Response
to the KPMG Study:
Pickering Lands Aviation Sector Analysis

Land Over Landings

April 18, 2020

(rev. April 26, 2020)

Contents

Overview and General Observations

In 2016, Transport Canada tasked KPMG to forecast capacity and demand in the southern Ontario airport system for the 20-year period 2016 to 2036. Following completion of the supply and demand study, KPMG conducted an additional three studies, which took so long to produce that some details of the December 2016 forecast report are now significantly out of date, and the later, newer sections diverge from the first report in tone, intent, and perspective. Because of the disjointed structure (four separate reports purporting to be one) and the extended timeline, a lot of material is repeated – and even contradicted – in subsequent reports.

Regardless, the essential conclusion is clear, and is expressed frequently and unequivocally in the **Supply and Demand Report (December 2016)** – in fact, it is repeated no fewer than eighteen times, not counting five times in the executive summary. **No additional airport in southern Ontario will be needed to meet 2036 demand**. The report shows that, with modest capacity expansions of some existing airports, southern Ontario airport capacity will not only meet forecasted demand but will exceed it by a huge margin. The report further states that adequate runway and terminal building capacity exists within the system as a whole, with the introduction of high-speed rail services in the region.

The Supply and Demand Report was submitted several months after the contract was awarded. The findings are so decisive on the fundamental matter of supply and demand that this first report should have marked the end of the study. But no. Eleven months later came a brief **Contextual Bridge Report (November 2017)**, described as having been requested by Transport Canada as a "bridge" between the Supply and Demand Report and the **Airport Type and Role Report (September 2018)**. The "bridge" was not part of the original contract. Clearly, the findings of the first report had thrown a monkey wrench into Transport Canada's expectations. The project's Statement of Work, from June 2016, had said this about the type-and-role report (p. 7):

> Taking into account the current regulations and zoning and the need for aviation services that will be identified in the supply and demand report, the objective of this report is for the contractor to develop options for what type of airport will be needed….

Will be identified. *Will* be needed. When the first report concluded there was no need for an airport, justification had to be fabricated to explain why an analysis of potential airport types and roles, and an assessment of potential revenue-generation and economic impacts were still pursued.

The "bridge" report introduces what it describes as a policy factor that would influence the decision to develop a Pickering airport. Namely, the eyebrow-raising notion that need "is just one reason" to build a new airport; an airport could instead be built to stimulate economic growth. Yet Transport Canada's mission is "to serve the public interest through the promotion of a safe and secure, efficient and environmentally responsible transportation system in Canada." Where in that statement or in any Transport Canada document or past action is there a scrap of evidence showing that helping regions with their economic growth by adding airports is something Transport Canada does?

Report #2 is the Airport Type and Role Report and, here, things get even stranger. With the permission granted by the "bridge" report to brush aside the data-driven conclusions of report #1, this new report

relies on “anecdotal evidence,” speculation, and assumptions to develop type-and-role airport options. Their purported advantages are often shown elsewhere in the reports to, in fact, be liabilities. The “successful” airport pairings selected as models for Pickering are ill-suited to the exercise: the two examples chosen operate at what were pre-existing airports and don’t carry the huge cost of airport construction in their expenses. Five options are presented for Pickering. Three (Primary Hub International Airport, Passenger Feeder Airport, and Major Air Cargo Airport) are convincingly disqualified. The remaining two (Industrial Airport and Specialty Passenger Airport), despite evident failings, go on to be further assessed in the final report.

Report #3, the **Revenue Generation and Economic Impact Assessment Report (March 2019)**, sails off into the speculative ether and is impossible to critique because the most significant parts – all the expense and revenue details that are required to demonstrate a sound business case to the public for the proposed airport models – have been redacted. Still, it contains some interesting revelations. It says that the study on revenue and economic impact resulted from “a decision by Transport Canada to decide whether or not to continue to study the potential for a new airport on the Pickering Lands.” This is as close as we may ever get to a glimpse into Transport Canada’s thinking: that the Department was actually considering stopping the study after receiving the first report and its emphatic conclusion (or maybe after the second big report’s unconvincing “what-if?” exercises) and admitting at last that there was little or no benefit to be had in further studying the potential for an airport that had none.

Mostly, though, there is – literally – nothing to see in this closing report. Of its 127 pages, 49 have been partly or wholly redacted. No financials are revealed. Were they indefensible? Disastrous? Who knows? Left unredacted are the caveats, such as: “a change in any of the assumptions could have a material impact on the financial and economic analysis….” And there are cautions, such as: “[the scenarios] should not be interpreted as projections of the future.”

At the end of more than three years of study, this final report’s conclusion hardly warrants the title. It advises that the report’s content is not comprehensive; is not conclusive; is just scenarios based on a set of assumptions; that it could be a useful tool. It says the study is exploratory and that no definite conclusions can be drawn. It states that potential investors would need to do their own analyses, draw their own conclusions.

It states that airport development would be subject to market forces. “There is a significant level of uncertainty associated with the assumptions used to generate the scenarios, and it is likely that the future will deviate from the assumptions presented in this report.” Such a disclaimer – which is what this is – virtually negates the contents of the three later reports. As a conclusion, it is even less specific than that of the Needs Assessment Study Report of 2010, which said that the Pickering Lands should be held for an airport “if and when required.”

The KMPG Report also exposes a blatant flaw in the study. Nowhere does it seriously address climate change and the impact this global crisis will have on every major aspect of the aviation sector. Transport Canada could have intervened for the second time in this study and commissioned KPMG to thoroughly examine the likely possibility that the climate crisis would have a significant negative impact on the aviation sector, and would therefore have a significant impact on the outcomes of the study. By not incorporating (or even warning of) the implications for aviation in the analyses of airport types and roles, revenue generation potential, and economic impact potential, KPMG has delivered conclusions, especially in reports #2 and #3, that are divorced from reality.

Extracts and Detailed Comments on the Reports

The most significant and revealing passages have been pulled from the report and compiled in this Response for ease of reference. We have whittled down the 491 pages, obtained via our Access to Information request, to 44 pages of extracts. Where we thought it necessary or useful, we commented on findings, conclusions, omissions, contradictions, oddities, and other matters of significance or interest.

In the following pages:

- extracts from the reports are shown between quotation marks
- our comments and observations are indented and shown in red italics
- bold-face in text is used for emphasis, both in the extracts and in the comments
- the fully sequential page-numbering of the Access to Information version is the numbering referenced throughout

Supply and Demand Report
December 2016

1.0 INTRODUCTION

1.3 Study Assumptions, Limitations and Use of this Report

"[T]his report … is subject to significant uncertainties and is derived using myriad assumptions, which may change based on a number of factors, for example:" (p. 19)

Lists investments, industry trends and requirements, shifts in travel patterns, and economic conditions – but not the potential effects of climate change.

"This document should be considered in its entirety. **Selection of, or reliance on, specific portions of this document could result in the misinterpretation of comments and analysis provided."**

1.6 Comparing Toronto Pearson Airport to London's Heathrow Airport

"In the context of this study, it is important to note that Toronto Pearson Airport and London Heathrow Airport are **very different**." (p. 23)

Makes the point that London is a far stronger attractor of inbound passengers than Toronto is, and is geographically better placed to serve the world.

2.0 AIRPORT PROFILES

"Historical activity data from 2000 to 2014 was sourced from Transport Canada's Publication TP577, produced jointly with Statistics Canada. Activity data from 2015 was sourced from Statistics Canada's CANSIM database." (p. 27)

2.2.3 Activity History and Destinations Served

Fig. 2.4 Historical Passenger Activity – Billy Bishop Toronto City Airport (p. 34)

Entirely redacted. Why redact historical data that are publicly available from StatsCan? Figures on historical data are redacted not just for Billy Bishop but also for Waterloo, Peterborough, Lake Simcoe, and Hamilton airports. And 2014 passenger numbers and 2015 aircraft movements are redacted for all pertinent airports except Pearson and Oshawa. Why?

2.3.1 Airport Role and Location (p. 36)

KPMG assumes in this first report that Buttonville airport will be closing near the end of 2017; important to note, since this is the supply-and-demand report. (Buttonville is still open, although now serving a much-depleted customer base.)

3.0 STAKEHOLDER CONSULTATIONS

Note: Dr Polonsky's work for his report Jets & Jobs was made available to KPMG.

"The need for better communication with associations and the public: Many stakeholders expressed concern towards the lack of communication and transparency regarding the government's intentions on developing the Pickering Lands." (p. 57)

"The need for Transport Canada to make a decision regarding the development of a new Pickering airport soon, regardless if the decision is to develop the new airport, or to not build the new facility."

All consulted parties are said to have claimed that "there is demand for general aviation activities at a new Pickering Airport." The GA fraternity may have said this but it's hard to believe that most other participants did. Furthermore, GA aircraft movements are often said, later on in the report(s), to be in general decline.

"Most stakeholders agreed that development of an airport on the Pickering Lands should begin with a large runway which makes a statement that the government is committed to allowing for the development of a full-scale commercial airport."

Given the cost of such an undertaking and the financial risks involved, is it acceptable and ethical to place the idea of "making a statement" ahead of actual need?

3.3.1 Air Carriers

"… were not in favour of a new airport on the Pickering Lands." (p. 57)

Of five airlines approached for input, only three responded, according to the report.

"In the opinion of the airlines, there is considerable underutilized capacity at Hamilton Airport, Waterloo Airport and Billy Bishop Airport to support their current and future air services."

"Some air carriers expressed concerns regarding the cost of a future airport on the Pickering Lands. If a new Pickering Airport were to be owned and operated by the GTAA (one potential governance model to be discussed in subsequent reports), air carriers noted that the cost to develop and operate the new Pickering Airport should not be recovered through higher air carrier fees at Toronto Pearson Airport." (p. 58)

3.3.2 Airports

"In general, **airport operators** were in favour of a new airport on the Pickering Lands, citing a lack of general aviation capacity east of the GTA with the pending closure of Buttonville Airport. The **general aviation airports** were concerned about the possibility of lost traffic to a new airport on the Pickering Lands, depending on the identified type and role of the facility. In addition, consultations indicated that airports are willing to accept future general aviation traffic that may be transferred from Toronto Pearson Airport in the next decade as the GTAA moves towards increasing their passenger capacity." (p. 58)

"…large corporate aircraft operators [are] utilizing secondary and general aviation airports in the southern Ontario airport system … and connecting with downtown Toronto via helicopter. … the trend is expected to continue … throughout the 20 year planning horizon."

How sustainable is this, and how acceptable, in a time when emissions must drop? Helicopters

apparently use 3 times the amount of fuel an airport van would need to get passengers to their destinations. https://www.enn.com/articles/23533

3.3.3 Municipalities

"**All municipalities** consulted showed strong support for the development of an airport on the Pickering Lands and stated the critical need for the federal government to make a decision on the Pickering project as soon as possible." (p. 58)

Was Ajax mayor Steve Parish really among those supporters? Hard to believe.

"The area surrounding the Pickering Lands is forecast to grow by 70, 000 residents in the next 8 to 10 years. **Municipalities voiced concern that public perception and resistance to a new airport could increase once these new residents move to the area and become established.** The consulted municipalities stated that the growth of the surrounding area supports the argument that a **decision on the Pickering Lands is time critical.**" (p. 59)

In other words, our elected officials at the municipal level want this decision made now because they believe that having an area airport (regardless of whether need is proven) is more important that the wishes, concerns, and quality of life of their constituents.

3.3.4 Industry Organizations and Interest Groups

"Most industry organizations and local interest groups identified a new Pickering Airport as the most suitable replacement for the closing of Buttonville Airport." (p. 59)

Perhaps they've forgotten or they never knew the history – or they just don't care. They appear to have no ethical qualms about taking over property that was originally seized from private citizens by Ottawa for a public good, and using it instead for a private airport to benefit mostly rich owners and operators of corporate jets.

4.0 IMPACT OF KEY REGIONAL DEVELOPMENTS

4.1 Population

"The Ontario Ministry of Finance expects Halton to grow faster than any other census division [in the GTA]." (p. 60)

4.2.1 Highway 407 East Extension

"With the next phase of 407 east extension, access to Peterborough Airport will be improved, with significantly shorter travel times to/from the GTA. Travel times during peak periods to/from Toronto Pearson Airport from Durham Region and points further east have been, and will be continually reduced as Highway 407 is further extended." (p. 61)

Note: From Google Maps, Brougham to Pearson is 31 minutes, Brougham to Peterborough is 47 minutes.

5.0 INDUSTRY TRENDS AND REQUIREMENTS

"The observations noted herein should not be considered as a definite description of how the industry will grow within the next 20 years and should be considered only as commentary on the air transportation sector as a whole." (p. 70)

5.1 Domestic, Transborder and International Trends

"Between 2000 and 2015, domestic passenger traffic for all Canadian airports grew by 53 percent or 2.9 percent per year. Toronto Pearson Airport's domestic traffic grew by 34 percent during the same period, or 2.9 percent per year." (p.70)

Typo? Calculation error? Incredible coincidence? Can it really be 2.9% for both?

"Boeing has predicted that these trends … will continue through to 2035 and its Current Market Outlook predicts a 2.6 percent annual growth rate for traffic within North America."

"International routes have been very dynamic, particularly at Toronto Pearson Airport."

