Welcome to CCPPP’s Annual Conference on Public-Private Partnerships. This is our 27th anniversary and this year promises to be our most provocative, informative and top networking event yet.

Over the next two days, we’ll hear from leading Canadian and global experts who are wrestling with many of the same challenges you’re dealing with whether as government or business leaders. We all know the world is changing and many of the issues we’re facing now are increasingly immediate and serious — and may seem insurmountable — like climate change and cybersecurity and their implications for future proofing infrastructure.

While the portfolio of P3 projects across Canada is growing with new entrants to the market, capacity challenges are also coming to the fore, whether it’s inexperience in bringing projects successfully to market or the increasing concern over the skilled trades shortage to meet the demands.

We also can’t forget the impact of the challenges the sector is confronting in getting the project risk balance equation right; ensuring greater innovation in project design, delivery and life cycle management; as well as the need to engage more meaningfully with Indigenous communities to help build the infrastructure they need, as well as on projects that cross their lands.

As always, optimism must prevail. Those that fully “lean into” these challenges are creating more resilient, more innovative and more inclusive infrastructure that will benefit all of us. Many of those leading the charge are among the government, Indigenous and industry heavy hitters joining us over the next two days.

Natan Obed, president of the Inuit Tapiriit Kanatami and Canada’s National Inuit Leader, will deliver the conference Opening Keynote. His organization is the national voice of Canada’s 60,000 Inuit. Canada’s North needs significant infrastructure to drive greater economic development and improve the lives of its citizens. Its communities are also experiencing the effects of climate change in profound ways, from impacting wildlife to melting permafrost.

Tomorrow, Ontario Premier Doug Ford and Ontario Infrastructure Minister Laurie Scott will address our delegates in an Opening Keynote. His organization is the national voice of Canada’s 60,000 Inuit. Canada’s North needs significant infrastructure to drive greater economic development and improve the lives of its citizens. Its communities are also experiencing the effects of climate change in profound ways, from impacting wildlife to melting permafrost.

Along with these always interesting discussions, we also want our delegates to get a first-hand look at what’s coming in the project pipeline. This year, we have nine market soundings, from Alberta, Quebec, Newfoundlad and Labrador, LA Metro, Florida, the Philippines and Indonesia. There’s still time to register. Just check with our staff at the registration desk where you picked up your conference badge this morning. They’ll be happy to help.

And at lunchtime today, help us celebrate the best of our peers — teams that are pushing the boundaries of what a P3 can — and should be. This year we have five recipients of CCPPP’s National Awards for Innovation and Excellence in P3s. The projects, located in the Northwest Territories, Quebec, Alberta and Ontario, showcase the diversity of projects across the country using P3s to deliver innovative infrastructure that best serves the economic and social needs of Canadians.

We’ve been using P3s in Canada for 30 years now and it’s amazing to see that all of you can still find new, and better, ways of delivering projects that get the very best outcomes for Canadians.

I’d also like to give a special welcome to the 13 international delegations at P3 2019. You’ve come a long way to meet with Canadian companies, governments and our Indigenous community leaders. I also encourage everyone to stop by the International Café and chat with Canada’s Trade Commissioners, Export Development Canada and the Canadian Commercial Corporation to discuss P3 opportunities for Canadian companies in promising global markets.

The conference floor is the best venue to find each other (use the P3 2019 Conference & Networking App). I’d also like to welcome the city managers who are joining us for our Day 2 panel on Breaking Ground in the Municipal Sector. The majority of Canadian infrastructure is built and maintained by municipalities and Indigenous communities yet more need to engage in P3. Our speakers include those that are involved in P3s and those who haven’t yet to find out how best to structure projects to make the P3 model more accessible to municipal governments.

Be sure to stick around for our special Day 2 afternoon double session devoted to transportation topics, including a keynote by Alberta Transportation Minister Ric McVey, a sit down with Infrastructure Ontario President and CEO Ehren Cory and Metrolinx President and CEO Phil Verster and what promises to be an animated discussion on Innovative Financing Models for Major Transportation Projects.

There is so much to discuss! We want to hear your thoughts and encourage you to speak with our panellists at the many networking opportunities or simply pose a question during our panels by using our conference & networking app. Thank you again for joining us. Please enjoy the conference!
New Jobs mostly in health care and accommodation.

Ontario jobs-making juggernaut

Economy at a Glance

Table 1: U.S. and Canadian Jobs Markets – September 2019

<table>
<thead>
<tr>
<th>U.S.</th>
<th>Canada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Employment</td>
<td>2.4%</td>
</tr>
<tr>
<td>Service Sector</td>
<td>2.8%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>1.7%</td>
</tr>
<tr>
<td>Construction</td>
<td>2.5%</td>
</tr>
<tr>
<td>Unemployment Rate (SA)</td>
<td>5.6%</td>
</tr>
<tr>
<td>Unemployment Rate (NSA)</td>
<td>3.3%</td>
</tr>
<tr>
<td>Central Bank Interest Rate</td>
<td>2.1%</td>
</tr>
<tr>
<td>Federal Reserve’s Overnight Rate</td>
<td>2.1%</td>
</tr>
</tbody>
</table>

Table 2: Canadian Workforce Earnings, Year over Year – September 2019

| All employees, average weekly | 3.8% |
| All employees, average hourly | 4.3% |
| Union coverage, average weekly | 3.1% |
| Union coverage, average hourly | 3.5% |
| Non-union, average weekly | 4.0% |
| Non-union, average hourly | 4.6% |
| All employees, full-time average weekly | 4.2% |
| All employees, part-time average weekly | 1.3% |

Ontario’s year-over-year increase has been +3.3%, which is nearly one-and-a-half times the rate for the entire country (+2.4%).

