

Toronto Pearson 

Industry Forum

CREATING THE AIRPORT OF THE FUTURE

April 12, 2024

  Gates
Portes



WELCOME TO
Greater Toronto Airports Authority
Industry Forum

Karen Mazurkewich

Vice President, Stakeholder Relations
& Communications, GTAA

Toronto Pearson's Industry Forum



We want to hear from you

Scan the QR code to
submit your questions
throughout the day

Written responses will be shared following
the event.



OUR VISION FOR TORONTO PEARSON

Deborah Flint

President & CEO, GTAA

Pearson: a national economic engine

175

destinations available
by direct flight

40%

of Canada's air cargo
business

2nd

largest employment
zone in Canada

#1

large airport in
North America for ASQ,
awarded
by Airports Council
International

An urgent need to invest

Historical underinvestment

Deferred capital investments means we need to catch up

Growing competition

The U.S. government is investing over \$40B into airports
Other jurisdictions have invested billions of dollars to create global transportation hubs

Strong, sustained passenger growth in coming decades

2x

Global demand for
air travel is set to double
over the next 20 years*

65M

We expect to serve
65 million passengers
by early 2030's

Introducing: Pearson LIFT

Our plan to build one of the most advanced, sustainable and passenger-friendly airports in the world



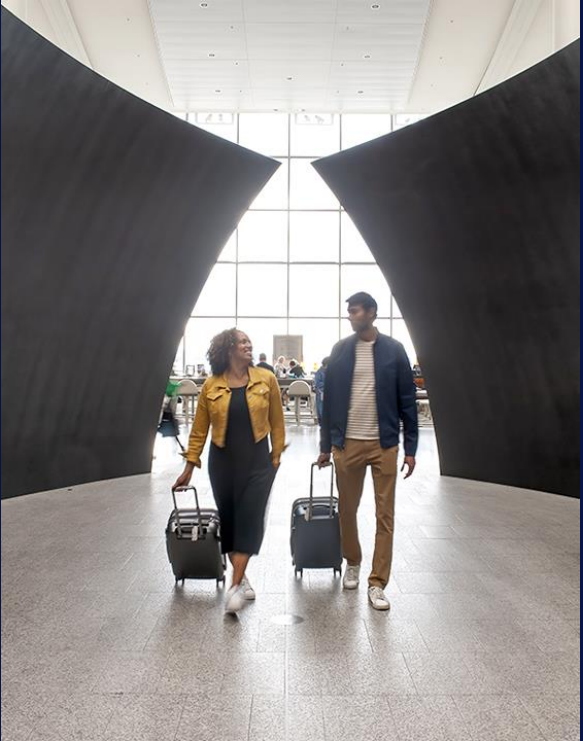
Creating the airport of the future



Future-proofed,
smart design



Built for the digital age



Exceptional customer
experience



Advancing our
net zero future

Together with our partners

40+ airlines

3 levels of government

Local communities

NAV CANADA

CATSA

CBSA

USCBP

Tenants

Labour groups

Transit & transportation partners

Operations & commercial partners



How we'll get there

We seek delivery partners who share our vision



- Innovative thinking and creative solutions that expedite delivery and cost efficiencies
- Working collaboratively and transparently
- Agility and flexibility to minimize impact to operations and communities
- Future-proofed planning
- Digital enablement in complex environment

What happens at Pearson matters to Toronto, Canada and the world

Catalyzing
economic growth
and job creation



Stronger
supply
chains



Opportunities for
local businesses,
and meaningful
employment





OVERVIEW: Pearson LIFT

Bernardo Gogna

Chief Infrastructure Officer, GTAA

Pearson LIFT: Multi-project programs spanning the next decade

Accelerator

Upgrades and improvements to critical operational assets (including interim facilities)



Gateway

Delivering new facilities that will enable the airport to provide an exceptional passenger experience for long-term forecasted demand



T1/T3 Revitalization

Renovations to both terminals to optimize capacity and renew assets



Technology Program

The roadmap for a series of technology integration projects within the airport to create a digital future. Some elements will filter into LIFT programs, ensuring tech consistency across Pearson.



High Priority Improvement Program

A series of distinct, stand-alone projects not incorporated into the above programs which will address any urgent or emerging projects of various sizes arising at the airport.

DETAILED OVERVIEW:

Owner's Engineer/Owner's Representative

Strategically expanding the GTAA's team in 2024

Enhancing and augmenting our team with external aviation specialists with global experience to fill designated roles and carry out responsibilities to support program delivery, becoming an integrated, collaborative delivery team.