"Boeing expects these international services will grow rapidly over the 2015-2035 period. Its forecasts call for North America-Europe traffic to grow by 2.9 percent annually. Trans Pacific and North America-Latin America traffic will grow by 4.5 percent and 5.4 percent annually, respectively." (p. 71)

"The new international flights[‘] … low frequencies make relatively modest demands on Toronto Pearson Airport's runways."

"Most international flights will continue to require extensive feed from North American services. Airlines entering a new market are usually very risk-averse, and will choose an airport that has already proven successful as an international gateway. Inertia will strongly favor Toronto Pearson Airport over other potential gateways such as Waterloo Airport and Hamilton Airport."

5.2 Aircraft Trends

"As part of Transport Canada's [Canada] Action Plan to Reduce Greenhouse Gas Emissions from Aviation, the Canadian airlines have committed to implement measures in order to reduce greenhouse gas emissions from Canada's aviation sector. One of these measures is targeting "faster" fleet renewals which would speed up the implementation of fuel saving technologies in the fleet of Canadian commercial aircraft. Canadian air carriers expect to achieve an average annual fuel efficiency improvement of 0.7 percent for both domestic and international flights between 2005 and 2020 through further fleet renewals." (p. 72)

This 2016 reference to saving fuel (and airline costs) is the only one that touches tangentially (without saying so) on climate change. But it was known in 2016 that the gradual shift to lower-emissions aircraft would be a mere fraction of what was going to be needed to lower the sector's increasing emissions tally in any significant way. (Projected industry growth would more than wipe out any gains made through technological advances.)

5.2.1 Large Ultra-Long Range

"Ultra-long-range aircraft … **have flight durations of more than 12 hours**." (p.73)

5.2.2 Long Range Medium Volume

"... **intermediate** volume long **distance routes of 6 to 12 hours in duration. …** Airbus has adopted a route concentration model. Boeing favours fragmentation." (p. 73)

"Most new fragmentation services operate between a large gateway (e.g. Beijing) and a secondary point (e.g. Calgary) thus diverting traffic from primary routes such as Toronto/Vancouver-Beijing." (p. 74)

5.2.3 Medium Range

"The **medium range** segment includes aircraft that have **flight duration between 3 to 6 hours**. … The airlines are replacing their existing fleets with new generation of aircraft which have more capacity than those they replace. Airports such as Toronto Pearson Airport will obtain additional seat capacity with no corresponding increase in runway use." (p. 74)

5.2.4 Short Range

"**Regional aircraft** are operated to efficiently serve short routes less than 3 hours in duration." (p. 74)

"The current trend in short range aircraft is increasing size and seat capacity. All of the new short-range aircraft have 70 to 100 seat passenger capacity and 70 seats has become the de facto minimum size for domestic short-range aircraft. The smaller short-range aircraft, for example, the 50 seat Regional Jet (CRJ-100, 200) have become economically obsolete. Although some still serve short, high yield routes, their airframes are approaching the end of their useful lives and any increase in fuel prices will accelerate their retirement. Turboprop aircraft in the 19-50 seat range face similar problems of high operating costs and obsolescence." (p. 75)

5.2.5 Corporate Aviation

[Highlights] trend toward using corporate helicopters from smaller airports to downtown Toronto. (p. 76)

But again, will this trend be environmentally sustainable?

"Toronto Pearson Airport's corporate general aviation traffic has slowly migrated to other airports, such as Oshawa Airport, Waterloo Airport, Lake Simcoe Airport and others due to high landing and service fees at Toronto Pearson Airport. Although these airports are much farther from downtown Toronto, consultations suggest that corporate helicopters are being used to transfer passengers from these secondary and general aviation airports to Billy Bishop Airport, or private helipads within downtown Toronto."

"It is important that capacity be provided for corporate general aviation traffic within an airport system, however, the requirement to provide this capacity in close proximity to urban centres is becoming less important as more and more corporate aircraft operators [are] utilizing secondary and general aviation airports, and connecting to urban centres via helicopter. This has been seen in other large metropolitan centres with diverse airport systems, such as New York City, and is expected to become a more popular trend in the southern Ontario airports system."

5.2.6 Flight Training

"Flight training **is expensive and is continuing to increase in cost due to rising fuel and insurance costs.** Many flight training candidates are enrolling in professional flight training programs offered by educational institutions. This method of training is preferable for many candidates as governments subsidize many programs. These training programs can create a substantial demand for airport infrastructure." (p. 77)

"Many organizations in Canada have established flight training units to support international flight training requirements utilizing existing airport infrastructure."

5.3 Air Carrier Trends

5.3.1 Hub and Spoke Model

"… hubs allow air carriers to provide connectivity between multiple city pairs, while consolidating their operations to reduce costs." (p. 77)

"… many large hubs have higher fares as compared to smaller regional airports. The dominant carrier has considerably higher market power through its greater choice of nonstop destinations, flights and total capacity." (p. 78)

5.3.2 Connecting Traffic

"Air Canada will be putting more focus towards building their high-volume international markets using wide-body aircraft, and seeking flight timings that maximize traffic feed from connecting flights operating smaller aircraft." (p. 79)

"Research, consultations and analysis suggest that connecting traffic will continue to grow at Toronto Pearson Airport, with a modest increase at Billy Bishop Airport. Traffic at the other secondary airports supporting passenger service within the system (Hamilton and Waterloo) is expected to grow on an Origin/Destination (O/D) basis."

5.3.3 Industry Consolidation

"The government will develop a new policy applying to all carriers whereby the maximum foreign ownership ceiling would be raised to 49 percent … The new change in foreign ownership will give Canadian carriers wider access to foreign capital markets. However, the greatest obstacles for airline financing are the low profits and high risks. These problems particularly apply to new entrants." (p. 80)

"Any radical changes to ownership, right of establishment, or cabotage rules would be strenuously opposed by Canada's airlines. There are no precedents for such liberalization and, for this reason, airline industry consolidation is not expected to dramatically impact capacity or demand at the southern Ontario airports, throughout the 20-year planning horizon of this study." (p. 81)

5.3.4 Charter Carriers

"If an airport were to be developed at Pickering, it is likely that air charter carriers will initiate low frequency services at the new airport, provided the appropriate, cost-effective facilities are provided." (p. 81)

5.3.5 Low-Cost/Ultra Low Cost Carriers

*This section includes many caveats with regard to such carriers. They would consider Pickering **if** the fees were low enough. But **if** they want to make money, the way to do it is to go to Pearson. Even then, success is not assured; WestJet/Air Canada work to kill such upstarts.*

"ULCCs would select a 'focus city' with a secondary airport offering low user fees." (p. 82)

"WestJet valued Toronto Pearson Airport's revenue advantage more than Hamilton Airport's cost advantage. WestJet retains a presence at Hamilton Airport, and also serves the Waterloo Airport."

"The established air carriers have proven hostile to new LCC and ULCC entrants. ULCC and LCC carriers typically require higher load factors (usually 85% or more) to recover costs and make a particular air service profitable. The yield management systems of the legacy air carriers and the few empty seats on most flights enable them to offer ultra-discounted seats on selected departures. By providing these lower fares on competing flights, they can essentially take passengers away from the ULCC/LCC service, and lower overall load factors below the break-even level. The **new low-cost entrants are inherently risky and suffer high rates of business failure.**"

"By accommodating several premium passengers, a flight by a established airline can reach its profitability target. The airline can then offer the remaining seats at a deep discount. This has **greatly reduced the impetus for low cost carriers in Canada**." (p. 83)

"… it expected that LCCs and ULCCs will … operate from designated secondary airports within the southern Ontario airport system (such as Hamilton Airport, and potentially Waterloo Airport), and possibly at the new Pickering Airport, once established."

A surprising comment, when the rest of this section strongly suggests that LCCs and ULCCs are too risky to count on.

5.4 Air Cargo Trends and Requirements

5.4.1 Air Mail

"Air mail does not introduce any major issues of clear relevance for the airports within the southern Ontario airports system." (p. 84)

5.4. 2 Air Express

"It is … expected that air express services will remain at Toronto Pearson Airport and Hamilton Airport." (p. 84)

5.4.3 General Air Freight

"The abundant supply of containerized capacity on wide-body passenger aircraft has depressed general cargo rates on many world trade lanes." (p. 85)

"Empty backhauls, such as from North America to Asia, further weaken the economics of pure freighter aircraft for general air freight. It is therefore expected that Toronto Pearson Airport's all-cargo flights will be limited mostly to air express."

Rapid growth in Canada-Asia air freight is undermined by weak economics, since most of the revenue is from Asia-to-Canada flights, not from Canada-to-Asia flights.

"The forwarders have agreements with the airlines that often stipulate the use of flights at Toronto Pearson Airport. Thus a hypothetical Montreal-Paris shipment might be first trucked to Toronto Pearson Airport or New York, even if nonstop capacity were available from Montreal. Similarly**, large volumes of cargo traveling to or from Toronto Pearson Airport may be handled through airports in the United States, and trucked to and from Toronto.**"

In short, very few airports are used for consolidated air freight.

"Due to the critical mass of freight forwarders, freight operators, and other air freight support services (such as Canada Border Services inspection and bonded warehouses) currently operating in close proximity to Toronto Pearson Airport and Hamilton Airport, migration of these facilities to other airports within the system is considered to be unlikely within the 20-year planning horizon." (p. 86)

5.5 Regulatory Changes

"The regulatory framework for commercial airlines changes slowly." (p. 86)

5.5.1 Globalization Impacts

"The globalization of southern Ontario has important implications for its airports. […] The airlines will likely insist on serving Toronto Pearson Airport." (p. 86)

5.5.2 Air Service Liberalization

"Canada now grants foreign carriers limited access even if there are no reciprocal advantages for Canadian airlines. However, it often constrains frequencies." (p. 88)

"Canada will likely continue to liberalize its air service agreements. However, any such changes will be selective, and will depend on equivalent advantages for Canadian carriers. It is expected that foreign air carriers will continue to seek additional access to Toronto Pearson Airport as Canada's premier gateway."

5.6 Industry Growth Limitations

5.6.1 Training

"Many industry organizations have cited future pilot and aircraft maintenance personnel shortages as a potential limitation for overall aviation industry growth." (p. 89)

"… airport system infrastructure is not considered to be a growth limitation in terms of pilot and aircraft maintenance personnel training." (p. 90)

The aviation sector is not alone in its concern over personnel shortages. Many "trades" worry about worker shortages – but never over facility shortages.

5.6.2 Airport Congestion

"As demand for air services is expected to increase, especially at Toronto Pearson Airport, it is expected that slot controls will continue to be in effect throughout the study's 20-year planning horizon. It is also assumed that the current terms of the Tripartite Agreement will remain the same, and slot controls will remain in place at Billy Bishop Airport." (p. 91)

6.0 DEMAND FORECASTS

"… forecasts play an important role in forming any decision regarding the development of a new Pickering Airport." (p. 92)

"**The ultimate decision of when to undertake a particular airport expansion project usually depends on the realized level of traffic, rather than on forecasts** that may have been prepared several years previously. Most projects are sufficiently small and the lead times are short enough that the airports can use current traffic as true indicator of facility needs. The forecasts play a subordinate role to current volumes in directing short term airport infrastructure investment decisions."

"**More than a decade could be required for planning and construction of any major airport project on the Pickering Lands.** Under these conditions, a decision to develop a new Pickering Airport may need to be made even before the catchment area has met the required threshold of traffic to justify the new airport. Any errors in timing could result in premature and unnecessary expenses or leave the southern Ontario airports system with a capacity deficit."

6.2 Transport Canada Forecasts

"The Passenger Origin/Destination Model (PODM) […] information is comprehensive and prior to 2014, no organization could match Transport Canada's resources for forecasting activity at Canadian airports." (p. 93)

"Transport Canada began developing the current set of forecasts in 2015. The forecasts developed by Transport Canada include low, medium and high forecasts; low and high forecasts are limited to 2030 with the medium forecast out to 2035. Since the planning horizon for this study is to 2036. Demand values were extended beyond 2035 using extrapolation of the 2014-2035 growth rates. Transport Canada forecasts aircraft movements as well; however, the data is limited to forecast general aviation movements. Local movements were forecast by the project team using historical growth rates and the expectations of the airport operators during the consultation process. Transport Canada's forecasting staff had knowledge of renewed interest of this Pickering evaluation. The Transport Canada forecasts also had valuable insights into other airports, such as Waterloo and Hamilton. Transport Canada's forecasts themselves have proven highly accurate after extensive validation. Thirteen-year-old forecasts of enplaned-deplaned passengers deviated by less than 6 percent from the actual values. Forecasts of Toronto Pearson Airport's enplaned-deplaned traffic commissioned in 2007 deviated by only 4 percent from the 2015 actual."

"Before 2014, most Canadian airports used Transport Canada forecasts for their long-term planning. While some major airports develop forecasts in-house, the Transport Canada forecasts were the de facto gold standard in predicting future passenger and aircraft movements when they were being produced."

See report's Appendix D, p. 197, for Table of Assumptions and Model Inputs.

