Economic Impact Considerations of an Expanded Billy Bishop Toronto City Airport

Prepared for the City of Toronto
Final Report
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HLT ADVISORY

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1. Introduction

Background and Objectives

Introduction

Toronto-based Porter Airlines has requested that the City of Toronto ("City") agree to amendments of the 1983 Tripartite Agreement between the City, Toronto Port Authority and Transport Canada in order to permit jet aircraft to take off and land at Billy Bishop Toronto City Airport ("BBTCA"). At the May 7, 2013 City Council meeting, the City Manager was instructed to report back to Council addressing (bullet points shortened from May 7th Council Decision):

- the approval process required to amend the Tripartite Agreement;
- how to remove the exclusion of jet aircraft from the airport while maintaining the current noise limitations;
- the potential economic impact/opportunity associated with amending the Tripartite Agreement;
- whether recent or anticipated changes to Runway End Safety Areas may require changes to runway lengths at BBTCA;
- the potential noise, environmental and traffic/congestion impacts as well as any impacts on the City's waterfront work; and
- other factors that should be considered by Committee and Council.

Various consultants and external advisors have been engaged to address these requirements. This report, prepared by HLT Advisory, focuses solely on the economic impact/opportunity associated with increased activity at BBTCA.

Objectives

Given the original three week time period, the consultant was expected to make best efforts to collect and analyze data to indicate the type and magnitude of impacts expected to result from the introduction of jet aircraft to BBTCA, including commercial impacts related to scheduled aviation, Waterfront development, potential impacts on key sectors such as film and media industries operating in the Port Lands, potential benefit for the manufacturing of aircraft in Toronto, tourism and other business development.

The following report documents the findings and conclusions from this analysis.

Scope and Limitations of Work

HLT undertook the following steps to complete this assignment.

- Met and consulted with City staff and Waterfront Secretariat representatives and others as necessary to fully understand the project, gather background and insight and to confirm deliverables.
- Reviewed and commented on the Billy Bishop Toronto City Airport (YTZ) Economic Impact Study, InterVISTAS Consulting Group, October 25, 2012 and the Waterfront Toronto Economic Impact Analysis (April 2001 – March 2013), UrbanMetrics Inc., April 26, 2013.
- Reviewed a wide range of background documents on BBTCA and/or other downtown/regional airports within Canada or internationally. A list of documents reviewed is included in the Appendix.
- Interviewed a cross-section of stakeholders. A list of interviewees is included in the Appendix.
- Analyzed Porter Airlines data to determine incremental arrivals following introduction of Porter service to existing destinations.
- Researched North American destinations where city centre/regional airports coexist with major international airprts. In these examples we will identify relevant operating and usage information.
- Analyzed historical city-pair information between Toronto and a finite number of North American cities not currently served from BBTCA (to include Miami, Los Angeles, Vancouver and Calgary).
- Identified other North American cities with airport/rail link connections to the downtown core and analyze usage.
- Interviewed representatives of selected industry sectors (e.g., film and media) active in the central waterfront to identify potential usage patterns of air service to BBTCA from North American origins outside of the current 500 km range.
- Interviewed selected tourism industry representatives to identify potential benefits of air service to BBTCA from North American origins outside of the current 500 nautical mile range.
- Conducted a high-level market analysis focused on potential air activity between Toronto and other North American cities outside the current 500km Q400 range.
- Estimated economic impacts, both qualitative and quantitative, of introducing longer-haul aircraft into BBTCA.
- Drafted a scope of work for additional analysis (as well as identifying incomplete worksteps from the current analysis, given timeframes), should the City of Toronto wish to pursue expansion of the BBTCA.

Scope and Limitations of Work (Cont'd.)

In completing this analysis, HLT focused on the:

- Potential increase in passenger loads through BBTCA without consideration of which airline(s) would handle this increased activity ;and
- Economic and business benefits/challenges derived solely from increased passenger activity (HLT was not engaged to consider stakeholder interests other than airport/airline stakeholders and airport/airline users.)

After completing these steps we prepared the following report.

2. An Overview: City Centre/Regional Airports

Evolution of City Centre/Regional Airports

Many of North America's and Europe's existing city centre and/or regional airports commenced operation as the principal airport serving the host community (e.g., Edmonton Municipal, George Best Belfast City Airport) and have evolved into a supporting airport to a newer, larger, international airport. In a select number of other cases, historically, either general aviation needs (e.g., BBTCA) or a need for specialized commercial air service (e.g., London City Centre Airport) has spurred airport development and ongoing operations.

A brief summary of four city centre/regional airports is provided below to provide context for current BBTCA operations.

Edmonton City Centre Airport (ECCA)

Opened: 1929
Location: Less than 5km to city centre
Owned/Operated by: Edmonton Airports (also operator of Edmonton International Airport)
Passengers: scheduled services ceased in 2009
Economic output (1995): $388 million direct, indirect and induced economic output (source: InterVISTAS)

ECCA and Edmonton International Airport (EIA) were consolidated under Edmonton Airports in 1995. Among other reasons for consolidation was a belief that ECCA inhibited Edmonton from non-stop service to more destinations (as passengers used ECCA to transfer through Calgary International).

In the year prior to consolidation, EIA handled 1.9 million passengers while ECCA handled 900,000. In 1996, EIA handled 3.1 million passengers while ECCA handled 500,000 for a total of 3.6 million (some 800,000 more passengers than the last year of unconsolidated operation). EIA handled more than 6 million passengers in 2012

ECCA is currently used as a general aviation runway although complete **closure will occur Nov 30** in order to create an "environmentally friendly community of 30,000 residents."

London City Airport ("LCA")`

Opened: 1987
Location: Less than 7 km to Canary Wharf/12 km to City of London
Owned/Operated by: Private joint venture
Passengers: 3 million + (2012) including 360,000 inbound business visitors and 313,000 leisure visitors to London*
Economic output (2009): £100 million gross value added*
**London City Airport, Integral to Growth—The Economic Significance of London City Airport, February 2011*

LCA operates with a single runway on a very constrained land parcel in East London. A master plan through 2030 has recently been prepared showing potential growth in passenger volume to 8 million passengers/annum. LCA is connected to the London Underground via Docklands Light Railway.

Since inception, LCA has been positioned as a business airport serving Canary Wharf and the City of London in addition to nearby meetings/convention and sports infrastructure (i.e. Excel Centre, Olympic Stadium).The majority of flight activity is centered on major European financial capitals (e.g., Zurich, Frankfurt, Amsterdam). Significant commercial relocation has taken place from the City and west London to Canary Wharf (e.g. Barclays, Citigroup, KPMG, Thomson Reuters) with access to LCA repeatedly cited as a differentiating factor.

City Centre/Regional Airport Examples (cont'd.)

William P. Hobby Airport Houston ("Hobby")

Opened: 1927
Location: about 10 km from city centre
Owned/Operated by: Houston Airport System (also operates George Bush Intercontinental Houston Airport)
Passengers (2012): 10.2 million
Economic output (2011): US$4.5 billion (source: GRA, Incorporated)

Hobby served as Houston's primary airport until 1969 when George Bush Intercontinental Houston Airport opened. Since that time, Hobby has operated solely as a domestic airport with Southwest Airlines the dominant player among six scheduled carriers.

In 2012, Southwest Airlines initiated a process to have Hobby handle international flights (with a focus on Mexico as well as Central and South America destinations/origins). United, the principal carrier at Bush Intercontinental, vigorously opposed such a measure on the basis that two international airports serving the same geographic market would result in flat-line passenger growth. United also contended that Southwest's pricing structure was non-economic and that converting Hobby to an international airport would result in 3,700 lost jobs.

Following extensive debate, with both "sides" offering a range of analyses supporting their positions, Houston City Council approved the introduction of international flights to Hobby commencing in 2015. Southwest has commenced construction of a US$150 million + terminal to handle an anticipated 1.5 million additional passengers.

George Best Belfast City Airport ("Belfast")

Opened: 1938 (sustained commercial operation since 1983)
Location: 5 km from city centre
Owned/Operated by: Eiser Infrastructure Fund (separately owned/ operated from Belfast International Airport)
Passengers (2012): 2.5 million (65% business passengers)
Economic output : n/a
Source: http://www.belfastcityairport.com/ and York Aviation

Belfast airport originally started as a base of operations for aircraft manufacture, operated as a passenger and military airport through the 1970's and became a commercial airport in 1983. Similar to BBTCA, Belfast is governed by a 1997 "Planning Agreement" that limits the number of flights (48,000/annum), number of seats available for sale (4 million), hours of operation (6:30 am – 9:30pm) and a proposed noise cap.

The threat of a noise cap has spurred analysis of various growth options for Belfast including a "low" scenario (close UK cities), "medium" (several European cities) and "high" (UK and European) cities as well as outbound Mediterranean destinations. A study completed by York Aviation quantifies the economic outputs of the various options and suggests the "medium" growth scenario strikes the appropriate balance between increased inbound/outbound traffic. The York Aviation study also speaks to the attractiveness of multiple airports operating within a given location from a cost competitiveness, business location/support/retention, and improved air connectivity.

Business/Economic Arguments for City Centre/Regional Airports

The business and economic arguments in favour of, or opposed to, regional/downtown airports can broadly be grouped as follows:

- Demand—regional/downtown airports ultimately survive or fail based on demand, and exist to serve both residents and local businesses. Many of these airports have focused on the business traveller (e.g. London City Airport) where proximity to the business core is seen as a distinct advantage resulting from efficiency and time savings. Such demand is not necessarily incremental to the market however, as a portion of pre-existing demand could be transferred from the primary or other nearby airport;
- Connectivity—the benefits of efficient air connections (and follow-on connections via other transportation modes) is beneficial from a business location, business support and business retention basis, a benefit that continues through to employees in a highly mobile operating environment;
- Convenience—location factors of the airport (proximity to office or residential concentrations, transit access) can appeal to traveller segments (e.g., BBTCA and Edmonton Municipal). This can be seen on a smaller level with heliports and similar air service operations (e.g., Helijet and Burrard Air operations from Vancouver harbour to Victoria);
- Price competitiveness—competition among multiple carriers is most often cited as a benefit to consumers. While arguments have been made that competitive airports can drive fares below the profitability threshold (e.g., United versus Southwest regarding Hobby Airport), independent research confirmed that competitive airlines do not operate below profitability;
- Consolidation versus fragmentation—depending on the location, demand patterns and alternate services, arguments can be made to consolidate airport operations (e.g., Edmonton Airport's decision to combine Edmonton Municipal with Edmonton International resulted in substantial incremental passengers from many more points of origin) or permit a degree of fragmentation (e.g. Houston Airports permitting international flights to operate from Hobby);
- Economic output, job creation and revenues to government—commercial airport operations generate substantial economic activity given the labour intensiveness of the industry, significant tax burden on purchases (i.e., airfares) and significant local value added potential (limited import substitution). Not all economic output will be incremental to the destination however;

Only a very limited number of negative business and economic arguments are routinely made about regional/downtown airports. Most of these centre on noise and traffic congestion or on the commercial aspects of multi-airport operation within a single market (e.g., predatory pricing, consolidation of traffic to build critical mass of passengers).

3. Air Access and Activity To/From Toronto

CANADIAN AIR PASSENGER ACTIVITY

BBTCA and Pearson airports are among the ten busiest airports in Canada when measured by total enplaned and deplaned passengers. Passenger volume through Pearson has grown 17.5% since 2006 increasing from 29.7 million passengers to 34.9 million passengers in 2012.

Top 15 Canadian Airports by Passenger (Enplaned+Deplaned) Totals

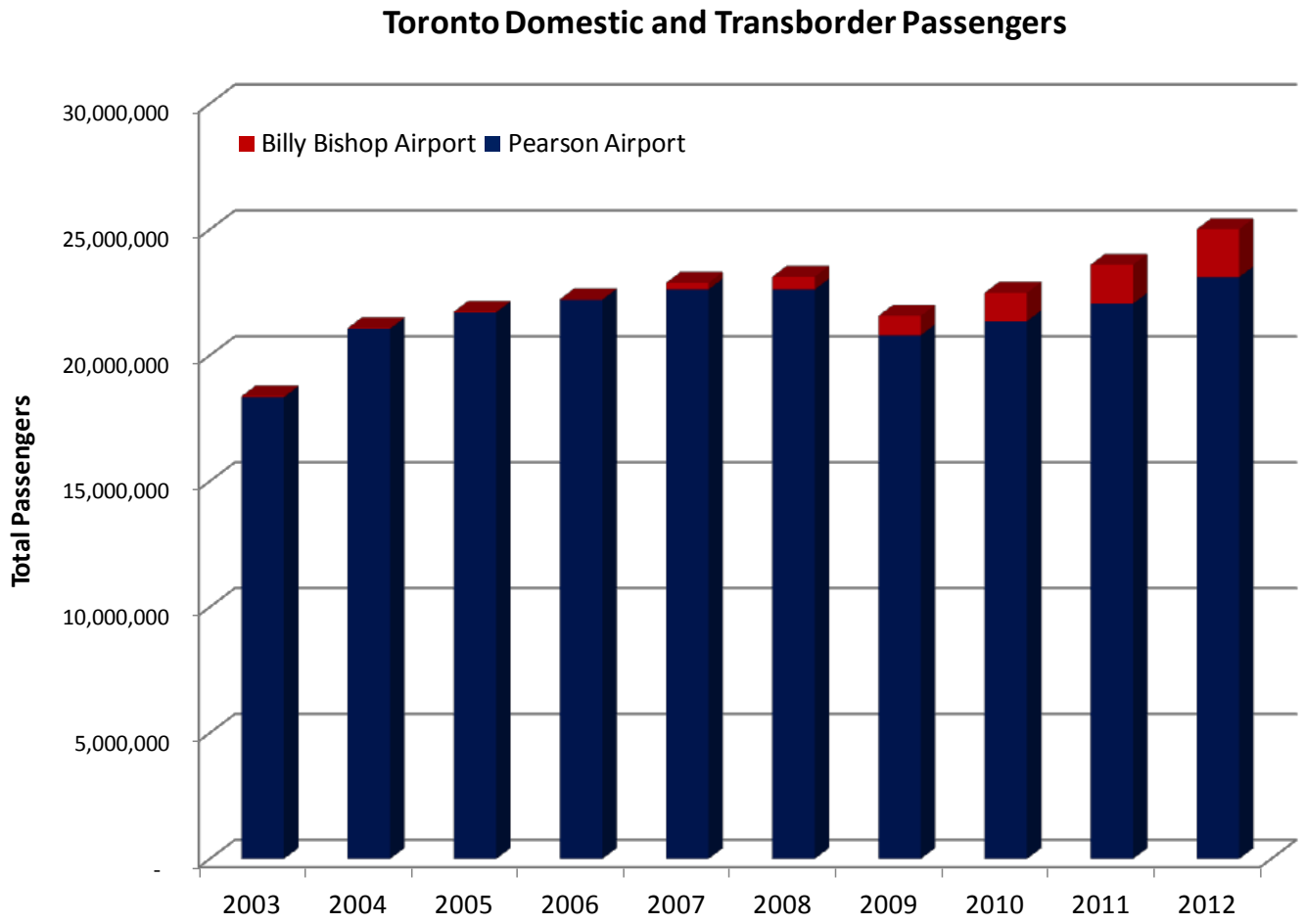
			2006	2007	2008	2009	2010	2011	2012
1	Toronto Pearson International Airport	Toronto	29,688,029	29,673,319	30,531,483	28,937,765	30,856,749	32,278,458	34,912,029
2	Vancouver International Airport	Vancouver	16,253,477	16,951,591	17,108,871	15,503,645	16,255,724	16,394,986	17,596,901
3	Montréal-Pierre Elliott Trudeau International Airport	Montreal	11,476,528	12,308,792	12,163,987	11,706,936	12,609,493	13,228,564	13,798,821
4	Calgary International Airport	Calgary	11,186,340	11,884,221	12,210,006	11,255,833	11,775,287	12,073,264	13,641,246
5	Edmonton International Airport	Edmonton	5,302,239	5,817,558	6,230,818	5,787,512	5,981,256	6,156,730	6,676,445
6	Ottawa Macdonald-Cartier International Airport	Ottawa	3,688,499	3,962,579	4,156,884	4,089,624	4,239,168	4,359,055	4,685,956
7	Halifax Stanfield International Airport	Halifax	3,330,941	3,346,526	3,463,249	3,318,498	3,427,865	3,482,421	3,605,701
8	Winnipeg James Armstrong Richardson International Airport	Winnipeg	3,574,679	3,554,969	3,551,751	3,305,085	3,384,991	3,383,882	3,538,175
9	Billy Bishop Toronto City Airport	Toronto	22,859	264,454	508,641	770,681	1,130,625	1,548,376	1,909,364
10	Victoria International Airport	Victoria	1,343,819	1,438,707	1,501,189	1,449,966	1,464,349	1,456,782	1,506,578
11	St. John's International Airport	St. John's	1,157,152	1,163,778	1,184,655	1,166,849	1,305,924	1,329,239	1,450,000
12	Kelowna International Airport	Kelowna	1,267,518	1,327,252	1,359,619	1,280,197	1,364,496	1,355,975	1,440,952
13	Québec City Jean Lesage International Airport	Quebec City	802,263	899,612	1,099,915	1,154,012	1,252,119	1,343,021	1,342,840
14	Saskatoon John G. Diefenbaker International Airport	Saskatoon	1,003,613	1,012,221	1,110,861	1,115,397	1,195,685	1,214,704	1,326,838
15	Regina International Airport	Regina	889,951	928,391	990,170	997,310	1,101,152	1,107,427	1,185,715