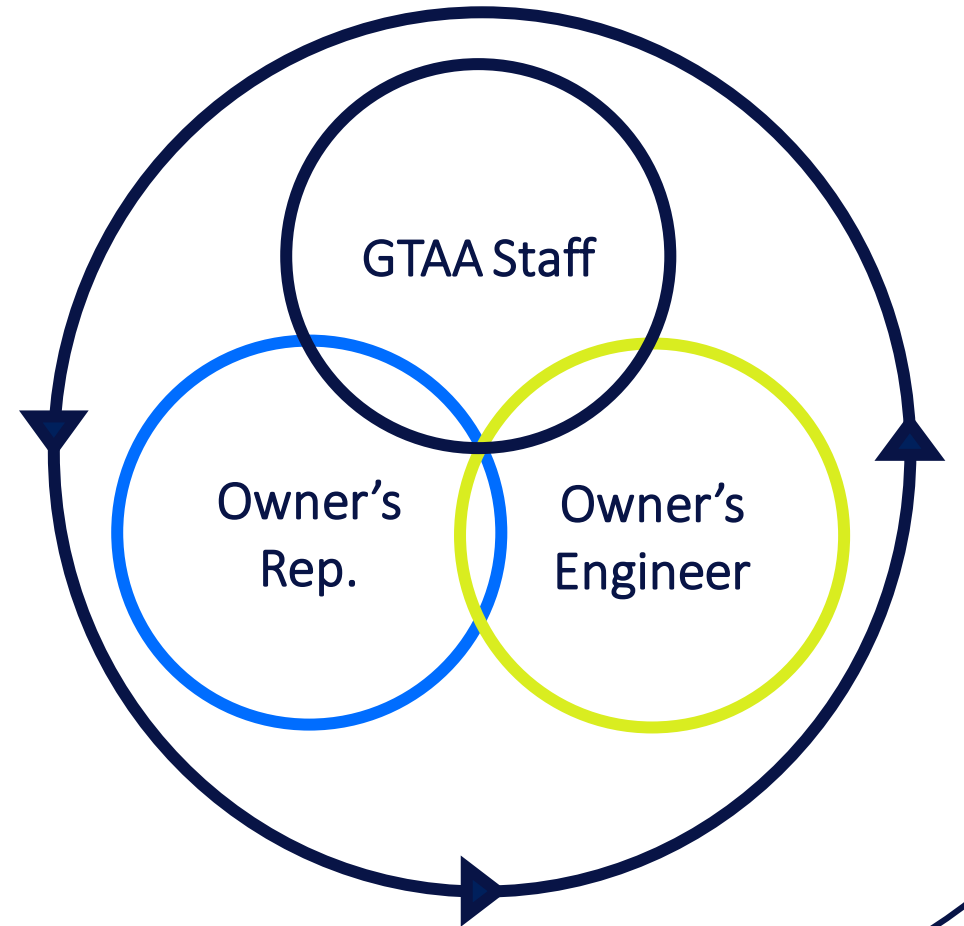
Owner's Representative (OR):

Onboard two Owner's Representative firms by fall 2024

Owner's Engineer (OE):

Onboard one Owner's Engineer experienced in aviation by fall 2024

Integrated Pearson LIFT Team



Services required from Owner's Representative (OR)

The Owner's Representative(s) will provide, as required:

- Program and project management
- Construction coordination and inspection
- Quality control and quality assurance
- Health and safety
- Logistics and site management
- Commercial management
- Cost estimating
- Program controls (schedule, cost, risk, reporting, document management)
- Stakeholder management
- Consents, permitting and approvals management

The focus of the Owner's Representative(s) is to support GTAA in managing the performance of the contractor(s).

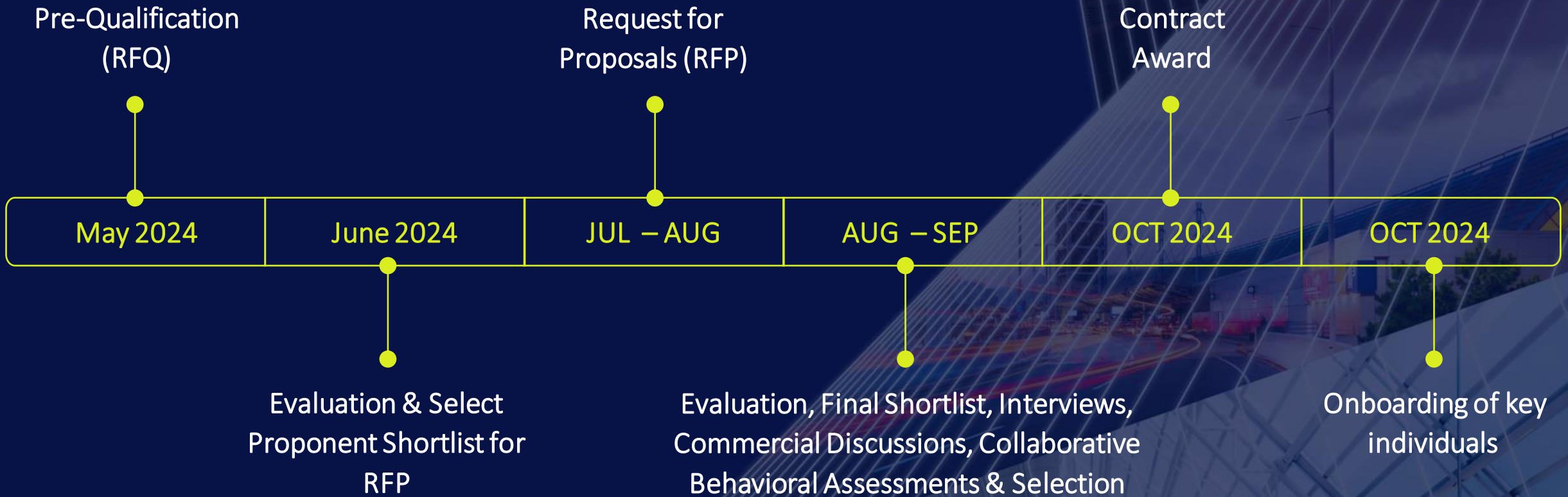
Services required from Owner's Engineer (OE)

The Owner's Engineer will provide, as required:

- Mechanical and electrical engineering
- Structural engineering
- Civil engineering
- Systems engineering
- Architecture
- Specialists in modularity and circularly
- Design management
- Environmental & sustainability consultancy
- Other specialist disciplines

The Owner's Engineer will support GTAA with design management but will not hold any design responsibility.

