$246 million in net revenue gains from the sale of the LCBO head office lands.

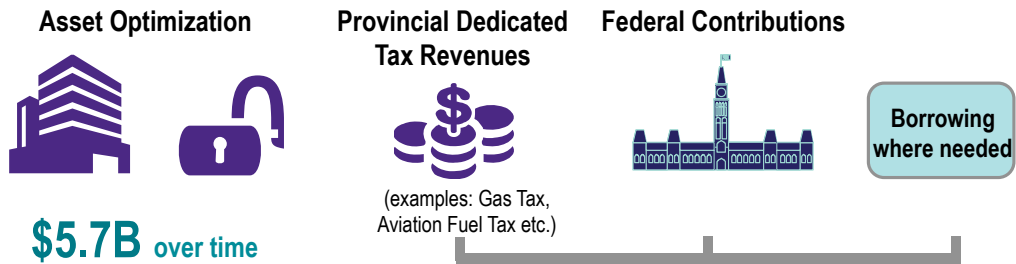
The government previously credited \$1.35 billion in net proceeds from the sale of the Province's shares in General Motors, bringing the total balance of the Trillium Trust to more than \$4.75 billion.

The government will also move forward with a regulation to credit the Trillium Trust with the net revenue gains from the secondary offering of Hydro One shares.

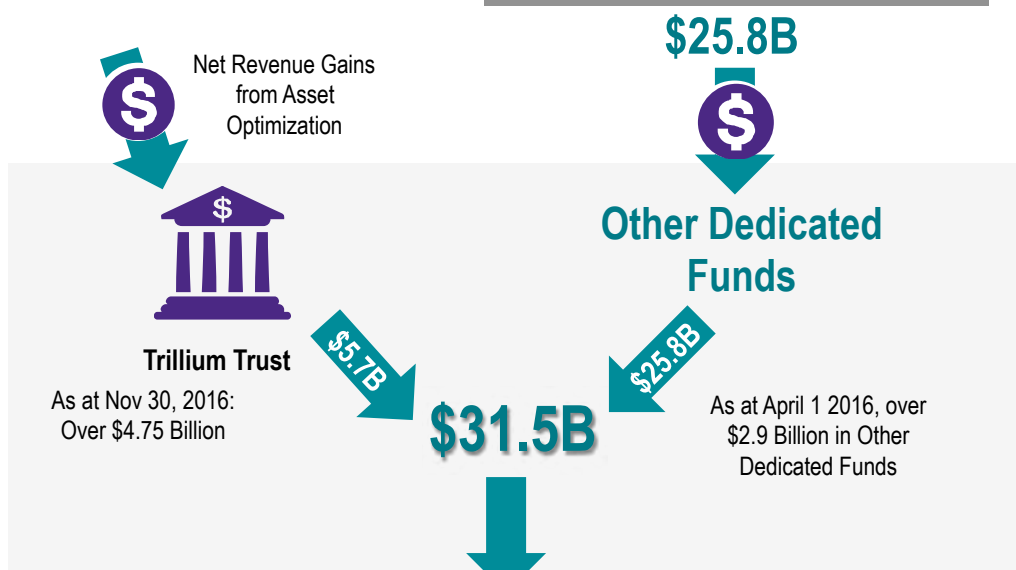
The plan will support the development of an integrated transportation network across the province, manage congestion, connect people, and improve the economy and quality of life.