6.3 Airports

6.3.1 Toronto Pearson International Airport

6.3.1.1 Forecast

"The breakdown [for Toronto Pearson] of the total movements into domestic, transborder, international, non-reporting and general aviation can be found in Appendix D." (p. 97)

6.3.1.2 Validity and Sensitivity

"This study relies on forecasts provided by Transport Canada. Future traffic levels at Toronto Pearson Airport are the greatest source of uncertainty, and arguably the most important factor influencing any decision to trigger the development of a new Pickering Airport." (p. 99)

As with the Needs Assessment Report in 2010, the authors here make sure the reader knows that Transport Canada was the source of the forecasts on which all else has been based.

"The vital importance of the Toronto Pearson Airport forecasts to this study requires validation of the Transport Canada forecasts. The project team constructed 5 alternate sets of forecasts to test the validity of the Transport Canada models."

"Transport Canada Low and High forecasts bracket all other estimates. The graph supports the decision to use the Transport Canada Medium case as the primary forecast of activity for Toronto Pearson Airport and the rest of the airports within the southern Ontario airport system." (p. 100)

Which begs the question: If Transport Canada's forecasts were already predicting that Pickering wasn't needed, why waste tax dollars by hiring KPMG?

6.3.2 Billy Bishop Toronto City Airport

"… plays a genuine but modest role in relieving Toronto Pearson Airport." (p. 100)

6.3.3 Toronto Buttonville Municipal Airport

"… is assumed to close by 2019 at the latest and this reality is portrayed in the forecasts." (p. 102)

"The recent decline [in general aviation activity at the airport] reflects […] the broader trend of declining general aviation."

6.3.4 Region of Waterloo International Airport

"Passengers use many attributes to choose an airport, including availability of carriers, nonstop destinations, frequencies and fares. **Airport congestion is a relatively minor criterion** as airlines have proven tolerant of high levels of congestion and delay." (p. 102)

"Small airports with limited scheduled services that compete with large and nearby facilities often experience volatile air services."

6.3.5 Peterborough Municipal Airport

"Transport Canada forecasts general aviation movements to have modest increases." (p. 104)

"…facility is categorized as a general aviation airport within the southern Ontario airport systems." (p. 105)

6.3.6 Lake Simcoe Regional Airport

"… has aligned itself away from intensive flight training to serve more corporate aircraft." (p. 105)

6.3.7 Oshawa Executive Airport

"… expected growth in both general aviation and local movements. General aviation movements will be mostly influenced by an increase in corporate general aviation activity as operations at Buttonville Airport relocate to Oshawa Airport. Similarly, local movements are forecast to increase as a result of flight training and recreational operators relocating to Oshawa Airport." (p. 106)

6.3.8 Burlington Executive Airpark

"Transport Canada forecasts indicate a modest decline in general aviation movements into the future." (p. 107)

6.3.9 John C. Munro Hamilton International Airport

"… could, in principle, serve as a secondary to Toronto Pearson Airport. However, passenger traffic volumes remain well below the airport's potential. It has, like many secondary airports in metropolitan areas (e g. Chicago-Gary. Los Angeles-Palmdale, London-Stanstead. etc.), a history of short-lived and volatile air services." (p. 107)

"… has been the focus of attempts to launch low cost carriers. Its proximity to large urbanized regions, its low (in comparison to Toronto Pearson Airport) landing costs and the lack of congestion are major inducements. By serving Hamilton, a low-cost carrier might distance its service from Air Canada, and hopefully avoid aggressive retaliation." (p. 108)

"Transport Canada forecasts do not include low cost carrier activity at Hamilton Airport. **New entrant airlines are inherently risky** as both WestJet and Air Canada would oppose any start-up carrier."

"Aircraft movement forecasts at Hamilton Airport show a continuation in the decline of general aviation movements." (p. 109)

6.3.10 Brampton Airport

"Transport Canada's forecasts show modest growth with some flight training demand shifting from Buttonville Airport." (p. 109)

6.4 High Speed Rail

> *Important to note: Ottawa's 2020 focus is on high-frequency, not high-speed, rail. Ontario's Windsor-to-Toronto high-speed rail plan is on hold (for further study).*

"The dynamics of air and high-speed rail competition in Canada are … largely a matter of speculation." (p. 110)

"An analysis … found that 'the improvement in rail times was found to be a significant factor in reducing short haul air traffic in Europe'."

"A study of the Madrid-Barcelona route stated air service share of total traffic was 62.5 percent in 2007. It fell to 52.7 percent after the introduction of high-speed rail services."

"If the [Quebec-Ontario] high-speed rail service captured 70% of the eligible traffic it would reduce air traffic by 2,248,557 passengers per annum." (p. 112)

"The high-speed rail services would therefore not relieve the major constraint of runway availability. … [The topic] is examined within Scenario 4 in Chapter 8."

6.4.1 High Speed Rail Initiatives

"Unlike air travel it would offer true downtown-to-downtown service." (p. 112)

"… the convenience of a station near Toronto Pearson Airport, might counteract any growing tendency to use the London or Waterloo airports. Eventually, as traffic and congestion at Toronto Pearson Airport grows, high speed rail might accelerate the development of these secondary airports." (p. 113)

6.5 Air Cargo

… air cargo is relatively unimportant in the demand-capacity relationship at an airport. (p. 113)

"[T]here is consistently strong demand for Asia-North America capacity, but North America-Asia air cargo is chronically weak and generates low unit revenues."

"Forwarders make extensive use of intercity trucks. Many 'air cargo' shipments travel entirely by trucks." (p. 114)

"At the hub or 'gateway,' the forwarder has volume-based contracts with the airlines. This arrangement can cause extensive 'leakage' of Ontario's air freight to airports in the United States."

"Pearson … has relatively few all-cargo flights operated for general forwarder/airline cargo. These flights use wide-body all-cargo aircraft, usually ex-passenger…"

"The very large wide-body belly capacity of passenger flights on the North Atlantic has depressed cargo yields sufficiently to eliminate almost all freighter flights for airline-forwarder cargo."

"**These considerations make air cargo almost irrelevant to any demand-capacity analysis of Toronto Pearson Airport**. This study therefore **does not consider** air cargo capacity at the southern Ontario airports as a major factor driving the need of an airport at Pickering."

6.6 Summary

"Transport Canada forecasts call for relatively little change in the roles of the airports within the southern Ontario airports system." (p. 114)

"Billy Bishop will continue to serve intercity passengers."

"… neither the Waterloo Airport nor the Hamilton Airport will, in 2036, play a significant role in relieving Toronto Pearson Airport."

"Larger traffic volumes at the Hamilton and Waterloo airports might postpone the need to develop an airport on the Pickering Lands. However, the advantages of Toronto Pearson Airport: Air Canada and WestJet hubs, high frequencies, a wide source of airlines and destinations, and numerous surface transport options, may offset the disadvantages of an increasingly crowded and delay-prone airport. Hamilton and Waterloo airports might then provide role models for the proposed Pickering airport. It

might provide small scale, specialized commercial services of immediate relevance to the eastern extremities of the GTA. **However, total volumes would not be sufficient to create a meaningful secondary role.** Toronto Pearson Airport's 'capacity' depends on its terminals, security services, government inspections services, gates, surface transportation links and airspace. However, **its runways are arguably the most important determinant of its passenger throughput**. Since it would be prohibitively expensive to purchase sufficient land for new runways, the airport's basic configuration is largely fixed. The **number of runway operations is therefore an important determinant of passenger capacity."** (p. 116)

Fig. 6.21 Southern Ontario Aircraft Movement Demand Forecast (p. 117)

This figure shows enormous volatility in actual movements between 2003 and 2017. Once the forecasts kick in, things change. Aircraft movements are expected to increase in an almost straight 40-degree incline right to 2035. (Forecasters will not, of course, have imagined the disastrous effects of the COVID-19 crisis. But they knew about the climate crisis, and that it is likely to have a significant negative impact on aviation – and they ignored it.)

7.0 AIRPORT CAPACITIES

"The requirement to develop a new Pickering Airport has, through previous studies, been identified based on a projected capacity shortfall or gap in Toronto Pearson Airport's ability to service the expected air passenger demand within southern Ontario. Previous studies also suggest that the capacity shortfall extends to include the airports within the southern Ontario airports system." (p. 118)

7.1 Approach and Methodology

"This study not only considers current infrastructure and operational practices at the airports within the southern Ontario airports system, but also considers future capacity in 2036 based on planned developments identified within current airport Master Plans and Development Plans commissioned by the airports themselves." (p. 118)

7.2 Definitions

"Maximum Runway Throughput Capacity: The expected number of movements that can be performed on the runway(s) in an hour without violating ATC rules, assuming continuous aircraft demand." (p. 119)

"Practical runway capacity = 85% of the Maximum Throughput Capacity (FAA definition)."

"Annual Runway Passenger Capacity: Annual runway passenger capacity is determined by taking the calculated practical annual capacity, and applying an average number of aircraft seats to each movement. An 80% load factor is assumed for each aircraft."

"Annual Terminal Apron Passenger Capacity: … average passenger gate throughput of 300,000 passengers per annum (PPA) at Toronto Pearson Airport and 250,000 PPA at the other passenger secondary airports … This definition and method was determined through research of current passenger volumes and number of gates at Toronto Pearson and Billy Bishop Toronto City Airport."

7.2.2 Air Terminal and Groundside Capacity

"Annual Terminal Building Passenger Capacity: … 10,000 m^2 of terminal area per million PPA." (p. 120)

"Annual Groundside Parking Passenger Capacity: … 850 parking stalls per 1 million PPA … does not include privately operated parking facilities, vehicle drop offs and pickups and capacity provided by public transportation."

7.2.3 Cargo Capacity

"Cargo Capacity: The expected processing maximum in terms of tonnes of air cargo per annum that can be handled at on and off-airport facilities … Both dedicated cargo aircraft and belly cargo space on passenger aircraft are considered …" (p. 120)

7.3 Calculation of Airfield Capacity

7.3.1 Selected Airfield Capacity Model

"Prototype Airfield Capacity Model (PACM) was utilized in the determination of airfield capacity at each airport within the southern Ontario airports system (except Toronto Pearson where capacity values were provided by the GTAA and validated by the project team)." (p. 121)

Instrument flight Rules (IFR) vs. Visual Flight rules (VFR)

"… all movements for Toronto Pearson Airport and Hamilton Airport are assumed to be completed under Instrument Flight Rule (IFR) operations with IFR clearance retained until landing. Waterloo Airport, Billy Bishop Airport and the general aviation airports are assumed to operate under both IFR and VFR [Visual Flight Rules] conditions based on current and future airport roles." (p. 126)

7.3.1.1 Model Inputs and General Assumptions

Prevailing Meteorological Conditions

"The climatic summary published for Buttonville Airport was selected as best representative of the region and the group of ten airports selected for capacity analysis, based on its central location within the system." (p. 123)

> *Each airport has its own, unique meteorological conditions that affect airfield operations. No pilot would or could plan to use Pearson, for instance, based on Buttonville weather. In fact, to do so is illegal. So KMPG's decision to use Buttonville's climate summary to represent the weather conditions of all southern Ontario airports is lazy and wrongheaded, and compromises the analysis.*

Annual Days of Operation

" Since the demand for air travel is typically lower on weekends than on weekdays and lower in the fall, winter and spring seasons than in the summer, the multiplication of the **planning day capacity by 365 days per year** would yield an unrealistically high annual airfield capacity. Instead, analysis of weekday versus weekend and seasonal traffic data at Toronto Pearson Airport suggests that a planning day to **annual capacity factor of 320 is more appropriate**. For the purpose of this study, 320 days has been applied to the determination of annual capacity at all passenger and general aviation airports in the southern Ontario airports system. (p. 127)

> *We have the same question as our aviation consultants: Why choose 320 days as a more realistic and "more appropriate" annual airfield capacity when Pearson is open every day of the year?*

Average Aircraft Size

"… Pearson Airport, an average seating capacity per aircraft movement of 128 for 2016, and 148 for 2036 has been assumed … A load factor of 80% is applied to calculate the number of passengers per aircraft movement." (p. 127)

7.4 Passenger Airports

7.4.1 Toronto Pearson International Airport

7.4.1.1 Background

"Southern Ontario regional air traffic demand was estimated at approximately 44 million passengers annually in 2015 and is expected to at least double by the early 2040s. According to the GTAA, more than 90 per cent of the demand is anticipated to be accommodated at Toronto Pearson Airport." (p. 128)

Again, KPMG takes no account of the potential impact of the climate crisis.

7.4.1.2 Airfield

"[Pearson] GTAA applies an hourly cap of 90 movements in planning its operations. Accordingly, under Base Condition and Condition A, the cap of 90 movements has been used as the hourly practical runway movement capacity for Toronto Pearson as this reflects current practices … planning day is consisted of 18 standard operating hours … daily practical runway movement capacity of Pearson is estimated at 1,620 movements." (p. 129)

"According to the GTAA and NAV CANADA, existing hourly maximum runway throughput capacity based on an east-west runway configuration was identified at 120 movements. Operating in north-south runway configuration, hourly maximum runway throughput capacity is reduced to 86 movements per hour … Based on historical utilization … Multiplying the 117 movements by 18 hours, a factor of 0.90 to account for lower demand in some hours of the day, and a 0.85 factor to account for a practical service level, total daily practical throughput capacity would be 1,611. This figure reconciles well with the 1,620 daily practical throughout capacity calculated above, with a 90 movement per hour operational cap."

"… the hourly practical runway movement capacity in 2036 is estimated as the 90 movement per hour cap subject to a 20% improvement, resulting in a practical runway movement capacity of 108 movements per hour."