Quebec, with a change of +3.1%, has also been a significant jobs generator over the past year.

Furthermore, Quebec is now tied with British Columbia for lowest unemployment rate among all the provinces, both at 4.8%.

Central Bank Interest Rate

Federal Reserve’s Overnight Rate

Bank of Canada’s Overnight Rate

Table 2 shows wage increases weekly and hourly Canada-wide to be +3.8% and +4.3% respectively. The highest number in the table is +4.6% for non-union workers hourly.

Employees in the U.S. have been seeing pay cheque increases that have generally been about one percentage point below Canadian results.

For more articles by Alex Carrick on the Canadian and U.S. economies, please visit: www.constructconnect.com/blog.
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making the difference
A report-card-style report issued by eight national infrastructure stakeholder organizations calls for long-term and sustainable spending to replace Canada’s aging infrastructure.

The Canadian Infrastructure Report Card (CIRC), released Oct. 8, said a significant amount of public infrastructure in Canada is in poor condition. The report found nearly 40 per cent of roads and bridges are in fair, poor or very poor condition, with roughly 80 per cent being more than 20 years old.

In some categories, such as community centres and libraries, more than 60 per cent of facilities are at least 20 years old. As well, 30 per cent of water infrastructure, such as watermains and sewers, is in fair, poor or very poor condition.

“Reliable infrastructure connects our communities, enables our economy and protects our environment — it supports our quality of life right across the country,” said John Gamble, president and CEO of the Association of Consulting Engineering Companies–Canada (ACEC), one of seven organizations supporting the report. “So, in light of these findings, Canadians should be concerned.”

It’s the third report card issued by founding CIRC partners the Canadian Construction Association (CCA), the Canadian Public Works Association, the Canadian Society for Civil Engineering and the Federation for Canadian Municipalities. Besides the ACEC, other participants in the report are the Canadian Urban Transit Association, the Canadian Network of Asset Managers and the Canadian Parks and Recreation Association.

For the first time, the CIRC made extensive use of data compiled for the Canadian Core Public Infrastructure Survey, a new federal program. 2019 results found that asset categories in worse condition than was reported in the 2016 report included roads, bridges and wastewater and linear stormwater assets.

“Data from the report revealed that Canada’s public infrastructure is at serious risk,” said Mary Van Buren, CCA president. “It will require rehabilitation and replacement in the next few decades to ensure services provided continue to meet the needs of communities.”

Roads and bridges are more vulnerable and will require significant investment over the next decade in order to keep them at a fair level if not a good or excellent level, Van Buren said.

“This is something post-election where we will be using this data to talk to the government about investing in Canada and the urgent need for investments particularly in our roads and bridges,” she said.

Gamble said infrastructure is a core business of government and it’s important to Canada’s economic, social and environmental quality of life.

“It’s what connects our cities, it’s what enables commerce and it contributes to how we protect and manage the environment and therefore it is worthy of a lot of attention from policy makers and decision makers,” he said. “Public policy decisions need to be informed decisions and that is really the genesis of the report card, to facilitate informed decision-making when it comes to infrastructure investment.”

Gamble said previous analysis was based on long-standing climate patterns and failed to consider the effects of increasingly severe weather on aging infrastructure.

“Most engineers would argue most of those assumptions are no longer valid, as the 100-year flood is now the 50-year flood or the 20-year flood,” he said.

“The changing climate has two impacts on the existing infrastructure. One, the indirect impact is the wear and tear on existing infrastructure and therefore the physical impact on infrastructure, and secondly, in light of the changing climate, a lot of the infrastructure was built based on assumptions that were far too conservative — they were good-faith design assumptions made based on climate and predictable weather at the time, but with changing weather events, the capacity of existing assets may not be what we hoped it would be.”

Discussions on infrastructure funding should also consider funding burdens born by municipalities, Gamble suggested. Funding formulas for new infrastructure is generally 33-33-33 per cent among the three levels of government, but that fails to consider that 90 per cent of lifecycle costs to maintain the infrastructure is paid by the municipal level.

“I would argue that even with these generous contributions from the federal and provincial government, the municipal sector is still bearing about 93 per cent of the overall cost of design, build, maintain and managing infrastructure assets,” he said.

For more information on the report card visit www.canadianinfrastructure.ca.

This story originally appeared in the Daily Commercial News and the Journal of Commerce on Oct. 15.
Diversity of P3 use showcased in 2019 CCPPP National Awards

Gold Award Winners

Gordie Howe International Bridge Project (Project Financing Award):
This international crossing — which will be the largest cable-stayed bridge in North America and the first new major trade link between the United States and Canada in four decades — represents one of the largest recent private financings of a P3 in Canada with a total project cost of CAD$5.7 billion. The bi-national and high-profile nature of this project posed some “interesting challenges” for the team to overcome from working with two different sets of codes, regulations, standards, taxation systems and currencies to environmental issues and border security, the awards committee said. The project itself was very large and technically complex involving a large bridge span, highway works and two parts of entry. The step-up step-down security package provided to lenders is unique and the project is the first P3 to use a non-traditional foreign exchange risk framework to balance fluctuating currency prices, setting a precedent for future cross-border transactions.

