

Top 100

Canada's Biggest Infrastructure Projects

AECOM
Top Projects
2017



AECOM Top Projects 2017

EDITOR

Andrew Macklin

PUBLISHER

Todd Latham

ART DIRECTOR & DESIGN

Donna Endacott

ASSOCIATE EDITOR

Katherine Balpatasky

AECOM

AECOM is built to deliver a better world. We design, build, finance and operate infrastructure assets for governments, businesses and organizations in more than 150 countries. As a fully integrated firm, we connect knowledge and experience across our global network of experts to help clients solve their most complex challenges. From high-performance buildings and infrastructure, to resilient communities and environments, our work is transformative, differentiated and vital. A Fortune 500 firm, AECOM had revenue of approximately \$17.4 billion during fiscal year 2016. See how we deliver what others can only imagine at aecom.com and [@AECOM](https://twitter.com/AECOM).

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AECOM Top Projects 2017



With \$186.4 billion invested in Canada's Top 100 Projects of 2017, the country is experiencing record investment in creating and improving public sector infrastructure from coast-to-coast. Those investments are creating tens of thousands of jobs and providing a foundation for the country's growing economy.

In 2017, AECOM again showed why it is a leader in Canada's infrastructure industry. In this year's edition of the ReNew Canada Top 100 projects report, AECOM was involved in 29 of the 100 largest public sector infrastructure projects, one of just a handful of businesses to reach our Platinum Elite status. Those 29 projects represented just under \$61.5 billion, close to one-third of the \$186.4 billion list.

AECOM's involvement on the Top 100 stretches across multiple sectors, working on big infrastructure projects in the transit, energy, transportation, health care and water/wastewater sectors. That speaks to the strength of the team that the company has built in Canada to deliver transformational assets across a multitude of industries.

Through these projects, AECOM has also shown its leadership in both putting together teams, and working as a member of a team, to help produce the best project possible for the client. As a company that prides itself on its ability "to develop and implement innovative solutions to the world's most complex challenges," they have shown they are willing to work with all involved stakeholders to create the greatest possible outcome for the client.

"We are very proud of our contribution to building and maintaining infrastructure across Canada," says Doug Allingham, executive vice president, Canada. "Our multi-disciplinary teams are delivering innovative solutions for multiple markets, and our involvement is clearly adding to the country's economic and social development."

AECOM will continue to be one of the leaders in providing the quality, innovative infrastructure that drives Canada forward.

Andrew Macklin
Editor, ReNew Canada



For details about AECOM's Top 100 projects, or to browse all 100 projects by sector, location, value, and funding model, visit top100projects.ca

Projects are ranked by dollar value and, to make the list, must be underway, whether undergoing an environmental assessment, in procurement, or under construction.

All dollar amounts listed in this publication are in Canadian dollars.

Credit: Hydro-Québec



Romaine Complex

Top 100 Rank: 6
Cost: \$6.5 billion

Location:

Havre-Saint-Pierre,
Quebec

Owner: Hydro-Québec

AECOM's Role: Engineer

Funding: Public

This 1,550-MW hydroelectric complex on the Romaine River involves four generating stations and reservoirs spaced over 150 kilometres along the Romaine River, located on the North Shore of the Gulf of St. Lawrence. Each station will have an associated rockfill dam, two generating units, and a spillway. One permanent access road 150 kilometres long will also be built as part of the project linking the generating station to the regional highway.

Hydro-Québec began its work in summer 2009. Work is continuing as scheduled, with work on Romaine-3 and Romaine-4 underway. An average of 975 workers is estimated for the project with a peak workforce of over 2,000 workers from 2012 to 2016. Romaine-2 was commissioned in 2014, followed by Romaine-1 in 2015. Romaine-3, and Romaine-4 are expected to be online in 2017, and 2020, respectively.