# Moving Ontario Forward

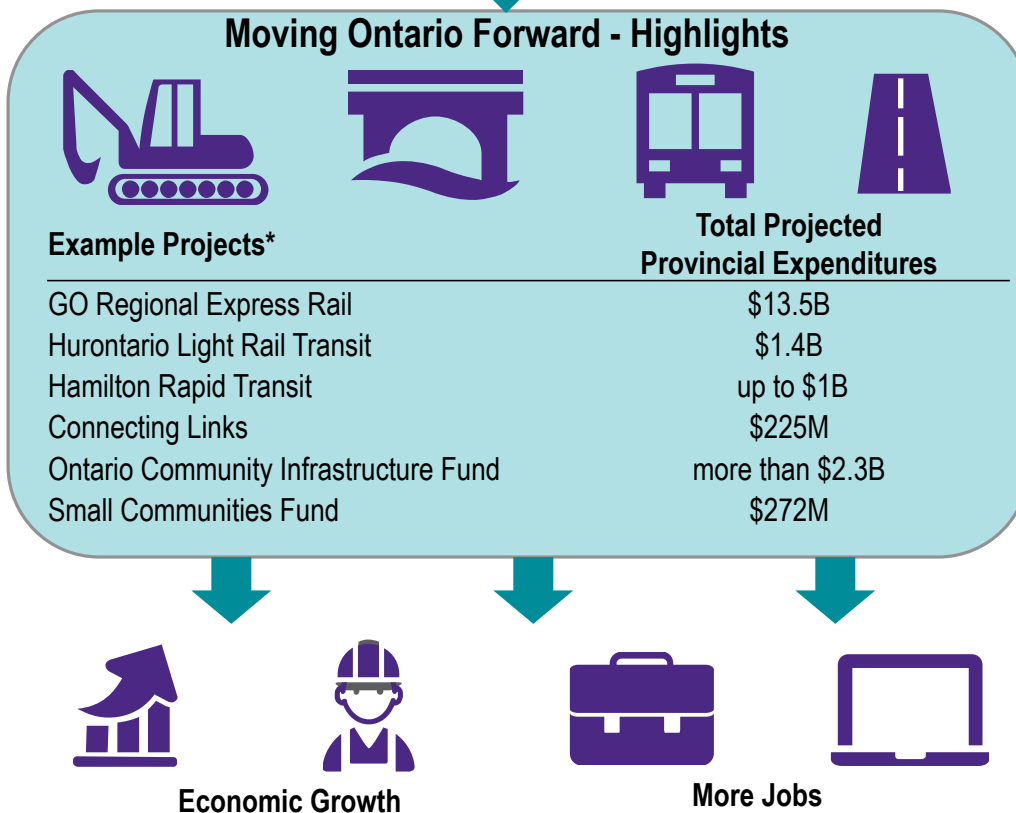
Sources



Dedicated Funds



Priority Investments and Outcomes



\*Includes projects with anticipated federal contributions

## Promoting community benefits

The importance of community benefits is set out in the *Infrastructure for Jobs and Prosperity Act, 2015*. The act defines these as the “supplementary social and economic benefits” of an infrastructure project, such as local job creation and training opportunities, improvement of public space, or other benefits the community identifies. This concept can help advance a range of goals, including reducing poverty and developing the local economy.

As an example, Metrolinx and the Toronto Community Benefits Network have developed a Community Benefits Framework for rapid transit projects in Toronto. Clauses in tendering documents require bidders to commit to providing benefits identified by the local community. In the case of the Eglinton Crosstown LRT project, these included employment, apprenticeships and local supplier opportunities.

Building on that experience, Metrolinx will issue provisions for a Community Benefits Framework in future projects it implements in the Greater Toronto and Hamilton Area.

Ontario has already crafted government-wide strategies in this area. A pilot social procurement strategy in 2014, for example, encouraged a diversity of suppliers to take part in the 2015 Pan Am/Parapan Am Games. This helped lead the way for the Ontario Social Enterprise Strategy, which was launched in June 2016 as a comprehensive approach to helping social enterprises compete in Ontario.

## What’s next?

Ontario will continue to use a mix of funding and delivery approaches, explore international best practices in the Ontario context, and identify new opportunities for innovation. The Province will also continue to strengthen its internal oversight of major public infrastructure projects to enhance delivery outcomes. At the same time, Ontario will continue to look for opportunities to ensure that public infrastructure projects provide broader benefits to their communities. In particular, the Province will be developing regulations requiring apprenticeship plans for certain provincial infrastructure projects under the *Infrastructure for Jobs and Prosperity Act, 2015*.

## EVIDENCE AND BENCHMARKING

Collecting, collating, organizing and analyzing data are essential to ensuring that decisions about infrastructure priorities reflect the best possible evidence. Sharing the information that underlies decisions, and providing data for partners on how well infrastructure plans are working, are key elements in accountability and transparency.

Ontario's Centre of Excellence for Evidence-Based Decision-Making, launched in the 2015 Budget, is setting standards for the use of evidence, tracking performance across government, and equipping public service staff with the necessary tools and training.