Partners: Windsor-Detroit Bridge Authority and Bridging North America

Silver Award Winners

The New Toronto Courthouse (Project Development Award):
Construction is underway on Ontario’s first high-rise courthouse in Toronto’s downtown core, which will amalgamate six Ontario Court of Justice criminal courthouse locations in one new, accessible location. The P3 project, with an estimated cost savings of $228.7 million compared to the more traditional approach to procurement, is “noteworthy for its design considerations, as well as its significant stakeholder consultations” to improve access to justice and enhance operational efficiencies, as well as commemorating the rich cultural and heritage value of the site, said the awards committee. Along with its 63 courtrooms and 10 conference rooms, the 17-storey facility will include improved security features integrated throughout the design of the courthouse and house the first Indigenous Learning Centre in an Ontario courthouse.

Partners: The Ontario Ministry of the Attorney General, Infrastructure Ontario and Stantec Infrastructure (with Renzo Piano Building Workshop and NORR Architects & Engineers Limited).

Tlicho All-Season Road (Project Development Award):
This 97-kilometre all-season gravel highway, which will link the remote northern community of Whatch with its neighbours in the Northwest Territories, is among the first P3s in North America with an Indigenous government that has a cash-funded equity stake in the project. “This is a project that includes substantive benefits for the Indigenous community throughout the construction and operation of the project,” the awards committee said. The project is also notable for its unique approach to handling long-term risks related to climate change, which is happening at an unprecedented rate in the North. To address this challenge, the territorial government worked with its advisors and a climate specialist to develop a “bespoke climate change risk-sharing regime” using cutting-edge modeling, enabling the partners to more efficiently price their potential exposure to this risk for long-term operations and maintenance of a road constructed above the permafrost. This climate change risk-sharing model could be used to help other projects globally. The territorial government has said the total cost using the P3 model over 28 years compared favourably to a traditional design–bid–build procurement.

Partners: Government of the Northwest Territories and North Star Infrastructure GP

Library and Archives Canada’s Gatineau 2 Project (Project Development Award):
This new flagship building will sit next to and complement the award-winning Preservation Centre in Gatineau, Que., which will also undergo improvements under this project. It will be the first “net-zero carbon” facility dedicated to archival preservation in the Americas and the first federal building constructed to the requirements of Canada’s Greening Government Strategy. This will also be the world’s largest preservation facility equipped with a high-tech automated archive storage and retrieval system. Overall, the project will not only allow Library and Archives Canada to ensure that Canada’s precious national collections are kept under optimal preservation conditions, but also set a global standard following the example of its existing Preservation Centre, which is often the envy of other memory institutions at home and abroad.

Partners: Library and Archives Canada and Plenary Properties Gatineau

Stoney CNG Bus Storage and Transit Facility (Infrastructure Award):
This gigantic facility near the Calgary International Airport can hold more than 500 standard 12-metre buses and is the largest indoor compressed natural gas bus holding complex in North America and one of the largest in the world. But not only are the buses using greenhouse gas reducing technology, this “showpiece facility” is an “impressive example of infrastructure built and designed to incorporate sustainability,” the awards committee said, pointing to its innovative top-down ventilation design that safely and efficiently removes air contaminants, as well as its rainwater harvesting system for its bus wash system. The P3 project has an estimated cost savings of 34.7 per cent or $162.6 million compared to a traditional procurement.

Partners: The City of Calgary and Infrastructure Calgary (Plenary/CPL/CIU)
I’ve been an eventful year for P3s in Ontario with stakeholders such as the Ontario government, its agency Infrastructure Ontario and major project owners like Metrolinx, all redefining key elements of the model and pushing boundaries. When the Province and IO unveiled their first P3 project Market Update in two years (on Sept. 10), the financial commitment to more than $665 billion worth of projects made the big splash but as IOs president and CEO Ehren Cory pointed out in an interview at the time, it’s also notable that behind the scenes the P3 model is being significantly recalibrated.

“The word innovation gets thrown around a lot and means different things to different people,” said Cory. “We are on a journey of constantly improving and changing our model.”

Although the project pipeline might look very similar there is a lot going on under the surface in how we create a model that works well for the market.”

“Institutionally, the Ontario government signalled it would be taking P3s in new directions back in March when then-Minister of Infrastructure Monte McNaughton announced new steps to attract international investors looking to participate in Ontario’s P3 market while on a trade mission in Berlin.

New measures included creating opportunities for more competition in P3s by accounting for international experience, promoting innovation by making project evaluation criteria better to reward design innovation. Cory’s Market Update letter in September reiterated the goals.

“IO is continuing to take the necessary steps in consultation with the industry to improve upon our project delivery approach,” he wrote. “As an international leader in public-private partnerships, IO believes it is critical to continue the evolution of the model to meet today’s realities.”

Cory offered examples of the way IO has reformed its approach to negotiating risk transfer within a project, spurred on by the onset of so much new transit work. A DBFM contract today is different from one 10 years ago, he said. With so many transit projects spanning long corridors, old strategies of dealing with risk — automatically trying to pass risk off to the private sector — may not be applicable.

