Top 100
Canada’s Biggest Infrastructure Projects

#13 Turcot Interchange
#6 Romaine Complex
#59 Region of Waterloo ION LRT
#53 Giant Mine Remediation
#82 Wilson Facility Enhancement and Yard Expansion
#65 Lions Gate Secondary Wastewater Treatment Plant
With $186.4 billion invested in Canada’s Top100 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 Top100 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 Top100 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 Top100 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.
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.

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.

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.
**Wastewater**

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.

**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**

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 2006, 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.
Health Care

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

Keeyask Hydroelectric Project
Top 100 Rank: 7
Cost: $6.5 billion
Location: Lower Nelson River, Manitoba
Owner: Keeyask 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
<table>
<thead>
<tr>
<th>Project</th>
<th>Top 100 Rank</th>
<th>Cost</th>
<th>Location</th>
<th>Owner</th>
<th>AECOM's Role</th>
<th>Funding</th>
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</thead>
<tbody>
<tr>
<td>Confederation Line</td>
<td>21</td>
<td>$2.13 billion</td>
<td>Ottawa, Ontario</td>
<td>City of Ottawa</td>
<td>Preliminary Engineering</td>
<td>P3</td>
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<tr>
<td>Eglinton Crosstown Light Rail Transit (LRT)</td>
<td>4</td>
<td>$9.1 billion</td>
<td>Toronto, Ontario</td>
<td>Metrolinx</td>
<td>Architect, Consulting Engineer, Preliminary Planning/Study, Design</td>
<td>P3</td>
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<tr>
<td>Spadina Subway Extension</td>
<td>17</td>
<td>$3.18 billion</td>
<td>Toronto, Ontario</td>
<td>Toronto Transit Commission</td>
<td>Architect and Engineering Design</td>
<td>Public</td>
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<td>Edmonton Valley Line – Stage 1</td>
<td>25</td>
<td>$1.8 billion</td>
<td>Edmonton, Alberta</td>
<td>City of Edmonton</td>
<td>Owner's Engineer</td>
<td>P3</td>
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<tr>
<td>York VIVA Bus Rapid Transit (vivaNext)</td>
<td>30</td>
<td>$1.5 billion</td>
<td>York Region, Ontario</td>
<td>York Region Rapid Transit Corporation and Metrolinx</td>
<td>Planning and Preliminary Design, Architect and Engineering Design</td>
<td>Public</td>
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<tr>
<td>Finch West LRT</td>
<td>41</td>
<td>$1.2 billion</td>
<td>Toronto, Ontario</td>
<td>Metrolinx</td>
<td>Technical Advisor</td>
<td>Public</td>
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<td>Scarborough Subway Extension</td>
<td>14</td>
<td>$3.56 billion</td>
<td>Toronto, Ontario</td>
<td>Toronto Transit Commission</td>
<td>Environmental Services</td>
<td>P3</td>
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<td>Ottawa LRT - Stage 2</td>
<td>16</td>
<td>$3.315 billion</td>
<td>Ottawa, Ontario</td>
<td>City of Ottawa</td>
<td>Owner’s representative</td>
<td>Public</td>
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<td>Montreal Metro Car Replacement</td>
<td>19</td>
<td>$2.191 billion</td>
<td>Montreal, Quebec</td>
<td>Société de transport de Montréal (STM)</td>
<td>Engineering and Project Management</td>
<td>P3</td>
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### Top Projects 2017