Source: Statistics Canada (2006-2011) and individual airport websites (2012). BBTCA passenger totals based on Toronto Port Authority data.

Over the same period, BBTCA has also grown from 23,000 passengers in 2006 to 1.9 million passengers in 2012, a significant growth curve, (82 fold) given limits on size of aircraft (and associated restrictions on route options). Total enplanements and deplanements to Toronto have increased every year (over the previous year) except for 2008/2009.

Toronto Domestic and Transborder Air Traffic

Only Pearson Airport handles international air traffic to Toronto. Pearson and BBTCA handle both domestic and transborder (i.e., U.S) passengers. Combined domestic and U.S. passengers through both airports has increased 8% since 2008.



Source: Toronto Pearson International Airport and Billy Bishop Toronto City Airport.

Air Capacity to Toronto

Data from the Diio Mi database permits comparison of airline seat capacity between Toronto (Pearson and BBTCA) and the ten highest-volume Canadian and U.S. cities (based on available airline seats to all airports in a specific city, for example New York includes LaGuardia, JFK and Newark). Montreal is among the cities that have seen the greatest increase in annual inbound seats, with service to BBTCA added by Porter in 2007 and Air Canada in 2011.

Top 10 Canadian Cities to YTO: Annual Seats (Inbound only)

Rank		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1	Montreal	1,801,741	1,547,027	1,544,196	1,813,603	1,744,480	1,596,232	1,669,892	2,026,086	2,121,683	2,058,395
2	Vancouver	1,411,020	1,435,513	1,436,395	1,369,842	1,391,299	1,284,184	1,235,289	1,285,437	1,311,033	1,369,161
3	Ottawa	1,143,609	1,080,783	1,089,261	1,256,073	1,184,708	1,205,675	1,243,951	1,359,921	1,339,907	1,324,588
4	Calgary	943,632	960,167	970,694	985,587	996,178	925,456	911,662	951,628	972,193	1,058,490
5	Edmonton	490,544	505,335	539,426	593,050	627,516	607,880	632,185	642,966	660,087	721,510
6	Halifax	742,322	719,244	736,754	682,901	663,039	662,156	629,641	620,800	638,881	610,786
7	Winnipeg	575,887	592,817	561,795	570,698	555,143	542,024	537,391	544,759	534,499	529,093
8	Thunder Bay	242,323	223,820	270,855	263,813	263,269	286,979	311,395	340,217	370,444	366,984
9	St. John's	190,966	197,316	219,315	249,719	262,414	272,689	276,160	283,810	299,443	320,374
10	Quebec City	173,445	164,512	151,625	155,520	227,132	242,722	281,868	267,639	286,125	281,365

Source: Diio Mi database

Top 10 US Cities to YTO: Annual Seats (Inbound only)

Rank	City	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1	New York[1]	1,113,006	1,124,928	979,619	962,601	1,131,200	1,181,229	1,236,824	1,330,408	1,604,537	1,727,032
2	Chicago[2]	800,780	783,994	731,465	744,642	700,634	786,582	679,580	641,073	630,047	641,657
3	Boston	276,563	278,208	247,381	234,865	239,181	229,670	320,273	337,633	371,187	364,760
4	Los Angeles	362,456	380,316	323,126	281,983	309,904	241,522	284,816	326,736	342,090	351,785
5	Washington[3]	260,750	248,419	269,396	249,758	228,824	214,189	224,577	213,600	310,452	341,304
6	Orlando	158,972	197,709	239,276	232,228	247,292	258,159	249,500	269,471	313,815	320,567
7	Miami	243,473	251,118	257,012	251,362	239,829	248,319	300,422	313,102	316,063	319,753
8	Las Vegas	155,306	178,565	210,815	241,188	248,014	252,822	219,920	240,379	261,770	275,399
9	Atlanta	276,050	256,679	251,518	244,996	250,717	209,886	240,825	248,492	255,957	272,112
10	Fort Lauderdale	113,651	175,407	169,633	185,022	182,338	185,951	216,792	230,142	257,730	257,469

Source: Diio Mi database

1- Includes LaGuardia Airport, Newark Liberty International Airport and John F. Kennedy International Airport.

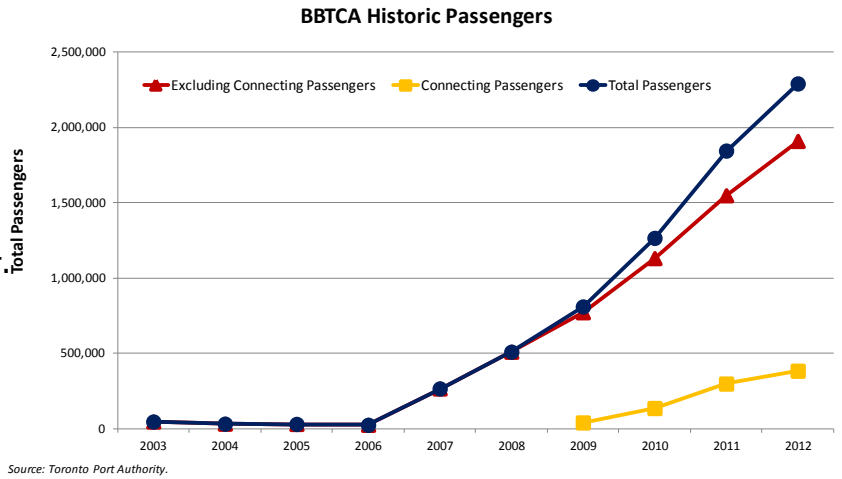
2- Includes Chicago O'Hare International Airport and Chicago Midway International Airport.

3- Includes Dulles International Airport and Ronald Reagan Washington National Airport.

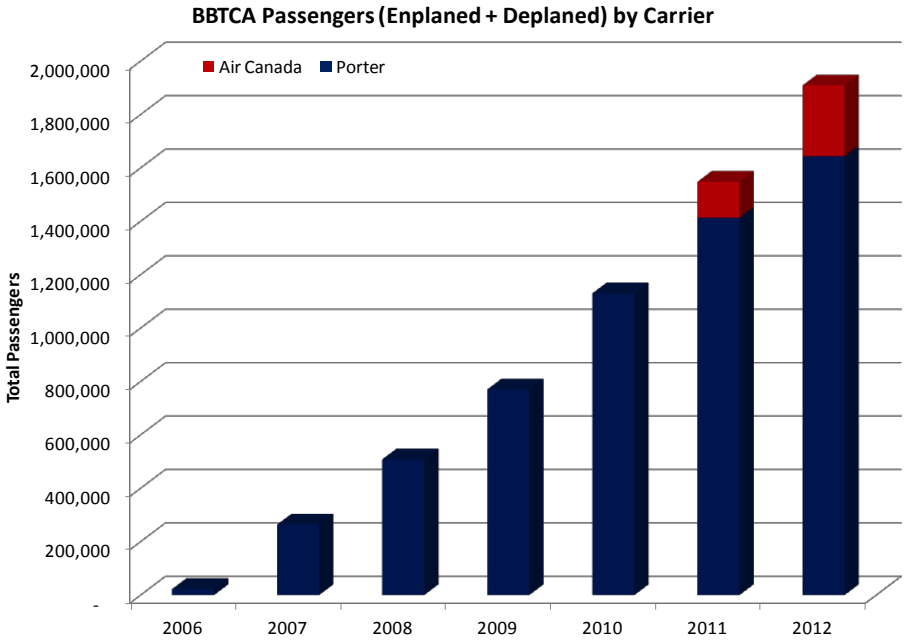
BBTCA Activity and Context

BBTCA's current position as the ninth busiest Canadian airport has occurred over a relatively short time period (essentially the five years from 2006 through 2011).

Non-stop destinations to/from BBTCA include: Boston, Burlington (Vermont), Chicago, Mont Tremblant (seasonal),Montreal, Myrtle Beach (seasonal), Ottawa, Newark, Ottawa, Quebec City, Sault Ste. Marie, Sudbury, Thunder Bay, Timmins, Washington D.C. and Windsor. Connecting flights (on the same airline) are available to Halifax, Moncton and St. John's.



Source: Toronto Port Authority.



Source: Toronto Port Authority.

Porter accounts for 86% of total passenger volume through BBTCA as well as controlling 85% of the available slots based on the 2013 schedule (172 slots out of the total 202 daily slots at BBTCA).

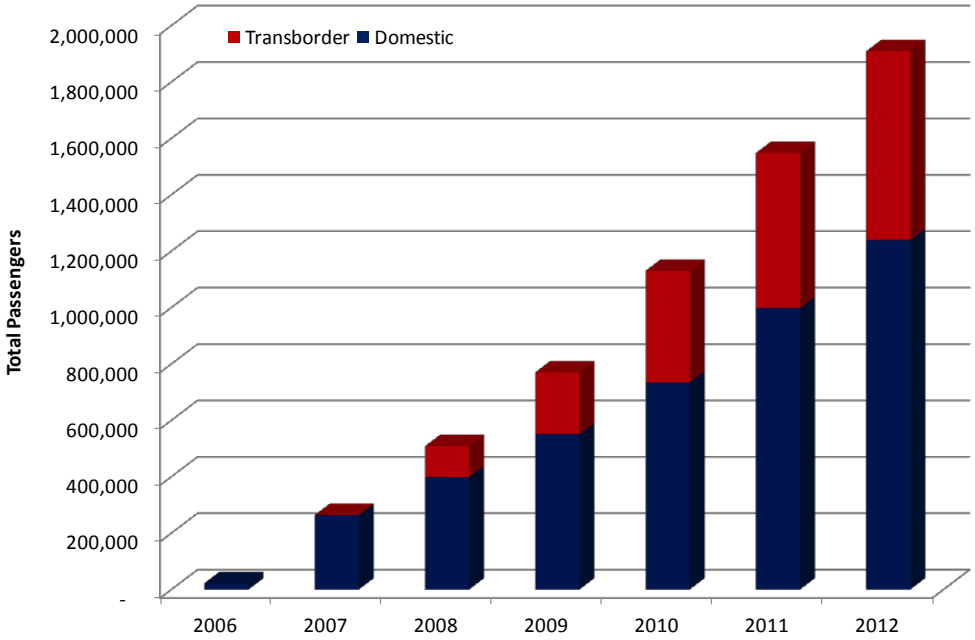
BBTCA Passenger Characteristics

Of the 1,909,364 passengers handled at BBTCA in 2012, some 1.24 million passengers were traveling between Toronto and Canadian cities (domestic passengers) while 670,000 were travelling between Toronto and a U.S. city (transborder passengers). The proportion of transborder passengers to domestic passengers has grown from 22% to 35% over the 5-year period from 2008 to 2012.

As the carrier handling the majority of traffic through BBTCA, Porter's passenger characteristics are indicative of overall BBTCA operations. Key characteristics include:

- Directionality—According to Porter Airlines, overall directionality of the Porter passenger is roughly 50% inbound and 50% outbound (i.e., about half the passengers flying Porter through BBTCA originate in Toronto and are flying outbound with the remaining 50% originating elsewhere). A slightly greater proportion of transborder traffic originates in Toronto.
- Length of stay (trip duration) — BBTCA's role as a predominately business-oriented airport (but with a growing leisure base given the addition of new destinations/origins) is demonstrated through the 42% of domestic passengers staying no or one night (the majority are believed to be zero nights). Only 26% of trips last 4 days or more.

BBTCA Domestic and Transborder Passengers



Source: Toronto Port Authority and Porter Airlines

Existing Porter Customer Characteristics

	Directionality*		Trip Duration (Days)			
	Outbound	Inbound	0-1	2-3	4-6	7+
Domestic	46%	54%	42%	37%	14%	7%
Transborder	57%	43%	13%	51%	27%	8%
All	51%	49%	32%	43%	19%	7%

Source: Porter Airline Statistics

**Refers to outbound/inbound to Toronto.*

4. Previous Economic Impact Quantification

Key Findings of Recent Economic Impact Studies

Over the past year, two economic impact studies have been completed on BBTCA and Toronto waterfront development, specifically:

- InterVISTAS Consulting Inc., Billy Bishop Toronto City Airport Economic Impact Study, October 2012
- urbanMetrics Inc., Waterfront Toronto Economic Impact Analysis (2001-13), April 2013

These studies bring both a specific and broad perspective to the discussion of expanded operation at BBTCA.