“It’s a DBFM but we need to share the risk on utilities relocation, it is a big deal when you do a transit project,” he explained.

One of IOs focuses right now is moving to risk reduction instead of risk transfer, Cory said. There can be savings if the whole project or components are derisked. So, IO is viewing the Ontario Line subway project as having a dozen early-works projects.

“Could we accelerate the project and derisk it by moving a bridge or widening a bridge or moving some utilities, getting early work done that speeds up the work but also takes out the risk,” he said.

It’s clear IOs drive to derisk projects is not only supported by the private sector, the private sector is pressing hard. As chief operating officer and executive vice-president of EllisDon Capital, Joey Comeau has sat down with IO often in recent years to discuss risk.

“On fewer and fewer projects the private sector is willing to take the risk transfer they have taken in the past on these large-scale civil projects,” he said recently. “Right now, the private sector is starting to react. We realize the risk transfer was inappropriate and collectively we are starting to push back on that very hard.”

Among major transit projects driving change in P3 procurement practices, none is more transformational than the GO RER OnCorr electrification project. Metrolinx had unprecedented consultations with bidders and other interested parties worldwide over the past two years, collaboration that continues as four qualified bidders pull together proposals during the in-market phase. The OnCorr capital projects alone will cost $10- to $12 billion and there will also be 30 years of operations and maintenance.

“The OnCorr project is such a unique one for us,” said Cory, laying out a list of capital works in addition to a major change to the Metrolinx service model.

“If you picture a classic P3 of the past, it’s a really big construction project with a 30-year maintenance component. OnCorr is a 30-year operating and maintenance project with a construction contract. So that’s why it has required us to innovate in how we evaluate the bidder, and what we are looking for, and for sure, it has opened up the window for innovation.”

Metrolinx president and CEO Phil Verster attended the Market Update presentation and explained how the OnCorr owners were pushing bidders on the all-important technical issue of the energy solution for the trains — hydrogen-powered versus an overhead catenary system.

“Those are choices bidders can make,” he said. “I don’t think those are unresolved issues, quite the opposite, those are choices in the market we allow bidders to make. And that is what P3s are about. It’s about innovation. It’s about encouraging consortia to innovate when they put proposals forward to us.”

IO is in a better position to showcase its expertise on a world stage now that the Ontario government has passed legislation permitting the agency to contract out its services to outside agencies. Cory was quoted as saying at a May meeting of the Canadian Club in Toronto that the initiative would provide “an opportunity for Ontario-based companies to be able to participate in other markets, because they have a homegrown advantage having spent the last decade-plus working here.”

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Left is a list of capital works in addition to a major change to the Metrolinx service model.

Metrolinx president and CEO Phil Verster discussed procurement for the massive GO RER OnCorr project at a Metrolinx town hall event in Mississauga in September.

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Employing up to 4,000 employees across the country, it currently has more than 150 active projects ranging from commercial and residential high rises, airport extensions, restoration work on heritage buildings, infrastructure and civil projects and more.

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Pomerleau embraces innovation better than anyone in the industry. In fact, for the second consecutive year, its excellence and innovative ways were recognized with a CanBIM Innovation Spotlight Award for its work on the Willow Square Continuing Care Centre in Fort McMurray.

“We strive to implement digital technology processes and methodologies in our day-to-day operations from project conception to delivery and beyond,” says Eric Lessard, Pomerleau’s Chief Digital Officer.

When combined with key elements that make up Pomerleau’s DNA, this visionary approach shapes the experience of its clients, partners, and the communities where the company operates. The Pomerleau experience is characterized by authenticity, trust and efficiency. It is built on Pomerleau’s steadfast commitment to quality and its determination to carry out the work while upholding the highest standards in health and safety.

As Sean Strickland, Director of Business Development & Industry Relations explains: “At Pomerleau, we believe that the choice of a project’s delivery method should align with the client’s objectives. This is most certainly true with P3 projects.”

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Since 2010, Pomerleau has completed twelve P3 project with an average value per project of $170M. In less than a decade, this brings the total value of P3 projects carried out by Pomerleau to $2B. Pomerleau’s P3 experience includes a wide breadth of facilities, ranging from health research centres, to train maintenance yards and long-term care facilities. Most notably, Pomerleau’s P3 endeavors include the McGill University Health Research Centre (phase 1 & 2) and the University of Montreal Health Research Centre, both located in the heart of downtown Montreal.

“Our process includes an integrative design approach that brings the design team, Pomerleau and key specialized trade partners to the table early in the project.”

Jeremie Poirier, Pomerleau’s Project Manager

Recently, Pomerleau was shortlisted to bid on Infrastructure Ontario’s Halton Consolidated courthouse project. It has been awarded, as part of a consortium, two long-term care facilities in Gander and Grand Falls-Windsor, Newfoundland and Labrador. Pomerleau was awarded the contract for the design, construction, financing and maintenance of these 60-bed facilities in April 2019 by Government of Newfoundland and Labrador.

“Our process includes an integrative design approach that brings the design team, Pomerleau and key specialized trade partners to the table early in the project. This approach strengthens our ability to anticipate the necessary steps to ensure a strong project throughout its entire build,” says Jeremie Poirier, Pomerleau’s Project Manager for both facilities.