<table>
<thead>
<tr>
<th>Project</th>
<th>Top 100 Rank</th>
<th>Cost</th>
<th>Location</th>
<th>Owner</th>
<th>AECOM's Role</th>
<th>Funding</th>
</tr>
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<tbody>
<tr>
<td><strong>Hamilton LRT</strong></td>
<td>49</td>
<td>$1.0 billion</td>
<td>Hamilton, Ontario</td>
<td>Metrolinx</td>
<td>Engineer, technical advisory services</td>
<td>Public</td>
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<tr>
<td><strong>Hurontario LRT</strong></td>
<td>33</td>
<td>$1.4 billion</td>
<td>Mississauga and Brampton, Ontario</td>
<td>Metrolinx</td>
<td>Owner’s representative, technical advisor</td>
<td>Public</td>
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<tr>
<td><strong>Gordie Howe International Bridge</strong></td>
<td>20</td>
<td>$2.14 billion</td>
<td>Windsor, Ontario to Detroit, Michigan</td>
<td>Windsor-Detroit Bridge Authority</td>
<td>Engineer</td>
<td>P3</td>
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<tr>
<td><strong>East Side Transportation Initiative</strong></td>
<td>44</td>
<td>$1.125 billion</td>
<td>Eastern Manitoba</td>
<td>Government of Manitoba</td>
<td>Engineer</td>
<td>Public</td>
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<tr>
<td><strong>Hanlan Water Project</strong></td>
<td>89</td>
<td>$450 million</td>
<td>Mississauga, Ontario</td>
<td>Region of Peel</td>
<td>Environmental Assessment, Preliminary Design Report, Tunnel Design and Engineering</td>
<td>Public</td>
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<tr>
<td><strong>Bonnybrook Wastewater Treatment Plant D Expansion</strong></td>
<td>77</td>
<td>$600 million</td>
<td>Calgary, Alberta</td>
<td>City of Calgary</td>
<td>Engineer</td>
<td>Public</td>
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<tr>
<td><strong>North End Sewage Treatment Plant Biological Nutrient Removal Upgrade</strong></td>
<td>61</td>
<td>$794.6 million</td>
<td>Winnipeg, Manitoba</td>
<td>City of Winnipeg</td>
<td>Engineer</td>
<td>Public</td>
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<tr>
<td><strong>East Rail Maintenance Facility</strong></td>
<td>56</td>
<td>$859.2 million</td>
<td>Whitby, Ontario</td>
<td>Toronto Transit Commission</td>
<td>Owner’s Engineer</td>
<td>P3</td>
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**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

AECOM Top Projects 2017

1. Bonnybrook Wastewater Treatment Plant D Expansion
   Calgary, Alberta

2. Confederation Line
   Ottawa, Ontario

3. Deep Geological Repository
   Kincardine, Ontario

4. East Rail Maintenance Facility
   Whitby, Ontario

5. East Side Transportation Initiative
   Eastern Manitoba

6. Edmonton Valley Line – Stage 1
   Edmonton, Alberta

7. Eglinton Crosstown LRT
   Toronto, Ontario

8. Finch West LRT
   Toronto, Ontario

9. Giant Mine Remediation Project
   Yellowknife, Northwest Territories

10. Gordie Howe International Bridge
    Windsor, Ontario to Detroit, Michigan

11. Hamilton LRT
    Hamilton, Ontario

12. Hanlan Water Project
    Mississauga, Ontario

13. Henvey Inlet Wind Project
    Between Sudbury and Parry Sound, Ontario

14. Hurontario LRT
    Mississauga and Brampton, Ontario

15. Keeyask Hydroelectric Project
    Lower Nelson River, Manitoba

16. Lions Gate Secondary Wastewater Treatment Plant
    North Vancouver, British Columbia

17. Montreal Metro Car Replacement
    Montreal, Quebec

18. North End Sewage Treatment Plant Biological Nutrient Removal Upgrade
    Winnipeg, Manitoba

19. Ottawa LRT – Stage 2
    Ottawa, Ontario

20. Port Hope Area Initiative
    Port Hope, Ontario

21. Region of Waterloo ION LRT – Stage 1
    Waterloo, Ontario

22. Romaine Complex
    Havre-Saint-Pierre, Quebec

23. Romaine Complex Transmission Line
    Minganie Region, Quebec

24. Sainte-Justine University Hospital Centre
    Montreal, Quebec

25. Scarborough Subway Extension
    Toronto, Ontario

26. Spadina Subway Extension
    Toronto, Ontario

27. Turcot Interchange
    Montreal, Quebec

28. Wilson Facility Enhancement and Yard Expansion
    Toronto, Ontario

29. York Viva Bus Rapid Transit (vivaNext)
    York Region, Ontario