

A man in a grey suit is walking through an airport terminal. He is carrying a black suitcase and holding a smartphone. In the background, there are large windows and a sign that reads "EXIT" and "SORTIE". The sign also has two arrows pointing right, one above the other, with airplane icons and the numbers "500-550" and "168-181" respectively.

Developing a Regional Airport and Ground Transportation Plan for Southern Ontario

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Understanding regional airport & ground transportation needs for Southern Ontario

- **Airports require long-term planning cycles of 20-30 year periods** in order to support the development of large scale infrastructure like terminals and runways
- As part of its long-term planning process, the GTAA is **studying the regional airport and ground transportation network** in Southern Ontario
- We developed a perspective on growth for the **economy, population, air travel and ground transportation** requirements of the region
- The study was supported by McKinsey & Company, The Centre for Spatial Economics (C4SE) and Professor Eric Miller
- **We consulted with all levels of government**, including the Province (MTO, Finance, Municipal Affairs, Tourism), Transport Canada, Metrolinx, City of Toronto
- We are engaging with 10 regional airports in Southern Ontario to understand their growth plans and operational capabilities

We studied the macroeconomic conditions in Southern Ontario and the implications on ground and air transportation 30 years from now



\$1.0 Trillion
Ontario GDP in 2043



~15.5 Million
people
Population in 2043

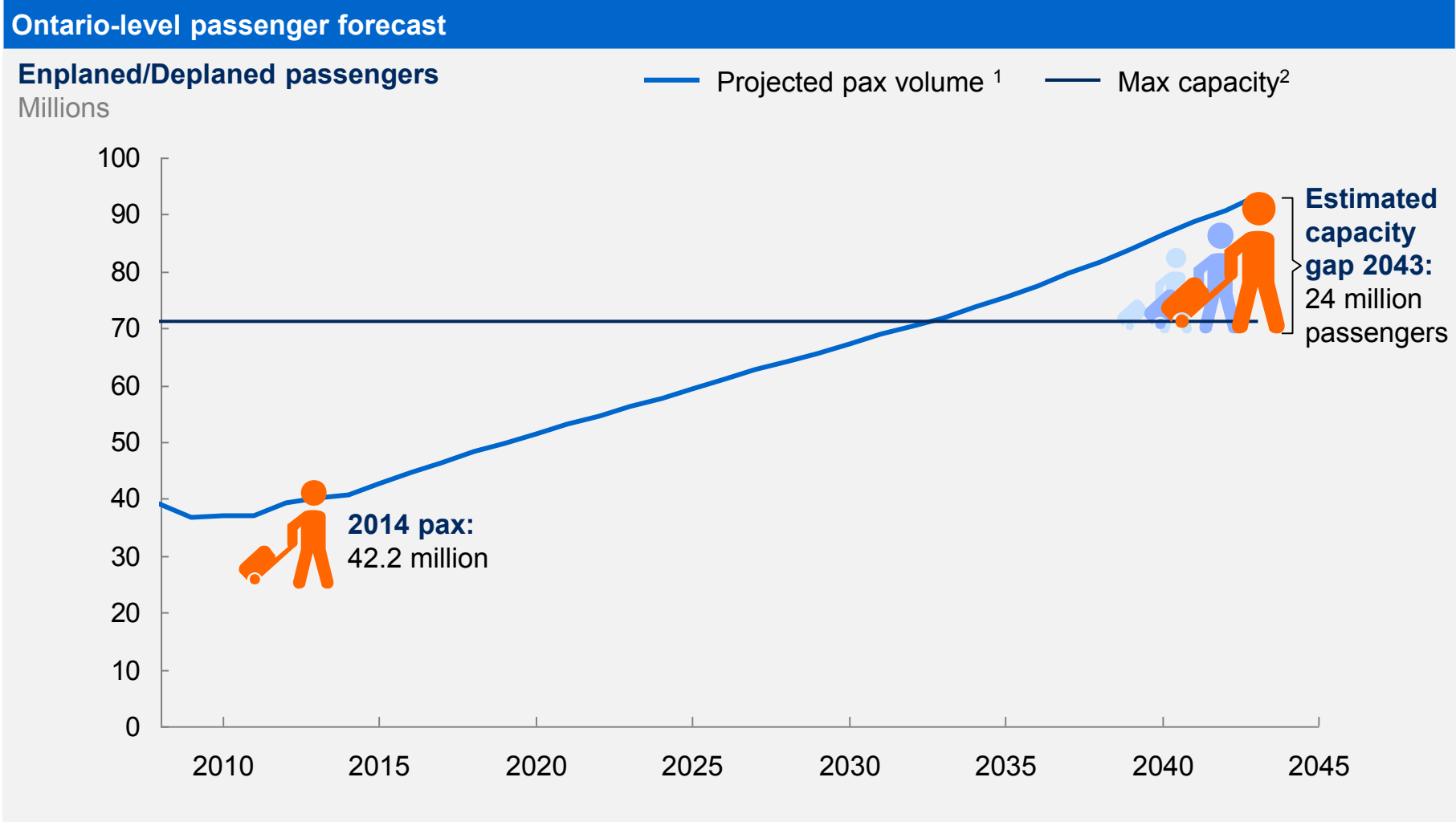


90 Million
passengers
Air travel demand in 2043



Substantially
increased
ground transportation time

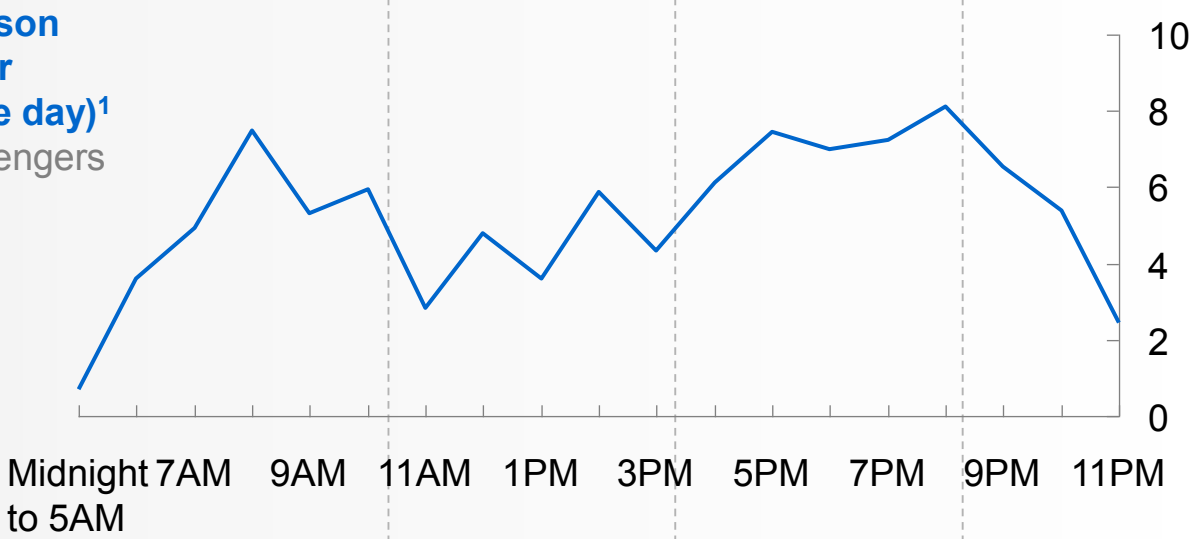
After 2032, the region will not be able to accommodate expected increases in demand for air travel, even with GTAA planned capacity investments



1 Projection for Southern Ontario passenger traffic (excluding Ottawa) based on base case economic and population growth
2 Estimated maximum regional capacity assuming no additional investment, except Pearson

Driving times to Pearson will increase over the next 30 years

Projected Pearson 2043 passenger volume (for one day)¹
Percent of passengers




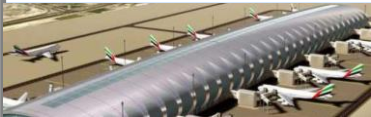




Passengers will need to leave much earlier than ever before prior to their departure time due to traffic

Travel time to Pearson (mins)