Billy Bishop Toronto City Airport Economic Impact Study: InterVISTAS Consulting Inc., October 2012

Client: Toronto Port Authority
Objective: Economic impacts of employment at BBTCA

Findings and Conclusions:
A 2012 survey of 43 businesses (15 BBTCA employers, 17 offsite businesses supporting BBTCA, 11 hotels) found that BBTCA generates:

- $900 million in direct economic output ($1.9 billion total output when indirect and induced impacts are included)
- $200 million in direct Gross Domestic Product /value added ($640 million total GDP)
- $70 million in direct wages ($290 million total wages)
- 1,700 direct jobs (5,700 total jobs)
- $57 million in tax revenue or payments in lieu of taxes

The study noted that forecasted increases in passenger volume will spur growth in these key impacts.

The study also noted, but did not include in the tally of economic benefits, the spending generated by non-local visitors to Toronto arriving via BBTCA which InterVISTAS estimated at $123.6 million/ annum.

Waterfront Toronto Economic Impact Analysis (2001-13) urbanMetrics Inc., April 2013

Client: Waterfront Toronto
Objective: Three phases including: 1) economic impact of Waterfront Toronto's investment between 2001 and 2013; 2) analysis of the impact of Waterfront Toronto's investment on real estate values; 3) benefits created by public and private sector real estate projects stimulated by Waterfront Toronto's investment.

Findings and Conclusions:
The three-part analysis determined that since 2001:

- Waterfront Toronto's $1.26 billion investment in revitalization projects (the majority of which were in construction-related projects) generated 16,200 full-time years of employment, $3.2 billion of economic output and government revenue of $348 million.
- Waterfront Toronto's land assembly, infrastructure development, planning (including flood protection and parkland) and remediation have stimulated investment and provided a basis for future development (with building permit pace exceeding that of other Toronto areas), increasing land (and building) values and addressing transit needs.
- Waterfront Toronto's actions will result in more than 10,000 residential units, one million square feet of office space, 937,000 square feet of institutional space and 230,000 square feet of retail space.

The findings and conclusions of each economic impact study are provided as context. We have not reviewed the terms of engagement or otherwise analyzed the scope or underlying objectives for commissioning the reports.

Applicability of Recent Economic Impact Studies

The relevancy and/or applicability of the recently-completed economic impact studies on the current deliberations over expansion of BBTCA activities is briefly summarized below.

Billy Bishop Toronto City Airport Economic Impact Study: InterVISTAS Consulting Inc., October 2012

Conclusions applicable to current assignment:

The economic impact of BBTCA operations is substantial. Increased passenger throughput, particularly throughput of passengers more likely to purchase goods and services while in Toronto (e.g. visitors to the city from more distant origins), will further enhance economic output.

Implications/Additional Information Required:

- The InterVISTAS report did not address incrementality (i.e., degree to which BBTCA activities could be accommodated at Pearson);
- Larger planes to/from points of origin greater distances from Toronto will create additional staffing needs (more gate agents, baggage handlers) to support operations;
- The InterVISTAS report included only employment-related impacts; spending by incremental visitors to Toronto and BBTCA annual capital expenditures were estimated but not factored into the final calculation of economic output;
- Some of the assumptions used by InterVISTAS (e.g., room rates in Toronto hotels) could be refined once parameters are determined for expanded operations; and
- The stimulant impacts raised by InterVISTAS are relevant and valid but could be quantified to present a more complete picture of economic benefit of BBTCA.

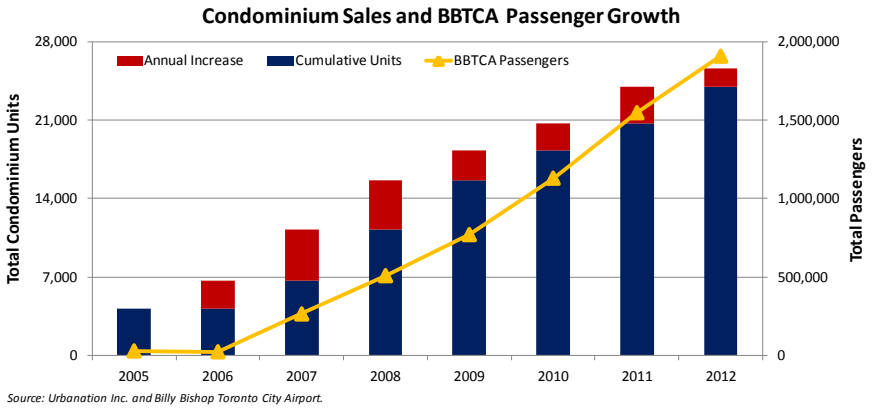
Waterfront Toronto Economic Impact Analysis (2001-13) urbanMetrics Inc., April 2013

Conclusions applicable to current assignment:

The urbanMetrics report did not directly address the BBTCA with respect to actual or potential impacts of airport activity on residential, commercial or other waterfront development projects. Indirect references in the study include the need to ensure adequate transportation/transit and related access along the waterfront corridor.

Implications/Additional Information Required:

- The waterfront development precinct (and surrounding areas) is a high density, urban environment with infrastructure needs (e.g., transit) and constraints/challenges (e.g., noise, periodic congestion).
- The pace of residential and commercial growth in this precinct suggests market acceptance of constraints/challenges.



Source: Urbanation Inc. and Billy Bishop Toronto City Airport.

5. Considerations Affecting Potential Passenger Increases

Background

In evaluating the potential business and economic impacts from expanded BBTCA operations, we sought to gain insight from not only secondary data sources but also a variety of stakeholders of the BBTCA; airline industry participants within the GTA , as well as businesses related to Toronto's waterfront which may be affected by the existence of BBTCA.

A number of stakeholders and/or industry sectors were identified by the City of Toronto and/or through our research. Representatives of these stakeholders and/or industry sectors were contacted to elicit perspectives from all angles of the issue with respect to the expansion of BBTCA, specifically:

- BBTCA operators including commercial & private air service, airport servicing and airport authority
- BBTCA suppliers and servicers (e.g., Billy Bishop Taxi Association)
- Waterfront Toronto
- Metrolinx (Union Pearson Express)
- Toronto tourism industry
- Film industry
- Corporate customers of BBTCA (current and potential)
- Residential and commercial developers
- National Airlines (Air Canada /WestJet)
- United Airlines
- Greater Toronto Airports Authority
- Bombardier

The queries put to all stakeholder industry sectors during these sessions were:

- Does the current BBTCA operation have an impact on your business in a positive/ negative manner?
- How would an expanded BBTCA (including jet service to/from various major points in North America) impact your business?
- Do you believe that the proposed expansion would bring incremental passengers and associated spending to Toronto?
- Generally, do your stakeholders view the existence of BBTCA in a positive or negative manner?

The opinions, views and considerations gained from these interviews are summarized on the following pages and were used to inform our assumptions around future BBTCA volume projections.

Related issues by sector

Tourism

Economic impacts from additional inbound passengers to Toronto will be affected by three key factors:

- whether the passenger is travelling for business or leisure;
- the mode of transportation; and
- length of stay of the visit of each individual.

For the most part, business travellers, travellers arriving by air and travellers staying multiple nights generate greater impacts (these characteristics are not mutually exclusive).

Expansion of BBTCA to provide for larger (jet) aircraft assumes the following:

- Growth of inbound passengers from major cities in western Canada, southwest USA and southeast USA;
- Expanded length of stay from the current commuter customer arriving from closer-in Canadian and USA markets, and
- Significant opportunity for increased meeting and convention business (USA and western Canada) on small and large scale given convenience to downtown convention & hotel facilities.

Growing an incremental tourism base to the current volumes entering Pearson airport is assessed as follows:

- Response from corporate customers with respect to flying more often due to BBTCA long haul option is inconclusive. However, diversion from Pearson is likely (for convenience) and given potential for improved pricing options; and
- Leisure activity from long haul markets are more likely to use a BBTCA option if price stimulation was a fundamental part of the airline strategy at BBTCA.

General Business Activity/Support

The opinion of the downtown business community (as based on interviews for this study) view the existing BBTCA airport as:

- Convenient—proximity and ease of travel to prime downtown offices. Time savings from direct bus service or a short taxi ride is a common theme from the corporate customer;
- Efficient (customs clearance)—Corporations cite a significant inbound USA usage of BBTCA as part of their ongoing business travel due to the relative ease of customs clearance;
- Passive infrastructure—Businesses situated on or near Toronto's waterfront are somewhat neutral as to the economic benefit of BBTCA seeing marginal economic impact on their businesses;
- Potentially noisy—Businesses under the flight path coming over the East Bayfront, West Don Lands areas share similar concerns to film studios, although these business operations are less affected by aircraft noise, and
- Less than ideally serviced—Businesses supporting the BBTCA operations such as aircraft servicing, taxi, parking and bus operators will benefit from the expansion of BB, although the primary goal of airport executives is to enhance mass transit access to the facility, reducing current congestion that somewhat hampers the customer experience.

Related issues by sector

Media and Entertainment

Film and media business sectors utilize Pearson Airport for most productions that are sourced outside of the GTA, and do not see a significant benefit from the expansion of BBTCA. Air travel into GTA related to film production is a fairly minor expense in comparison to the large production budgets, and therefore is not viewed as an item than needs to find additional cost savings such as would accrue from a second option at BBTCA for flights from Los Angeles.

Film studios located on the eastern waterfront section of downtown Toronto (Port Lands) are concerned about the aircraft noise given proximity to flight paths into and out of BBTCA. Outdoor and back lot facilities are sensitive to any environmental disturbance during the filming process.

Film studio spokespeople who were located further north from the lakefront did not cite aircraft noise as a factor, and did believe that the access to air travel at BBTCA was a positive attribute.

Waterfront Real Estate Developers

Residential high-rise developers with existing, under construction and planned assets located south of the Gardiner Expressway generally agreed that the two primary advantages cited by condo buyers are:

- access to the central business core
- attraction of the waterfront lifestyle.

However all interviewees agreed that the typical demographic of the current condo resident in the waterfront community skews to a 30-40 year old active business person who accesses the Billy Bishop Airport for both business commuting and getaway leisure purposes.

Developers were decidedly favourable to the existence of the airport as an attribute to support residential growth south of King Street, and believe that the advantages for the typical condo resident far outweigh any negatives.

Developer interviewees also noted that the soundproofing standards required in current high-rise construction in the waterfront area (given expressway, transit and the general congested urban environment) mitigate any potential issues from aircraft noise.

Related issues by sector

Airline Sector

Consultation with Air Canada, United Airlines, and West Jet Airlines was conducted through this process in order to document their individual positions on the proposed runway expansion at BBTCA which would introduce access to jet aircraft. All three carriers offered a similar opinion on the request by Porter Airlines to operate the CS-100 jet on extended runways at Billy Bishop Airport:

- The proposal to allow the CS-100 to fly out of BBTCA should also be extended to any jet which satisfies noise parameters outlined in the Tripartite Agreement
- The slot allotment should be altered to allow a competing air carrier to utilize BBTCA to more fully compete with Porter.
- Expansion at BBTCA will not negatively impact Pearson Airport as Pearson's growth trajectory is a factor of international city pair growth on wide body aircraft.

Aerospace Manufacturing

Discussions with Bombardier corporate executives were held to provide clarity on the current economic impact of the aerospace manufacturing in Toronto's Downsview facility; a plant that currently employs 4,000 people in the production of Q400 aircraft, used by Porter and other Canadian airlines.

Bombardier current manufacturing of Q400 and future Global 7000/8000 aircraft at Downsview which will result in a $2.1 billion investment by Bombardier, creating approximately 12,000 direct, indirect, and induced jobs throughout Canada.

The manufacturing of the C100 aircraft in Montreal affects six GTA companies directly including Honeywell, while metal crafters throughout the GTA and aluminum production facilities such as Rio Tinto in Hamilton, will also benefit from the proposed programme which could reach $14 million in business value (VoB) by 2020.

Bombardier's overall spend in Ontario including production, indirect goods and services totalled approximately $600 million in 2012 when aerospace is combined with rail car production.

Impact of Union Pearson Linkage

Metrolinx is working towards introducing a dedicated rail access between Pearson Airport and Union Station by 2015 (prior to the Pan American/Para Pan American Games). Key characteristics of the "Union Pearson Express" include:

- Designed specifically for the airport consumer as opposed to a "tie in" to existing municipal transit/suburban commuter rail;
- Continuous service operating every 15 minutes between 5:30am and midnight;
- Adult one way trip in the range of $30; express train tickets will be marketed outside of Toronto as part of the airline ticket purchase to Pearson;
- Metrolinx predicts a 65:35 split between business and leisure visitors, and
- Metrolinx passenger volume projections represent less than 10% of total Pearson enplanements/deplanements.

The Appendix contains a comparison of major North American markets and transportation services from respective airports.

Metrolinx planners have considered the potential expansion of BBTCA in forecasting passenger volumes. Metrolinx believes that:

- Projected passenger volumes utilizing BBTCA will be a small percentage of overall air traffic into GTA;
- BBTCA will not significantly affect, or be significantly affected by, Union Pearson Express due to limited potential for expansion, and
- Projected growth of air movements through Pearson from new international markets will fuel the Union Pearson Express projections through the first five years of service.

Impact assessment:

- Dedicated airport-city centre rail links have proven successful and popular in many European and Asian centres. Dedicated rail links in North American centres are less common and, as a result, may be slower to gain acceptance (particularly by U.S. visitors);
- The convenience factor of BBTCA for business travellers is unlikely to be supplanted by the Union Pearson Express option, however, the maximum capacity at BBTCA is expected to limit competitive pressures on Union Pearson ticket sales, and
- Assumption that airlines utilizing BBTCA will utilize stimulative ticket pricing to increase usage from longer haul, incremental markets and attract , to some extent, a new leisure customer who is price sensitive rather than motivated by convenience offered by the future rail link.

City Pair Targets

Target city pairs for longer-haul (i.e., distances greater than 500 nautical miles) have been identified based on stakeholder input, existing city pair volumes and pricing/competitive analysis. The key focus is on those routes currently commanding the highest average price considering all current competitors. This approach assumes the business model for any airline operating from BBTCA will partly be built on price reduction to existing air service in/out of Pearson.

Targeted geographic regions (and major centres) are summarized below:

Region	Principal City Targets	Airlines Providing Service
Canada West	Calgary Edmonton (also Vancouver)	Air Canada Westjet
USA (South)	Dallas Atlanta (also Miami, Houston)	Air Canada American Delta United US Air Westjet
USA (West)	San Francisco (also Los Angeles, Denver, Phoenix)	Air Canada Alaska American Delta United US Air Westjet

6. Potential BBTCA Passenger Volume Adjustments and Economic Impacts

FORECASTING CONTEXT

The potential economic impacts from expanded air activity at BBTCA are based on the following assumptions:

- The 202/day "cap" on flights in/out of BBTCA (101 flight pairs) remains unchanged. These caps (+/-5%) are already achieved most weekdays, necessitating replacement of existing aircraft with larger aircraft as opposed to simply adding more flights;
- The new aircraft under consideration (i.e., Bombardier CS 100 series) seats 107 passengers, 37 seats more than the current 70-seat Q400 aircraft used by Porter. WestJet and Air Canada use configurations for Q400 aircraft ranging from 70-78 seats;
- Approximately 23% of existing Q400 flights will be replaced by CS100 flights (mid-range scenario);
- Inbound and outbound point of origin is assumed to be 50% (consistent with current passenger distribution);
- Visitor spending estimates were taken from the *Statistics Canada's Travel Survey of the Residents of Canada and International Travel Survey 2010* provided by the Ontario Ministry of Tourism, Culture and Sport, and
- Economic output was calculated using the Ontario Ministry of Tourism, Culture and Sport 's TREIM model.