Credit: Robb Williamson, AECOM



Wilson Facility Enhancement and Yard Expansion

Top 100 Rank: 82
Cost: \$506.4 million

Location: Toronto, Ontario

Owner: Toronto
Transit Commission

AECOM's Role:
Engineer

Funding: Public

TTC's Wilson Yard is undergoing a significant expansion of the rail yard and supporting maintenance facilities, which is required to accommodate the needs for Toronto Rocket train storage, as a result of the introduction of the Spadina Subway Extension, and increasing service demands on Line 1 (Yonge University Spadina). This expansion will add eight new storage tracks to the facility with room to store 16 trains, as well as an expanded car house for servicing Toronto Rocket trains, new run-around connections, and a connection to Downsview station.

The entire project is expected to be completed by 2019.

Credit: GrandLinc



Region of Waterloo ION LRT

Top 100 Rank: 59
Cost: \$818 million

Location: Waterloo,
Kitchener and
Cambridge, Ontario

Owner:
Region of Waterloo

AECOM's Role:
Lead Designer

Funding: Public

Transit options for the Region of Waterloo were debated at length before light-rail technology was selected instead of bus rapid transit.

This rapid transit service will shape the future of the community's transportation system by bringing LRT in two stages. Stage 1 is expected to open in 2017 and includes a 19-kilometre LRT route from Conestoga Mall Transit Terminal to Fairview Park Mall Transit Terminal, with stops in downtown Kitchener, Grand River Hospital, UpTown Waterloo, both universities, and Waterloo Park. It also features a 17-kilometre route of adapted bus rapid transit (aBRT) from Fairview Park Mall to the Ainslie Street Terminal in Cambridge, with four stops along Hespeler Road.

Stage 2 will see the BRT line converted to LRT, creating a seamless 37-kilometre service of 23 stops between Cambridge and Waterloo. Detailed design is underway, and construction of Stage 1 has commenced and is on track for completion.

Transportation

Credit: Robb Williamson, AECOM



Turcot Interchange

Top 100 Rank: 13
Cost: \$3.67 billion

Location: Montreal, Quebec

Owner: Ministère des Transports du Québec

AECOM's Role: Project Manager

Funding: Public

The Turcot Interchange is a major traffic hub in the Montreal area, connecting Autoroutes 15, 20, and 720, and facilitating access to the Champlain Bridge. It is also a vital link between the Montreal Pierre- Elliott-Trudeau International Airport and downtown. The final plans for the reconstruction of the deteriorating expressway interchange include more space allocated to public transit, cyclists, pedestrians, and green space. Several bus-only lanes have been reserved along Highway 20, Notre Dame Street West, and St. Patrick Street.

Construction of a temporary public transit bypass at Notre Dame and Angrignon Boulevard West has been completed to minimize the impact of the Turcot Interchange reconstruction. The project is expected to be completed by 2020.

Remediation

Credit: Aboriginal Affairs and Northern Development Canada



Giant Mine Remediation Project

Top 100 Rank: 53
Cost: \$903.5 million

Location: Yellowknife, Northwest Territories

Owner: Aboriginal Affairs and Northern Development Canada and Public Works and Government Services Canada

AECOM's Role: Environmental Services, Preliminary and Detail Design, Construction Management

Funding: Public

Between 1948 and 2004, the Giant Mine was a major economic driver for Yellowknife and the Northwest Territories. Mining operations at the site, which grew over the years to encompass more than 870 hectares were halted in July 2004. Since 2005, Aboriginal Affairs and Northern Development Canada (AANDC) and the Government of Northwest Territories (GNWT) have co-managed the site, with the Deton'Cho Nuna Joint Venture providing on-site care and maintenance. However, when the mine closed, 237,000 tonnes of arsenic trioxide were left behind in underground chambers. Under a multi-year services agreement with AANDC, Public Works and Government Services Canada (PWGSC) is contributing project management, engineering, procurement, and environmental services.