	2014	2043		2014	2043
Downtown Toronto	27	30	25-35% increase in driving time	49	67
Downtown Hamilton	66	82		49	50
Pickering Town Centre	54	71		38	42
	AM rush			PM rush	

¹ Does not correlate to flight departures. This chart represents when passengers leave to reach the airport on average 2 hours earlier

Toronto Pearson is increasingly becoming a major global hub airport

Airport name	Passenger traffic, 2014, Millions	Change in passenger traffic between 2013 and 2014, %
London Heathrow	 73.4	+1.3%
Dubai International	 70.5	+5.5%
Charles de Gaulle	 63.8	+2.6%
Singapore Changi	 54.1	-0.2%
John F. Kennedy International	 53.2	+5.8%
Toronto Pearson International	 38.6	+6.8%

There are multiple options for regions to accommodate growing air passenger demand

	Description	Example airport
1 Build a single, large airport	<ul style="list-style-type: none">Large hub airport to handle all current and future demand (connecting and O&D traffic)	 Dubai Airports Connecting the World
2 Develop a robust regional airport system	<ul style="list-style-type: none">Network of regional airports throughout across greater TorontoCould be mixture of dual-hubs, hub and spoke, and separate O&D-focused airports	 THE PORT AUTHORITY OF NY & NJ
3 Status quo	<ul style="list-style-type: none">Pearson builds out to capacityLimited coordination amongst airports and ground transportation to accommodate demand	 BER BERLIN BRANDENBURG AIRPORT

2 Approach and examples to regional airport systems

- Multi-airport systems are increasingly common in city-regions; ~60 'systems' worldwide
- Multi-airport systems can have a division of roles between the airports involved
- The GTAA is working closely with stakeholders to assess the development of a multi-airport system in Southern Ontario



Regional airport systems around the world

London: London Heathrow – Gatwick – Luton – etc.

Heathrow 

Gatwick
AIRPORT


LONDON LUTON
AIRPORT

Washington, DC: Ronald Reagan National – Washington Dulles International

 Reagan National Airport

 Dulles International Airport

Paris: Charles de Gaulle – Paris Orly


AÉROPORTS DE PARIS

New York: John F. Kennedy International – Newark Liberty International – La Guardia – etc.

John F. Kennedy Intl. Airport

New York


Newark - Liberty
International Airport

La Guardia Airport

New York

Ground transportation is an integral component for a regional airport system

Why ground transportation matters

- Increases airport access for travelers and employees
- Connects airport to city center and other transport nodes (e.g., regional airports)
- Drives airport growth
- Requires integrated planning with city and region, including roadways

Typical modes of “best-in-class” ground transportation

- High speed rail
- Heavy rail
- Bus rapid transit

Some airports have gotten it right...