"This 20% improvement in movements if applied to the 117 hourly maximum runway throughput capacity would provide 140 movements per hour in 2036."

"The 320 value was selected as it was the basis for the 2010 Pickering Lands Needs Assessment study completed by the GTAA. We understand that this value was determined by the GTAA by analyzing the weekday, weekend and seasonal traffic demand at Toronto Pearson and determining a ratio of planning day movements to annual total movements."

"Future airfield capacity is constrained by the current runway system. There are no firm plans for adding an additional east-west parallel runway. The most significant improvement to airfield capacity is expected to come as a result of ATC [air traffic control] technology advancements as well as practices and procedural improvements. These improvements are expected to be operational within the 20-year planning horizon (and as early as 2026) and would include a combination of the three practices and

procedures listed below. These technology enhancements are reflected in the Condition B capacity calculations for passenger airports." (p. 130)

> *The three ATC technology enhancements are (1) visual separation on departure, (2) Precision Runway Monitoring (PRM), and (3) time-based arrival separation. Note that the 6th runway was not considered, as the GTAA's potential need was beyond KPMG's 20-year planning horizon.*

"Combined, it is expected that **these [ATC] improvements will yield a 20% increase to maximum runway throughput. Other improvements,** if implemented, which **may contribute to achieve higher throughputs beyond the 20% increase**, include the following: … Performance Based Navigation (PBN) … Multilateration (MLAT) … Aircraft Vortex Spacing System (AVOSS)." (pp. 130-131)

Table 7.1 Toronto Pearson Airport Estimated airfield Capacity (p. 131)
Shows the **2036 Pearson forecast: annual practical throughput (aircraft movements): 622,000 and annual runway passenger capacity: 73,700,000**.

"Between 2015 and 2035, Transport Canada forecasts Toronto Pearson Airport's enplaned-deplaned passenger traffic to grow by a compounded annual rate of 2.6 percent. The **15.4 percent increase in average seat capacity** implies a 2.6 percent annual growth over 5.5 years. Larger aircraft could thus significantly increase the capacity of Toronto Pearson Airport and postpone large investments in new airports." (p. 132)

"New flights to the Far East, Middle East and South American will follow scheduling patterns that are very different from the traditional markets of Canada. … many of the new flights will arrive and depart at off peak times. They will allow Toronto Pearson airport to increase its passenger throughput with no new investments in facilities." (p. 133)

7.4.1.3 Terminal Apron

"… In the next 20 years the GTAA plans to increase the number of aircraft stands as aviation growth warrants and depending on the changes in aircraft fleet mix of the airlines serving Toronto Pearson Airport." (p. 133)

7.4.1.4 Terminal Building

"… the GTAA is expected to continue to meet the growing demand for air travel through making optimum use of existing facilities prior to investing in new capital infrastructure. … The GTAA's current development plans contemplate expansion of Terminal 1 to the east. Phasing and timing … will depend on the forecast aviation growth. … The current projections estimate an increase of 15 to 25% in the total terminal floor area in the next 20 years." (p. 134)

7.4.1.6 Cargo

Cargo Capacity and Airline Operations
*"*Many passenger and all-cargo flights carry strong cargo traffic in one direction, but suffer from weak backhaul traffic." (p. 135)

Cargo Capacity at Toronto Pearson Airport
Table 7.3 Air Cargo Capacity of Toronto Pearson Airport. Base[d] on Summer 2016 Data (p. 136)
Freighter aircraft: 228,418 | Passenger aircraft: 797,748 | **Total: 1,026,166 tonnes/year.**

"… the airlines used **only 34.7 percent** of Toronto Pearson Airport's effective [cargo] capacity (2014 traffic versus 2016 capacity)." (p. 137)

7.4.1.7 Summary

"Toronto Pearson Airport's existing **(2016) capacity is most limited by terminal apron capacity**. … ultimate 2**036 capacity … constrained by terminal apron capacity.**" (p. 138)

"… Pearson … has adequate land within their current property boundary to provide additional annual terminal apron passenger capacity beyond the additional 25 to 35% increase that is currently planned within the next 20 years." (p. 138)

> ***General observations on section 7.4.1 [Toronto Pearson]:*** *A fundamental objective of the Supply and Demand study was the assessment of southern Ontario's airport system capacity. Assessing Pearson's capacity was highly important, because Pearson's ground lease states (in subsection 44.01.01):* "If the Tenant is continuously and actively meeting any capacity and demand requirements for airport and aviation services at the Airport, the Landlord will not construct and operate, during the Term, an airport as a Major International Airport within seventy-five (75) kilometres from any point on the perimeter of the [Pearson] lands."
>
> *The ground lease does not define "capacity" but the GTAA provides a definition in its Master Plan, 2008-2030, and again in its Needs Assessment Study: Pickering Lands, 2010, a report to Transport Canada. This formula has been used by Transport Canada for decades to determine Pearson's hourly capacity: the maximum average hourly throughput (capacity) is determined and then multiplied by the airport's operational hours in the day (18), by its operational days in the year (365), and by 1.03, being its agreed 3 percent nighttime allowance, to arrive at Maximum Annual Capacity.*
>
> *Practical capacity is then derived by taking 85% of that number to allow for contingency. This 85% is standard across the industry and is also used for roads.*
>
> *The GTAA has, over time, tried to lower Pearson's maximum annual capacity numbers by using, in its calculations, a low multiple on some hours in the day, fewer days in the year, and, latterly, the complete substitution of instrument condition numbers that occur, in fact, only 14% of the time. KPMG's report has done the same, using 320 operational days in a year and making no calculation for the nighttime allowance. Examples of calculations (see p. 23 of this Response) show how the aircraft movement numbers are affected as a result of these adjustments.*
>
> *KPMG further muddies the waters by deciding to use, as the basis for its capacity calculations, (a) the Prototype Airfield Capacity Model* ***for all airports except Pearson*** *(the GTAA supplied Pearson's data), (b) the* ***climatic summary of Buttonville airport****, and (c) the GTAA's* ***planning number of 90 aircraft movements per hour*** *for Pearson. It's important to note that the* ***GTAA would never use Buttonville's weather forecasts*** *to determine runway use at Pearson. And the* ***90-movement planning number*** *used by KPMG is related to* ***Pearson's current apron and gate constraint****, not to its runway capacity.*

*While all airports have capacity constraints of one type or another, **insufficient runway capacity at Pearson is the only constraint that would justify building Pickering. The Summary makes no mention whatsoever of having found current or future runway capacity issues at Pearson**.*

It is instructive to see Pearson's own (adjusted-down) calculations of total runway capacity, and to compare them with unadjusted versions:

From the GTAA's 2008 Master Plan for Pearson (ch. 5, p. 5.11), quoted verbatim:

"Toronto Pearson's average hourly airside 5-runway capacity can be calculated as:
*(79% x 126) + (14% x 108) + (6% x 75) + (1% x 30) = **119**"*

*The maximum annual capacity is then given as **610,000** but the GTAA arrived at this total by using adjusted-down/factored daily numbers.*

The actual mathematical calculation, based on the formula explanation in the 2008 Master Plan (see para 2 of these general observations) looks like this:

*(.79 x (56 +70)) + (.14 x (48 + 60)) + (.06 x 75) + (.01 x 30) = **119.46***

*The full benchmark maximum annual capacity would be 119.46 x 18 x 365 x 1.03 = **808,398***

In the 2017 Master Plan (p. 48, para 4), the GTAA reported the capacity of Pearson's N/S runway as around 90 movements per hour, an increase from the original 75. (Working backwards in the equation, 75 becomes 90, 60 becomes 72, and 70 becomes 84. We preserve the percentage relations and assume a full 90 by 2037.)

Thus, for year 2037, the actual mathematical calculation becomes:

*(.79 x (56 + 84)) + (.14 x (48 + 72)) + (.06 x 90) + (.01 x 30) = **133.1***

*This results in a maximum annual capacity of **900,701***

*And the **6th runway average hourly capacity** is increased in the 2017 Master Plan from 132 (in the 2008 Master Plan, ch. 5, p. 5.18) to **158.58 aircraft movements per hour**, for a total maximum annual movement capacity at Pearson of **1,073,127**.*

*Compare this with Pearson's actual total annual movements in 2019 (per the GTAA's 2019 Annual Report, p. 17): **452,800**.*

*The calculations show that, **operationally, Pearson is currently running at under 50 percent of full maximum capacity**. Presumptions used by KPMG in their calculations were seriously flawed, but they did not materially affect the report's findings: **a Pickering airport will not be needed**.*

7.4.2 Billy Bishop Toronto City Airport

7.4.2.6 Summary

"Billy Bishop Airport's existing capacity is currently most limited by terminal apron capacity." (p. 141)

7.4.4 John C. Munro Hamilton International Airport

7.4.4.6 Cargo

"The relatively small number of all-cargo operators at Hamilton Airport creates volatility." (p. 147)

7.6 Southern Ontario Airports System Capacity Summary

7.6.1 2016 System Capacity

" … the passenger airports have an estimated annual runway passenger capacity of **94.7 million PPA,** suggesting that this many passengers can be accommodated on the existing runways within the southern Ontario airports system. A value of 47.1 million PPA has been identified for the terminal apron capacity within the system, and current air terminal infrastructure has a capacity to support 56.3 million PPA. Groundside parking capacity for the southern Ontario airports is estimated at approximately 28.5 million PPA; however, this value excludes third party parking facilities, and does not take into consideration passengers arriving and departing from airports using public transportation. Cargo uplift capacity for Toronto Pearson Airport and Hamilton Airport is estimated at 1.2 million tonnes per annum (excluding belly cargo and air mail capacity)." (p. 157)

"… general aviation airports … 903,000 annual aircraft movements."

"… terminal apron capacity is the limiting constraint to future capacity expansion at Toronto Pearson and Billy Bishop airports, and air terminal building capacity is the limiting constraint at Waterloo Airport and Hamilton Airport."

7.6.2 2036 System Capacity

"…. runway passenger capacity at the system's passenger airports is estimated at approximately **119.6 million PPA in 2036**. Additionally, an annual capacity of 66.5 million PPA has been identified for the airport system's terminal apron capacity. Terminal building capacity is estimated at 80.3 million PPA. Future groundside parking capacity of the system has been estimated at 33.7 million PPA, not considering third party private parking facilities and public transit." (p. 157)

Table 7.26 2036 System Capacity Summary (p. 159)
Total system 2036 aircraft movement capacity: 1,839,000

8.0 SCENARIO DEVELOPMENT

8.1 Scenario 1 – 2016 Airport Conditions, 2036 Demand

8.1.2 Supply and Demand [Summary]

"… the calculations suggest that **there is a surplus of runway capacity for both passenger service airports, and for general aviation airports** within the southern Ontario airports system. Capacity shortfalls exist for terminal apron, terminal building and groundside parking capacity; however, these can be overcome with infrastructure expansion within existing airport boundaries." (p. 166)

8.2 Scenario 2 – 2016 Airport Conditions, 2019 Demand, Buttonville Airport Closure

8.2.2 Supply and Demand [Summary]

"… the calculations suggest that **there is a surplus of annual runway passenger capacity** and … movement capacity for … passenger service airports, and for general aviation airports. … deficits can be managed within the existing airport footprints." (p. 171)

8.3 Scenario 3 – 2036 Airport Conditions, 2036 Demand
8.3.2 Supply and Demand [Medium Demand Summary]

"… if airport infrastructure is expanded to its full potential as indicated in … Master Plans and Development Plans. and new ATC operations practices are put in place at … Pearson, **there will be a surplus capacity of 45.7 million annual runway passengers** within the … system. … terminal apron passenger capacity is the limiting capacity factor … additional aircraft stands or methods of increasing gate throughput must be provided." (p. 175)

8.3.4 Supply and Demand [High Demand Summary]

"Pearson Airport is expected to reach capacity and have a capacity deficit… **This is the only instance within this study where runway passenger capacity demand could exceed the estimated capacity… This suggests that additional runway passenger capacity would have to be provided … within the system, or an additional runway would be required at Toronto Pearson**." (p. 176)

"Nonetheless, even when the Transport Canada high demand forecasts are applied in Scenario 3, a surplus of 31.9 million PPA is identified for annual runway passenger capacity within the system. This suggests that **new runways would not be required to support the high passenger demand forecast, and improvements in terminal apron, air terminal and groundside parking capacities would adequately support the 2036 high forecast**." (p. 177)

8.4 Scenario 4 – 2036 Airport Conditions, 2036 Demand, High Speed Rail
8.4.2 Supply and Demand
8.4.2.1 Passenger Service Airports

"Under Scenario 4 runway facilities are sufficiently capable of handling the runway passenger demand in 2036." (p. 181)

8.5 CONCLUSION

Findings of all scenarios are summarized and confirmed in the Conclusion. ***In none of the scenarios was an additional airport found to be needed.***

APPENDIX B – STUDY ASSUMPTIONS

*A total of 48 assumptions are listed and described (pp. 191-193). With the exception of "*new generation aircraft with lower noise signatures and lower emissions*," there is no further reference to emissions-reduction and none at all to climate change.*

APPENDIX C – STAKEHOLDER CONSULTATION LIST

Air carriers: *Five are listed but the text has claimed that only three responded (no differentiation shown in chart)*

Study airports: *Pearson and Hamilton sent three reps, Billy Bishop and the other seven sent one or two*

Municipalities: *Durham Region sent three reps (including chair Roger Anderson); York Region sent one staff; Markham sent three staff; Ajax sent Mayor Parish and one staff; Pickering sent Mayor Ryan, CAO Prevedel, and Economic Development Director Jadoon. No one from Whitby.*

Industry associations and interest groups*: In addition to all the main industry groups, from NAV CANADA to ATAC, ALPA, and COPA, the Ontario Ministry of Transportation sent two staff; Durham Gateway Partners sent Ted Nickerson (pres.) plus one; and Pickering Airpark sent four (more even than Pearson!)* (pp. 195-196)

5. CONCLUSIONS

"As demonstrated through the hypothetical concepts of required investments, passenger serving airports within southern Ontario airport system will be capable of meeting the forecast demand within the 20-year study horizon if necessary capital investments are made and air traffic control best practices are adopted. **This validates the results of the Supply and Demand report.** Therefore, on the basis of capacity versus demand alone, a new airport on the Pickering Lands is not foreseen to be required before 2036. Recent publications and initiatives, such as the **southern Ontario Airport Network** and the **GTAA Mega hub strategy support this conclusion."** (p. 223)

*The "bridge" report clearly states here, bolstered by SOAN and Pearson, that **the first report's conclusions were valid**.*

"… it is recommended that Transport Canada monitor **policy and industry factors and events that could change projections and / or the timing for a decision to develop a new airport on the Pickering Lands.** For example, accelerated growth in the GTA could advance the need for an airport forward. In this context, the Type and Role Report should explore options for airport development within the southern Ontario airport system, to prepare Transport Canada to make timely decisions when forecast demand exceeds supply."