The remediation project proposes to leave behind a site suitable for future community use as the community sees fit. In August 2014, the decision was made to move forward in implementing the measures outlined in the EA. The project's goal is to ultimately protect public health and safety and the environment through longterm containment and management of the site's waste, water treatment, and surface cleanup at the site. General discussions with stakeholders to prioritize the measures have already begun. Project completion is expected in 2025.

Wastewater

Credit: Metro Vancouver



Lions Gate Secondary Wastewater Treatment Plant

Top 100 Rank: 65
Cost: \$700 million

Location: North Vancouver, British Columbia

Owner: Metro Vancouver

AECOM's Role: Owner's Engineer, Design

Funding: P3

The Lions Gate Secondary Wastewater Treatment Plant is a key component of Metro Vancouver's Integrated Liquid Waste and Resource Management Plan, which was approved by the B.C. Ministry of Environment in May 2011. Based on the new federal wastewater regulations, the existing Lions Gate Wastewater Treatment Plant must be upgraded to secondary treatment by December 31, 2020.

The new plant will be built on a 3.5-hectare brownfield site approximately two kilometres east of the current facility. Once commissioned, it will provide secondary treatment to approximately 200,000 residents of the North Shore, including the District of West Vancouver, City of North Vancouver, District of North Vancouver, Squamish Nation, and Tsleil Waututh Nation.

In 2013, Metro Vancouver completed a multi-disciplinary project design process with stakeholders to develop a facility plan that

complements the neighbourhood. The facility is designed to be compact, secure, resilient, and to support experiential learning and education on topics such as water use and sustainable water infrastructure.

Based on a KPMG report, input from Partnerships BC, and its own assessment, Metro Vancouver has adopted a design-build-finance procurement model for the project, with private financing for the five-year construction period comprising approximately 35 per cent of the project's total construction costs.

The new facility is scheduled to be operational by the end of 2020, and the existing plant will be decommissioned once the new plant is in service. The Government of Canada has committed \$212.3 million from its Building Canada Fund for the Lions Gate project, and Metro Vancouver is still working with the province to secure provincial funding support for the construction of the new plant.

Sainte-Justine University Hospital Centre Modernization

Top 100 Rank: 52

Cost: \$939.6 million

Location: Montreal, Quebec

Owner: Sainte-Justine University Hospital Centre

AECOM's Role: Project Manager

Funding: P3

Energy

Keyask Hydroelectric Project

Top 100 Rank: 7

Cost: \$6.5 billion

Location: Lower Nelson River, Manitoba

Owner: Keyask Hydropower Limited Partnership

AECOM's Role: Site infrastructure engineering services

Funding: Public

Romaine Complex Transmission Line

Top 100 Rank: 37

Cost: \$1.3 billion

Location: Minganie Region, Quebec

Owner: Hydro-Québec

AECOM's Role: Engineer

Funding: Public

Henvey Inlet Wind Project

Top 100 Rank: 46

Cost: \$1 billion

Location: Between Sudbury and Parry Sound, Ontario

Owner: Henvey Inlet First Nation

AECOM's Role: Environmental Services

Funding: Private

Environment

Port Hope Area Initiative

Top 100 Rank: 39

Cost: \$1.28 billion

Location: Port Hope and Clarington, Ontario

Owner: Natural Resources Canada and Atomic Canada Limited

AECOM's Role: Engineer (Port Granby) and Environmental Assessment

Funding: Public

Deep Geological Repository

Top 100 Rank: 47

Cost: \$1 billion

Location: Kincardine, Ontario

Owner: Ontario Power Generation

AECOM's Role: Environmental Consulting (Socio-Economic Impact Assessments, Communications, and Consultation Programs)

Funding: Public

Confederation Line

Top 100 Rank: 21
Cost: \$2.13 billion

Location: Ottawa, Ontario

Owner: City of Ottawa

AECOM's Role: Preliminary Engineering

Funding: P3

Eglinton Crosstown Light Rail Transit (LRT)