Economic impact was calculated on inbound passengers. Distribution of business versus leisure passengers was estimated using current Porter customer data. To the extent aircrafts are used for other purposes (outbound Caribbean), the economic impact will be reduced. The economic output and related impacts on the following pages assume the economic outputs estimated by InterVISTAS' Billy Bishop Toronto City Airport Economic Impact Study (October 2012) remain in place (except as noted).

Finally, the economic impact projections in this report give no consideration to which airline(s) operates future incremental flight activity.

AIRCRAFT UTILIZATION BACKGROUND

Economic benefit resulting from the deployment of jet aircraft to BBTCA is based on the following assumptions:

- Additional service between Vancouver/Edmonton/Calgary and downtown Toronto (BBTCA) will stimulate the overall passenger travel between these cities and the GTA (served by Pearson) due to fact that current high business travel pricing during peak Mon-Fri flight periods are a reflection of high load factors into Pearson served by Air Canada and WestJet;

- It has been proven historically in many markets in the USA, and with Porter Airline current pricing tactics in Montreal, Ottawa, and New York, that lower prices will stimulate both certain business travellers and a larger percentage of the leisure market. A business passenger today currently pays upwards of $600 one way between Toronto and Calgary on the two primary carriers serving Pearson-Calgary International. An airline operating out of a lower cost airport such as BBTCA will have the ability to adopt a lower price point to stimulate business travellers who, heretofore, may reduce frequency on these markets due to the high cost of travel;

- The same perspective becomes stronger when assessing Canada's leisure market which is very price-sensitive and willing to embark on incremental cross-country trips when the price is positioned to stimulate travel; and

- The growth in US inbound travel from both the west and southern US markets also will result from aggressive pricing, but will also be determined by the convenience factor of getting to the downtown Toronto business destination in less time. The notion of a one night stay on a quick turnaround between California or Texas becomes more of a reality with access directly to Toronto's inner business core.

Flight Distribution

BBTCA has a maximum capacity of 202 scheduled commercial movements per day amounting to 73,730 flights per year. This is a self-imposed cap by BBTCA to ensure compliance with noise exposure levels. The number of BBTCA scheduled flights varies by day with weekday demand the highest at 97%. Scheduled flights on Sundays and Holidays operate at between 70-75% capacity. Saturday demand is further reduced to 50% of available supply.

With the addition of jet aircraft and the 202 flight per day cap, existing Q400 flights will be replaced at peak times because jets holding 37 more potential passengers will provide added capacity at the 'rush hour' periods of business travel. Three scenarios have been prepared (i.e. low, medium and high) with all three scenarios achieving 100% utilization. The difference in scenarios relates to assumption of load factors by the operator. As a result, jet aircraft flights will represent 16% in the low scenario rising to 31% in the high scenario on weekdays. The cap on existing Q400 flights on weekends and holiday will be unaffected, as there is currently enough capacity to accommodate additional flights required from the jet aircraft.

To summarize, additional jets will not add more frequency during the weekday period , but will replace smaller Q400's to carry more passengers. In addition, jets may be deployed on the less utilized weekend periods to serve new long haul US and Canadian destinations. Current overall BBTCA utilization is 84.8%. The addition of jet aircraft will increase utilization to between 90.5% and 94.4%.

2013 Schedule: Distribution of Flights

	Days	Max Flights per Day	Max Flights	Utilization	Average Flights/Day	Flights
Weekdays	236	202	47,672	97%	196	46,198
Holidays/Other*	25	202	5,050	71%	143	3,567
Saturdays	52	202	10,504	48%	98	5,093
Sundays	52	202	10,504	73%	147	7,642
Total	365	202	73,730	84.8%	171	62,500

Source: Billy Bishop Toronto City Centre Airport.
**Holidays/Other are weekdays with less than 182 scheduled flights.*

Distribution of Flights (with jet aircraft)

	Days	Max Flights per Day	Utilization	Flights/Aircraft Q400	CS100	Total
Low						
Weekdays	236	202	100.0%	39,896	7,776	47,672
Holidays/Other*	25	202	82.5%	3,567	600	4,167
Saturdays	52	202	56.6%	5,093	857	5,950
Sundays	52	202	85.0%	7,642	1,286	8,928
Total	365	202	90.5%	56,198	10,520	66,718
Mid						
Weekdays	236	202	100.0%	35,779	11,893	47,672
Holidays/Other*	25	202	88.8%	3,567	918	4,485
Saturdays	52	202	61.0%	5,093	1,311	6,404
Sundays	52	202	91.5%	7,642	1,967	9,609
Total	365	202	92.5%	52,081	16,089	68,171
High						
Weekdays	236	202	100.0%	31,663	16,009	47,672
Holidays/Other*	25	202	95.1%	3,567	1,236	4,803
Saturdays	52	202	65.3%	5,093	1,765	6,858
Sundays	52	202	98.0%	7,642	2,648	10,290
Total	365	202	94.4%	47,965	21,658	69,623

Source: HLT Advisory Inc. based on Billy Bishop Toronto City Centre Airport schedule data.
**Holidays/Other are weekdays with less than 182 scheduled flights.*

Flight and Passenger Forecast

The addition of the CS-100 jet aircraft creates the opportunity for the following three North American market areas to be served out of BBTCA:

- Canada West- Primarily Calgary and Edmonton, and to a lesser extent Vancouver. These markets are projected to add between 8-16 flights on a peak weekday, requiring deployment of 6-12 jet aircraft in service. Additional passengers (enplaned + deplaned) from these flights would range from a low of 307,000 to a high of 615,000.
- US West- Primarily San Francisco, and to a lesser extent Los Angeles. These markets are projected to add between 3-5 flights on a peak weekday, requiring 1-2 aircraft to serve one of these cities from the west coast. Additional passengers (enplaned + deplaned) from these flights would range from a low of 115,000 to a high of 192,000.
- US South- Primarily Dallas and Atlanta. These markets are projected to add between 6-14 flights on a peak weekday. Additional passengers (enplaned + deplaned) from these flights would range from a low of 230,000 to a high of 538,000. 2 additional CS-100 would be required to serve 6 flights/per day while 4 aircraft would be utilized for up to 14 flights per weekday on these two new markets.

Inbound Flights per Day (Peak Weekday)

	Low	Mid	High
Canada West	8	12	16
US West	3	4	5
US South	6	10	14
Additional Inbound Flights	17	26	35

Source: HLT Advisory Inc.

Total Passengers Projected

	Low	Mid	High
Q400	2,300,496	2,131,979	1,963,462
CS100			
Canada West	307,228	460,842	614,455
US West	115,210	153,614	192,017
US South	230,421	384,035	537,649
Total CS 100	652,859	998,490	1,344,121
Total Passengers	2,953,355	3,130,469	3,307,583

Source: HLT Advisory Inc.

Note: Q400 planes have a capacity of 70 passengers. CS100 planes have a capacity of 107 passengers.

Economic Benefits from Expanded BBTCA Operations

Spending by incremental non-resident passengers through BBTCA (as a result of CS100 service) is estimated at between $68 million and $134 million annually. As a result of replacing Q400 flights with longer distance jet flights, a reduction will occur in same-day passenger spending. However, the increase in overnight passenger spending will more than offset the loss in same day spending.

Spending of Non-Resident Passengers*

	Low	Mid	High
Business			
Same Day Passengers	-$380,889	-$751,666	-$1,122,443
Overnight Passengers	$44,209,069	$65,258,063	$86,307,057
Total Business	$43,828,180	$64,506,397	$85,184,614
Leisure			
Same Day Passengers	-$317,106	-$524,253	-$731,399
Overnight Passengers	$24,826,361	$37,274,386	$49,722,411
Total Leisure	$24,509,254	$36,750,133	$48,991,011
Total Spending	$68,337,435	$101,256,530	$134,175,625

Source: HLT Advisory Inc. based on visitor spending data from Statistics Canada's Travel Survey of the Residents of Canada and International Travel Survey 2010

**Non-resident passengers are estimated at 50% of total passengers, consistent with current.*

The incremental non-resident passenger spending produces the following economic impacts, all of which are additive to the InterVISTAS economic impact calculations.

Economic Impacts of Expanded BBTCA Operations

	Low	Mid	High
Total Visitors' Spending	$68,337,435	$101,256,530	$134,175,625
Gross Domestic Product			
Direct	$33,159,798	$46,114,920	$65,070,042
Indirect	$14,908,227	$22,085,847	$29,263,467
Induced	$14,894,631	$22,051,252	$29,207,772
Total	$62,962,656	$90,252,019	$123,541,281
Labour Income			
Direct	$22,712,967	$33,618,924	$44,524,880
Indirect	$10,119,618	$14,992,325	$19,865,032
Induced	$9,452,502	$13,993,970	$18,535,372
Total	$42,285,087	$62,605,219	$82,925,284
Employment (Jobs)			
Direct	637	943	1,250
Indirect	176	261	346
Induced	164	243	322
Total	977	1,447	1,918
Total Taxes			
Direct	$15,576,317	$23,072,709	$30,569,027
Indirect	$12,465,556	$18,470,897	$24,476,222
Induced	$200,861	$297,316	$393,770
Total	$28,242,734	$41,840,922	$55,439,019

Source: HLT Advisory Inc. based on Ontario Ministry of Tourism's TREIM Model.

APPENDICES

Appendix	**#**	**1**	**Bibliography, Phase 1**
	#	**2**	**Interview List Phase 1**
	#	**3**	**Interviews of Waterfront Businesses**
	#	**4**	**Literature Review**
	#	**5**	**Condominium Market Value Impact Analysis: Billy Bishop Airport**

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The above is in addition to various Statistics Canada, individual airport and airline data sources as referenced on individual tables and charts throughout the report.

Interviews

1. Air Canada – Derek Vanstone, VP Government Relations
2. BMO – Linda Tuck Chapman, Chief Procurement Officer
3. Billy Bishop Taxi Association – Asafo Addai
4. Bombardier Aviation- Ryan Debrusk, Director Sales, Americas
5. Board of Trade Toronto, Patrick Gill, Manager of Policy
6. Canadian Owner & Pilots Association – Kevin Psutka, President & CEO
7. Cinespace Studios- Steve Mirkopoulos, CEO
8. Great Gulf Homes – Alan Vihant, Senior VP High-rise
9. Greater Toronto Airports Authority –Toby Lennox, Vice President Strategic Planning and Stakeholder Relations
10. Metrolinx – Stephan Mehr, Director Business Planning
11. Ontario Chamber of Commerce – Liam McGuinty, Senior Policy Advisor; Josh Hjartson- VP Policy& Government Relations
12. Ontario Media Development Commission – Donna Zuchinski, Film Commissioner Industry Development
13. Pinnacle Developments – Mark Bales, Project Manager
14. Porter Airlines – Jeffrey Brown, Executive VP Strategy & Procurement
15. RBC – Glenn Desouza, VP Sourcing
16. Sky Regional Airlines – Russell Payson Operations Director
17. Stolport Corporation – Victor Pappalardo, President
18. Toronto Island Pilot Owners – David Sprague, Secretary
19. Toronto Port Authority, BBTCA – Geoffrey Wilson, President & CEO
20. Toronto Tourism – David Whitaker, President & CEO
21. Tridel Corporation – Jim Ritchie, Senior VP Sales & Marketing
22. urbanMetrics – Rowan Faludi, Partner
23. United Airlines – Hershel Kaman, SVP Alliances, Regulatory & Policy
24. Waterfront Toronto – Meg Davis, VP Development
25. WestJet Airlines – Mike McNaney, VP Environment, Fuel & Government Relations

These interviews were conducted in addition to City of Toronto staff and consultants responsible for other aspects of the BBTCA expansion analysis.

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Mr Christopher Dunn
Waterfront Secretariat, City of Toronto
BBTCA Expansion Proposal

November 15, 2013

Billy Bishop Airport : Phase 3

Dear: Mr Dunn

This letter report summarizes our findings with respect to the interview of waterfront enterprises conducted over the past two weeks. Once edits and comments are made by the City, this report along with the Barry Lyon Property Value Analysis will be seamlessly added to the original June 26 BBTCA report submitted by HLT and revised though the past three months.

A. Scope of this Analysis

Over the past month, HLT has been requested to continue with an additional phase of work with respect to BBTCA, specifically to:

- Interview a range of businesses located along the central waterfront to identify the impact from commercial airline traffic since 2006 to today. Further, to identify the expected impact of the changes currently proposed to the trip agreement on waterfront attractions including cultural spaces and restaurants, as well as other recreational uses in the Inner Harbour and on the Toronto Islands, including; waterfront restaurants, businesses, Harbourfront Centre, arts and culture, Toronto Music Garden, Waterfront BIA and Queens Quay Terminal, tour boats (Mariposa and others).
- Conduct a literature review to assess the impact of airport traffic on residential property values adjacent to airport lands throughout the world and;
- Comment on the potential impact on residential property values along the central waterfront from increased commercial airline traffic since 2003 to today and the expected impact of the changes currently proposed to the Tripartite Agreement.
- City Pair analysis needs additional explanation: simplify some of the descriptions used to attain the economic impact presented in June 26 document.

The following report summarizes our findings and conclusions.

B. INTERVIEWS

This element of the work scope focused on seeking input from commercial entities most likely to be affected by airport expansion.

1. INTERVIEW LIST

In conjunction with input from the City of Toronto, HLT identified the following list of commercial enterprises located along the central waterfront. Representatives of each establishment were interviewed to understand the impact of airport operations on their business.

Paddle Toronto:	Dave Corrigan, Owner/Operator
Toronto Island Bicycle Rental:	Gordon Chhor, Owner/Operator
Wheel Excitement:	Kevin Currie, Owner/Operator
Centerville Amusement Park:	Bill Beasely, Owner Beasely Enterprises
Mariposa Cruises:	Cindi Vanden Heuvel, Vice President Marketing
Toronto Harbour Tours:	Dan Ferris, Owner/Operator
Great Lakes Schooner:	Damian Ivers, Owner/Operator
Yankee Lady Charters:	Jill Hicks, Vice President
Exhibition Place:	Arlene Campbell, General Manager Sales /Events
Ontario Place:	Eriks Eglite, Interim General Manager
Radisson Admiral Hotel:	Dermot McKeown, General Manager
Amsterdam Brewhouse:	Todd Sherman, Owner Urban Eateries Group
Canadian National Exhibition	David Bednar, CEO

In addition to commercial enterprises on the central waterfront, we also interviewed Mr. Toby Lennox, Vice President Strategy Planning and Stakeholder Relations at the Greater Toronto Airport Authority with respect to BBTCA impact on activity at Pearson International Airport

2. NEGATIVE IMPACTS IDENTIFIED

The following negative impacts were raised by the interviewees.