The Contextual Bridge Report, a thin 20 pages, including cover, was almost a year in the making: It was clearly meant to provide a seamless segue into the subsequent reports and a justification for continuing with the study despite the unambiguous conclusion of Report #1.

Type and Role Report
September 2018

EXECUTIVE SUMMARY

"The Analysis comprises three primary reports and one additional contextual piece (an annex to the first report) to **bridge the findings between the first and second reports**." (p. 225)

*This very first paragraph contains a glaring contradiction. An already published report cannot "bridge" to the findings (i.e., discoveries or conclusions) of an analysis that hasn't yet been conducted and that won't be finished for another 11 months. The contextual report describes its own purpose more honestly: "[The Bridge Report's] policy factors **provide a basis for proceeding** with the Type and Role Report and the Revenue Generating Potential and Economic Impact Report." (p. 207) The Executive Summary and the Introduction of the Type and Role Report offer a third explanation for the "bridge" report: "*to illustrate **how individual airports** within the southern Ontario airports system **could be expanded** to meet forecasted passenger demand…."

It's hard not to conclude from such disparities that the study was manipulated after the submission of Report #1, to obtain the desired result the first report failed to deliver.

1.0 INTRODUCTION

"The results of the Supply and Demand Report and the Contextual Bridge Report resulted in a **desire** to examine potential roles and service types for a new airport on Pickering Lands that **could support economic growth as opposed to responding to a need for additional passenger capacity within southern Ontario**." (p. 237)

Since when has Transport Canada been in the business of adding airports to the system to create local economic growth?

1.2 Study Objectives

"While the Supply and Demand showed that there is sufficient capacity to accommodate passenger demand to 2036 at the existing southern Ontario airports, **anecdotal evidence suggests that there is market interest in developing a passenger airport on the Pickering Lands** and that, **if a passenger airport were developed, there could possibly be sufficient traffic to make the new airport financially feasible**. This conclusion is based on the potential for discount airlines to be served at low marginal cost and on the improved service provided by an airport more proximate to passenger originating from east GTA. Further, there is likely a point in the future, beyond the 2036 horizon of the Supply and Demand Report, at which passenger demand will exceed the existing capacity in the southern Ontario airports system. This conundrum prompted Transport Canada to proceed with future phases of the study, to identify what type and role a new airport on the Pickering Lands could play." (p. 237)

What anecdotal evidence? And why even entertain it? Anecdotal evidence is defined as being "not necessarily true or reliable, because based on personal accounts rather than facts." What's more, KPMG actually goes so far as to imply that, if a Pickering airport were built, it "could

possibly" attract enough business to keep it afloat. It's the bogus "build it and they will come" theory, and based on anecdotal evidence, to boot! The study discredits itself.

"The Type and Role Report covers a 20-year planning period. The analysis presented in this report is **preliminary, is subject to significant uncertainties, and is derived using assumptions on economic and market conditions, which may change** based on several factors, including for example:

- investments and changes in the southern Ontario airports system;
- evolving industry trends and requirements;
- shifts in air passenger travel patterns;
- economic conditions (the value of the Canadian Dollar relative to the U.S. Dollar, energy prices, stock market volatility, etc.)
- changes in government airport policy;
- differences between forecast and actual demand over the 20-year planning period; and
- discrepancies between anticipated and actual infrastructure development." (p. 238)

  Everything on this list of assumptions is uncertain and intangible, demonstrating that when there is no need for an airport, there is nothing solid left to analyse, making the third and fourth reports empty exercises.

"The analysis presented in this report incorporates information available as of the report date and the appropriateness of **many of the assumptions** that were used in preparing the analysis **may change**."

"KPMG and WSP's procedures consisted solely of inquiry, comparison and analysis of identified and **provided information and relevant information from third party sources**. The team relied on information provided by project participants **without verification or audit**."

"This document should be considered in its entirety. **Selection** of, or reliance on, **specific portions** of this document **could result in the misinterpretation of comments and analysis provided**." (p. 239)

2.0 AVIATION FUTURE OF PICKERING LANDS

2.1.1 Additional Factors

2.1.1.1 Toronto Pearson International Airport – Mega Hub

Table 2.1 GTAA Aircraft Movement and Passenger Capacity, **Master Plan 2017-2037** (p. 240)

	2017 Actual	2037 Forecast Demand	2037 Capacity
Aircraft Movements	465,536	632,000	615,000 – 650,000
Enplaned/Deplaned Passengers	47,130,358	85,000,000	**85,000,000***

*Passenger capacity is not directly addressed, however GTAA indicates they expect to be capable of meeting this demand through medium and long-term terminal developments."

*Note: These numbers, from the latest Master Plan, show a big increase in Pearson's air passenger **capacity**. The previous Master Plan had been used as the data source, just a year earlier, for KPMG's Supply and Demand Report. The table below shows the earlier numbers (from pp. 116, 131):*

	2036 Forecast Demand	*2036 Capacity*
*Aircraft Movements**	*≈ 575,000*	*622,000*
Enplaned/Deplaned Passengers	*70,250,000*	***73,700,000***

**5-runway airport; assumes 6th runway not built yet.*

"While protected in the Toronto/Lester B. Pearson International Airport Zoning Regulations, it is not anticipated that a new 4th east-west runway [6th runway] will be required within Toronto Pearson Airport's Master Plan time horizon." (p. 241)

"[Toronto Pearson Airport … mega-hub] will require the displacement of small passenger and GA aircraft from Toronto Pearson Airport to other airports within the southern Ontario airports system to provide capacity for additional wide-body aircraft movements with more seats per aircraft."

"… any plans for a new airport on the Pickering Lands should consider the following:

- that a new airport providing **international passenger air service** on a large scale on the Pickering Lands **would likely be in direct competition with Toronto Pearson** Airport's mega-hub strategy;
- that there may be an opportunity for a new airport on the Pickering Lands to accommodate **smaller, specialized regional and charter passenger traffic,** which may be displaced from Toronto Pearson Airport to make room for larger aircraft (to increase Pearson's runway capacity); and
- that there may be **sufficient demand** to trigger a new or increased development of an airport on the Pickering Lands **sometime after 2036**, when Toronto Pearson Airport is expected to reach 85 million passengers per annum (GTAA's stated capacity)."

2.1.2 Aviation Industry Trends

2.1.2.1 Low-Cost Carriers

"LCC and ULCC operators in Canada have had a **volatile past**, with many new entrants beginning operations, experiencing rapid growth, and ultimately failing shortly after." (p. 242)

An important observation to keep in mind as this report begins to lay out possible scenarios for a Pickering airport.

"For example, former ULCC airline, JetsGO operated domestic and transborder services, commencing operations in 2001. JetsGo ultimately faced bankruptcy and ceased operations abruptly in 2005. Conversely. WestJet began operation as a low-cost airline in 1996 and is now one of Canada's largest air carriers." (p. 242)

"Several LCC/ULCCs are currently offering domestic ULCC services or exploring the potential for serving Canadian cities. Flair Airlines is an example of a ULCC operating in Canada. Flair Airlines began scheduled passenger operations under the travel reseller NewLeaf in July 2016 from Hamilton Airport utilizing Boeing 737-400 aircraft; it has since announced its plan to move to Toronto Pearson Airport in late October 2018. Other examples of new entrants in the market include Canada Jetlines and Swoop (a WestJet subsidiary)."

"An integral component to a successful ULCC operation is the use of a suitable low-cost airport environment as an alternative to larger, more expensive airports … low-cost airport … help ULCC's cater to a cost-conscious market segment."

Under the present foreign ownership limit rules, ***2 national air carriers seem to be Canada's natural capacity. Air Canada and WestJet prey on cheap-fare start-ups by offering a few really low fare seats on each flight, or develop their own low-fare subsidiaries. Start-ups with national service aspirations either fail or merge with their bigger competitors. Cheap-fare start-ups tend to move from secondary to major airports, where their increased revenues exceed their increased costs****.*

"… Hamilton Airport has aligned itself to fill the role of a low-cost airport …"

… even though its cheap-fare air-carrier business is unstable and prone to moving to Pearson.

"Past experience with ULCC and LCC airlines in Canada should be considered when assessing the financial viability of a new airport on the Pickering Lands supporting these types of operators. The abrupt suspension of ULCC and LCC operators due to financial shocks … could result in reduced revenue generation for the airport…."

Again, the report is flagging a big concern: a new airport, already under the gun to deliver a return on the heavy investment involved in building a greenfield facility, should be wary of relying on ULCC and LCC airlines for its revenue stream.

Relevance to a New Airport on the Pickering Lands

"… **may be** an opportunity for a new airport on the Pickering Lands to increase the momentum of ULCC operations in Canada … high-density population in the east GTA … **If the airport is operated to promote a low-cost environment** for passengers and airlines while continuing to be financially sustainable, a new airport on the Pickering Lands **could potentially** generate new air passenger demand in the ULCC market sector." (p. 242)

Durham Region is forecasted to maintain its 10% segment of the GTA's population. And given the unreliability of ULCC carriers, as the report makes clear, the "if" above is a BIG IF.

"Past experience with ULCC and LCC airlines in Canada should be considered when assessing the financial viability of a new airport on the Pickering Lands supporting these types of operations. The **abrupt suspension of ULCC or LCC operations due to financial shocks** (e g. rapid oil price increase, weak demand due to economic recession, or significant geopolitical events) **could result in reduced revenue** generation for the airport due to a decrease in passengers utilizing the airport's facilities and a reduction in landing fees as a result of decreased aircraft movements."

A final word of caution on ULCCs and LCCs…

2.1.2.2 Domestic Point-to-Point Service

"Point-to-point is a service offering where secondary markets are provided low frequency, non-stop service to typically long-range destinations, contrary to the traditional hub-and-spoke model … point-to-point services do not typically feed the airlines' major hubs. This type of service is provided primarily to serve customers looking for a more convenient travel option." (p. 243)

Note: Transborder or international point-to-point service is not even considered.

Relevance to a New Airport on the Pickering Lands

"… the GTAA's plans to become a mega-hub airport could see further displacement of smaller domestic point-to-point operations to secondary airports. In addition, advancements in airplane design have improved the economics of providing point-to-point services to and from secondary airports." (p. 245)

"Demonstrated growth of domestic point-to-point air service at secondary airports in southern Ontario demonstrates how point-to-point air services can operate successfully in Canada and are likely to be sustainable at a new airport on the Pickering Lands."

But only if there is a demonstrated need!

2.1.3 Reduced Surface Travel Times to Airports

"[Table 2.3 on surface travel times] excludes travel on Highway 407ETR and Highway 412 … It is assumed that typical ULCC and LCC passengers are cost conscious and would not use toll roads to access low-cost air services." (p. 248)

This is a highly debatable assumption and skews the findings. Total travel costs are far greater than the highway tolls.

Relevance to a New Airport on the Pickering Lands

"A new airport on the Pickering Lands could significantly improve access to air service for travellers in the GTA, particularly in the east, in addition to **potential passengers in Durham Region, Peterborough County, Northumberland County, and points further east, because it would significantly reduce travel times**." (p. 248)

*The part in bold (above) actually describes **Peterborough Airport's catchment area. I**s the report making the case for Peterborough airport?*

"Providing specialized passenger services at an airport on the Pickering Lands, such as sun-destination charters and domestic point-to-point passenger service, could provide residents in Toronto and east GTA with alternatives to such services at an increasingly congested Toronto Pearson Airport."