The Province has developed leading-edge tools, models and analyses to produce useful, accountable and transparent evidence. The primary analytical results are shared among ministries through an evidence-informed integrated framework that can help optimize the long-term capital plan. Specifically, the framework identifies infrastructure investment trade-offs across sectors, based on relative economic impacts, renewal needs and demographic changes, to support long-term infrastructure planning.

The *Infrastructure for Jobs and Prosperity Act, 2015* calls for long-term infrastructure planning to have a strong focus on identifying and responding to the management requirements of existing public assets. Understanding where

maintenance, rehabilitation and renewal investments should be made requires effective asset management practices: an integrated, life-cycle approach to effective stewardship of infrastructure assets. Good asset management helps set future priorities and achieves better value from existing infrastructure by avoiding unnecessary costs. The Ministry of Infrastructure is collaborating with other ministries and partners to get complete, accurate and up-to-date data on provincial infrastructure assets. This will include an integrated asset inventory. Spanning all capital ministries, it will track the location, value, age and condition of provincial assets. It will serve as evidence for identifying key trends and expected needs for public infrastructure over the next 10 years and developing strategies to meet those needs.

Benchmarking is the process of regularly comparing an organization's performance to that of its peers, with the goal of improving quality and raising performance. Benchmarking can be of value in asset management by setting out an acceptable level of performance and showing how well assets are performing in relation to similar assets, or leading performance indicators or standards. Performance can be defined on several dimensions, including, for example, condition, user satisfaction, safety and/or environmental impacts. Benchmarking can also create a valuable network for sharing best practices.

## Metrolinx business cases

To demonstrate how evidence supports decisions, Metrolinx provides the business cases for many projects on its website, including the Eglinton Crosstown Light Rail Transit, GO Regional Express Rail, Scarborough Rapid Transit, and the Yonge North Subway Extension. Reports can be downloaded from [http://www.metrolinx.com/en/regionalplanning/projectevaluation/benefitscases/benefits\\_case\\_analyses.aspx](http://www.metrolinx.com/en/regionalplanning/projectevaluation/benefitscases/benefits_case_analyses.aspx).

Each business case looks at specific projects for a specific route, technology and level of service to address a specific need or opportunity, and considers a range of factors, such as travel time, convenience and other passenger benefits, capital and operating costs, environmental, economic, social and community impacts, and alignment with current policy goals.

Work is underway to roll out a business case framework, including guidance documents and training, across Metrolinx to enhance the development of robust business cases to help decision makers ensure that major investments are a good use of public funds and consistent with transit priorities.

## Ensuring effective asset management

Having a system in place for the long-term maintenance, renewal and replacement of assets is critical to striking the right balance between caring for existing assets and investing in expansion. Ontario's Infrastructure Asset Management Framework will inform and guide the development of the upcoming long-term infrastructure plan. This framework follows a "plan-execute-review" process that helps in:

- Establishing robust and consistent ways of measuring how well assets are performing in light of desired outcomes, particularly at the community level.
- Collecting data on what assets ministries have, and their condition.
- Analyzing current and future needs in light of assets' condition and service levels, identifying actions to address any gaps, assessing costs and benefits, and determining the extent to which actions can be carried out using existing resources and within current budgets.
- Developing and carrying out a program to make the best use of resources to achieve desired outcomes.

As well, the new Leasehold Asset Management Planning initiative uses evidence-based decision making to support life-cycle reinvestment planning for leasehold improvements, fixtures, furnishings and equipment. It is a unique approach developed by Infrastructure Ontario that leverages condition information for hundreds of Ontario government facilities using an asset management software system.

Infrastructure Ontario works with client ministries to develop detailed strategic plans, including resource needs, that are based on information about existing assets and their condition. The Ministry of the Attorney General used the new approach for courthouses, and other ministries, including Community Safety and Correctional Services, have since started working with Infrastructure Ontario to apply it to their asset portfolios.

The Ministry of Infrastructure is working with partners to provide public access to project data, through Ontario's Open Government Initiative. An important aspect of Open Government is Open Data, a commitment to make all provincial government data publicly available unless it is exempt for legal, privacy, security, confidentiality or commercially sensitive reasons.

The Ministry of Infrastructure is also working with its partners to assess and apply innovative techniques for presenting evidence and analysis visually. The collection of infrastructure project data from across the Ontario government is driving the development of web-based interactive maps and infographics, which are available at [ontario.ca/BuildOn](http://ontario.ca/BuildOn). This effort will allow people to better track the status and progress of important infrastructure projects in their communities.