2024 Indicative Procurement Timelines



Deeper dive into the Accelerator Program

Accelerator Program Objectives



Increased Capacity

To address the growing demand for capacity during the intervening years before Gateway is completed



Cargo Capacity Expansion

To begin cargo capacity expansion by developing the North Apron



Resilience & Restoration

To upgrade the airfield lighting and electrical systems as well as restore deteriorating pavement, addressing obsolescent assets, and achieving resilience



Path to Net Zero

To progress towards our corporate net-zero Greenhouse Gas (GHG) emissions target

Accelerator: The four sub-programs

1 Airfield Projects



- Airfield Electrical
- Pavement Restoration
- Airfield Ground Lighting
- Triple Box Culvert

2 Greenhouse Gas Emissions (GHG) Projects



- Low GHG HVAC
- Energy efficient lighting (Viscount)
- Electric vehicle charging
- Increasing PV generation

3 Priority Projects



Various priority projects where assets are at end-of their operational life. high-risk and require replacement /upgrade within airside and groundside.

4 Interim Infrastructure Project



- Interim Terminal
- Hard Stands for Interim Terminal
- Hard Stands during Gateway construction
- Associated infrastructure
- North Apron Development

Airfield Projects: enhancing airfield resilience and efficiency, improving on-time performance



1

Airfield electrical

- New Airfield Lighting Controls & Monitoring System
- New Field Electrical Centres (FECs)
- New primary distribution, luminaires, transformers, smart switches and cabling

2

Airfield civil surfaces

- Reconstruction of 2 runways (05/23 and 06R/24L)
- Reconstruction of close to 50% of Taxiways
- New secondary distribution and drainage from fixture cans where reconstruction occurs
- Up to three new Rapid Exit Taxiways off of Runway 05/23
- Annual apron slab and airside road improvements
- Spring Creek Triple Box Culvert & Relief Pipe

GHG emissions projects: advancing towards our net-zero goals

These programs will contribute to our target with an incremental ~20% reduction in GHG

1 Clean Heat on the Infield

- Reducing GHG emissions
- Enhance operational reliability
- Future expandability and efficiency enhancements
- New chilled water and hot water distribution system which can adapt to future changes

2 Expanded EV Charging

- Expansion to Over 70 airside Ground Service Equipment Charging Stations
- Nearly 100 new MV Charging Locations for both airside and groundside operations

3 Expanded Solar PV

- Strengthening energy resiliency and reducing GHG Emissions
- Increasing the GTAA photovoltaic solar energy generation on campus
- Introducing ground-mounted PV array installation for up to 5MW

Priority Projects: spectrum of projects that will transform our Airside and Groundside



11 Unique Projects

Diverse project spectrum encompassing four general types:

- Infrastructure renewal: Replacing end-of-life assets
- Regulatory adherence: Ensuring compliance with regulatory standards
- Operational excellence: Enhancing performance efficiencies
- Resilience reinforcement: Restoring and strengthening durability

A New Interim Terminal

Strong increase in near-term demand necessitates Interim passenger processing facilities prior to Gateway becoming operational.

- **Two-phase expansion:** Increasing Toronto Pearson's throughput by 6 Million Annual Passengers (MAP).
- **Phase 1:** adds 3 MAP
- **Phase 2:** adds 3 MAP
- **Innovative interim terminal:** Approx. 62,000sqm, with an efficient hard stand operation and airside bussing connectivity.
- **Leading with green:** Prioritizing sustainability with a strong commitment to Net Zero targets and the potential integration of sustainable technology.



Interim infrastructure: New hardstands

33 new hardstands will be constructed, supporting:

- Interim Terminal operations
- Cargo growth
- Relief during Gateway Program construction

Two Locations:

Location 1 = 17nr:

- 11 MARS Hard Stands
- 4 MARS Dedicated Cargo Stands
- 2 Code F Dedicated Cargo Stands

Location 2 = 16nr:

- 14 MARS hardstands
- 2 Code F capable Hardstands

Contract for Accelerator Program to be awarded in 2024

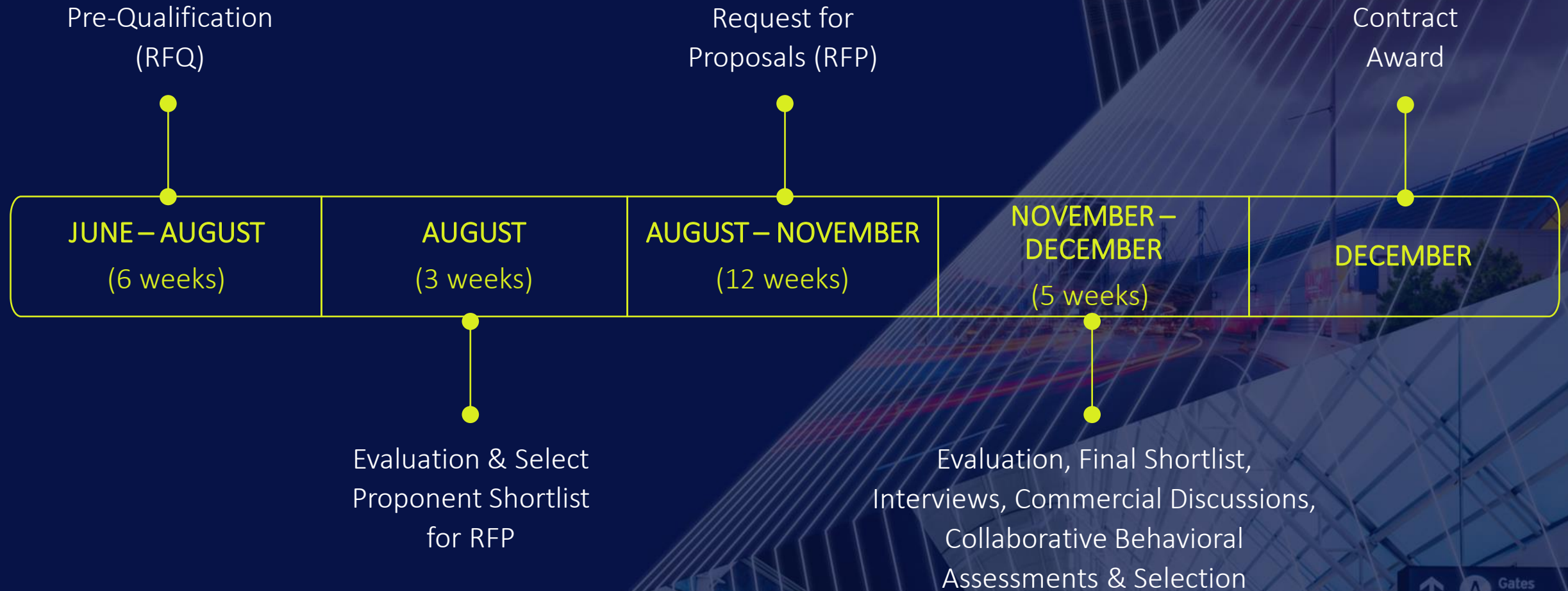
We are seeking:

- Global aviation expertise and Canadian insight
- A proven track record of delivering aviation programs similar in size and nature, recognizing the complexities of operating in a live airport environment
- Experience in bringing creative solutions to design and delivery including sustainability, technology, modularity and circularity
- Experience in working cooperatively both internally and externally of the airport environment
- Industry expertise in delivering major programs safely

What does success look like?

- A collaborative partnership of Contractor, Designer and Engineer.
- A partner who can deliver infrastructure at our target cost
- A partner who can deliver within our aggressive schedule
- A partner who will bring to the table innovation in technology, design, logistics and construction process

Accelerator Indicative Procurement Timeframes



Accelerator Indicative Delivery Schedule



HIGHLIGHTS:

Gateway Program

Gateway Program Overview

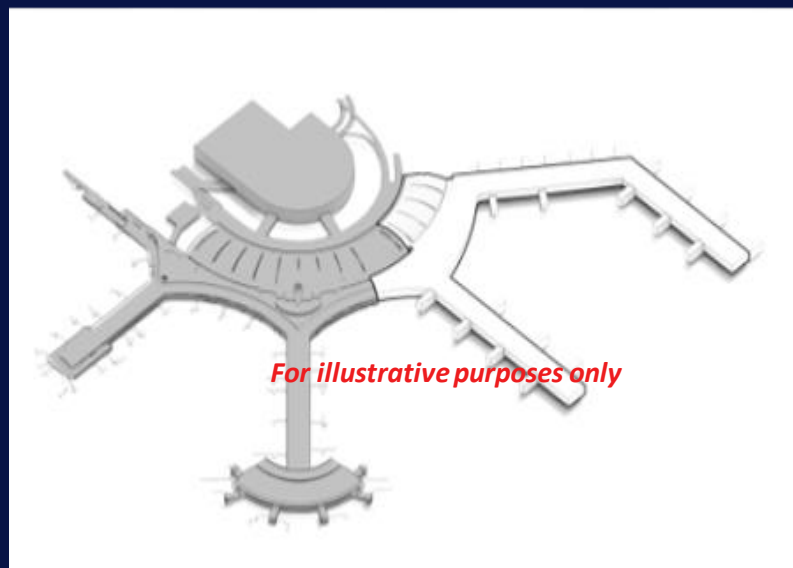
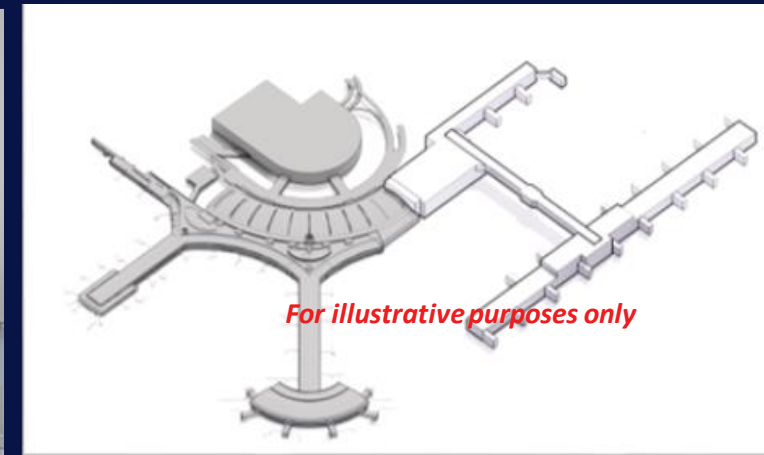
Our objectives:

New terminal space that supports Toronto Pearson's long-term demand forecast of 65M passengers per year – early 2030's

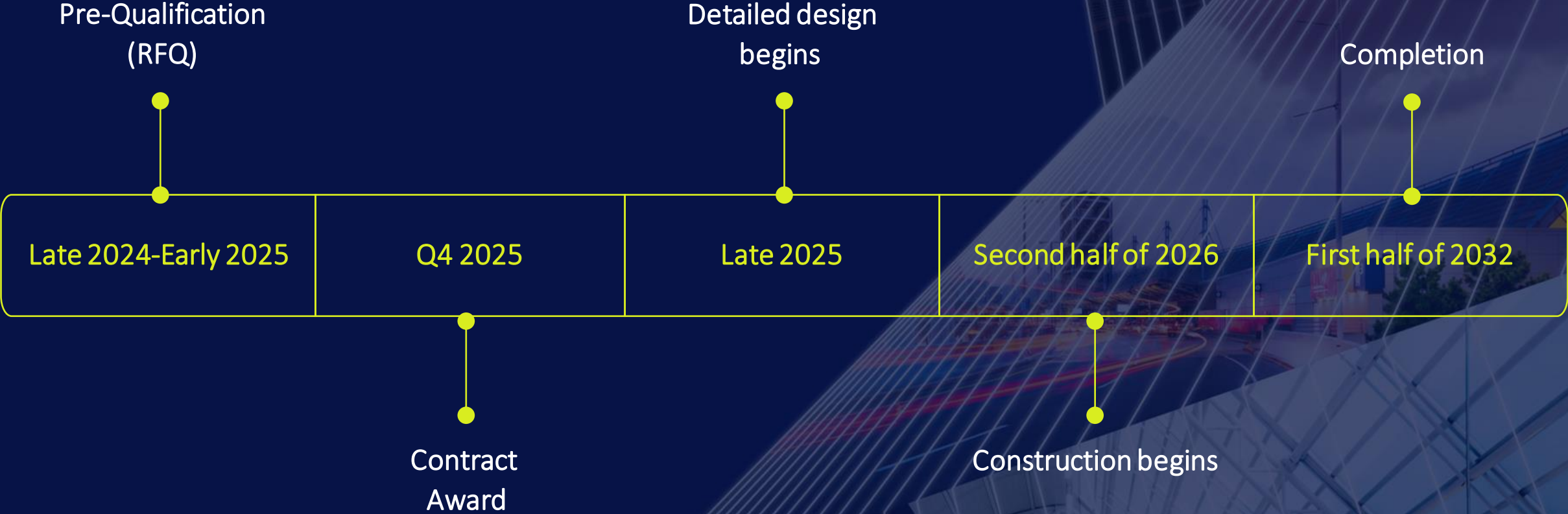
- Maximize the use of the apron, providing increased capacity of MARS gates leading to better flexibility
- Optimize aircraft flow/parking to improve operational performance and efficiency
- Enhance the commercial offering and improve the passenger experience
- Improve gate-to-gate connecting time for travelers
- Create resilience through redundancy, swing capacity and simplified baggage, passenger and aircraft movement
- Develop sustainable infrastructure to help achieve GTAA net zero carbon goals

Gateway Program: 300,000 sqm of new Terminal space connected to T1

We are currently assessing various design options that could deliver on Toronto Pearson's needs. Rendering/imagery is for illustrative purposes only. Final design(s) may differ.



Gateway Program Indicative Delivery Schedule



HIGHLIGHTS:

T1/T3 Revitalization Program

Terminal 1/Terminal 3 Revitalization Overview

Our objectives:

- Modernization of T1 & T3 to enable more seamlessly connected terminals and further digitalization of the passenger journey and airport operations.
- Enhance amenities and retail spaces for passenger, retail and employee experience.
- Improve service levels through optimized and expanded passenger and airside processing.
- The restoration of obsolete and high-risk assets to ensure operational performance and efficiency.
- Incorporate sustainable design and support greenhouse gas emissions reductions.