Again, making the case for Peterborough Airport? The following chart is drawn from Google Maps 8 a.m. Weekday Travel Times:

Travel (fastest route, including Hwys 401/407/412/418)	***Minutes***
Brougham – Pearson	*31*
Brougham – Peterborough	*47*
Whitby – Pearson	*45*
Whitby – Peterborough	*48*
Oshawa – Pearson	*48*
Oshawa – Peterborough	*45*
Port Hope – Pearson	*68*
Port Hope – Peterborough	*31*

Pickering could become a maintenance/repair/overhaul/industrial airport, but would it beviable? These needs are already served by Peterborough. (p. 55)

***Peterborough** has an existing 7,000-ft runway (unlike Pickering, which isn't built), capable of providing transcontinental passenger jet service. The new Bombardier C-series jets (now Airbus*

A220) can range as far as the southern Caribbean. Peterborough has had charter flights but is also capable of point-to-point routes, including by ULCCs, throughout the continent. Peterborough is outside Pearson's 75 km exclusion zone (Pickering isn't, so would be limited to charters, scheduled domestic destinations), and is therefore able to fly directly to domestic, transborder, and international destinations nearly everywhere on the continent.

Pickering's financial burden would include paying the capital costs of constructing an airport, costs that Peterborough doesn't have.

2.1.4 Facilitation of E-Commerce

Relevance to a New Airport on the Pickering Lands

… it is clear that an airport capable of supporting air cargo services in the east GTA would be highly desirable for **e-commerce businesses expanding operation**s in that area of the GTA." (p. 249)

*In the previous paragraph, however, it is reported that "*the zoning in place allows for very limited warehousing in the Innovation Corridor, suggesting that the establishment of a fulfillment centre-type facility is unlikely.*" So why are the authors arguing for e-commerce facilitation through a Pickering airport? It's as if they haven't read their own material.*

"Industrial, passenger, or general aviation airports may be capable of supporting air cargo operations **in a secondary role** and do not necessarily require large dedicated cargo facilities to do so."

Yet the authors have already reported that Pearson and Hamilton have surplus cargo capacity.

2.1.5 Bombardier Sale of Downsview Airport

"The capital costs associated with establishing operations at an airport and challenges involved with developing a reliable supply chain and skilled work force discourage large industrial businesses from relocating unless required by external forces. Bombardier is relocating its operations from an airport that it owns so that the land can be sold. This reflects the high market value of the land rather than any inherent advantage that might be achieved by relocating manufacturing operations. Because of the **significant capital investment involved, it is uncommon for a large manufacturing or overhaul organization to relocate its facilities**." (p. 250)

2.1.6 General Aviation in Eastern GTA

2.1.6.1 Buttonville Airport Closure

"Since the first announcement of the Airport's closure, aviation activity levels have dropped significantly, as operators using the airport began **relocating to other airports in southern Ontario**." (p. 250)

Relevance to a New Airport on the Pickering Lands

"At this point in time, the **closure of additional airports for non-aviation development is highly speculative**, however, the **recent re-allocation of traffic from Buttonville Airport to other airports in southern Ontario demonstrated that the airports currently within southern Ontario can accommodate changes in the system, and that market forces will drive business decisions** regarding the relocation of various tenants and air operators." (p. 251)

2.1.6.2 Oshawa Airport Closure

Relevance to a New Airport on the Pickering Lands

"Given the nature of the service agreement between Transport Canada and the City of Oshawa. it is likely that Oshawa Airport would close if a new airport on the Pickering Lands were to open." (p. 252)

2.1.6.3 Global Pilot Shortage

"There are currently several flight training programs operating in southern Ontario, however, the ability of these operations to expand to meet forecast demand is unknown." (p. 252)

> *The Supply and Demand Report has documented that small airports have a significant amount of unused aircraft movement capacity suitable for flight training. Is it essential to use Canadian airport capacity to train pilots from other countries who have no intention of ever working in the Canadian aviation industry?*

"This reduction in training cost does **not necessarily imply that a flight school** at a new airport on the **Pickering** Lands **would be commercially viable**, given the existence of flight training institutions at many neighboring airports." (p. 253)

"Existing vocational programs formerly located at Buttonville Airport, however, have already relocated to other system airports and have invested significantly in hangars and training facilities. This makes a move by these programs to another airport in the near future unlikely. While flight training could be an appropriate use of a new airport on the Pickering Lands, it is unlikely that such training could justify the development of a new airport alone."

2.1.8 Public Support

"… over time, support for the airport has also grown: there is now **private interest in the development of a new airport on the Pickering Lands for general aviation use**. There is also strong local political support. In October 2017, **the City of Pickering endorsed a motion to support the development of an airport in Pickering (subject to study results)** citing the anticipated economic benefit and job creation potential." (p. 254)

> *A good example of using anecdotal evidence (likely gleaned from a handful of the stakeholders consulted for the report). There have been no legitimate public surveys. The airport has not been on any election ballot. During the most recent municipal election campaign, it wasn't even a principal item on the platform of its greatest proponent, Pickering's mayor (he talked it up but it appeared nowhere on his campaign's website). Support is limited to some local politicians, local boards of trade, and a small group of local GA pilots. None of this support is relevant when there is no supply-and-demand issue. It's too bad that the Type and Role Report was submitted a year before the most recent federal election, when all the area MPs who (very vocally) did not support a Pickering airport were victorious in their ridings. The famously anti-airport Pickering-Uxbridge MP won a landslide victory over her pro-airport opponents.*

"**Apart from the existing air carriers, who were concerned about the potential splitting of operations between Toronto Pearson Airport and a new airport on the Pickering Lands**, the **other stakeholders generally expressed widespread support for a new airport** on the Pickering Lands. Furthermore, some of the strongest proponents for a new airport on the Pickering Lands were the municipal and regional governments surrounding the Pickering Lands, who see the potential benefits that an airport could provide to their respective local economies. The general trends and opinions collected as part of the

Supply and Demands Report were largely similar to those outlined in Dr. Polanski's [sic] report on the potential future use of the Pickering Lands." (p. 255)

Relevance to a New Airport on the Pickering Lands

"The decision to construct a new airport on the Pickering Lands will be influenced by the political environment and public opinion at that time." (p. 255)

"Some elected municipal representatives were elected on a pro airport platform, potentially indicating support by local constituents for a new airport on the Pickering Lands."

> *This statement is brushing the edges of misinformation, and only the injection of "potentially" manages to save it (a little). No local municipal politicians could honestly be said to have been "elected on a pro airport platform." They may have had an airport as part of their platform, but it was one plank among many and never at the top. Suggesting that their win meant constituency support for an airport is embroidering the facts to help meet an objective.*

3.0 AIRPORT SYSTEMS

3.2 Informal System

3.2.1 Southern Ontario Airport Network [SOAN]

"The network does … provide airport operators with an open forum to discuss capacity issues and opportunities for business development." (p. 257)

3.3 Case Studies - Airport Profiles

"The two airport pairs chosen were:

- Phoenix Sky Harbour Airport and Phoenix Mesa Gateway in the United States
- Vancouver International Airport and Abbotsford International Airport in Canada" (p. 260)

  *The fundamental problem with this selection is that t**hose successful airport pairs involve airports that are already built. Phoenix Sky Harbour and Vancouver International are both primary hubs, while Mesa Gateway and Abbotsford were originally military airports, later repurposed. They did not have to pay massive new-airport construction costs. A Pickering airport would.***

"The secondary airports serving the cities of Phoenix and Vancouver grew through response to passenger and private sector market demand for low cost passenger service."

3.3.1.1 Phoenix Sky Harbour – Phoenix Mesa Gateway Airports

"Mesa Gateway … is classified … as a general aviation reliever airport …" (p. 262)

"Given Mesa Gateway Airport's military heritage, the WGAA inherited substantial airside infrastructure for an airport of its anticipated type and role, including three parallel runways, supporting taxiways, and extensive apron areas. This greatly assisted with the initial development of the Airport, where efforts were focused on stimulating business and air service interest utilizing the available infrastructure."

"… also accommodates … aircraft Maintenance Repair and Overhaul (MRO) operations, flight training organizations, fixed base operators, manufacturing, government agencies, and numerous non-aviation

related companies. The 2009 Mesa Gateway Airport Master Plan indicates that the Airport is a significant economic generator for the community, directly creating over 1,250 jobs and generating over $200 million in revenue each year."

3.3.1.2 Vancouver International – Abbotsford Airports

"Abbotsford Airport was initially constructed during the Second World War for military purposes. It was owned and operated by Transport Canada as a civilian airport starting in 1958. As part of the National Airports Policy of 1994, ownership of the airport was transferred to the City of Abbotsford and has since been operated by the Abbotsford Airport Authority. Its growth has been market driven, facilitating 126,568 aircraft movements in 2016 and 677.653 passengers in 2017, making it Canada's 11th busiest airport." (p. 264)

"… primary service offerings in general aviation commercial and industrial, in addition to providing specialty passenger service. The Abbotsford Airport has supported the operation of Canadian Low-Cost Carriers and charter airlines, providing scheduled point-to-point domestic air service, seasonal sun destination charters, and service to major hubs. … Abbotsford Airport continues to grow as a prominent low-cost airport."

"... has maintained several long-term general aviation tenants. Conair Aerial Firefighting … Cascade Aerospace operates a 235,000-square foot facility and specializes in aerospace engineering and modifications, and MRO services for civil, commercial and military aircraft. Other general aviation businesses at the Airport facilitate flight training, fixed base operations, and recreational flying."

3.3.1.3 Pierre Elliot Trudeau International Airport – Mirabel Airport

"Mirabel Airport was unsuccessful in fulfilling its planned role. However, Mirabel Airport remains in operation to this day as an industrial and cargo airport. It is currently fulfilling a significant aviation role as the facility accommodates extensive cargo and aviation manufacturing operations, and is the home to Bombardier's manufacturing facility supporting the development of the C-Series aircraft program. These operations continue to grow." (p. 266)

3.4 Findings

3.4.1.1 Governance

Potential success factor for a new airport on the Pickering Lands

"Establish an independent governance model that has the flexibility to attract and adapt service types, and the resulting airport role, to respond to, and accommodate changes in market demand." (p. 267)

3.4.1.2 Geographic Location and Ground Transport Access

Potential success factor for a new airport on the Pickering Lands

"A new airport on the Pickering Lands would result in a significant reduction in driving times to an Airport for the travelling public in the east GTA." (p. 268)

But would it? See the chart on p. 32 of this Response.

3.4.1.3 Competitive Aeronautical Fees and Land Lease Rates

Potential success factor for a new airport on the Pickering Land
"Offer **competitive** land lease rates and aeronautical fees to stimulate growth of aviation-related commercial activity." (p. 268)

> ***How could Pickering compete with existing airports that pay no expenses for new construction?***

3.4.1.4 Orderly and Planned Airport Development

Potential success factor for a new airport on the Pickering Land
'Ensure a new airport on the Pickering Lands is well planned, allowing for flexible phased development to **satisfy** evolving **aviation market demand**."

> *In the context of the Supply and Demand Report's findings, this means:* ***don't build an airport at Pickering.***

4.1 Options Definition and Analysis
4.1.3 Option A: Industrial Airport

"In Option A the role of a new airport on the Pickering Lands … would be a **General Aviation Industrial and Corporate Airport."** (p. 271)

"… not all the [KPMG study Ontario] airports have the required land assembly for a l**arge-scale aviation-industrial operation**, such as a large-scale aircraft manufacturer, or an MRO operator."

> *Note:* ***Bombardier Downsview occupies only 37 acres.***

"A high-level review of industrial airports was unable to identify a purpose-built greenfield industrial airport in North America.

> *Note:* ***KPMG couldn't find a greenfield industrial airport anywhere in North America.***

"Conversely, in southern Ontario, Peterborough Airport began as a small GA airport and through strategic investment has grown to become a significant industrial airport."

> *If Peterborough is now a "*significant industrial airport*," how could a new, additional airport, quite close by, stand a chance of competing?*

4.1.4 Option B: Specialty Passenger Airport

"A new airport on the Pickering Lands supporting [domestic scheduled and charter services; transborder and international charter services] would be … a **Potential Reliever and General Aviation Corporate Airport."** (p. 272)

"Reducing driving times to/from airports that provide desirable passenger air services for residents **within regions of the eastern GTA and in neighbouring counties further east along the Highway 401 corridor (and beyond)** is likely to increase the number of air trips of existing travelers and/or induce travel demand in non-travelers living in the eastern GTA (especially if a ULCC were to operate from a new airport on the Pickering Lands).

> *We feel obliged to point out that increasing the number of air trips of existing travellers, and inducing travel among non-travellers, are not necessarily great ideas at a time when the aviation sector has few options for effecting emissions reductions on any worthwhile scale.*

"… new airport on the Pickering Lands could also stimulate significant regional economic growth as proximity to an airport that supports passenger and/or cargo air services is an important factor when large scale companies make decisions regarding the location of their headquarters and other facilities to support their business. (p. 273)

4.1.5 Option C: Primary Hub International Airport

"A new airport on the Pickering Lands supporting [domestic, transborder, and international scheduled and charter services] would have a defined role as a **Primary International Hub (Passenger) Airport**." (p. 273)

"… large-scale international operations at a new airport on the Pickering Lands are not considered to be a viable primary service offering that solely justifies development of a new airport. This option was **discounted due to conflicting current and future roles with Toronto Pearson Airport.**" (p. 274)

4.1.6 Option D: Passenger Feeder Airport

"A new airport on the Pickering Lands supporting [domestic and transborder scheduled and domestic, transborder, and international charter services] would have a defined role as a **Feeder Airport**." (p. 274)

"In consultations with air carriers, some expressed resistance to splitting their core hub operations between Toronto Pearson Airport and a new airport on the Pickering Lands." (p. 275)

If five carriers were invited to participate and only three responded, as reported earlier, then how many are "some"?

