

Advancing complex **infrastructure projects**

Alternative delivery solutions to meet today's mobility challenges



Our vast experience working on Public Private Partnerships (P3) and alternative delivery projects gives us the unique perspective of working on all sides of a project—as owners advisors, design-build contractors and as developers.

We are industry leaders, able to bring tailored teams of specialized professionals to help you deliver major projects on time and within budget. With experience on more than 650 P3 projects around the world, you can count on us to help deliver your most critical infrastructure projects.

Cover:
**Réseau express métropolitain (REM)
Quebec, Canada**

Design team partner responsible for design of tunnels, bridges, stations, railway infrastructure, road improvements, intermodal equipment and other structures. Once completed, the REM will be one of the largest automated transportation systems in the world.

Main:
**Gordie Howe International Bridge
Windsor, Ontario, Canada and Detroit,
Michigan, U.S.**

Lead designer on this new six-lane bridge crossing the Detroit River. At approximately 2.5 kilometres with a main span of 853 metres, it will be the longest cable-stayed bridge in North America and will set the record for the world's longest composite steel and concrete cable-stayed bridge deck.



Delivering sustainable infrastructure

We customize our approach to meet the distinct needs of each project. We partner with developers, concessionaires and design-builders to provide planning, modeling and detailed design services for every type of project delivery method and transportation mode. Once projects are built, protecting your infrastructure and making

sure it's operating at peak efficiency are critical. We are a go-to provider of operations and maintenance services for technologically advanced transportation systems. Our experience extends to the operation and maintenance of major transportation networks such as commuter rail lines, highways, airports and toll roads.



1 Waterloo (ION Stage 1) LRT

Waterloo and Kitchener, Ontario, Canada

As lead designer and engineer of record, responsible for developing a design to support the project's capital, operating, maintenance and life cycle costs. We led a multi-disciplinary team to design approximately 19 kilometres of track with 19 street level stops from the Conestoga Mall in Waterloo to the Fairview Mall in Kitchener.

2 Hudson-Bergen LRT

Hudson County, New Jersey, U.S.

Lead joint venture partner, lead designer, and lead operations and maintenance partner on this DBOM contract, the first of its kind on a U.S. transit project and the first DBOM awarded to a single consortium. As a 70% owner of 21st Century Rail Corporation, we designed and built the system, provided financing and operate it under a 20-year contract ending in 2020.

3 UP Express, Toronto

Ontario, Canada

Lead designer on this link between Pearson International Airport and Union Station. We provided architectural, structural, rail, utility relocation and environmentally sensitive design services. This project required extensive stakeholder coordination to expedite approvals.

Our transportation specialists work with you to develop innovative design solutions that help meet schedules, control overall project costs and make you more likely to become preferred bidders on major infrastructure projects.

You gain a distinct advantage when you draw on our connected expertise, international skills, local technical strength and seasoned national experts who are dedicated to successful alternative project delivery.



**1 I-595 Corridor Improvements P3
Broward County, Florida, U.S.**

Lead designer on this \$1.2 billion DBFOM responsible for designing, managing and coordinating all efforts of the overall design, as well as scheduling and managing subconsultants. This award-winning project is an example of how bold and innovative solutions within a P3 can solve real congestion problems.



**2 North Tarrant Express Segment 1W
Tarrant County, Texas, U.S.**

Lead designer on this private toll concession, the first in North Texas and the U.S.'s first congestion-priced managed lanes long-term concession. The project rebuilt and expanded seven segments of the most congested highways in the Dallas-Fort Worth. It exceeded scope expectations and was commissioned nine months early.



**3 Northwest Anthony Henday Drive
Edmonton, Alberta, Canada**

Lead design firm responsible for design management and design of roads, bridges, drainage, utilities, electrical and signage, as well as environmental mitigation and facilitating regulatory approvals. At the time, this award-winning design-build ring-road expansion was Canada's largest highway construction project.

You have a vision for a complex project—one that will provide faster transit, build roads or revitalize a major airport. You face tough challenges and we're better than anyone at helping you solve them.

Our P3 Owner Advisory professionals can help you navigate the complexities of P3 delivery and provide guidance on the intricate technical, financial and legal strategies needed for these projects to succeed. From conceptual planning through to implementation, operation and maintenance, we can help you negotiate contracts, define project scope, assess payment mechanisms, set output specifications and outline clear project performance requirements.

Whitby Rail Maintenance Facility
Whitby, Ontario, Canada

Technical Advisor on this \$860-million, 500,000-squarefoot facility that includes a layover facility, train maintenance facility, crew centre, track maintenance facility and all supporting infrastructure. The project was delivered under an Alternative Finance Procurement (AFP) using a DBFM contract.