- Loss of Marine Exclusion Zone ("MEZ")—The most commonly held concern (significantly by passenger tour operators) relates to the future potential that the expansion of the BBTCA runway may increase the MEZ (Marine Exclusion Zone) thus reducing the access by large vessels through the Western Gap.

All passenger tour operators expressed concern that the proposed airport expansion would greatly reduce or eliminate the Western Gap passage which would significantly curtail future operations for their enterprises.

- Vehicular congestion accessing BBTCA—A great many of the businesses interviewed held the most concern for vehicular congestion on the waterfront: a portion of which was attributed to the Bathurst/ Queen's Quay airport activity, and a much larger impact attributed to the growing number of cars brought into the area by residential development.

  Most comments with respect to traffic congestion, and its potential negative impact on the waterfront enterprises, were related to the need for a broad based traffic strategy that addressed Lakeshore Ave, Queen's Quay and all north/south arteries. It was fairly unanimous that the need for increased transit options in/out of BBTCA was a requirement regardless of future expansion plans.

- Boating restrictions-- Any movement of the placement of current buoys due to the expansion of the runway would eliminate this navigational route forcing certain tour boat operators out of business.

- Loss of tranquility—Canoe and paddling rental customers are clearly affected by the presence of aircraft overhead, particularly considering that this customer is one who values quietness as they head across the harbour to the serenity of the island inlets.

- Safety—Flight activity is creating a safety concern in the heavily travelled marine areas as guides are in constant need to call instructions to their customers following them throughout the harbour.

- Certain events such as the Labour Day air show have been moved west over time due to the frequency of activity at BBTCA, although no specific impact to the event has been identified.

3. Concerns not Identified as Negative Impacts

The following perceived negative impacts were either not raised by the interviewees or, when raised by the consultants, were determined unimportant.

- Noise—Noise from existing aircraft flying in/out of Billy Bishop Airport was not cited as a negative factor in operations or guest satisfaction of the great majority of the respondents. Passenger tour operators generally felt that the activity at BBTCA is considered part of the animation of the harbour experience, although comments did refer to concern about future flight path trajectories of jet approaches lower than current aircraft. Restaurants, hotels, rental operators considered the proximity of the airport as neutral to positive with virtually no instances of customer complaints due to the noise created by aircraft.

- Increased harbour activity-- BBTCA is considered by some a positive influence on providing customers to the businesses interviewed: specifically hotels, Exhibition Place trade show and meeting clients, bike rentals, sightseeing boat tours.

- Passenger tour vessels all discussed the growing congestion in the harbour as the waterfront grew in popularity, but viewed the current airport activities as neutral to the success of their operations.
- Island businesses—Businesses operating on the islands did not experience any impact from aircraft noise as they are situated on the east side away from BBTCA, and presumably will continue to avoid flight paths associated with BBTCA
- An interview with the Vice-President, Strategy of the Greater Toronto Airport Authority (GTAA) reiterated their position from earlier discussions which suggests that the expansion of BBTCA with jet service to selected long haul markets would not have any impact on Pearson Airport. Pearson currently serves close to 35 million passengers a year compared to the 2 million served currently by BBTCA. He mentioned that the direct to downtown service provided at BBTCA does not compete with the significant international and transborder routes served by Pearson for all of southern Ontario, Quebec, points east, and even to Europe from passengers embarking in the Pacific Rim or western and central USA.

4. SUMMARY OF FINDINGS

It is clear that the current activity as it relates to noise emanating from aircraft take off/landing does not have a significant impact on the commercial operators interviewed such as passenger tour operators, adventure rental companies, amusement park, or hotels/restaurants. There was virtually no evidence that customers of these businesses were complaining of the noise created by BBTCA.

It is also important to note that all of the respondents on behalf of the passenger tour vessels made reference to potential impact of the current runway expansion request due to the fear that the Marine Exclusion Zone (MEZ) be extended further into the harbour and/or Western Gap.

There exists a significant concern from the operators that any reduction in the size of the navigational routes currently made available for their business operations would potentially end their ability to conduct business as there exists no other suitable option for carrying passengers on sightseeing, corporate, or wedding cruises. It is fair to suggest that the representatives of these companies interviewed hold a common mistrust that the federally regulated airport will not, at sometime in the future, close the Western Gap to the marine operators.

Virtually all of the interviewees with respect to the subject discussed cited the concern of traffic congestion that exists today, and the apparent lack of a master traffic and parking plan to handle the growth of BBTCA. Though many of these respondents valued the business that accrued from being located near BBTCA, they questioned how vehicular, transit, and parking issues would be managed to protect the access to the waterfront commercial area.

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Mr Christopher Dunn
Waterfront Secretariat, City of Toronto
BBTCA Expansion Proposal

November 15, 2013

Billy Bishop Airport : Phase 3

Dear: Mr Dunn.

This letter report summarizes our findings with respect to a comprehensive review of studies conducted around the issue of airport noise and disruption and its impact on residential property values. Once edits and comments are made by the City, this report will be seamlessly added to the original June 26 BBTCA report submitted by HLT and revised though the past three months.

AIRPORT PROPERTY VALUE LITERATURE REVIEW

The City of Toronto requested that a comprehensive literature review be conducted in order to assess the impact of airports around the world on the residential property values adjacent to airport lands.

In scanning the various studies that have been provided over the past twenty years designed to mathematically assess variances in land value in a neighbourhood adjacent to airports, it is clear that the body of work from around the world has been a result of homeowners' and municipalities' expressing concerns with respect to the impact of aircraft noise on residential investment.

A list of the studies and reports reviewed is contained in the Appendix.

1. REVIEW PROCESS

A number of studies have been produced over the past twenty years to evaluate the impact from airports, and the attendant noise contours, on residential property values. The presence of aircraft noise is one of many considerations the consumer must evaluate in buying or selling a residence. Researchers have been careful to consider other effects on sale prices and to normalize their influences in research studies. Although there are many factors that must be considered when evaluating home values, nearly all research conducted in this area found negative effects from aviation noise. Given differences in statistical methods, samples, time periods, and urban locations, empirical studies have not produced a singular value for the effects of airport noise on property values. With the number of various noise measurement methods available, no single standard methodology exists, which adds to the complexity of comparing previous studies. In general, studies

have shown that airport noise has exerted a negative impact on residential property values.

In reviewing these property value studies, it was established that findings were required to be split into those that assessed neighbourhoods adjacent to international airports with wide body jets, and with those that were near smaller, regional airports flying smaller aircraft. In both cases, the studies selected have reviewed airports with jet service and, in some cases, located in the city core with heavy residential populations.

Brief explanations on the theory of measuring both noise and property values having an impact on residents is included to frame the discussions that evolve from the selected studies.

By and large, the body of data gleaned from the available studies relates to single family residences in suburban tract lands adjacent to large airfields that are located outside of the downtown core of major cities. A few examples of airports located in or near the downtown sectors of major urban centers such as Berlin, London Stansted, and Boston will receive greater attention due to the obvious relevance to the issue of expanding Billy Bishop Toronto Center Airport.

The following will uncover the various methods and theories which are used to assess impact on property value, and then order the output of these reports by airport size and relative value of residential areas located near existing airports.

2. NOISE MEASUREMENT

The measurement of normal background noise levels in urban areas such as the waterfront in Toronto using the Leq (Equivalent Noise Level) metric are approximately 50-60 dBA (Decibels A-weighting scale) during daytime hours and 40 dBA during evening hours. People are normally more sensitive to intrusive sound events at night, and the background sound levels are normally lower at night because of decreased human activity. Therefore, noise events during the nighttime hours are likely to be more annoying than noise events at other times. Studies conducted in US cities utilize the FAA standard based on the DNL (Day Night Average Sound Level) metric. The DNL adds a 10dB penalty to sound levels occurring between 10:00 pm and 7:00 am. In essence, the DNL is the 24-hour equivalent sound level including this 10dB penalty. This 10dB penalty means that one nighttime sound event is equivalent to 10 daytime events of the same level.

A value of 65 is considered as the lower limit for defining a significant noise impact on people. At 65 and above, individuals experience the disruption of normal activities, such as speaking, listening, learning, and sleeping. A DNL of 75 or more is viewed as incompatible with single family housing. (*Meta-Analysis of Airport Noise, Jon P Nelson*)

In Canada, the most commonly used noise measure in published literature is the Noise Exposure Forecast (NEF). The Noise Exposure Forecast (NEF) is a single number rating of overall aircraft noise. It combines the noise levels of individual aircraft and the numbers of aircraft to give a single number rating of the average negative impact of the aircraft noise for the purpose of compatible land use planning. The NEF includes a nighttime penalty of 12.2 dB penalty which correspond to 16.7 daytime movements. This measurement

relevant to BBTCA aircraft movements is more stringent compared to the DNL metric used in the USA which correlates extremely well with DNL.

Determining Property Value

There is a large body of literature on the impact of aircraft noise on property values. They vary based on research methods employed, geographic areas studied, and based on research implications.

Most of the studies use one of three methods in estimating the impacts of aircraft noise: hedonic price method; meta-analysis; or contingent valuation method (based on the willingness to pay). Of the three methods, hedonic price method is the one most often used in the existing studies. Although it is the most accepted valuation method for aircraft impact studies, NDSI (Noise Depreciation Sensitivity Index) estimates from hedonic price studies are hard to transfer from one location to another or from one time period to another.

The hedonic pricing method is used to estimate economic values for ecosystem or environmental services that directly affect market prices. It is most commonly applied to variations in housing prices that reflect the value of local environmental attributes.

It can be used to estimate economic benefits or costs associated with:

- Environmental quality, including air pollution, water pollution, or noise; and
- Environmental amenities, such as aesthetic views or proximity to recreational amenities

The hedonic pricing method is most often used to value environmental amenities that affect the price of residential properties. The following issues and limitations should be considered as the hedonic method of assessment:

- The scope of environmental benefits that can be measured is limited to things that are related to housing prices;
- The method will only capture people's willingness to pay for perceived differences in environmental attributes, and their direct consequences. Thus, if people aren't aware of the linkages between the environmental attribute and benefits to them or their property, the value will not be reflected in home prices; and
- The method assumes that people have the opportunity to select the combination of features they prefer, given their income. However, the housing market may be affected by outside influences, like taxes, interest rates, or other factors.

(*Ecosystem Valuation Dennis M King & Marissa J Mazzotta 2000*)

One of the more recognized studies by an early practitioner and well known expert in this field summarizes much of his work with the following thesis:

'Detached family homes will suffer a decline in value to a greater extent than townhomes or condo high rises. Clearly the more expensive the detached home, the greater the

impact on the value of the home being discounted due to proximity to airport. Rural areas tend to suffer a greater discount than suburban areas which is greater than congested urban areas. The impact of airport noise near the water is diminished to the propensity for greater demand to be closer to the water.' (*Bell 2001*)

Another well known theory quoted in a number of studies is the recognition that one must distinguish between the issue of 'depressed' and 'declining' land values. Depressed land values means the value of the land is increasing, but the rate is less compared to land values not impacted by airport activity.

The following body of work extracted from the past twenty years of published studies and consulting reports provides a sample of property value assessments with respect to large international airports and smaller airfields utilized mostly by turbo prop and smaller jets similar to that which is predicted for BBTCA as part of the request for runway expansion.

Airports: Outskirts of City

One of the more recognized studies published with respect to the effects of airport noise and proximity to residential housing was conducted by *Booz-Allen & Hamilton* in 1994 which included a study of three significant international airports in the USA: Los Angeles International (LAX) ; Baltimore/Washington International (BWI) ; and John F Kennedy Airport (JFK) in New York. Although the results indicated a consistent negative impact on residential property market values, it was the first study to recognize the variance of impact from a lower to higher priced home. Losses of the total home market value across these three large residential populations adjacent to large international airports ranged from less than 1% for low priced homes to 15-19% value loss for moderately priced real estate. It is also claimed that the reduction in value of a high priced home is exponential to that of lower priced homes if an airport is subsequently constructed after the neighbourhood has been developed and reached its price and value equilibrium.

McMillen (2004) found that residential property values for houses subjected to a noise level of 65 or more decibels near Chicago's O'Hare Airport were about nine percent lower than otherwise similar homes. Similarly, *Espey and Lopez* (2000) estimated a $2400 difference, slightly more than two percent, in the price of a house in Reno-Sparks, Nevada, in areas with a noise level of at least 65 decibels.

Using hedonic models, the academics analyzed the effects of proximity and noise on housing prices in neighborhoods near Hartsfield-Jackson Atlanta International Airport during 1995-2002. Proximity to the airport is related positively to housing prices due to access to a job market, major transportation hubs etc. The essence of this study is to address a 7 year period and the complications caused by changes over time in the levels and geographic distribution of noise and by the fact that noise contours are measured infrequently. A general decline in noise (fewer jumbo jets) boosted housing prices during 1995-2002. After accounting for proximity, house characteristics, and demographic variables, houses in noisier areas sold for less than houses subjected to less noise. Also, the noise discount is larger during 2000-2002 than 1995-1999.

Concerning airport noise, the results are mixed in that airport noise is related negatively to housing prices, but the relationship is statistically significant only for the 65 + decibel

noise contour. The coefficient for the 70 dBa noise contour suggests a noise discount of 6.1 percent. Thus, the noise discount for houses in the 70 dBa noise contour is slightly more than double that of houses in the 65 dBa noise contour.

Uyeno, Hamiltion and Biggs (1993) studied Vancouver International Airport and estimated the percent change in property value per unit of sound exposure related to the different property types in Richmond BC. Three types of property were considered: vacant land; detached houses; and multiunit residential condominiums. The distinction was made between detached houses and condominiums because it was assumed that aircraft noise would have less effect on the residents of condominiums since they are generally more mobile and discount less for the noise effect and since condominiums are usually better soundproofed. However the study estimated that percent change in property value per one decibel increase in noise level for detached houses, condominiums and vacant land is 0.65 percent, 0.90 percent, and 0.16 percent respectively. For example, a residential detached house valued at $400,000 would decrease $26,000 for each 10 decibel incremental NEF level; while a condominium experiencing the same 10 decibel increase would decrease $36,000 , and vacant land would decrease $6,400 based on the same relationship to the increase in decibel level.

Urban Airports

Volker Nitsch (July 2009) provide an interesting example of an inner city airport , Berlin Tempelhof, which was deemed to be closed due to the impact of noise on a large urban population. Using data from a referendum on the closure of Tempelhof, the authors assess the costs and benefits of an airport located in the core of a large city. Amenities of airports include, among others, access to flight travel and good shopping and employment opportunities. Disadvantages include, most notably, aircraft noise but also, for instance, the risk of plane crashes.