"For this reason and due to the close proximity to Pearson Airport, it is considered unlikely that a new airport on the Pickering Lands would be developed solely to feed a major hub airport. **This option was therefore discounted**."

4.1.7 Option E: Major Air Cargo Airport

"A new airport on the Pickering Lands supporting [domestic, transborder, and international scheduled and charter cargo services] would have a defined role as a **Primary Hub (Cargo) Airport**." (p. 275)

"Hamilton Airport's location, facilities, and lack of operational restrictions make it an appropriate location to continue serving domestic, transborder and international air cargo carriers. Developing a new airport on the Pickering Lands with the primary goal of serving the air cargo market in southern Ontario would compete directly with Hamilton Airport's established service types and role and would not satisfy the 'minimize negative impacts' evaluation criteria. **For this reason, it was discounted**."

4.2 Option Evaluation

"1. Minimal service overlap with existing airports in the system

2. Potential for financial and operational success

a. anticipated business interest in the option,

b. availability of talent with relevant skills, and

c. availability of existing infrastructure / ability to build new infrastructure to support the airport." (p. 276)

4.3 Summary of Evaluation

"The assessment … identified two options as candidates for further analysis." (p. 278)

5.0 AIRPORT DEVELOPMENT REQUIREMENTS

"There is significant uncertainty related to the conceptual design of a new Airport on the Pickering Lands. Two of the greatest sources of uncertainty are related to the airport role and to the timing of airport development:

1. Airport Role … **airport options are based on a perceived market opportunity, rather than based on excess demand relative to existing capacity**, the realization of the airport role(s) depends on business interest in pursuing the opportunities." (p. 279)
2. Timing of Development - Forecasting aviation demand for the purpose of airport development planning is challenging and depends on many underlying assumptions. Further, as the development concepts contemplated in this report are based on market opportunity, rather than excess demand, it is even more difficult to accurately predict the 'right' timing for development of a new airport. For example, while industry trends can be monitored, one cannot accurately predict when an aircraft manufacturer may elect to relocate operations or when and where a new passenger air carrier may enter the market.

While these uncertainties exist, their impacts can be mitigated through effective land use planning, and by developing a phased approach to airport development to allow the airport the opportunity to change service types and roles over time. These approaches can help improve the chances for airport success." (p. 280)

There follow 27 pages of assumptions and considerations to do with the two options left standing, covering small and medium development concepts (including suggested runway layouts). Because Report #1 has already shown that neither of these airport types is needed, this section can only be seen as an exercise to fulfil a contractual requirement, and is otherwise of little value.

6.0 LAND USE

6.1 Land Use Designations

6.1.3.1 Fixed Based Operations

"A fixed-base operator (FBO) is a business dedicated to servicing and supporting local and transient (visiting) aircraft … cater to corporate and general aviation customers, such as charter flights, business jets, and recreational pilots … fueling, aircraft parking and storage, ground support, the sale of pilot supplies, and aircraft de-icing. The main components of FBO facilities include hangar(s) and associated apron space, lounges, offices, and pilot briefing rooms." (p. 311)

6.1.3 Aviation commercial

6.1.3.2 Manufacturing, Maintenance, Repair, and Overhaul [MRO]

General note re this section: ***Only aircraft manufacturers and aircraft maintenance hangars actually need access to a runway. All other aviation sector business can be located anywhere; e.g., famous landing gear company Dowty has prospered in airport-free Ajax for over 70 years.*** https://www.dowtyheritage.org.uk/content/category/dowty-group/dowty-canada

"A unique Aviation Commercial use is business dedicated to the manufacturing of aircraft or aircraft components … facilities for the completion of aircraft (final assembly lines) ..." (p. 311)

"The manufacturers of aircraft components, such as avionics and engines, may also choose to locate themselves on airport lands. However, **the need for airside access is less critical as the components produced may be shipped for use elsewhere**."

"MROs are businesses that cater to the servicing, repair and refurbishment of aircraft through their staff of qualified engineers and technicians. Aircraft of all types and sizes require routine maintenance, inspections, and ad-hoc repairs, with MROs catering to one or more of these areas." (p. 312)

6.1.4 Non-Aviation Commercial

"Certain uses [businesses that do not require airside access] may be discouraged because of their propensity to:

- attract birds and wildlife, which may strike or be ingested by aircraft;
- be noise-sensitive, meaning that the user may experience annoyance from aircraft operations; and
- generate exhaust plumes that reduce visibility or cause other hazards to aircraft." (p. 315)

6.1.6 Airport Reserve

"The Airport Reserve contains lands for which it is not currently practical to designate for specific uses." (p. 317)

"In the interim, the Airport Reserve designation **limits development and protects the existing creek systems on the western portion of the Pickering Lands**."

Which suggests that the creek systems of the western portion (immediately adjacent to the national park) would not be protected once an airport was built.

7.0 NEW PICKERING AIRPORT GOVERNANCE OPTIONS

7.3 Canadian Airport Governance

7.3.1 Option 1 – Privately Owned and Operated

"The private entity **would be obliged** to use the Pickering Lands for an airport…" (p. 321)

7.3.2 Option 21 – Municipally Owned and Operated

"… the federal government would transfer the Pickering Lands to the municipality … The municipality, as owner and operator, is responsible for funding both capital and operating costs of the airport. Operational budgets and capital projects would therefore be funded through airport operating revenues, funding from upper levels of government, and from the municipal tax base." (p. 321)

"An example is … **Waterloo Airport**, which is owned and operated by the Regional Municipality of Waterloo ... in 2017 43% of the revenue came from fees and charges collected by the Airport **and 57% came from tax levies**, excluding debt servicing." (p. 322)

"An example [of a municipally owned and contractor operated airport] is **Peterborough Airport**, which is owned by the City of Peterborough and operated under contract by the Loomex Group … funding comes from airport revenues, **municipal subsidies**, and various federal and provincial programs that assist with airport development."

7.3.3 Option 3 – Municipally Owned and Airport Commission Operated

"… the Pickering Lands would be transferred to the municipality (e g., a region, city, township, or a combination thereof) which would establish an airport commission. An airport commission is a semi-autonomous group of individuals appointed by the municipality that focus on the planning, management, development, and promotion of the airport on behalf of the municipal council." (p. 322)

"Commission members are typically selected based on their skills that are important to develop and operate an airport, including for example knowledge and experience with the aviation industry, airport operations, accounting, law, and marketing. Commission members often use their local contacts to promote the airport and secure funding (e g., including private investments, additional airport revenues, grants or loans). Furthermore, the existence of a qualified commission assists in creating credibility when approaching governments and industry to encourage participation in the development of the airport. The municipality, as the airport owner, continues to carry the legal and regulatory obligations." (p. 323)

"An example … is **Lake Simcoe Airport**, which is jointly owned by City of Barrie, the County of Simcoe, and Oro-Medonte Township … Airport operations, expansion, and improvements are funded from airport revenues and **a subsidy** from the City, County, and Township (which is based on a pre-established cost sharing arrangement)."

7.3.4 Option 4 – Municipally Owned and Airport Authority Operated

"… the Pickering Lands would be transferred to the municipality (e.g., a region, city, township, or a combination thereof) and an airport authority would make all decisions concerning airport planning, funding, construction, customer relations, and would be responsible for complying with all applicable laws and regulations. In this option, the airport authority becomes the operator of the airport and the municipality becomes the landlord." (p. 323)

"An example … is **Iqaluit Airport** … owned by the Government of Nunavut, reporting through the Department of Economic Development and Transportation, and operates under a 30-year contract with Nunavut Airport Services, which is a subsidiary of the Winnipeg Airport Authority."

7.3.5 Option 5 – Transport Canada Owned and Airport Authority Operated

"… the federal government (e.g., through Transport Canada) retains ownership of the Pickering Lands, and the operations are governed by an airport authority. The airport authority has full authority to plan, develop, and operate the airport**. Above a certain threshold of activity at the airport, an annual lease payment would be made to the federal government**." (p. 324)

"An example … is Toronto Pearson Airport … owned by Transport Canada and operated by the Greater Toronto Airports Authority. … It is self-funding with the ability to incur debt by borrowing."

7.3.6 Option 6 – Transport Canada Owned and Operated

"… Transport Canada is the owner, funder, developer, and operator of an airport." (p. 324)

"…rarely implemented …. current examples … **Sandspit Airport** … **Penticton Airport** in British Columbia … **Sept-Iles Airport** in Quebec. Transport Canada has retained ownership and operations of these airports because of **challenges associated with their transfer including, for example, land claims, remoteness, and complex multi-party agreements**."

7.4 Governance Considerations

7.4.1 Land Control

"Ongoing ownership of the Pickering Lands by the federal government would help ensure that the federal government is a stakeholder of any future airport." (p. 326)

7.4.2 Initial Capital Investment

"The **initial construction of an airport on the Pickering Lands could potentially be cost prohibitive to a municipality** considering using its own resources. **Under the National Airports Policy, however, the federal government cannot make financial contributions to airport authorities that operate on federal lands. Accordingly, under the current policy framework, the federal government could not be a source of capital financing for the airport development**." (p. 326)

> ***Finally, the truth comes out. No public money available for construction. Private investors must build.*** *But on pp. 359-360, KPMG lays out "***the minimum values for three key financial metrics that would likely be required for a private sector investor to consider investing in the development of a new airport***," including this: that "***[a]nnual cash flows are positive within five (5) years* **of beginning opening** ***[sic]." How could any small Ontario airport pass a standalone, cash-flow-positive hurdle within 5 years?!*** *On p. 326, it's suggested that a* ***municipal or Ontario loan/subsidy would be needed until the airport operations can meet operating costs, which few small airports in southern Ontario ever do. If a Pickering airport were uniquely given this financial support, all small airports would demand that they too receive, in fairness, the same treatment and loans/subsidies to cover their operating losses.***

"With municipal and federal financing unlikely, this leaves external sources to fund such an undertaking. Private sector funding may be available under an arrangement such as a public-private partnership (P3) It should be emphasized that a P3 is not an airport governance structure. A P3 is a mechanism which allows governments to have high-cost infrastructure built in conjunction with the financing and expertise of the private sector."

"The private sector assumes the major share of the risks, and expects a return on investment commensurate with the risks it is assuming and it will also require an influential voice and participation in an independent, and effective governance structure."

7.4.3 Initial Operating Investment

"…initial phases of airport operations, the revenue generated may not cover the operating costs of a new airport on the Pickering Lands, depending on factors such as the level of traffic at Pickering. There may need to be **some form of loan or ongoing subsidy provided to the airport operator until the revenues from operations can meet operating costs**. The sources of this financing could potentially include **subsidies or a repayable loan from local municipalities or the Province**." (p. 326)

"The option exists for an **airport operator to fund the initial operating losses as part of a long-term contract to operate the airport**. The operator would expect to recover the initial losses as the airport revenues grow to the point of an operating surplus."

7.4.6 System Competition

"Any airport developed on the Pickering Lands will provide some level of competition to other airports in the southern Ontario airports system. It is in the best interest of the southern Ontario airports system that a **governance option is selected that does not provide a new airport on the Pickering Lands with a competitive advantage at the expense of the existing airports**." (p. 328)

7.5 Governance Options Evaluation
7.5.1 Option 1 - Privately Owned and Operated

"… involves Transport Canada selling or transferring under a long term lease the ownership of the Pickering Lands to a private entity for it to develop and operate the new airport. **The Pickering Lands have been held for over 40 years with the intention of constructing an airport, therefore it would be difficult for Transport Canada to sell or transfer the Lands if the final use was not aviation related**." (p. 329)

*Note the difference in wording between this para and 7.3.1. "*It would be difficult to*" is not the same thing as "*would be obliged to*." (our underlining in all cases)*

"It would be unusual in the Canadian airport governance context to sell outright lands reserved by the federal government for airport use. In this case, the **federal government would need to ensure the ongoing use of the lands is tied to an airport**." (p. 330)

And note the difference in wording between this para, the one above, the one under 7.3.1, and the one below. When does mandatory become optional?

7.5.2 Option 2 – Municipally Owned and Operated or Contractor Operated

"… the Pickering Lands would be transferred, sold or leased to a municipality, with specific **conditions and controls to ensure that the property is used for aviation purposes.** If the property were to be sold to the municipality at fair market value, the cost may be prohibitively expensive, which would be compounded by the cost to develop the required supporting infrastructure. The **municipality would need to generate this revenue from its tax base. In addition, the municipality would need to provide operating subsidies in the initial years of operation**." (p. 330)

"Using a contractor would relieve the owner municipality of the day-to-day operating responsibilities, but there would be **additional costs to compensate the contractor, including the contractor's profit margin**."

"Assuming the contractor does subsidize operations in the initial years, this cost-plus interest would need to be repaid over the period of the contract." (p. 331)

7.5.3 Option 3 – Municipally Owned and Airport Commission Operated

"… the **ownership of the property would be assumed by a municipality** and the **significant capital outlay and potential operating subsidies would be borne by the municipality** itself, or through arrangements with the private sector." (p. 331)

"The … difference between Options 2 and 3 is the i**ndependence that an airport commission has from municipal government's decision-making processes.** The development and operation of the airport would be the primary focus of the commission, versus the various and potentially conflicting

responsibilities of municipal officials Members of the commission, appointed by stakeholders, would bring expertise and credibility to the management of the airport, providing confidence to potential investors."