The Canadian construction leader continues to lead an industry-wide transformation and relies on its 53-year strong experience, the talent and dedication of its team members and on innovation to deliver more efficiencies and better outcomes for its clients from coast to coast.

For more on Pomerleau’s latest P3 and other projects, visit: pomerleau.ca.
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The State of P3s

There are 285 active public-private partnership projects across Canada, delivering $139.3 billion in total market value. The project totals on this map reflect projects that are either active (in procurement, under construction or operational) or in the pipeline (not yet in procurement).

P3 Sector Snapshot

- **Transportation**
  - Number of Active Projects: 79
  - Projects in Pipeline: 24

- **Health**
  - Number of Active Projects: 101
  - Projects in Pipeline: 17

- **Energy**
  - Number of Active Projects: 11
  - Projects in Pipeline: 3

- **Education**
  - Number of Active Projects: 15
  - Projects in Pipeline: 3

- **Recreation & Culture**
  - Number of Active Projects: 15
  - Projects in Pipeline: 5

- **Water & Wastewater**
  - Number of Active Projects: 21
  - Projects in Pipeline: 3

- **Government Services**
  - Number of Active Projects: 5
  - Projects in Pipeline: 0

- **Information Technology**
  - Number of Active Projects: 5
  - Projects in Pipeline: 1

- **Accommodations**
  - Number of Active Projects: 10
  - Projects in Pipeline: 8

- **Justice**
  - Number of Active Projects: 23
  - Projects in Pipeline: 2

- **Accommodations**
  - Number of Active Projects: 10
  - Projects in Pipeline: 8

Data Source: www.p3spectrum.ca
The Canadian Council for Public-Private Partnerships congratulates the recipients of the 2019 National Awards for Innovation and Excellence in Public-Private Partnerships

GOLD AWARD FOR PROJECT FINANCING
Gordie Howe International Bridge Project
A partnership of the Windsor-Detroit Bridge Authority and Bridging North America

GOLD AWARD FOR PROJECT DEVELOPMENT
Tłı̨chǫ All-Season Road
A partnership of the Government of the Northwest Territories and North Star Infrastructure GP

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SILVER AWARD FOR INFRASTRUCTURE
Stoney CNG Bus Storage and Transit Facility
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$65 billion IO pipeline a significant job generator: Scott

Ontario Minister of Infrastructure Laurie Scott unveiled a $65-billion P3 project pipeline that she says will be a significant driver of economic prosperity and job creation for the province, particularly for the construction sector.

The 2019 Infrastructure Ontario (IO) Market Update lays out 32 projects that are currently in the active procurement or pre-procurement stages plus 11 more projects in planning. The pipeline includes 16 health care projects, seven more than the last update released two years ago, and makes clear that the five new GTA (Greater Toronto Area) transit projects announced in the spring are signature works for the government.

Scott was joined by IO president and CEO Ehren Cory at a pipeline reveal event hosted by the Canadian Council for Public-Private Partnerships in Toronto on Sept. 10.

The projects, Scott said, represent a "key part of Ontario’s future prosperity" and will "generate thousands of jobs in the skilled trades, engineering and design sectors."

"The 2019 Market Update is a challenge to the best in the industry big and small, local and international, to team up with Ontario and successfully deliver the high-quality infrastructure that our province relies on and depends on," he said.

"It is a good sign for the industry," commented David Frame of the Ontario General Contractors Association. "We are pleased with the amount of work.

"A lot of infrastructure needs to be built. We are taking this as a commitment from the government that they are going to get it built.""

The so-called "marquee" lineup of GTA transit projects include the Ontario Line subway, GO Transit expansion projects, the Scarborough Subway Extension, the Yonge North Subway Extension and the westward extension of the Eglinton Crosstown LRT.

Cory said the east-west Ontario Line was a top priority with planning well underway. IO plans to issue an RFQ in spring 2020 and an RFP later in 2020 with work expected to start in 2022 and completion in 2027.

Andy Manahan, executive director of the Residential and Civil Construction Alliance of Ontario, said the volume of projects was good to see but noted his colleagues were expressing doubts that the timeline for the Ontario Line could be accomplished.

"Even the construction phase is ambitious because you have to go over the Don Valley and the Don River further south," he said. "Those components of the project are very challenging."

As for the project's procurement phase, he asked, "Is it feasible? Spring 2020 is a very tight timeline. We are already into the fall of 2019."

Frame commented, "It is possible to do it that fast but they are just going to need the dedication to get it done."

The project pipeline represents the single largest commitment to P3 projects in Ontario's history, Scott said.

"These 16 new hospitals will expand health care services across Ontario including Windsor, Ottawa, the Niagara region, Toronto, Kingston and Moosonee," she said.

Ian Cunningham, president of the Council of Ontario Construction Associations, took issue with the distribution of project spending while otherwise praising the new project envelope.

"It was good that we got an update and they announced their commitment," he said. "They missed a year and I guess we are in a planning phase. It is an impressive pipeline of projects, largely centred around the GTA."

"I would say they support the economic development and growth of Ontario, keeping people healthy and getting to work and getting goods to market."

Scott noted in an interview that the government had held off preparing a marquee lineup of projects until after its election in the spring of 2018, skipping an update last fall as it reviewed its finances.