Previous research (as well as frequent opposition to airport expansion) suggests that, for locations adjacent to airports, the costs outweigh the benefits. For instance, it has been widely documented that land values tend to decline as airport noise increases. However, when the residents of Berlin were asked to participate in a referendum in 2008, 881,035 votes were cast, of which the majority (529,880 or 60%) were indeed in favour of keeping the airport open. Still, the referendum failed. Since voter turnout was low (about 36%), the votes for the initiative were only 21% of the total electorate of about 2.438 million eligible voters, while a quorum of 25% had been required.

Boston's Logan Airport, located in a densely populated area on the city's waterfront, serves as a proxy for BBTCA even though Logan is a much larger international airport serving overseas markets with a high frequency of widebody jets. Through many years of community action groups expressing concern about noise from the 24 hour airport having an impact on property values, the Massachusetts State Government has been considering the potential use of airport user fees to provide compensation to homeowners affected by the presence of the airport on land values.

The proposed expansion of Stansted Airport in Essex County, England into a 'Superhub' for British aviation has been a hotly debated topic of discussion for approximately ten years. Although this area of 1.4 million residents is not located in the core of London, it does compare to the scenario existing on Toronto's waterfront in that anticipated economic development due to job creation in the area would be positioned against a concerned resident base which fears the negative impact on property values. The decision on the future of British airport expansion has been continually delayed and is not expected till early 2015. Clearly the scale planned for the next expansion of one of Britain's airports is significantly larger than that which could occur at BBTCA.

SSE (Stop Stansted Expansion) economics adviser, Brian Ross, said: "We know from past experience that, as soon as any shortlist of airport expansion options is published, every single area on that shortlist will be hit by generalized blight and local residents will experience not only stress and anxiety, but immediate difficulties in selling their homes…. 'the last time that Stansted was short-listed for major expansion, in 2002, £570 million was wiped off local house prices during the next 18 months, affecting an area of about 150 square miles' (*EADT 24 web news ,Sept '13)*

A precedent may be cited as Heathrow Airport's owner BAA ' bought hundreds of homes around the airport under its voluntary Property Market Support Bond scheme. It purchased homes at values which were index-linked from a 2002 base' (*EADT 24 web newsOct '13)*

"If you were thinking of buying within or near one of the possible London airport proposals, you'd step back and think again," says James Del Mar of estate agency Knight Frank, who heads the firm's team advising on compensation for homes along the route of the HS2 high-speed train service from London to Birmingham. *(The Guardian Aug '13)*

B. CONCLUSIONS

Throughout the past twenty years a number of academic studies have been produced to determine whether or not the presence of airports near residential areas has been responsible for exerting a negative impact on the homeowners' investment in properties, or whether the rate of appreciation has lagged behind residential areas not affected by airport noise. The studies have typically been produced due to community pressures from residents who cope with the disruption of airport activity or those who live under a flight path feeding a major airport.

It is clear that the sampling of academic studies conducted by practitioners utilizing the theory of hedonics to assess airport noise and its impact on property values leads to the premise that residential property values are negatively affected in comparison to areas lying outside of the flight path or located a further distance from an airport.

Most studies cite the 65 decibel threshold in an urban environment as the level beyond which residents are affected by airport noise. It is assumed that any noise decibel measurement at 65 or below may be considered normal in a congested urban setting.

By and large, the studies conducted on the impact of property values due to the presence of a busy commercial airport have leaned toward older subdivisions becoming, over years adjacent to boundaries of expanding or newly built airports. Most of the studies conducted also point out that the benefits of the proximity to an airport for a residential area do exist in the form of job creation and business generation. The following conclusions have been established from the literature review undertaken:

- There exists a correlation between the value of a residential property and the degree to which the property value will be affected negatively by the proximity of an airport;
- It is generally supported in the literature that 65 + decibels is the point at which airport noise is deemed to have a deteriorating effect on property values;
- One landmark study by *Randall Bell* suggested that the impact of airport noise near the water is diminished due to the propensity for greater homebuyer demand to be closer to the water;
- There is isolated evidence of communities around the world, which are located near urban airports, supporting the existence or expansion of airports for reasons that override property value concerns. (Berlin, Houston);
- There exist examples of municipal jurisdictions compensating property owners due to the affect of airport noise on residential land values;
- Much of the literature cites examples of airports that operate significant jet frequency including widebody (jumbo) aircraft which exert significant noise exposures, and are more reminiscent of the activity through Pearson Airport than that of BBTCA in the inner core of Toronto; and
- It may be summarized in the literature reviewed that the costs outweigh the benefits when the issue of residential property values within the vicinity of a busy commercial airport are assessed.

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City of Toronto

CONDOMINIUM MARKET VALUE IMPACT ANALYSIS: BILLY BISHOP AIRPORT

Toronto, Ontario

November 2013

N. BARRY LYON CONSULTANTS LIMITED

CITY OF TORONTO

CONDOMINIUM MARKET VALUE IMPACT ANALYSIS: BILLY BISHOP AIRPORT

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1.0 INTRODUCTION

On May 7, 2013 the Executive Committee of the City of Toronto formally adopted a request to review a proposal put forward by Porter Airlines to amend the 1983 Tripartite Agreement that currently governs the operations of the Billy Bishop Toronto City Airport (BBTCA). This proposal requests that each of the parties to the Tripartite Agreement consider an exemption from the commercial jet ban that is in place, for the Bombardier CS100 jet aircraft, and that they approve an extension on either end to the main runway.

The introduction of the CS100 at BBTCA has the potential to expand operations at BBTCA. Introduction of jet aircraft would extend the possible range of commercial air services to new long-haul destinations, compared to the existing regional routes. The use of these jets also increases the maximum number of passengers possible per flight, from 70 in the Bombardier Dash8-Q400, which is currently in use, to 107 in the CS100 jet aircrafts. While maintaining the same number of maximum flights per day, the proposed change would increase the potential number of persons moving to and from BBTCA on a daily-basis.

The expansion of operations at BBTCA through the introduction of jet aircraft could have both negative and positive impacts on Toronto's waterfront, nearby communities, the natural environment and the city's local economy. As such, the City has retained the professional services of various consultants to conduct studies that assess these and other possible impacts from the addition of jet aircraft.

As part of this review process, N. Barry Lyon Consultants (NBLC) has been retained by the City as a sub consultant to HLT Advisory Inc. to assess how operations at BBTCA may have impacted local condominium apartment values with a view to understanding if an opinion could be formed with respect to future property value impacts.

2.0 APPROACH & METHODOLOGY

To understand if the presence of commercial aircraft activity at BBTCA has, or will play a role in influencing condominium apartment values in the local market area, NBLC has developed a four phased approach.

This approach begins with developing a clear understanding of the surrounding land uses. To do so, NBLC surveyed the local area, noting existing land uses, area attributes and any problems. This was done in an effort to assess the overall marketability of the local area environment for condominium apartment living from the perspective of a potential purchaser as though they were visiting the area today.

This is followed by a retrospective review of the new condominium apartment market activity (not resales), starting with an overview of the GTA marketplace from 2003 to 2013, followed by an assessment of the Central Waterfront Submarket. The Central Waterfront Submarket is assessed in terms of overall price escalation and sales performances over the last ten year period. This sales activity is benchmarked against the broader Downtown West submarket, which is considered comparable to the Central Waterfront in terms of access to high order transit and walkability to jobs in the downtown core. Key differences are the presence of waterfront views to the south, the Gardiner Expressway to the north and aircraft activity at BBTCA. In this analysis, NBLC placed focus on observing if there are evident variations in key indicators at waterfront properties before and after Porter Airlines commenced service at BBTCA in 2006.

In the third phase of our research, we looked at the performance of the resale market compared to the broader downtown market. The new sale market in downtown Toronto, through the 10 year study period, was heavily influenced by investor activity. The resale market is dominated by end users who ranked and consider factors such as neighbourhood attributes and building conditions highly. As such, NBLC reviewed all resale activities between 2003 and 2013, within eight existing condominium apartment buildings located in the local area. Given that the price of individual units varies greatly based on location, height and views, data was amalgamated on a per building basis to evaluate the overall performance of the existing condominium apartment buildings in the resale market over time. For each of the selected buildings, resale transaction records were obtained from the Toronto Real Estate Board's (TREB) Multiple Listing Services (MLS) and organized by the year of sale to gauge the magnitude of change in average end prices, index pricing and sales pace on a year-over-year basis. Where possible, we reviewed the location, layout and views of each unit by examining the original suite floor plans in the sales marketing material (from NBLC's data base).

Finally, we conducted interviews with local real estate representatives having experience selling Central Waterfront condominiums, to solicit their perspectives on buyers' preferences and concerns in the local area.

3.0 BILLY BISHOP TORONTO CITY AIRPORT

Since 2006, passenger activity at the BBTCA has dramatically increased. Based on Toronto Port Authority Data, in 2012 it was estimated that approximately 1.9 million passengers used BBTCA. This was up from 22,859 passengers in its initial year of operation in 2006 and 264,454 passengers in the subsequent year. Growth from 2007 onward ranged from 52% to 23% year over year.

These passengers access the airport by ferry from the Bathurst St. Ferry Terminal, located at the end of a 20 meter right-of-way called Eireann Quay. Work on a pedestrian tunnel to the airport began in March 2012 and is expected to be complete by Fall 2014. This tunnel is expected to disperse traffic volume; which currently come in 15 minute intervals, with each ferry arrival and departure.

Upon arriving or departing BBTCA in peak-traffic intervals, passengers use the airport's mainland facilities. These include a shuttle bus pick-up/drop-off area, a taxi queuing area and short-term surface parking. A small amount of additional surface parking is also available at the west end of Stadium Road.

Based on preliminary work by BA Group, a transportation consultant to the City's review process, it is estimated that 48% of passengers access the airport by taxi and 20% do so by car.[1] With the current peak number of flights per hour at 16 flights, this level of activity generates approximately 750 vehicles on Eireann Quay during the business periods. Most of these trips are to and from the downtown core.

The changes requested to the Tripartite Agreement would increase the number of passengers transiting through BBTCA and the main land facilities significantly.

- HLT Advisory has estimated that the larger aircraft could increase passenger levels from the current 1.9 million travellers to between 2.9 and 3.3 million persons.[2]
- BA Group further estimates that with the same number of flights per hour (16) and approval of the CS100 Bombardier jets, traffic could increase from 750 vehicles per hour to 900 vehicles per hour. However, it is noted that BBTCA could, within the existing agreement, increase the number of passengers per hour, such that traffic volumes increase to these levels without the introduction of jets.[3]

In terms of noise impacts, we understand the CS 100 aircraft is expected by the manufacturer to be within the noise standards required for operation at the airport; however, this has yet to be confirmed by Transport Canada. We also do not have any exact information with respect to the impacts associated with noise or pollution from the introduction of jets at BBTCA, or impacts from the extension of the main runway. Real or perceived, all of the above changes to operations at BBTCA have the potential to impact on the marketability of condominium apartment units in the local area.

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[1] City of Toronto (Monday, September 9th, 2013). Public Consultation Display Boards. BA Group.

[2] HLT Advisory (June 2013). Economic Impacts Considerations of an Expanded Billy Bishop Toronto city Airport (Updated August 26, 2013).

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4.0 MARKET CONTEXT

This section of the report summarizes the surrounding neighbourhood condominium market context. Based on this information, NBLC concludes this section by providing commentary on the marketability of the local area from the perspective of a potential purchaser as though they were visiting the Harbourfront Community today. Observations are also based on site visits of the area in late October 2013.

For the purposes of this study we have defined a local area which is within closest proximity to the airport, potentially the most impacted by the operation of the BBTCA. The "Local Area" is bound by Lake Ontario to the south, Lakeshore Boulevard to the north, the yacht club basin and Confederation Park to the west and Lower Spadina Avenue to the east.

4.1 Surrounding Uses

- This area was one of the first portions of Toronto's waterfront to transition away from industrial uses to a mixed use area. This transition started in the early 1970's, around the foot of Lower Spadina and Yonge St., with the addition of residential, recreational, cultural and commercial hotel developments, continuing westward to the airport and immediate neighbourhood.
- Today, the immediate area to the north of the airport is an established mixed use neighbourhood.
- The area is dominated by residential uses. These residential uses are in a mix of housing forms and tenures. This includes a large cluster of low and mid-rise non-profit and assisted housing buildings (shaded in purple in Figure 1), built in the late 1980's to early 1990's, and known as the Bathurst Quay Community Land Co-operative. Surrounding the Bathurst Quay Community Land Cooperative are some market-rate condominium buildings (shaded in red in Figure 1) that were largely built in the early-2000s, with the exception of Quay West at Tip Top, more recently completed in 2011.
- These buildings include:
    - A 16-storey residential building, called Atrium on Queen's Quay, with 300 suites. This building is located closest to the airport's mainland facilities, at the northwest quadrant of Bathurst Street and Queen's Quay.

Bathurst Quay Low Rise Housing

South Beach Stacked Townhomes

Atrium at Queen's Quay

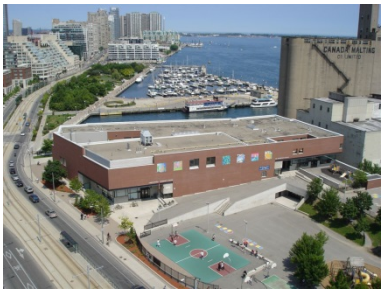
Figure 1: Surrounding Context

Source: Bing Maps, 2010; N. Barry Lyon Consultants, October 2013.

- Nearby, there is a stacked townhome project, with waterfront views, called South Beach Marina Townhomes. This project is on Stadium Road, overlooking the National Yacht Club, the Western Channel and HMSC York. This is one of the few medium density housing projects with direct waterfront views near the downtown core.
- Another condominium apartment building cluster in the area is the well-known Tip Top Lofts conversion project, 12-storeys tall, with 261 suites, at the southwest intersection of Bathurst Street and Lakeshore Boulevard West.
- Directly south of the loft building is Quay West at Tip Top. This building was completed in 2011, is 23 storeys tall and has 364 suites.

Tip Top Lofts

- There are also some parks, recreational area and community uses in the immediate area.
  - Park and recreational uses include: Little Norway Park, with a baseball park and splash pad area looking onto the Bathurst Street Ferry docks; Stadium Road Park; the Martin Goodman Trail; and Confederation Park.
  - Community facilities include a shared public space for: The Waterfront Public School (JK to Gr. 8), City School (Gr. 11 & 12 – Alternative High School) and the Harbourfront Community Centre.


Community Centre & School

- The former Canada Malting Complex, now owned by the City, occupies the eastern flank of Bathurst Quay, just south of the school. Part of the site has been leased to the TDSB for park space.


Little Norway Park

- Retail uses in the immediate area are very limited, with a small independent grocery store at the bottom of Atrium at Queen's Quay. Retail uses at the base of other apartment buildings in the market area are nail salons, dental offices, small boutiques and convenience stores.