7.5.4 Option 4 – Municipally Owned and Airport Authority Operated

"… the **land [is] transferred to a municipality**. The airport would be operated, under a contractual arrangement, by a new or existing airport authority." (p. 331)

"The benefit of contracting operations to an established airport authority is that it would bring its proven knowledge and expertise to the airport operation, with this option also relieving the municipality of the operating and management burden of the airport. Initial capital and operating costs would likely be borne by the owner municipality: however, an airport authority may be able to bring capital investment."

"In the case of the Pickering Lands, **the municipality would have responsibility for developing the airport. This would require significant management efforts and unique expertise that is different from operating an existing and established airport**." (p. 332)

"If an existing airport authority were to operate a new airport on the Pickering Lands it would have obligation to the operation of their "home" airport and a new Pickering Airport. The diversion of significant management efforts to focus on a new airport could cause concern with the "home" airport stakeholders. The **airport authority could be placed in a difficult or conflicting situation for decisions that affect both airports**, particularly if they operate another airport in the southern Ontario airports system."

> *A thinly veiled warning that **the GTAA would have a conflict if it were to operate a Pickering airport.***

"The primary disadvantages related to this option involve the **role of the municipality**, as it would be responsible **for funding the significant capital outlay and operating subsidies in the initial years**." (p. 332)

7.5.5 Option 5 – Transport Canada Owned and Airport Authority Operated

"The authority would need to develop and operate the airport on a demand-driven basis using common business principles." (p. 332)

"This option exhibits many of the important considerations for good governance identified in Section 7.1, as well as increased investor confidence. shareholder involvement, and flexibility to change as the airport grows."

7.5.6 Option 6 – Transport Canada Owned and Operated

"Transport Canada would own the Pickering Lands and be responsible for the initial capital expenses and ongoing funding of a new airport." (p. 332)

"While Transport Canada does own and operate some small airports today, the **airport expertise** the department once had in the 1980's **was significantly reduced** with the establishment of local airport authorities."

"… there is inherent conflict in acting as airport owner, operator, and regulator." (p. 333)

7.6 Governance Findings

"3. A new airport on the Pickering Lands …has the potential to impact other airports. **It is important that the decision to develop a new airport is based on a sound business case**." (p. 333)

"5. Developing an airport on the Pickering Lands **would be a complex and challenging process**."

"Option 3 (Municipally Owned and Airport Commission Operated) [e.g. Lake Simcoe Airport] and Option 5 (Transport Canada Owned and Airport Authority Operated) [e.g., GTAA] have **independent, knowledgeable, experienced and autonomous groups responsible for all aspects of airport planning, development, marketing, operations and business management**. Furthermore, these options are **potentially more attractive to large private sector investors**. Based on the findings above, an airport authority or commission is well suited to govern a new airport on the Pickering Lands."

8.0 CONCLUSIONS

"A new airport on the Pickering Lands is not anticipated to be required to accommodate a shortfall in air passenger capacity within the southern Ontario airports system before the 2036 horizon of the Supply and Demand Report. Forecast air passenger demand up to 2036 can be accommodated by the existing facilities of the southern Ontario airports system with modest improvements to airfield, air terminal, and groundside infrastructure, in addition to technological advancements in air traffic control. However, it may be desirable to develop an airport on the Pickering Lands before it is required to accommodate a projected passenger capacity shortfall in the southern Ontario airports system. **Development of the airport could instead support industrial developments in southern Ontario** and provide improved access to air services to travelers in East GTA." (p. 334)

"The location of a new airport on the Pickering Lands is likely to be compatible with reliable access to existing surface transportation modes to facilitate growth of business and/or passenger service."

"The most appropriate options … are an **Industrial Airport** (providing Aviation Commercial Development Lots) and **a Specialty Passenger Airport** (facilitating point-to-point scheduled and charter passenger air services, including those by ULCCs)."

"An **independent Airport Commission or Airport Authority with** appropriate representation from stakeholders is likely to be the most effective **governance model** for the development, management, and operation of a new airport on the Pickering Lands – assuming Transport Canada retains ownership of the facility.

> *There is an oddly schizophrenic character to this report. It pulls in two directions, and feels as if the authors of the conclusions had already forgotten their findings in the previous section (7.6). Within the space of two pages, the text undergoes a dramatic transition. After starting the conclusions with strong cautions about proceeding with any kind of airport on the Pickering Lands, and after raising legitimate issues, and after insisting on the importance of a sound business case, and after repeating (slightly softened) the conclusion of Report #1 – that no airport is needed within the period covered by the study – the authors then, in the very same paragraph, toss straight out the window the concept of "need" as a requirement. They replace "need" with "desire": "*However, it may be desirable to develop an airport…*". And from then on, the tone is that of airport-project facilitator. What happened here?*

APPENDIX C – AIRPORT DEVELOPMENT CONSTRAINTS

Airport Zoning Regulations

"The current AZRs in force for the Pickering Lands were published in 2004…" The text refers to the transfer of "significant portions" of the Lands to Parks Canada, and now "the current AZRs may overprotect for a new airport." (p. 350)

> *The post-Rouge National Urban Park draft AZRs never resurfaced after the public consultation in which we participated, but this report (p. 353) states that "*the new AZRs were submitted to the Canada Gazette in 2015, and are still in the final stages of approval and enactment,*" and describes the new AZRs has having a three-runway configuration. We have not seen those new AZRs in the Canada Gazette.*

Rouge National Urban Park

> *Conflicts in text (p. 353): Refers to RNUP's position adjacent to* "the site of the future Pickering Airport" *as if the airport had been approved or as if its approval were certain. Anticipates as the biggest issue* "the environmental impact of a new airport" *and lists some of the things that could have an adverse effect on flora and fauna in RNUP:* "the noise generated by aircraft, aircraft and vehicle emissions and glycol runoff from aircraft de-icing operations." *(our italics) Also notes that RNUP* "could attract large bird populations" and *says that the Environmental Assessment would identify appropriate mitigations to minimize impacts. The authors seem to have known nothing about the substantial resident Canada Goose population, or how "minimizing" impacts would still destroy the integrity of the Park by undermining its mandate and harming the flora and fauna in it.*

Revenue Generation and Economic Impact Assessment Report
March 2019

1 Introduction
1.3 Study Assumptions, Limitations and Use of this Report

"The document should be considered in its entirety, and in conjunction with the other three reports … Selection of, or reliance on, specific portions of this document could result in the misinterpretation of comments and analysis…." (p. 367)

2 Approach, Method, and Key Assumptions
2.1.3 Case Study Findings

"Most industrial airports are located either on former military bases or on former municipal airports that have become surplus…" (p. 369)

In other words, the airports used existing infrastructure, which was highly cost-effective.

The findings for passenger airports (p. 370) were partly redacted, but it can be deduced from what's still visible that secondary or reliever airports that have captured good market share had "historically been primary passenger airports" *and were closer to the city. Even so, it appears that* ***a 9.5% market share is the upper limit for a secondary passenger airport****.*

2.3.1 Scenarios Developed

Six Pickering scenarios were chosen for investigation (p. 371-374). KPMG has indicated timeframes for the construction of each type of airport but doesn't explain why every scenario starts into construction in 2026, making every type of airport operational anywhere from one to eight years before the year (2036) in which KMPG has already said there would still be no airport capacity issue requiring the addition of a new airport.

2.3.3.3 Specialty Passenger Airport Tenants

It is thought that a private-sector investor would probably be willing to invest in developing an airport if an air carrier committed to making that airport its headquarters (p. 382). But what are the chances? The authors are suggesting LCC and ULCC carriers, which, as they've already taken pains to point out, are precarious operations at the best of times. With climate change added to the equation, those carriers will likely be the first to disappear.

2.3.4.4 Significant Specialty Passenger Airport

*For this type of airport, KPMG is actually predicting "*high growth rates in the first five years*" during which the facility would reach "*90% capacity*" (p. 386) – and this with two ULCC or LCC airlines established there. Again, in a time of climate crisis?!*

In the rest of this report, lines of text and virtually all "Exhibits" (presumably figures and tables) have been redacted.

Conclusion

The report cautions that its content is not comprehensive, is inconclusive, just some scenarios based on a set of assumptions that might be a useful tool; study is exploratory: no definite

conclusions can be drawn. Potential investors would need to do their own analyses, draw their own conclusions.

"All six scenarios share the following common assumption set:
. Development of an airport on the Pickering Lands would be subject to market forces." (p. 447)

"There is a significant level of uncertainty associated with the assumptions used to generate the scenarios, and it is likely that the future will deviate from the assumptions presented in this report."

In other words, nothing in this report is solid or has much credibility, and can't be used as a basis for decision-making. How much did this cost taxpayers?

APPENDICES

Appendix B: Study Assumptions

General comments:
Everything is viewed through the lens of continued growth. The climate crisis and emissions-reduction targets are not part of any assumptions. The closest the authors get is this, under environmental impacts: "New generation aircraft with lower signatures and lower emissions will increasingly enter airline fleets potentially serving a new Pickering Airport." (p. 459) *That's it. And no mention of high-speed rail here…*

Appendix D: Potential Costs
D.1 Capital Costs for Airport Development
D.1.1 Key Assumptions

"It was assumed that the airport will be constructed with common construction techniques and materials. [Those] currently under development have not been considered." (p. 483)

This means that the authors chose business-as-usual construction, with no sustainable or low-emissions techniques or materials…, etc. By making this choice, they failed to take into account Canada's Paris Agreement emissions-reduction commitments of four years earlier. The question keeps surfacing: Did they really fail to do this? Or were they prevented or dissuaded from doing it?

"The identification of protected flora and fauna on the airport site … may result in addition of modification of the proposed airport infrastructure. … The presence of archaeological heritage … could also result in additional costs…"

"Pavement design is dependent on the bearing strength of the soils …. The pavement structure assumed that soils on the Pickering Lands are typical of those found elsewhere in the region." (p. 484)

Appendix E: Potential Revenue from Pre-construction Land Use
E.5.1 Constraints – Timeframe

Synopsis: Permanent structures are unlikely to be built on the Lands because there would be too little time for return on investment before an airport was built. They might be possible only in places where airport construction could go on without having to decommission the buildings. Not practical to start building in designated development areas before construction of an airport starts; a government decision is required to approve an airport. (pp. 488-489)

E.5.2 Temporary Uses

Synopsis: The report looks at far more possibilities than the Polonsky Report did. It assesses agriculture, parkland, parking, SWM, light industrial, special events, rec areas, disaster recovery area, seasonal commercial uses. Gives strong reasons for not considering most of them. Special events and seasonal uses are possibilities but still have major drawbacks. ***Only agriculture is tried, true, and "proven." Conclusion: the status quo is the best option.*** *(pp. 489-490)*

E.6 Magnitudes of Potential Pre-construction Revenues

*Synopsis: Transport Canada is already leasing "*approximately 98% of the total workable area for agricultural uses,*" with no potential for increasing revenues by increasing occupancy. (p. 491)*

On agricultural leases: *Currently, Transport Canada is already charging a premium cash rent of $120 per tillable acre on Lands. Perth County's rents can be as high as $300/acre! But mostly, farmland runs between $50 and $100 elsewhere, so Transport Canada couldn't count on being able to charge much more, and very little increase in revenue could be expected. In other words,* ***the status quo is likely the best option.***

…….

End Note

In the Introduction to the KPMG Report (p. 18), the authors remind us that the GTAA's 2010 Needs Assessment Study indicated that need for an airport "would ultimately be event driven and not time driven." Neither the GTAA in 2010 nor KPMG in 2016 (and 2018 and 2019) could have known how prophetic that indication would turn out to be. While they might have foreseen turbulent times ahead as the climate crisis deepens and as individuals and industry sectors are forced to dial back expectations, rethink practices, and alter priorities in a rapidly changing world, only the most prescient could have begun to imagine the unprecedented global shutdown brought about by COVID-19.

And yet, without considering the potential negative effects of the climate crisis on aviation, and without knowing about COVID-19, KPMG still concluded, unequivocally, in 2016, that a Pickering airport would not be needed by 2036, the end-date of the study. The Supply and Demand report identified ways to develop enough capacity within the existing southern Ontario airports system to far outstrip 2036 demand. As a result, the various scenarios for "economic stimulus" airports, explored in subsequent reports, come across as empty exercises, disconnected from actuality. With the havoc that the climate and pandemic crises will continue to wreak on our world – their full impact and timelines as yet unknown (although they will be grave and long-term) – it's as clear as can be that **the likelihood of ever needing a new airport at Pickering is now less than zero. The 1960s plan is well and truly dead**.

The time has come for the Federal Government to end the decades of imposed paralysis on North Pickering. It must allow the Federal Lands to thrive again and serve a greater, common good. How better than by resurrecting them as North Pickering Farms, which could be an important and sustainable contributor to the economy of Durham Region, a vital training ground for the next generations of farmers, and a crucial, secure source of fresh local food for Canada's largest population base? Today's realities and the imperilled future demand farsighted action just like this.