The 2019 market update meshes with the government's ongoing fiscal restraint, she said.

"It is very well thought out and sourced and meets the needs for infrastructure for Ontario," said the minister.

The 32 P3 projects in the market update include 13 civil and three community safety projects in addition to the health care builds.

Among projects in the procurement stage, the market update confirmed the Hamilton LRT project is expected to cost over $1 billion with contract close expected in October 2020, and the GO RER Oshawa electrification project is expected to cost over $10 billion with contract completion targeted for 2021.

Two projects with capital costs estimated between $200 million and $500 million, the Halton Region Consolidated Courthouse and the QEII Credit River Bridge, are both expected to reach contract close next spring.

During a question and answer session, Cory addressed roadbuilders, given that the sector is often left out of P3 planning.

IO has been in discussions with the Ministry of Transportation for the last six months, he said, looking for opportunities to use the P3 model for select large road and bridge projects.

The Credit River Bridge will be one such project and the upcoming Garden City Skyway build is planned as another.

"My advice for roadbuilders is, stay tuned for more," Cory said.

Newly unveiled projects in planning besides the Garden City Skyway include the Quinte Healthcare Corporation build, the Prince Edward County health centre in Picton, the Stevenson Memoinal Hospital in Alliston, the Collingwood General and Marine health care facility, Hotel Dieu Shaver in St. Catharines, Lake of the Woods District Hospital, Muskoka Algonquin Healthcare in Bracebridge and Huntsville, Grandview Children's Treatment Centre in Ajax, the Ottawa Children's Treatment Centre, the Early and Enabling Works for Subway Program and the Sheppard East Subway.

This story first appeared in the Daily Commercial News on Sept. 17.

Ontario Minister of Infrastructure Laurie Scott unveiled the government’s P3 market update at a sold-out Canadian Council for Public-Private Partnerships event in Toronto on Sept. 10.

DON WALL

Staff Writer
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There is not enough infrastructure investment being earmarked to build and maintain Ontario’s aging infrastructure and infrastructure investments from all levels of government — especially the federal government — should be higher, says the Residential and Civil Construction Alliance of Ontario (RCCAO), following the release of new, independent research.

The research, conducted by the Canadian Centre for Economic Analysis (CANCEA), evaluates the percentage of Ontario Gross Domestic Product (GDP) that is being invested into the province’s infrastructure from the federal, provincial and municipal levels. The analysis indicates systemic infrastructure underinvestment by the federal, provincial and municipal governments is putting the province’s economy at risk.

The concern is continuing the trend of underinvestment in infrastructure and the growing investment gap could mean infrastructure projects such as roads, bridges, transit, sewer and watermain systems could be delayed or cancelled.

“Ontario needs a lot of infrastructure investments and governments need to get their act together so that we can start making these proper investments,” stated Andy Manahan, executive director of the RCCAO.

“The results of the bulletin show that the larger share of the underinvestment is due to the federal government. If Ontario and municipalities try to make up the shortfall for what the feds are underinvesting, their returns on things like taxes generated would be less. To get the more optimal bang for the buck we really do need the federal government to step up and start making investments.”

CANCEA has been tracking the issue through econometric analysis since 2010 and provided updates in 2011, 2014, 2015, 2016 and 2018. The updates show a continual decrease in investment relative to GDP and while dollar value of infrastructure investment grew by 11 per cent between 2011 and 2018, it has not been keeping pace with economic growth, explained Paul Smetanin, president and CEO of CANCEA. Investments as a percentage of Ontario’s GDP decreased from 3.25 per cent to 2.79 per cent, a 14.2 per cent drop in investment, he added.

“Unfortunately, we are still trending in the wrong direction,” said Smetanin. “We have been doing this since 2010 and we are constantly having this deterioration in the amount of investment and maintenance of our infrastructure. In Ontario we are just not keeping pace with economic growth but more importantly with population growth…A lot of the availability of infrastructure space is being lost.”

CANCEA found the combined federal and provincial investment in Ontario infrastructure should be at 5.4 per cent of Ontario’s GDP. The expected total investment over the next five years is 2.65 per cent of provincial GDP, leaving an investment gap of 2.75 per cent. From 2014 to 2018, the federal contribution has remained under 0.5 per cent of GDP, a quarter of the two per cent that should be earmarked for Ontario infrastructure.

According to the report, the combined annual dollar value of infrastructure investments is expected to decrease from 2019 to 2022 which translates to “a continued downward trend in the percentage of provincial GDP invested annually and a further move away from the econometric target levels for long term growth…Investments are expected to be at a 10-year low of 2.45 per cent seen in 2016 again by 2022.”

“As a result of this continual decrease in investment relative to GDP, the target level — the level at which long-term real GDP growth is maximized, which is determined through econometric modelling — was revised from 5.1 per cent in 2011 to 5.4 per cent based on the 2018 update report (combined provincial/municipal, plus federal investment in the province),” states the report.

The report also states the share of infrastructure investments borne by the federal, provincial and municipal governments are unfairly allocated and “the federal government is a significant beneficiary, receiving a larger share of the benefit from the infrastructure investments made in Ontario than the share it directly invested.”