Public infrastructure touches on so many aspects of Ontarians' lives that sharing information about planned and ongoing projects is essential. That is why the Ministry of Infrastructure is giving the public access to more information about infrastructure projects and their status and working to convey it as clearly as possible.

To learn more about infrastructure projects in your community visit [ontario.ca/BuildOn](http://ontario.ca/BuildOn)

**Ontario's Digital Government** initiative is about making online services simpler, faster and better for people in the Internet era. To learn more, visit: [ontario.ca/Digital](http://ontario.ca/Digital)

## What's next

The Province continues to improve the consistency and quality of evidence used in infrastructure planning and asset management. This includes incorporating improved economic evidence, life-cycle assessment, and benchmarking in the infrastructure planning and decision-making process. Tools such as climate modelling can support evidence-based decision-making by integrating climate change considerations, such as adapting to climate change and increasing resilience, into infrastructure planning. A key goal will be to standardize the calculation and interpretation of asset condition across sectors wherever possible. The publication of 10-year capital spending figures, and the launch of new web features at [ontario.ca/BuildOn](http://ontario.ca/BuildOn), are part of the Province's more transparent reporting efforts.

## INTEGRATED PLANNING FOR BETTER OUTCOMES

Improved infrastructure planning requires a strong understanding of community and regional needs. This is an important part of the infrastructure planning framework.

Horizontal planning means taking a whole-of-government approach so that infrastructure investments better support the outcomes envisioned by key government priorities and policies and make better use of public spaces. Ontario understands the importance of taking a macro-level view of the province's communities when planning and prioritizing projects. This helps ensure that assets are distributed equitably across the province, and that infrastructure is being built to enable the right services in the right places.

Encouraging multi-use design of public buildings can support integrated planning by increasing the flexibility of the Province's infrastructure assets to adapt to changing needs and demographics of communities.

Another key way to get the most out of Ontario's infrastructure is to integrate infrastructure planning with land-use planning. The Provincial Policy Statement (PPS) sets out the government's policies on land-use planning by requiring consideration of provincial plans and policies in its guiding principles. It applies province-wide and provides clear policy direction in such areas as:

- The efficient use and management of land and infrastructure.
- The protection of the environment and resources.
- The creation of appropriate opportunities for employment and residential development, including support for a mix of uses.

All decisions affecting land-use planning matters must be consistent with the PPS. Municipalities use the PPS to develop their official plans and to guide and inform decisions on other planning matters, including planning for infrastructure.

Released in 2006 and currently under review, the Growth Plan for the Greater Golden Horseshoe works with the Provincial Policy Statement to provide more precise policy direction on land-use planning in Ontario's largest and fastest-growing region, stretching from Northumberland County in the east to Waterloo Region in the west, and from Niagara Region in the south to Simcoe County in the north. The review of the Growth Plan is expected to be completed in 2017. The plan provides a long-term vision for development in the region. Key policies focus on curbing sprawl, protecting farmland and green spaces, and supporting transit-oriented development and multimodal transportation options. The



plan commits the Province to giving priority to infrastructure investments that support the policies of the plan.

Released in March 2011, the Growth Plan for Northern Ontario is a 25-year policy framework that guides decision-making and economic growth in the North. It provides a roadmap to:

- Grow and diversify the economy.
- Enhance education, training, and career opportunities to support a skilled and creative labour force and labour market planning.
- Support efficient and effective infrastructure investment and planning.
- Ensure sustainable development and land use planning.

The Growth Plans are also aligned with other provincial plans and environmental protection policies. For example, the Growth Plan for the Greater Golden Horseshoe includes policies on the protection of the environment, which support the goals of the Greenbelt Plan and the Lake Simcoe Protection Plan. Given the role of land-use planning in building communities, a key goal of integration is ensuring that infrastructure planning supports the Provincial Policy Statement and growth plans. This yields important cost savings and other benefits because efficient development patterns can lead to fiscally and environmentally sustainable infrastructure.

The importance of integrated planning across government and with municipalities and other local community stakeholders was highlighted in *Community Hubs in Ontario: A Strategic Framework and Action Plan*. The Province will continue to work with local partners such as municipalities, community groups, social planning councils, indigenous partners, Local Health Integration Networks, school boards, and others to look at their roles and address barriers to ensure integrated local planning.