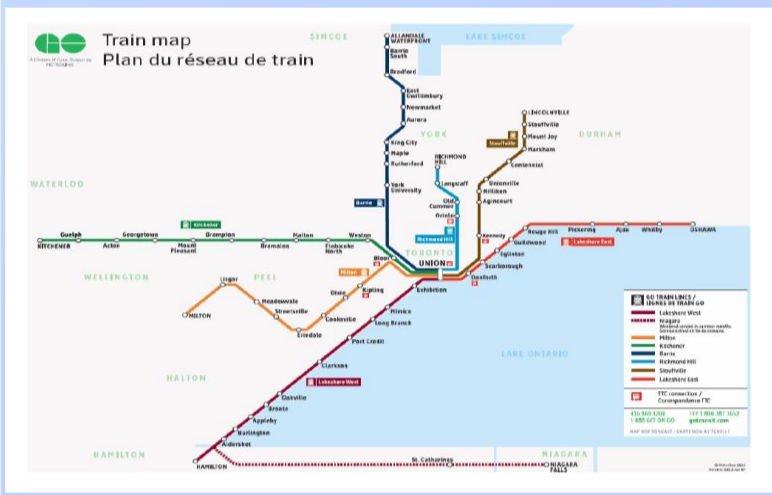


...while others have room to improve

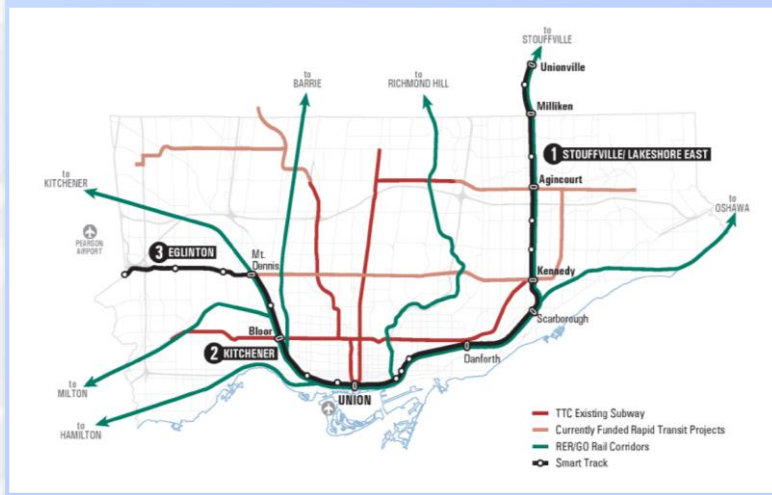


The last mile...transportation to Pearson

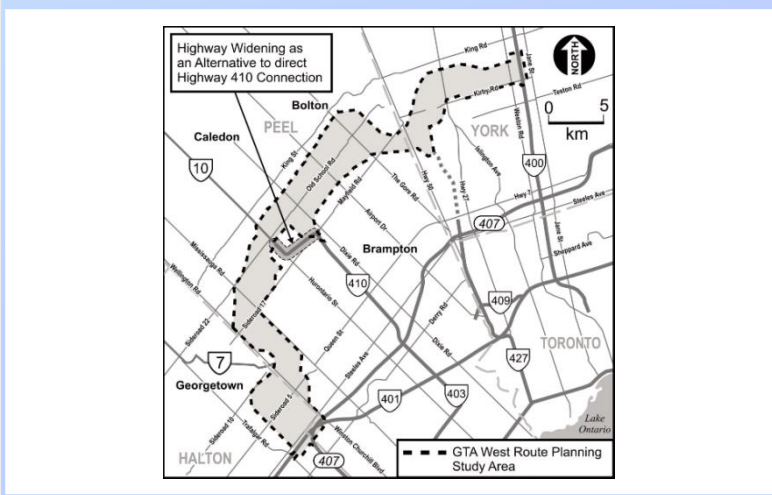
Regional express rail



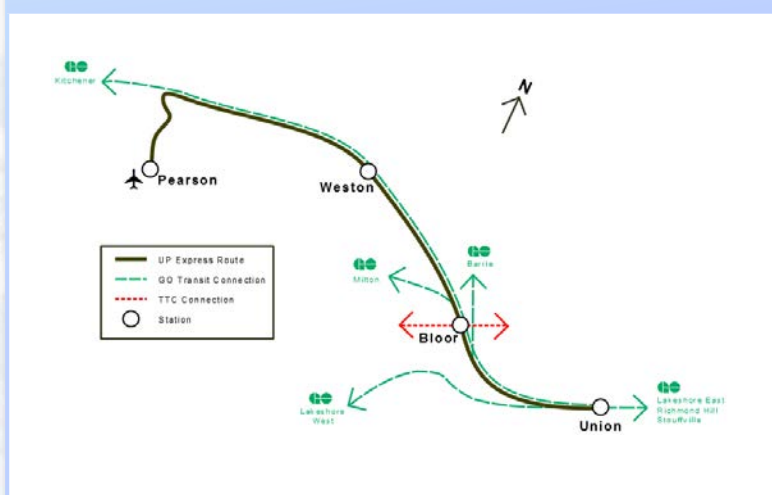
Proposed SmartTrack plan



Proposed GTA west corridor



Union Pearson Express





Key considerations in supporting regional air traffic growth

- Airports are economic catalysts; driving major regional economic benefits
- Global cities have prioritized airports as part of their growth plans
- There are multiple ways to accommodate investment in airports (e.g., new airports, expanding existing system of airports)
- Ground transportation is critical to airport and regional growth