T1/T3 Revitalization Program: Terminal 1 Scope

Parking Garage & Groundside Upgrades

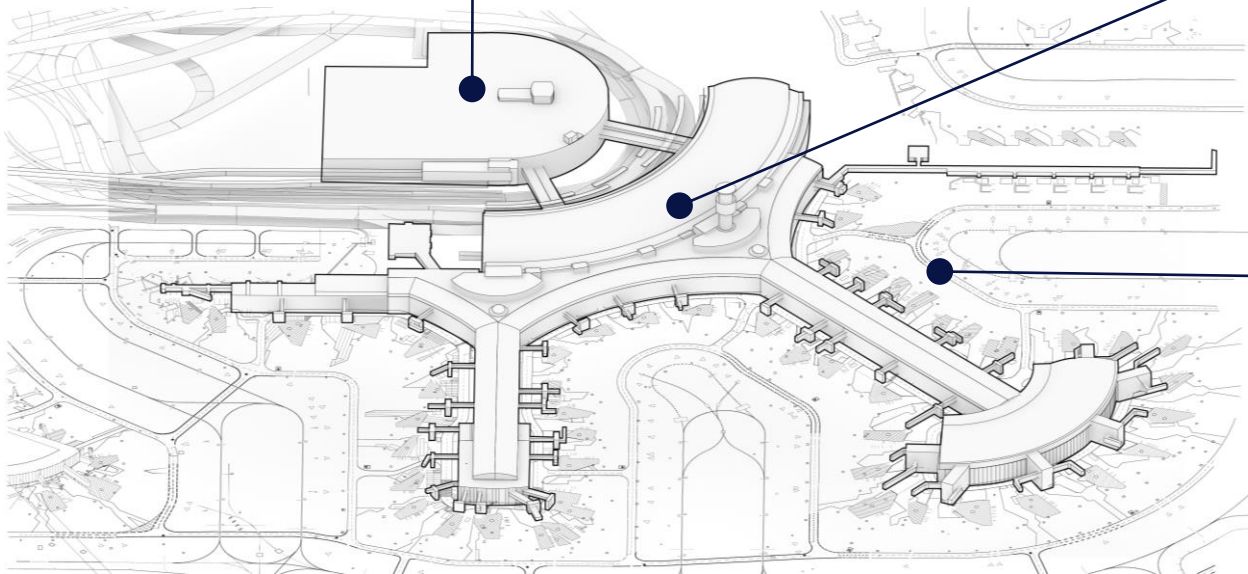
- Parking Garage Repair & Optimization
- GHG Reduction Initiatives
- Life Safety Network Monitoring System Restoration
- New Sidewalk Installation

General Terminal Upgrades

- Processing Upgrades
- Holdroom & Amenities Upgrades
- Commercial Upgrades
- Employee Workspaces Upgrades

General Building System & Envelope Upgrade

- Building Envelope/Flooring/Back-of-house Restoration
- People Moving Device (PMD) Restoration
- Aircraft Gating Equipment (PBBs) Restoration
- Mechanical System Upgrades
- Electrical System Upgrades
- GHG Reduction Initiatives
- Life Safety System Upgrades



T1/T3 Revitalization Program: Terminal 3 Scope

T3 / Viscount Parking Garage & Curbside

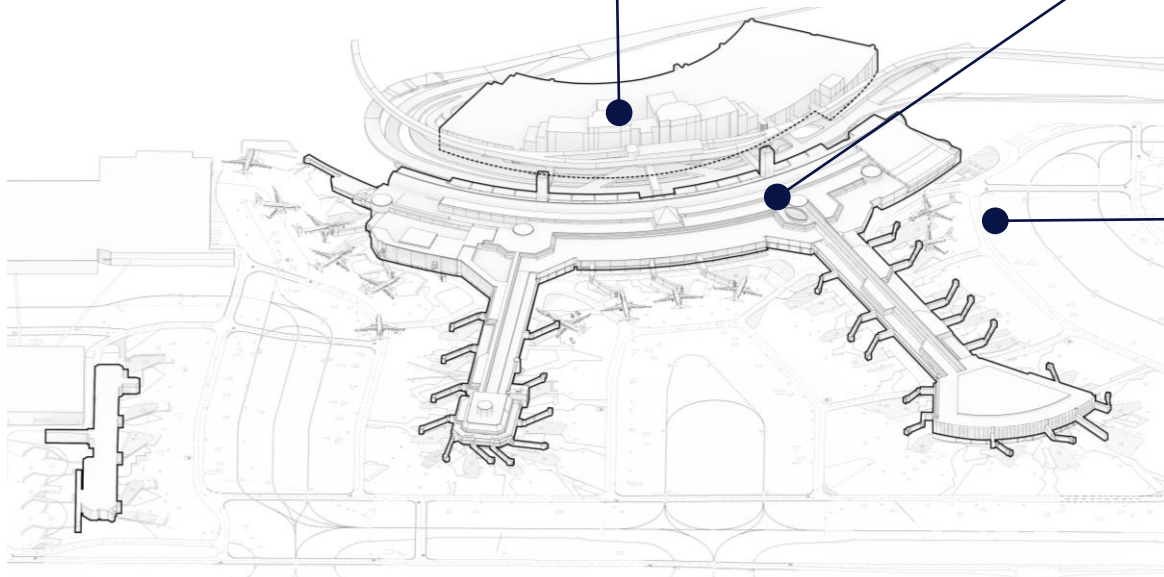
- T3 / Viscount Parking Garage Repair & Optimization
- Curbside Optimization