Integrated infrastructure planning, procurement and management should also reflect key goals around mitigating and adapting to climate change impacts. The *Infrastructure for Jobs and Prosperity Act, 2015*, recognizes the importance of growth plans by requiring its consideration as a guiding principle.

## What's next

Ontario's next long-term infrastructure plan will reflect key provincial policy goals and ensure they are properly integrated. Future work in this area will use the guiding principles in the *Infrastructure for Jobs and Prosperity Act, 2015* as a starting point.

## WORKING IN PARTNERSHIP

This update is the first step in building Ontario's next long-term infrastructure plan. The Province will continue to work closely with its funding and delivery partners to ensure infrastructure development meets Ontario's needs.

### Federal government

The Province welcomes new and increased federal commitments for both immediate infrastructure investments and long-term, predictable funding for provincial, territorial and municipal priorities. These commitments, which were announced in the federal budget in March 2016 and the Fall Economic Statement in November 2016, are being allocated in two phases.

#### Phase One Funding

Ontario has worked quickly to implement the first phase of new federal infrastructure funding, with allocations based on federal design parameters. Initiatives include:

- **The Clean Water and Wastewater Fund**

\$570 million in federal funding and \$270 million in provincial funding for water, wastewater and stormwater services in Ontario. In all, 444 municipalities, nine local service boards, and 120 First Nations were eligible to submit projects. Approved projects will be funded up to 50 per cent by the federal government, 25 per cent by the Province, and 25 per cent by the recipient.

### Clean Water and Wastewater Fund Projects

- **City of Toronto:** More than \$48.8 million in federal and provincial funding will be provided for early work to support the development of the Toronto Portlands. One of the initial projects is the Essroc Quay Lake filling and naturalization on the south side of the Keating Channel.
- **Region of Waterloo:** \$3 million of federal and provincial funding will be provided to upgrade and modernize the Hespeler Wastewater Treatment Plant, including providing secondary treatment.
- **Guelph:** More than \$1.1 million in federal and provincial funding will be provided to repair two high-priority stormwater retention ponds at Tovell Drive at Elmira Road Pond. Updates will reduce the potential for flooding upstream urban areas and significantly improve the quality of water and ecosystem health of the Eramosa and Speed rivers.

- **Public Transit Infrastructure Fund**

\$1.48 billion in federal funding to support rehabilitation of transit systems, including planning system improvements and expansions, enhancing asset management, and system optimization and modernization. Funding has been allocated to Ontario's 98 transit systems using a formula based on ridership. The federal government is matching up to 50 per cent of total eligible project costs, with recipients providing the balance.

## Public Transit Infrastructure Fund projects

- **Ottawa:** More than \$72 million in federal and provincial funding will be provided for early work on Stage 2 of the light rail transit project, including planning, engineering, geotechnical work and First Nations consultations.
- **Sudbury:** More than \$1.8 million in federal funding will be provided to upgrade and rehabilitate transit garages to improve service reliability and minimize vehicle life-cycle costs.
- **Barrie:** More than \$3.4 million will be provided to fund the replacement of 13 conventional transit buses.

### ■ Social Infrastructure Fund

A total of \$640 million in capital investments will support the repair and modernization of community infrastructure and address local service capacity and emerging needs, including approximately:

- \$337 million in new funding under the Investment in Affordable Housing for Ontario program over the next three years. Ontario is matching the federal government's commitment to double current funding for the program.
- \$209 million this year for energy and water efficiency retrofits and renovations in social housing projects.
- \$67 million over the next two years for affordable housing for seniors, such as accessibility upgrades and new construction.

- \$28 million over the next two years for the construction and renovation of shelters for victims of family violence.

### ■ Postsecondary Education, Strategic Investment Fund

Since the 2016 Budget, the Province has collaborated with the federal government, colleges and universities to implement the Post-Secondary Institutions Strategic Investment Fund in Ontario. This initiative will lead to shared investments of more than \$1.9 billion in research, innovation and training infrastructure at Ontario postsecondary institutions.

## The Next Phase – Canada's Long-Term Infrastructure Plan

The 2016 federal Fall Economic Statement outlined \$81 billion in federal infrastructure funding across Canada over the next 11 years. Five areas are eligible for funding: public transit, green infrastructure, social infrastructure, transportation that supports trade, rural and northern communities.