4.2 Residential Market Context

4.2.1 Market Strengths

Overall, Toronto's waterfront has historically been one of the city's most in demand communities in which to live. The following features underpin market demand for this location.

- Residential units in this area are desirable to many buyers due to their south facing views of Toronto's waterfront and the Toronto Islands, together with north facing views of the downtown skyline. These views, combined with the increasing amenities of the waterfront, which offer both passive and active

recreational and cultural programming opportunities, are unique in the City and by far its greatest market draw.

- The immediate area also has access to higher order transit, with the 509 Harbourfront Streetcar that provides service to Union Station and to regional transportation connections.
- Access to BBTCA will be seen as an advantage to some buyers; particularly to frequent airport users.
- Area residents are within a short transit rise or walking distance to King West (0.9 km); the South Core (1.0 km); Ferry Terminal to Toronto Island (1.5 km); as well as, Queen West (1.5 km). These areas include a wide assortment of trendy shops, restaurants, services, entertainment venues and recreational activities.
- The above areas serve as major employment districts, particularly the Downtown Core and emerging South Core area. With vehicle congestion increasingly becoming an issue, neighbourhoods within walking distance or a short transit ride to employment nodes will increasingly become popular, especially with young professionals.
- The local area boasts the only elementary school in the Harbourfront Community, south of the Gardiner Expressway. The local area is also about a 2.5 km distance to the new George Brown Waterfront Campus, at Sherbourne and Queen's Quay, in the new East Bayfront Community.
- In terms of outdoor recreation, residents in the local area have superior access to dedicated running/walking trails and paths, such as the Martin Goodman Trail and the revitalization of the Queen's Quay Boulevard, plus marinas, sailing clubs, paddling clubs, baseball diamonds, and activities on Toronto Island, etc. This will be attractive to potential purchasers who value an active lifestyle.
- Residents in the local area have access to many cultural attractions within less than a 1.0 to 2.0 km distance, including: the historic Fort York; Toronto Music Garden; Harbourfront; Enwave Theatre; and, the Walter Carsens Centre for the National Ballet School.
- The local area also has immediate access to the Gardiner Expressway from Lake Shore Boulevard West.

4.2.2 Market Shortcomings

In addition to the benefits, there are also a number of shortcomings to the local waterfront area. These weaknesses generally limit the local area from being considered a prestigious neighbourhood, with higher per square foot values (psf), which would be expected in other waterfront communities in other cities in North American, or achieved in places like the Bloor-Yorkville neighbourhood in Toronto. Below is a list of factors reducing the marketability of the area, and possibly dampening the overall appreciation of housing values in the local area.

- While the waterfront offers enjoyable weather during summer months, it can be equally cold and hostile during the winter.

- While the entertainment and cultural program opportunities on the waterfront will be attractive for some existing and future residents, these uses also generate tourist traffic, noise and other nuisances. Some residents may be put off by this high level of tourist activity.
- For residential units facing north, the Lakeshore and Gardiner Expressway present a constant source of noise and pollution. This combined with on-going repair work, weakens the marketability of units at lower floors.
- For some prospective purchasers, the Gardiner Expressway also creates a perceived sense of isolation and separation from the downtown.
- A key factor reducing the attractiveness of the area is a lack of retail uses that meet the daily needs of residents. While several buildings have some retail at-grade, an estimated 20% of these spaces are vacant and others are occupied by non-essential commercial services (e.g. tanning salons, nail salons, dental offices, etc.). The closest large grocery stores are at least 1.0 km away at: Sobeys at Queen's Quay Terminal; Longos at Maple Leaf Square; or Loblaws, on Queen's Quay, at the foot of Lower Jarvis. As a result, a car or transit is needed for the purchase of heavier groceries, and/or these purchases need to be combined with other activities away from the local area.
- It is possible that some buyers will have concerns with respect to operations associated with the BBTCA in terms of noise, pollution and traffic, and unknown impacts and continued expansion.
- The Harbourfront School is located in a high traffic area, which creates a real or perceived conflict between this sensitive land use and possible noise, pollution and accidents. Potential buyers planning to start families or having infants may not want to send their children to this school for the above concerns and the uncertainty of their impacts.
- Perhaps the biggest weakness of the local area is overall traffic congestion. This includes traffic congestion enroute to the Gardiner Expressway, Lakeshore Boulevard West and Queen's Quay. This is an issue during weekday mornings and afternoons when people are commuting in or out of the downtown from or to the west end of the GTA. As previously discussed, a regular source of heavy traffic is also the BBTCA with approximately 750 vehicles going to and from this area during peak hours. Traffic is further worsened in the local area on game/event nights at the Air Canada Centre, with an estimated 2.8 million annual visitors, the Rogers Centre, with 3.5 million annual visitors, BMO Field, with 500,000 annual visitors, and Molson Amphitheatre, with 337,000 annual visitors, all funneling onto major arterial roads near the subject site.
- Traffic issues are compounded by various construction projects underway that are simultaneously reducing lanes in the Central Waterfront area of Toronto (e.g. Queen's Quay Revitalization, Union Station). While many of these capital infrastructure projects are scheduled for completion within the next two years, there is expected to be significant on-going construction, and traffic congestion from office and residential development in the South Core of downtown Toronto.

- Eastbound and westbound on-ramps to the Gardiner Expressway are also increasingly congested during peak-hours, making access to the highway an increasingly less attractive asset, and potentially a nuisance over time in terms of noise and pollution.

4.3 Summary

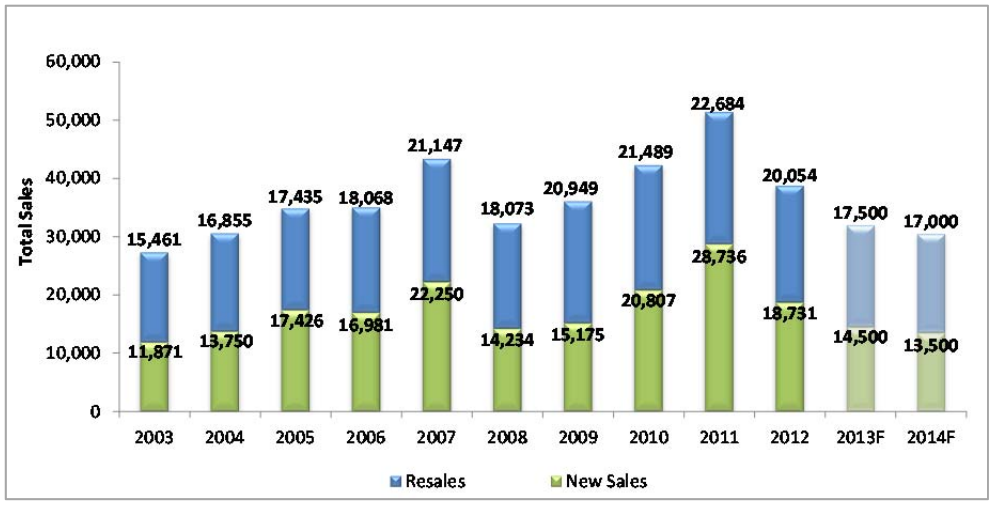
Overall Toronto's Central Waterfront area is an appealing community where many people seek to live. However, for all of its benefits and attractions, it has an equal set of disadvantages. This balance of market factors has placed limits on the demand for condominium development in the area to entry level to mid-market positioning compared to other areas of the City.

5.0 GTA NEW HIGH-RISE MARKET OVERVIEW

Over the last decade, there has been sustained growth in terms of both sales volumes and index pricing in the GTA high-rise marketplace, to the point where condominiums have become the popular new housing form of choice.

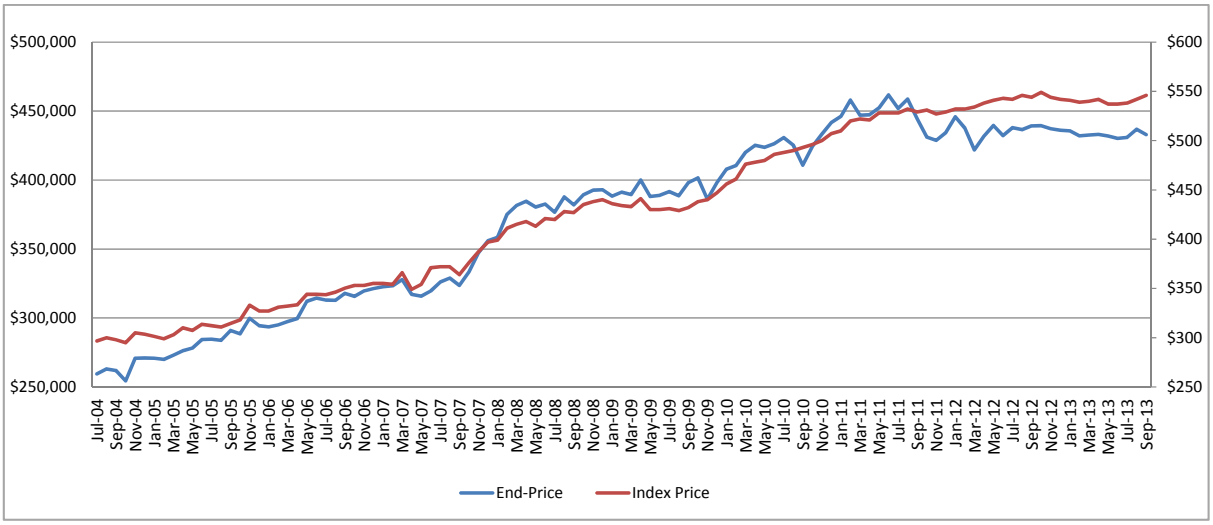
- The combined resale and new high rise markets have grown in total size from 27,332 annual sales in the GTA in 2003 to 38,785 annual sales in 2012, with an average annual growth of 3% (Figure 2).
- This growth is accompanied by rising end pricing and index pricing, at average annual increases of 5.2% and 6.3% respectively (Figure 3). Higher growth with respect to index pricing has occurred, in part, due to decreasing average unit sizes in an increasingly investor-driven market.

Figure 2: High-Rise New Sales and Resales in Greater Toronto Area



Notes: F=Forecast. Source: RealNet, August 2013; Toronto Real Estate Board Multiple Listing Service; September 2013; N. Barry Lyon Consultants Limited; September 2013.

Figure 3: Index and End Selling Price Appreciation in the New High-Rise GTA Marketplace.



Source: RealNet, August 2013; Toronto Real Estate Board, September 2013; N. Barry Lyon Consultants Limited; September 2013.

- Condominium demand over the last decade has been fueled by a broad range of factors that are inter-related, including, but not limited to:
  - Affordability issues in the ground-related housing market;
  - Increasing popularity of housing forms that offer a mix of amenities and a lower maintenance lifestyle;
  - Investor demand, combined with a limited and aging supply in the purpose built rental market;
  - Aging demographics, driving demand from retirees and empty nesters; and,
  - Growing employment opportunities in the downtown core, increasing demand for housing within walking distance of this area, particularly from young professionals "first-time homebuyers".
- Macro-economic conditions have also played a role in the level of GTA growth experienced over the last decade. These external influences include:
  - Challenging global economic conditions, and an overall concern of job security, in the Province and GTA;
  - Prevailing strong levels of immigration; and
  - Low interest rates in recent years.
- All of the above factors affect homebuyer confidence, determining whether a household is willing and ready to enter the new housing market and the resulting level of sales volumes/demand.
- Macro-economic influences explain fluctuations in sales volumes, in four to five year economic cycles, as seen in Figure 2. In Figure 2, peak condominium sales activity is seen in 2007, when economic conditions were strong across the GTA, and again in 2011, when the Toronto real estate market was considered a wise investment location, during the global economic recovery, generating high condominium investor activity.
- Notwithstanding these fluctuations in the market, the average end-selling price of new condominium units has increased steadily, along with index pricing, over the last ten years.
- This has not been the case over the last ten months. Over the last year and a half, the high rise residential market has shown signs of slowing, with fewer sales than in previous years and stabilizing pricing. This change in the market is attributed to a combination of:
  - The withdrawal of some first-time home buyers and some investors from the high rise market.
  - Generally speaking, the large presence of condo investor buyers has diminished in size as price escalations over the past few years have led to diminished returns on condominium apartment investments;
  - Lenders are pulling back in their support of condominium financing, to developers and end users, particularly investors.

- Increases in pricing and modified mortgage amortization rules have also effectively limited the pool of qualified mortgagees and have pushed the limits of affordability for first time home buyers, increasing rental vacancy levels and resale listings.

- With market conditions softening, there currently is a very large supply of unsold inventory in the GTA high rise marketplace.
  - The completion of many large-scale condominium projects will continue to add to the private rental market, as well as the resale market.
  - This "new" supply will also compete with current and future residential projects.

5.1 Future Expectations

Over the next several years we expect to see the completion of 13,000 to 15,000 new condominium apartments annually. Many of these units will be owned by investors who purchased units in peak market activity years. If large numbers of these investors sell their units, the increase in supply could result in softening demand and pricing in the overall new housing market, as well as the resale market.

Based on historic market trends and current conditions, NBLC expects that across all GTA market areas, the demand for new condominium development will continue into the foreseeable future. However, the investor interest that has driven the market in recent years, combined with increasing supply choices and other factors discussed above will likely moderate growth and pricing escalation over the next several years.

6.0 NEW CONDOMINIUM APARTMENT MARKET ON THE CENTRAL WATERFRONT

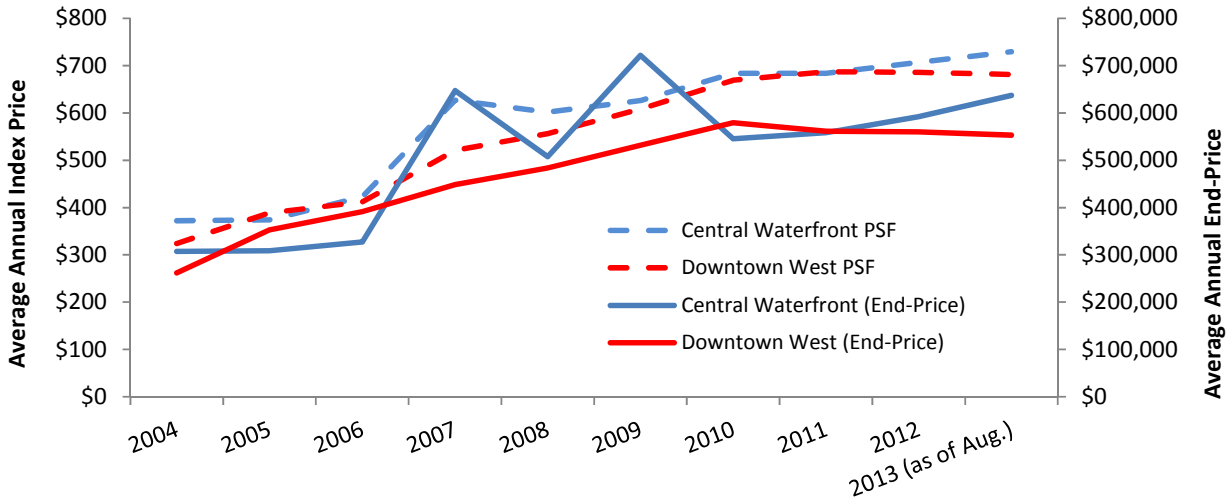
This section reviews the growth of new condominium development in the Central Waterfront submarket from 2003 to 2013 and compares it to the growth in the Downtown West submarket. The purpose of this analysis is to explore the demand characteristics of the new condominium market in terms of pricing over the ten year period. This period was selected to examine potential market issues before and after Porter Airlines began service at BBTCA in 2006.