“Previous reports that we have done show there is a systemic problem with the allocation of the cost of infrastructure in Ontario,” said Smetanin. “The problem is that while the Ontario government and municipalities are investing in infrastructure, they are not getting the rate of return back through taxation revenues because there is another level of government that is taking their share but not repatriating those taxation dollars back to essentially the source that generated it.”

The federal government remains significantly underinvested at 25 per cent of what benefit analysis suggests, states the report.

“If you were to allocate who should pay for infrastructure based upon who gets the benefits then you would expect the federal government to at least increase their infrastructure investment in Ontario by three times,” said Smetanin. “Unfortunately given the projections in the federal budget, we see no shift towards any significant increase in funding infrastructure from the federal government.”

CANCEA says increasing the percentage of GDP spent on infrastructure requires collaboration between all levels of government and that the investment should be split between the different tiers of government according to the expected future benefit.

This story first appeared in the Daily Commercial News on June 6, 2019.
Collaboration is the foundation of our success on P3 projects. It is the driving force that helps us find common ground with our partners to transform an indicative design into a winning design solution.

To learn more about Kasian’s P3 work contact Wojciech.Brus@kasian.com
CCA REPORT: PART 1 OF 2: This is the first in a two-part series on a report released by the Canadian Construction Association that reflects the thoughts of industry leaders on the key trends impacting the sector over the next five to 10 years. The report, done in partnership with Abacus Data, explores five themes. In this part, we look at the state of the workforce and the effect of technology on the industry. The second part of this series appears on Pg. 22 of The P3 Daily Reporter. This story first appeared in the Daily Commercial News and the Journal of Commerce on Oct. 3.

GRANT CAMERON
Correspondent

The pool of construction workers in Canada is shrinking and contractors aren’t using technologies to fill the shortages and augment the productivity of their workforce, according to a new report on key trends impacting the industry released by the Canadian Construction Association (CCA). There is “significant concern” over the projected skills shortages and labour shortages in the construction industry, partly driven by demographic issues, aging workers and negative perceptions about construction, the report states, but also by lagging adoption of new technologies by the industry.

CCA president Mary Van Buren says the findings should sound alarm bells for the industry and alert contractors to the need for a sustained national campaign to promote careers in construction.

“There is a war for talent at a time when Canada’s infrastructure is aging. We need to build new sustainable infrastructure and attract a tech savvy, creative workforce to build the Canada of the future,” she comments.

While there have always been booms and busts in construction, the industry has always been able to recruit people when the need arose, says Van Buren. But this time is different as the world is changing and construction is not seen as the employer of choice by the younger generation, so the industry needs to let future generations know about the breadth of career opportunities.

“We need a sustained, national campaign to show how the industry is a fit for everyone — engineers, drone pilots, carpenters and lawyers and everyone in between,” she says. "The industry represents seven per cent of Canada’s gross domestic product and employs 1.5 million people. This campaign needs to target parents, educators, politicians and of course our potential workforce.”

With fewer Canadians seeing construction as an attractive or viable career, the report states that the industry will have trouble maintaining a large enough workforce to keep up with demand. While the shortage will be felt across all construction occupations, it will be more acute among estimators, project managers and Building Information Modeling (BIM) specialists.

The report highlights several reasons youth are put off construction, namely the volatile and fluctuating nature of the work, long hours which affect work-life balance, and the fact the industry often requires workers to travel and put in long hours which many new recruits see as a barrier.

While it seems dire, Van Buren says the situation can be turned around and there is a big opportunity to tap into under-represented groups like women, Indigenous peoples and new Canadians.

“It will take a sustained effort over many years,” she said. “We are not starting from ground zero — companies have been recruiting from under-represented segments for many years — but we have not done it consistently, as an industry.”

With increasing demand, construction firms that have adopted new technologies are competing over a small number of qualified professionals, the report states, which is affecting many of the highest-skilled professions, including BIM practitioners, estimators, project managers and electricians.

On the technology side, the report states that Canadian construction firms are behind international competitors in innovative markets enter the Canadian construction market to meet that demand, domestic firms will be under even greater pressure to innovate, the report states.

A key barrier is that market competition for private-sector projects tends to force a race to the low-cost bid which results in less investment in innovation, states the report. Adopting new innovation can increase risk, which is usually downloaded to the contractor and not shared with the owner.

Van Buren maintains that a cultural shift is needed, away from the lowest price to the greatest value.

“It is common in the industry to award contracts to the low-cost bidder,” she notes. “This does not allow for pricing innovation and the risks that come with including innovation into projects.”

The report notes that the trend towards using technology will increase in the industry, as such devices as drones are now a staple tool that will continue to improve surveying and inspection tasks.

An interesting impact, says Van Buren, will come from mining data and using predictive analytics across construction projects.

“This is pretty much in its infancy and will grow as more infrastructure uses the IoT or other methods to collect data,” she comments.

The data, she says, will help improve maintenance by creating knowledge around ideal replacement times of parts or components, guide traffic flows to alternate routes when vehicles are autonomous, and inspect hard-to-reach infrastructure by providing digital images.

“This will lead to whole new business models and all kinds of technology-centric careers that don’t exist today,” says Van Buren.

However, while technology has many advantages, such as improving safety through practices as employing autonomous vehicles in mines, providing tools that allow people who are not as strong to do the work and boosting productivity with software to manage projects, Van Buren cautions there’s a limit to the benefits.