General Terminal Upgrades

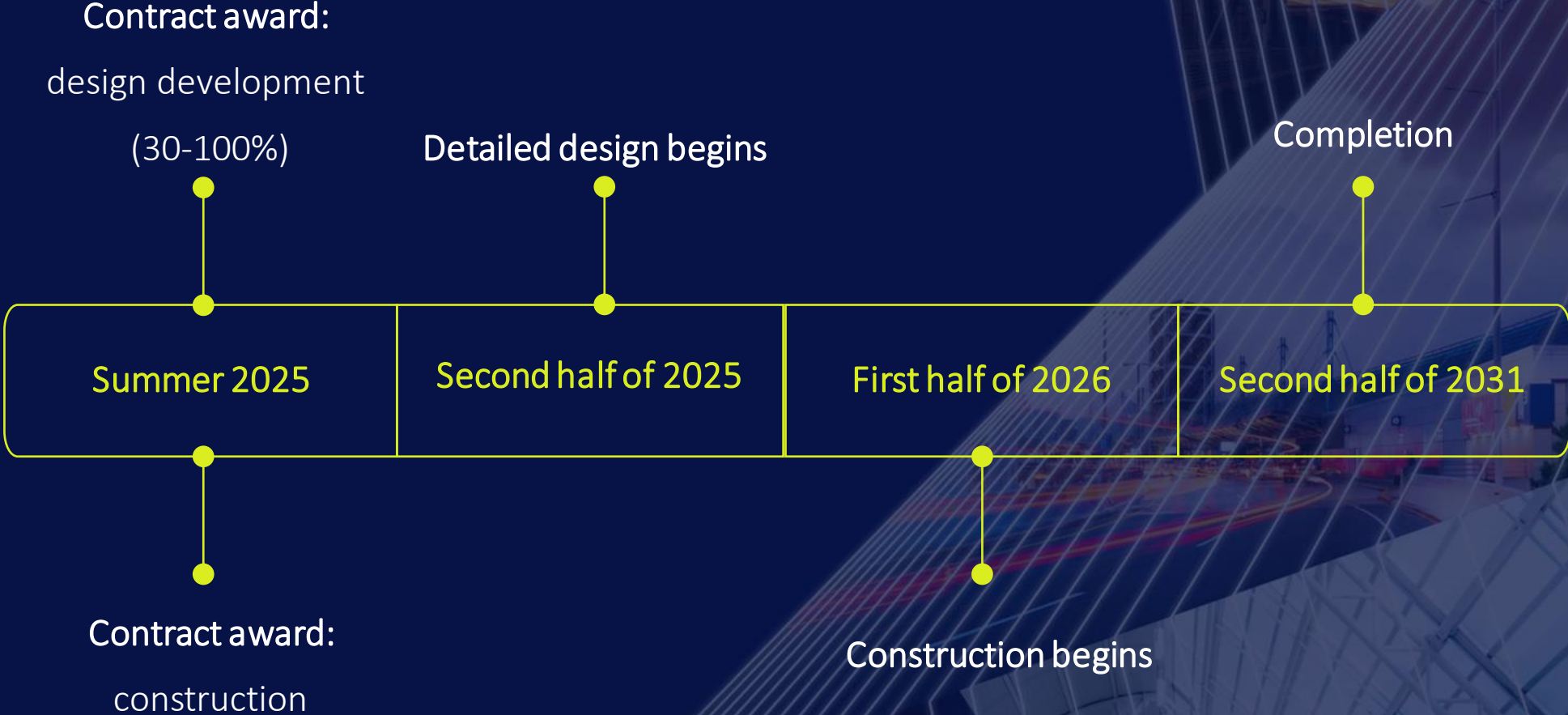
- Check-in Hall & Processing Area Upgrades
- Holdroom & Gate Area Upgrades
- Passenger Amenities Upgrades
- Commercial Upgrades
- Employee Workspaces Upgrades

General Building System & Envelope Upgrade

- Building Envelope/Flooring/ Back-of-house Restoration
- People Moving Device (PMD) Restoration
- Aircraft Gating Equipment (PBBs) Restoration
- Mechanical System Upgrades
- Electrical System Upgrades



T1/T3 Revitalization Program Indicative Delivery Schedule



OUR PROCUREMENT BLUEPRINT:
Core principles guiding our
procurement strategy



J'Maine Chubb

CFO, GTAA

A robust process built on best practices



Fair & Equitable

Transparent

Competitive

Principles guiding our procurement strategy

Incentivization to deliver value and cost efficiency

Joint risk and reward mechanisms

Collaborative and Integrated Relationships

Fair and reasonable contracting principles

Procurement that supports our community and future generations



Meaningful economic opportunities & job creation



Workforce development



Solutions to minimize our environmental impacts through all aspects of program delivery



Programs that champion diversity, equity & inclusion

Fairness First: key considerations in determining a conflict of interest

1 Access to Information

Does the supplier have access to GTAA information which might not be available to other bidders?

2 Unfair Competitive Advantage

Has the supplier gained an unfair competitive advantage through the work they are currently or previously contracted to deliver?

3 Status of Active Contract(s)

Is the supplier currently engaged on another contract which directly interfaces with the one they are considering bidding for?

4 Perceived Level of Influence

Could the supplier be perceived to have gained an unfair level of influence with the GTAA through their current or previous contracts?

5 Mitigation of Potential Conflicts

Where possible, can we identify and implement ways to mitigate potential/perceived conflicts such that the above issues can be minimized to allow for fair and robust competition?

What do you do if you think there is a conflict?

RFQs will contain a detailed description as to what the GTAA deems to be a potential or perceived conflict of interest.

Potential participants can submit a description of their potential conflict circumstances along with proposed mitigation solutions to the GTAA for a ruling.

Potential participants can make this request prior to the RFQ closing time to allow for them to make any necessary arrangements.