As the asset owner, you establish the purpose and scope of your project and you procure some, or all, of the financing, design, construction, operation and maintenance. Our P3 Owners Advisory professionals are highly skilled at structuring these complex agreements

with clearly outlined commercial and technical requirements for fixed infrastructure, systems, vehicle procurement, construction, traffic management, business continuity, testing and commissioning, operations and maintenance, safety, sustainability and asset handover.



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**1 Valley Line Southeast Stage 1 LRT
Edmonton, Alberta, Canada**

Led the Owner's Engineer team on Edmonton's first low floor LRT system that is scheduled for completion in 2020. We were initially engaged to provide preliminary design for the entire Southeast to West LRT, however, a decision was made to deliver the Southeast portion first via a P3. We were selected to advise on procurement and provide oversight during the design-build.

**2 Confederation Line LRT Stage 1 and 2
Ottawa, Ontario, Canada**

Once in operation, this line will provide reliable cross-town transit, alleviate downtown congestion and save OC Transpo up to \$100 million in annual operating expenses. As a member of Capital Transit Partners, we provided design and construction compliance services. In 2017, the team was awarded the Ottawa Stage 2 LRT contract for the \$3-billion extension of this award-winning LRT line.

**3 Finch West LRT
Toronto, Ontario, Canada**

Technical Advisor for the procurement and implementation phases of this project which features 10 kilometres of at-grade semi-exclusive LRT guideway and one kilometre of below grade guideway with 17 surface stops, one underground stop, and one underground station. Project completion is expected in 2023.

As your technical advisor, we provide fully integrated design, contract administration, construction oversight and complete program management services. Our comprehensive public sector background gives us a first-hand understanding of how to balance policy goals, garner stakeholder support and produce value for money. Our public sector clients also rely on our broad private sector insights to help inform decisions on what is financeable and what risks should be transferred. Our P3 Advisory team offers conceptual planning, environmental impact assessment, systems analysis and design, procurement support, contract management and construction oversight.

1 Highway 407 East Alternative Finance Procurement Ontario, Canada

Technical Advisor on the DBFM procurement for Highway 407 East. Work included directing and coordinating engineering and technical services to support planning and procurement. We also led a multidisciplinary team to manage the overall design and construction submission review process, provided construction oversight and a broad range of technical support.

2 LaGuardia Airport Redevelopment Program New York, New York, U.S.

A deal was put in place using a P3 model to replace LaGuardia's Central Terminal Building — at the time, the largest P3 in American history. For this ground-breaking transaction, we served as the P3 technical advisor in support of the airport's owner, the Port Authority of New York and New Jersey.

3 Highway 427 Expansion Toronto, Ontario, Canada

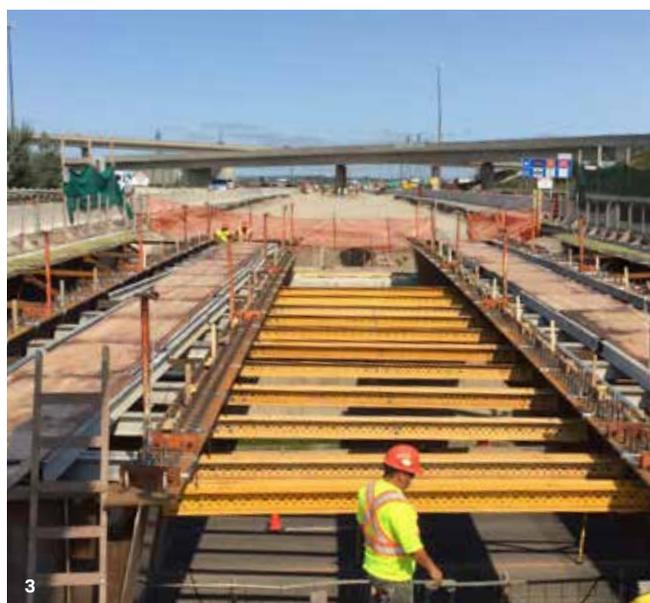
AECOM is partnered on this six-year assignment to provide technical advisory and construction oversight services for the Highway 427 Expansion project being delivered using an AFP DBFM model. The project includes a new 6.6-kilometre extension and a 4-kilometre road widening.



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About AECOM

AECOM is the world's premier infrastructure consulting firm, delivering professional services throughout the project lifecycle – from planning, design and engineering to consulting and construction management. We partner with our clients in the public and private sectors to solve their most complex challenges and build legacies for generations to come. On projects spanning transportation, buildings, water, governments, energy and the environment, our teams are driven by a common purpose to deliver a better world. AECOM is a *Fortune 500* firm with revenue of approximately \$20.2 billion during fiscal year 2019. See how we deliver what others can only imagine at aecom.com and [@AECOM](https://twitter.com/AECOM).