Ontario believes that to leverage funding quickly, the federal government should build on existing plans. The Province will work with the federal government, municipalities and other provinces and territories to ensure funding is allocated fairly. In addition, the federal government should remove current conditions, like "incrementality," that prevent provinces and municipalities from using the funds for existing priorities. In addition, Ontario looks forward to working with the federal government to develop the Canada Infrastructure Bank in order to provide innovative funding and financing options that help more projects get built. This partnership will help ensure that the Bank

does not replace long-term predictable grant funding for critical provincial and municipal infrastructure projects and that the Bank seeks to complement Ontario's existing approach to infrastructure procurement.

Ontario has set out six key principles for the design of the next phase of federal infrastructure funding. These principles, listed below, were agreed to by Quebec at a recent joint Quebec-Ontario cabinet meeting:

- Give provinces and territories the flexibility to set their own infrastructure priorities.
- Support an equitable funding distribution that reflects provincial populations.
- Respect existing provincial and municipal relationships.
- Recognize jurisdictions that have done good long-term infrastructure planning.
- Reduce administrative burdens by streamlining administration so that scarce public funds can be more efficiently directed to capital projects versus detailed project reporting.
- Move away from project-based agreements to comprehensive agreement or a global formula-based approach.

Ontario is committed to working with its provincial and territorial partners to urge the federal government to adopt these principles in allocating the next phase of federal funding.

At the same time, Ontario is working on the approval of projects submitted under the previous federal infrastructure program, the Building Canada Fund. To date 129 projects

have been approved, including the Ottawa River Action Plan, the Maley Drive extension in Sudbury, and the SWIFT broadband initiative in southwestern Ontario.

## Municipalities

Ontario is making significant investments in municipal infrastructure, including support through the Ontario Community Infrastructure Fund, which helps build and repair critical infrastructure and improve asset management planning in small, rural and northern communities.

The fund is increasing from \$100 million to \$300 million a year by 2018-19, including \$200 million a year in formula-based funding. Municipalities can now accumulate their formula-based grants for up to five years to undertake larger infrastructure projects identified as critical in their asset management plans. These changes reflect the progress municipalities have made on asset management planning.

Since 2012, as part of the Municipal Infrastructure Strategy, municipalities requesting infrastructure funding have had to develop asset management plans. When the strategy was launched, less than 40 per cent of municipalities reported having any kind of asset management plan. The province provided a Guide for Municipal Asset Management Plans, an online toolkit, and more than \$12 million in capacity funding in 2012 and 2013. Today, more than 95 per cent of municipalities have asset management plans.

That is significant progress, but plans still differ in their completeness, underlying methodologies and assumptions, and the degree to which they are being acted on.

To support improvement, the Province is providing funding to the Municipal Finance Officers' Association to deliver a package of new asset management planning tools, including an online self-assessment tool, expert assistance and individual training projects, and resources to help support communities of practice across Ontario.

For further standardization and consistency, Ontario is developing a municipal asset management planning regulation under the *Infrastructure for Jobs and Prosperity Act, 2015*.

Over the summer of 2016, the Province consulted with the municipal sector on the proposed regulation, receiving comprehensive and diverse feedback from municipalities, municipal sector associations, private sector organizations and the public. This feedback will be essential in helping shape the regulation. The government will also post the regulation's proposed content on the Regulatory Registry for further comment.

### **Help when it's needed the most**

The Ministry of Municipal Affairs, through the newly established Municipal Disaster Recovery Assistance program, provides funding to eligible municipalities to help repair or restore damaged infrastructure following a natural disaster.

## **Indigenous relations**

Ontario is working with its Indigenous partners to ensure a better future for First Nations, Métis and Inuit people living in the province.

Ontario is committed to collaborating with Indigenous partners, particularly where capital investments can help address the needs of their communities. The Province also works with Indigenous organizations to provide services, such as housing, to Indigenous people living in other communities.

The Chiefs of Ontario and the Government of Ontario signed a historic political accord in August 2015 that guides the relationship between First Nations and the province. The accord affirms that First Nations have an inherent right to self-government and that the relationship between Ontario and the First Nations must be based upon respect for this right. It also commits the parties to working together on issues of mutual interest, and it sets a path for further reconciliation between First Nations and the people of Ontario.