“Technology will not necessarily solve labour shortages, but it will help keep Canadian firms competitive, ensuring rewarding work for years to come,” she says.
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Procurement policies risk “hollowing out” sector: CCA report

CCA REPORT: PART 2 OF 2: This is the second in a two-part series on a new report released by the Canadian Construction Association (CCA) that examines the key trends impacting the sector released by the Canadian Construc-
tion Association (CCA).

Economic Snapshot

Anne’s Land (aka Prince Edward Island) is approaching 2020 in great shape

P.E.I’s economy grew by a country leading 2.9% in 2018 for the first time in 17 years. This growth was the result of strong domestic demand that was driven primarily by record net migration plus a moderate acceleration in exports. Unlike Newfoundland and Labrador (see Snapshot 419) across the Gulf of St. Law-
rence that has been experiencing a steady outflow of migrants to other provinces, Prince Edward Island, aka the Garden of the Gulf, has, since late 2016, seen an unprecen-
ted inflow of international migrants plus a net gain in inter-
provincial migration. Over this period, the province’s headcount has increased by an average of 2.2% y/y, well above the 1.4% y/y gain recorded by the country as a whole.

On the doorstep of 2020, the province’s economy appears to be well positioned to maintain its recent growth trajectory, thanks to an sustained growth of exports, consumer spending, business investment and government spending. Year to date, P.E.I’s merchandise exports are up by 11%, well ahead of the -0.6% drop they exhibited during the first nine months of 2018. Major contributors to this year’s stronger pattern of foreign sales include: shrimp lobster mostly to China (up 30%), air-
craft propellers to the U.S. (also up 30%) and pharmaceutical prod-
cuts. Exports of potatoes, the province’s main export commodity, are off by 10% due to weaker U.S. sales. Looking ahead, it will be difficult for P.E.I’s exports to accelerate in 2020 given the darkening core in global manufacturing and the U.S.-China trade war.

However, the outlook for the province’s lobster exports to Asia and aerospace products to the U.S. remains positive.

The record inflow of international migration on trend of impacting the sector released by the Canadian Construc-
tion Association (CCA).

Such projects will attract bids from large foreign firms, which have more robust balance sheets and capacity, the report notes, resulting in money being taken out of Canada and from domestic firms.

According to the report, governments at all levels have been moving to a practice of amalgamating projects, in some cases into mega-projects, acting as a sole funder and issuing a single contract to one large general contractor, essentially decreasing the number of firms that can compete.

But by combining projects, the report notes, they risk “hollowing out” the Canadian construction industry.

“This decreases the number of firms that can compete for the projects and limits the capacity of large firms to bid on other projects concurrently,” the report states. "Also, moving forward, we cannot compete at this level as they don’t have the capacity and can’t compete on price.”

CCA president Mary Van Buren says smaller firms are several years behind large projects because the administrative burden is too complex and resource-inten-
sive for them to handle.

“Some believe that, as projects grow in scope and com-
plexity, for example billion-dollar P3s, that only the very large firms will be able to compete,” she explains. “This will squeeze out the mid-size firms who, for example, might have built one or two schools a year but cannot build 10.”

Contractors see a polarized and consolidated future, with potentially only smaller and very large general con-
tactors in the ICI sectors as medium-sized firms will either have to grow their capacity and balance sheets or get more involved in design and become smaller to carve out a niche in the larger projects.

Alternatively, the report states, mid-sized firms will have to become more comfortable partnering with their peers in order to obtain large projects that are unable to obtain alone.

Van Buren says the situation will result in a decline in mid-sized contracting and a bidding war for projects.

“It reduces the number of capable contractors able to bid and it invites bids from international firms who have larger balance sheets, some of whom are backed by their govern-
ments, thus creating an uneven playing field,” she points out.

As projects grow in size and complexity, it will attract

The report states this decreases the number of firms that can compete for the projects and limits the capacity of large firms to bid on other projects concurrently.

Industry experts worry that bid qualification conditions such as experience on similar projects, retained expertise and access to data will give bigger projects price tags. The report states this decreases the number of firms that can compete for the projects and limits the capacity of large firms to bid on other projects concurrently.

Because foreign activity in the Canadian market means

projects are off by 10% due to weaker U.S. sales. Looking ahead, it will be difficult for P.E.I’s exports to accelerate in 2020 given the darkening core in global manufacturing and the U.S.-China trade war.

However, the outlook for the province’s lobster exports to Asia and aerospace products to the U.S. remains positive.

The report notes that contractors are also worried that countries will pursue more protectionist policies and increase tariffs and other trade barriers on resources essential for the construction industry or close market access altogether, and that the change in regulatory envi-
ronment, cancellations of large projects and the slow dis-
bursement of infrastructure money from the federal govern-
ment could mean slow times for construction in the next five to 10 years.

However, if governments were to announce clear time-
tables and investment commitments, simplify consultations and assessments, and secure more access to foreign markets it would positively affect the industry outlook, the report states.

Van Buren says Canadian infrastructure is aging and the next two decades will be critical for the country to remain one of the best in which to live and invest.

“Having good, strong Canadian firms will help Canada ride the wave and be a leader,” she says.

The report notes that contractors are also worried that countries will pursue more protectionist policies and increase tariffs and other trade barriers on resources essential for the construction industry or close market access altogether, and that the change in regulatory envi-
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