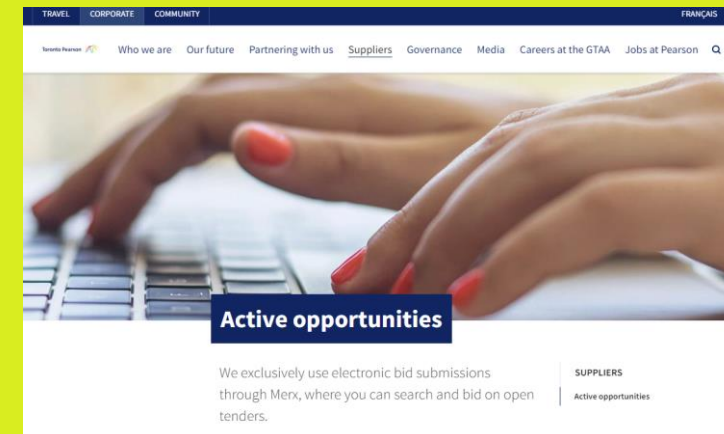
How to participate in Pearson LIFT

All attendees will be notified via email when our documents are posted to Merx

Solicitation of Proposals will take place through Merx, a robust procurement mechanism familiar to the industry (www.Merx.com)



Supplier portal page on [Toronto Pearson website](#) as direct link to Merx under Active Opportunities



KEY TAKEAWAYS

Key Takeaways

- A process built to ensure fairness and transparency
- Seeking global aviation experience
- Canadian experience
- A collaborative relationship
- Incentivization to deliver value
- Innovation to yield cost and time savings
- Innovation to deliver modularity and circularity



What's next

2024 key activities:

- Award Owner Engineer Contract
- Award two Owner Representative Contracts
- Award Accelerator Program Contract
- Second Industry Forum – Gateway and T1/T3

Looking to 2025:

Procurement for the delivery of the Gateway Program

Procurement for the delivery of the T1/T3 Revitalization Program

Stay informed

Get Involved:

- Register on MERX
- Start networking: Potential partner discussions are key
- Log on to MERX at the end of April for the OE / OR RFQ

We Value Your Input:

- Contribute insights via our Market Demand Analysis Survey

Join Us in Shaping the Future of Toronto Pearson!

Closing remarks



This document contains certain forward-looking statements or forward-looking information about the GTAA.

This forward-looking information is based on a variety of assumptions and is subject to risks and uncertainties. There is significant risk that predictions, forecasts, conclusions and projections which constitute forward-looking information, will not prove to be accurate, that the assumptions may not be correct and that actual results may vary from the forward-looking information. Words such as “believe”, “expect”, “plan”, “predict”, “project”, “intend”, “estimate”, “preliminary”, “anticipate”, , and similar expressions, as well as future or conditional verbs such as “will”, “may”, “should”, “would” and “could” often identify forward-looking information. Specific forward-looking information in this document includes, among others, statements regarding the following: expected domestic and international passenger traffic and cargo; expected return to pre-COVID-19 passenger and flight levels; investment in the Airport including with respect to capital projects and physical infrastructure; future Airport demand or activity; the GTAA’s borrowing requirements and its ability to access the capital markets; the GTAA’s ability to comply with covenants; debt levels and service costs; revenues, cash flows, working capital and liquidity and no funding shortfalls; terminal, airside, infield and other capital developments at the Airport and the funding of the developments; budgets and expenditures relating to capital programs and the funding of such programs; the timing of construction and commencement of operations of facilities currently planned or under construction at the Airport; the use of certain restricted reserve funds; and the funding of outstanding capital commitments. The forward-looking information is based on a variety of material factors and assumptions including, but not limited to, whether: population continues to grow in the long term; employment and personal income provide the basis for increased aviation demand in the Greater Toronto Area; the Canadian, United States, and global economies grow at expected levels; air carrier capacity meets the demand for air travel in the Greater Toronto Area; the growth and sustainability of air carriers contributes to aviation demand in the Greater Toronto Area; the impact of costs associated with new processes, technology solutions and facility enhancements are recoverable in the ordinary course; the Greater Toronto Area continue to attract domestic and international travelers; no other significant event such as a pandemic, natural disaster, or other calamity occur and have an impact on the ordinary course of business or the macroeconomic environment; the GTAA will be able to access the capital markets at competitive terms and rates; and no significant cost overruns relating to capital projects occur. These assumptions are based on information currently available to the GTAA, including information obtained by the GTAA from third-party experts and analysts.

Risk factors that could cause actual results to differ materially from the results expressed or implied by forward-looking information include, but are not limited to: public health emergencies; air carrier instability; passenger volumes; inability to meet business objectives; non-payment by customers; the GTAA’s ability to comply with covenants under its Master Trust Indenture and credit facilities; continuing volatility in current and future economic activity including shocks to the macroeconomic environment (e.g. changes in fuel prices, inflation, currencies, employment and spending); capital market conditions and credit rating risk; competition from other airports; wars (including the military conflict between Russia and Ukraine), riots or political action; labour disruptions; disruptions caused by extreme weather, natural disasters or other events which impact air industry networks; geopolitical unrest; acts of terrorism or cyber-security threats; disruptions to information technology infrastructure; the loss of key personnel; changes in laws or regulations including rate regulation; adverse amendments to the Ground Lease; the use of telecommunications and ground transportation as alternatives to air travel; loss of commercial revenues; carbon emission costs and restrictions; adverse regulatory developments or proceedings; environmental factors and climate change; changing attitudes towards air travel; the availability of aviation liability and other insurance; the timing of recovery and receipt of insurance proceeds; construction risk; legal proceedings and litigation; and other risks detailed from time to time in the GTAA’s publicly filed disclosure documents and, in particular, those identified in the Annual Information Form available at www.sedar.com. The forward-looking information contained in this document represents expectations as of the date of this document and is subject to change. Except as required by applicable law, the GTAA disclaims any intention or obligation to update or revise any forward-looking information whether as a result of new information or future events or for any other reason.