Top 100 Rank: 4
Cost: \$9.1 billion

Location: Toronto, Ontario

Owner: Metrolinx

AECOM's Role: Architect, Consulting Engineer, Preliminary Planning/Study, Design

Funding: P3

Spadina Subway Extension

Top 100 Rank: 17
Cost: \$3.18 billion

Location: Toronto, Ontario

Owner: Toronto Transit Commission

AECOM's Role: Architecture and Engineering Design

Funding: Public

Edmonton Valley Line – Stage 1

Top 100 Rank: 25
Cost: \$1.8 billion

Location: Edmonton, Alberta

Owner: City of Edmonton

AECOM's Role: Owner's Engineer

Funding: P3

York VIVA Bus Rapid Transit (vivaNext)

Top 100 Rank: 30
Cost: \$1.5 billion

Location: York Region, Ontario

Owner: York Region Rapid Transit Corporation and Metrolinx

AECOM's Role: Planning and Preliminary Design, Architect and Engineering Design

Funding: Public

Finch West LRT

Top 100 Rank: 41
Cost: \$1.2 billion

Location: Toronto, Ontario

Owner: Metrolinx

AECOM's Role: Technical Advisor

Funding: Public

Scarborough Subway Extension

Top 100 Rank: 14
Cost: \$3.56 billion

Location: Toronto, Ontario

Owner: Toronto Transit Commission

AECOM's Role: Environmental Services

Funding: P3

Ottawa LRT - Stage 2

Top 100 Rank: 16
Cost: \$3.315 billion

Location: Ottawa, Ontario

Owner: City of Ottawa

AECOM's Role: Owner's representative

Funding: Public

Montreal Metro Car Replacement

Top 100 Rank: 19
Cost: \$2.191 billion

Location: Montreal, Quebec

Owner: Société de transport de Montréal (STM)

AECOM's Role: Engineering and Project Management

Funding: P3

Hurontario LRT

Top 100 Rank: 33
Cost: \$1.4 billion

Location: Mississauga and Brampton, Ontario

Owner: Metrolinx

AECOM's Role: Owner's representative, technical advisor

Funding: Public

Hamilton LRT

Top 100 Rank: 49
Cost: \$1.0 billion

Location: Hamilton, Ontario

Owner: Metrolinx

AECOM's Role: Engineer, technical advisory services

Funding: Public

Transportation

Gordie Howe International Bridge

Top 100 Rank: 20
Cost: \$2.14 billion

Location: Windsor, Ontario to Detroit, Michigan

Owner: Windsor-Detroit Bridge Authority

AECOM's Role: Engineer

Funding: P3

East Side Transportation Initiative

Top 100 Rank: 44
Cost: \$1.125 billion

Location: Eastern Manitoba

Owner: Government of Manitoba

AECOM's Role: Engineer

Funding: Public

Wastewater

Hanlan Water Project

Top 100 Rank: 89
Cost: \$450 million

Location: Mississauga, Ontario

Owner: Region of Peel

AECOM's Role: Environmental Assessment, Preliminary Design Report, Tunnel Design and Engineering

Funding: Public

Bonnybrook Wastewater Treatment Plant D Expansion

Top 100 Rank: 77
Cost: \$600 million

Location: Calgary, Alberta

Owner: City of Calgary

AECOM's Role: Engineer

Funding: Public

North End Sewage Treatment Plant Biological Nutrient Removal Upgrade

Top 100 Rank: 61
Cost: \$794.6 million

Location: Winnipeg, Manitoba

Owner: City of Winnipeg

AECOM's Role: Engineer

Funding: Public

Rail

East Rail Maintenance Facility

Top 100 Rank: 56
Cost: \$859.2 million

Location: Whitby, Ontario

Owner: Toronto Transit Commission

AECOM's Role: Owner's Engineer

Funding: P3

TOTAL Top 100 Investment
\$186.4 billion

AECOM's Total Involvement
\$61.5 billion



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Ottawa, Ontario
- 3 Deep Geological Repository**
Kincardine, Ontario
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