The Province provides funding to Indigenous communities for their capital needs through programs such as the Aboriginal Community Capital Grants Program, the Small Communities Fund, and the Clean Water and Wastewater Fund. Ontario is committed to working with the federal government and First Nations communities to make real progress toward improving infrastructure in First Nations communities.

Indigenous households living outside of reserves are supported by programs like the Investment in Affordable Housing for Ontario Program.

## **Aboriginal Community Capital Grants Program**

The Aboriginal Community Capital Grants Program funds major or minor capital projects such as community centres, learning centres and business centres. The aim is to support Indigenous communities in realizing economic, cultural and social development objectives through funding of capital projects. Funding is available for all stages of a capital project, including feasibility studies, detailed design drawings, construction, renovation, and retrofitting.

## **Delivery partners**

Ontario recognizes the need for community infrastructure and the vital role played by community and not-for-profit agencies that deliver services at the local level, often in concert with municipalities. The Province will continue to engage with agencies and others to better understand local priorities and ensure that programs and policies have the flexibility to respond to local needs.

## **Private sector**

The Province also recognizes the value that private sector partners provide when it comes to investments in infrastructure. Through fair, transparent procurement – including the AFP delivery model – this partnership is yielding positive results for communities across the province. The Province will continue to work with the private sector as an important partner on infrastructure projects.

## SECTION 3: LOOKING AHEAD

### DELIVERING ON THE *INFRASTRUCTURE FOR JOBS AND PROSPERITY ACT*

The *Infrastructure for Jobs and Prosperity Act, 2015* enshrines long-term planning for infrastructure projects. It lays out principles that the government and broader public sector must consider when making infrastructure decisions, and the criteria that government must use in prioritizing projects.

A key aspect of the act is the new requirement for provincial infrastructure plans to be regularly developed and tabled in the legislature. At a minimum, a plan must include:

- A description of the state of the infrastructure wholly or partly owned by the government; including an inventory with a valuation of the infrastructure and the age and condition of infrastructure assets.
- A description of the government's expected infrastructure needs for at least the following 10 years.
- A strategy to meet those infrastructure needs.

Ontario is placing itself among the leading jurisdictions worldwide by engaging in ongoing long-term infrastructure planning. Planning will identify, measure, and quantify the Province's infrastructure investment needs in a consistent manner and prioritize funding allocations by

objectively analyzing needs on a province-wide basis. It will also support local planning and partnerships to meet the needs of communities and make the best possible use of public properties.

Ontario's economic growth and quality of life depend on optimal infrastructure decisions based on the best possible tools and data. The Province is committed to using robust evidence, and leading-edge practices to develop and table a long-term infrastructure plan that advances the important goals of the *Infrastructure for Jobs and Prosperity Act, 2015*.

The Ministry of Infrastructure intends to publish the first plan required under the act by the end of 2017, well ahead of the legislated deadline of 2019. The full long-term infrastructure plan will meet legislative requirements, while elaborating on Ontario's commitment to infrastructure planning through the policy lenses explored as part of this update. The plan will build on the ongoing success of our infrastructure investments and accomplishments to date, and will leverage the strong foundation laid by the Province's 2011 infrastructure plan *Building Together: Jobs and Prosperity for Ontarians*.

In developing the plan, the Province will emphasize the evolving needs of Ontario's regions and communities and how approaches



to planning and creating infrastructure must evolve with them, and will strive to align infrastructure planning with that of its local, regional and federal partners.

It is important to recognize that the nature and type of infrastructure is changing with the emergence of new technology and innovative approaches to designing and delivering infrastructure. Developing the plan will involve working to understand how emerging technologies will impact demand for infrastructure and the services that it provides.

Ontario's long-term plan will require support from all of our partners, particularly the federal government. The Province will continue to call on the federal government to ensure the design of its funding programs reflects provincial priorities. In particular, federal infrastructure programs should recognize the many years of critical capital planning and prioritization work already undertaken in Ontario. Federal infrastructure funding should be flexible, support sound long-term asset management planning, focus on existing priorities, and respect existing fiscal plans.

Ontario is making the largest infrastructure investment in the Province's history – more than \$160 billion over 12 years. You can track the progress of infrastructure projects by visiting [ontario.ca/BuildOn](https://ontario.ca/BuildOn)





**BUILD ON**

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