The Downtown West submarket was selected as a comparison, given that it shares some of the attributes of the Central Waterfront submarket, including its proximity to the downtown core and employment opportunities and accessibility to transit service. Any possible impacts of BBTCA would be significantly reduced in this adjacent market area. The following map illustrates the Central Waterfront submarket and the Downtown West submarket boundaries. Figure 5, on the following page, illustrates trends in average end-pricing and index pricing between these two submarkets.

Figure 4: Downtown West and Central Waterfront Submarkets

Source: RealNet Canada Inc. and DMTI Spatial CanMap.

Figure 5: Average End-Price and Index Pricing, 2004 to 2013



Source: RealNet, August 2013; N. Barry Lyon Consultants Limited; September 2013.

Figure 6

Downtown West										
Year	Active Projects	Active Total Units	Active Total Sold	Remaining Inventory	Total YTD Sales	Current Avg. Size	Current Avg. Price	% Change	Current $PSF	% Change
2003	45	10,532	6,777	3,755	2,052	-	-	-	$350	-
2004	33	7,082	5,501	1,581	2,109	808	$261,958	-	$324	-7%
2005	37	8,917	6,579	2,338	3,107	907	$352,729	35%	$389	20%
2006	43	10,436	8,520	1,916	3,073	949	$391,034	11%	$412	6%
2007	43	10,748	8,460	2,288	4,365	861	$448,720	15%	$521	26%
2008	52	14,423	9,825	4,598	2,966	871	$483,980	8%	$556	7%
2009	55	15,564	13,180	2,384	4,618	923	$531,849	10%	$608	9%
2010	69	20,295	16,807	3,488	4,405	913	$579,397	9%	$669	10%
2011	74	22,389	19,298	3,091	5,495	858	$561,366	-3%	$687	3%
2012	82	23,740	20,007	3,733	4,465	822	$559,849	0%	$686	0%
2013 (as of August)	77	23,377	18,984	3,770	1,130	813	$552,971	-1%	$681	-1%
Annual Ave. Increase							7.8%		6.2%	

Central Waterfront										
Year	Active Projects	Active Total Units	Active Total Sold	Remaining Inventory	Total YTD Sales	Current Avg. Size	Current Avg. Price	% Change	Current $PSF	% Change
2003	9	2,962	2,080	882	259	-	-	-	$369	-
2004	6	2,466	1,926	540	342	826	$307,196	-	$372	1%
2005	6	2,191	1,918	273	507	825	$308,495	0%	$374	1%
2006	5	1,795	1,094	701	363	773	$327,155	6%	$423	13%
2007	7	2,504	1,759	671	671	1,032	$647,259	98%	$627	48%
2008	5	1,965	1,251	714	509	843	$507,525	-22%	$602	-4%
2009	5	2,040	1,486	554	209	1,057	$721,705	42%	$626	4%
2010	5	2,055	1,652	403	99	837	$545,013	-24%	$684	9%
2011	5	2,055	1,652	403	118	842	$558,022	2%	$684	0%
2012	5	2,207	1,745	462	56	853	$592,162	6%	$707	3%
2013 (as of August)	7	3,334	2,796	538	896	893	$637,193	8%	$729	3%
Annual Ave. Increase							7.6%		6.4%	

Source: RealNet, August 2013; N. Barry Lyon Consultants Limited; September 2013.

- A key observation from Figure 5 is the fact that average index pricing for new condominiums has increased over the last ten years in both submarkets, from $350 psf to $681 psf in Downtown West and $369 to $729 in the Central Waterfront.
- End-pricing, on average, is typically higher in the Central Waterfront market.
- The average annual rate of increase over the last ten years in terms of index pricing between the two submarkets is also remarkably similar, at 6.2% per year in the Central Waterfront area and 6.3% in the Downtown West area.
- Looking at the periods before and after the opening of Porter Airlines in 2006, condominium development activity in the Central Waterfront remained consistent with the trends being experienced in the Downtown West Submarket to the north. Price increases between each submarket increased in tandem through this period.
- The increase in the average end-selling price in the Central Waterfront in 2007 is the result of the opening of Phase 1 and 2 of the Residence at Pier 27 by Fernbrook/Cityzen, with high opening index prices ($722 psf) that were well above other projects in the area (average $627 psf).
- In recent years, the overall average pace of sales has gone up slightly in the Central Waterfront area with the addition of two new projects in 2011 and two more projects in 2013. All of these are located in the South Core and East Bayfront area away from the "local area", closer to the airport.
    - The two most recent projects are Harbour Plaza Residence – West Tower, by Menkes, and Aqualina at Bayside, by Tridel and Hines. Aqualina is located at the foot of Sherborne Street, in the East Bayfront. Waterside units at this development would appear to not be impacted by air traffic at BBTCA in terms of noise and vehicle traffic.
    - Harbour Plaza, located on Harbour Street (Lake Shore Blvd. West), between York Street and Yonge Street, is set back further from the waterfront and blocked by several buildings.
- These two projects have achieved 91 and 83 sales per month respectively, since opening this spring/summer season, indicating strong demand in the Central Waterfront area, despite weakening overall market conditions.

7.0 THE LOCAL RESALE MARKET

This section reviews the condominium resale market of selected buildings in the Central Waterfront submarket, as defined by NBLC's defined "local area", between the ten years period of 2003 to 2013. This is done to further examine whether operation at BBTCA have had an impact on pricing appreciation.

The resale market refers to sales between individual owners. It is not influenced by sales and marketing strategies, like the new condominium market discussed in Section 6.0, and is based more on a neighbourhood's profile, attractiveness, and individual unit condition. In other words, rather than selecting units from plans, these buyers would tour a unit and, one assumes, have the opportunity to experience the noise and traffic issues associated with the area, including those associated with BBTCA. As a result, this section of the report provides a closer assessment of market demand for waterfront condominiums near the airport between individual end-users to help derive an opinion of future impacts of the airport on condominium apartment value appreciation.

In the "local area", NBLC selected eight condominium projects. These include six condominium apartment projects, one loft conversion project, and one stacked townhome project. Figure 7, on the following page depicts the location of these buildings and their relation to the BBTCA.

- Kings Landing Condominiums (460 & 480 Queens Quay West);
- 5QQ Condominiums (500 Queens Quay West);
- 550 Queens Quay West;
- Queen's Harbour (600 Queens Quay West);
- Atrium at Queen's Quay (650 Queens Quay West);
- Quay West at Tip Top (90 Stadium Road);
- Tip Top Lofts (637 Lake Shore Blvd) conversion; and
- A stacked townhome project, South Beach (28-38 Stadium Road).

As indicated in the methodology section of this report, the historical and current resale transaction data (between 2003 and 2013) was obtained from the Toronto Real Estate Board's (TREB) Multiple Listing Services (MLS). NBLC briefly reviewed the current condition of each building in terms of its age, typical occupants, amenities and associated retail uses to determine if any features might have an impact on resale values. This was done by looking at original promotional material, and through a local area tour.

Focus was then given to analyzing the data and historical sales trends, noting increases in values within these buildings using key market indicators (e.g., end prices, index prices, sales-to-listing ratio (SLR), days on market (DOM), and sales-to-listing price ratio (SLP)). The average SLP is calculated based on the average list price to the average price of sold units only; this excludes units with listings that expired, or that were listed but not sold.

Figure 7 – Location of Resale Condominium Apartment/Stacked Townhome Projects

Source: Bing Maps, 2010; N. Barry Lyon Consultants, October 2013.

This information is presented in table form for each building. We have provided commentary for each building, particularly when variations to historical trends or other buildings in the local area are observed.

As a broad benchmark, we also compare our finding to the larger Toronto Real Estate Board's C1 Zone, bound by Bloor Street to the north, Yonge Street to the east, Lake Ontario to the south, and the Gardiner Expressway to the west. This larger market area includes N. Barry Lyon Consultant's defined "local area".

During this period, the average price of condominium building in the C1 Zone increased from $250,000 to $427,000, or an increase of 71% over the past 10 years (5.5% per year on average).

7.1 Kings Landing (460 & 480 Queens Quay West)

With construction complete by 1988, Kings Landing is one of the first condominium apartment buildings to be built in the former industrial area along Toronto's Downtown central waterfront. It is located at the northwest corner of Lower Spadina Avenue and Queens Quay West, immediately north of the Toronto Music Garden.

- This project was positioned towards the luxury end of the market, with 101units only, ranging in size from 1,207 square foot one-bedroom suites to a 5,482 square foot penthouse suite. About 75% of the units at Kings Landing have terraces and most units have enclosed solariums. These units are mostly facing south, with Inner Harbour views.
- In the mid-1990's, this building was redesigned to incorporate rehearsal space for the National Ballet of Canada on lower floors, facing the Gardiner Expressway. This use remains today.
- There are some retail stores at street level, including a mix of boutiques, a café and dental office.
- Various amenities, typical of a luxury building, are also present.
- Real estate brokers indicate that occupants of the building are primarily older, more affluent professionals, working in the downtown core, as well as some seniors/retirees. Some residents have been living in this building since the late-1980s and early-1990s.
- Upon launch of sales in 1983, units at Kings Landing ranged in price from $179,260 to $1,096,000, averaging about $120 (north facing) to $195 per square foot (south facing).
- Resale activity in Kings Landing is moderate, with only about 10% of its units turning over each year. This low level of turnover is indicative of a building occupied by end-users who are "move-down buyers", with no investor activity, that remains an attractive place to live.
- Of note, the maintenance fees at Kings Landing are the highest among the condominium projects in the surrounding area at an average of about $1,100 per unit per month over the past 10 years, which deters many buyers and explains why units normally spend an average of two months before selling at Kings Landing.

Resale Condominium Apartment Building Profile – Kings Landing	
Developer/Builder:	**Harbour Quay**
No. Units:	101
Opening Date:	May 1, 1983
Suite Size Range:	1,207 to 5,482 Square feet
Opening Price Range:	$179,260 to $1,096,000
Opening $PSF Range:	$119 to $208
Amenities:	Concierge, indoor swimming pool, whirlpool, sauna, fitness room, party room, tennis court, two sun decks
Retail At-Grade:	Walter Carsens Centre for the National Ballet, nail salon, tanning studio, café, convenience store, pet boutique, dental care office

Year	# Listed	# Sold	SLR	Avg. List Price	Avg. Sold Price	SLP	DOM	Avg. Size	Avg. PSF	Avg. Maint. Fee/Mo.
2003	17	7	41%	$610,429	$552,929	97%	59	1,657	$330	$905
2004	12	8	67%	$634,067	$543,063	96%	43	1,652	$331	$970
2005	11	5	45%	$634,445	$684,200	93%	80	2,081	$303	$1,047
2006	11	8	73%	$680,900	$589,000	97%	58	1,570	$360	$979
2007	9	8	89%	$720,111	$661,875	95%	49	1,715	$381	$1,064
2008	11	5	45%	$816,064	$616,600	97%	43	1,568	$386	$1,111
2009	8	5	63%	$696,738	$652,260	95%	114	1,731	$381	$1,106
2010	5	2	40%	$979,180	$782,500	94%	47	1,625	$450	$1,236
2011	6	4	67%	$731,983	$767,500	96%	68	1,700	$450	$1,122
2012	12	5	42%	$967,133	$854,600	94%	18	1,689	$488	$1,239
2013 (YTD)	7	5	71%	$1,038,414	$866,300	95%	55	1,830	$468	$1,379
Average Annual Increase				**5.5%**	**4.6%**				**3.6%**	

Source: Toronto Real Estate Board (TREB) Multiple Listing Services (MLS); RealNet, August 2013.

- In the past 10 years, the average end price of the resale units at this building have increased by 57%, compared to an overall increase of 71% experienced in the Toronto Real Estate Board's C1 Zone.
- This lower appreciation is expected at Kings Landing, given that pricing is already at the upper end of the market (including maintenance fees) and suites likely require some significant upgrades, compared to most units in the C1 Zone.
- Due to the limited resale activities each year at Kings Landing, average end prices tends to be skewed by smaller or larger unit sales within a given year, with correspondingly lower or higher end-pricing. We consider these "outlier" units. As such, when looking at average pricing from one year to the next, there are noticeable fluctuations.

- Index price values are less affected by outlier units (e.g. larger, south facing suites with higher than average pricing). Therefore, on a per square foot basis, the average resale value at Kings Landing increased even more steadily, from $330 per square foot in 2003 to $460 per square foot in 2013, equating to a 42% increase in value over the past 10 years, or approximately 3.6% increase annually.
- Comparing the average resale value in 2003 to the current year (2013, as of November), over a ten year period, the end price of the units increased at an average annual rate of 4.6% over the past decade.
- The view exposure of a unit places significant influence on its value at Kings Landing. South facing units achieve a much higher value per square foot than the north and west facing units having views of either the Gardiner Expressway or the neighbouring 5QQ Condominiums. This explains the two dips of the index price in 2005 and 2009, as both years had only 4 to 5 units sold and prices were skewed by the north or west facing units sold in those years.
- Overall the building, despite its age and its close proximity to the Gardiner Expressway has experienced year over year property value increases. Demand in terms of days on market was the slowest of all surveyed buildings, averaging about 2 months per sale. This is common to larger, older buildings where unit interiors and common areas are typically dated and frequently require renovation, as well as units having higher monthly fees.
- There is also no indication that activities at BBTCA, pre- and post-commercial aircraft activity, have influenced sales activity.
- In speaking with real estate agents who typically sell units to older, more affluent buyers in the area, it is expected that there will always be demand for units in buildings like Kings Landing in the Central Waterfront area. While some existing residents may wish to sell their units because of increasing irritations in the area, buildings like Kings Landing are somewhat unique in the market. They have much larger units than can be found elsewhere in Toronto and this will help with overall value appreciation and continued demand. This unique feature, of course, is somewhat off-set by the fact that older buildings and individual suites will typically require some level of upgrading or repair.

7.2 5QQ Condominiums (500 Queens Quay West)

With sales starting in 1997, 5QQ Condominiums were the first phase of a two-phase development. This project is located on the north side of Queen's Quay, across from the Music Garden, and immediately to the west of Kings Landing.

- Initially, buyers at this project were primarily owner occupants moving from older existing waterfront condominiums and North Toronto, according to resale agents.
- Opening prices at 5QQ Condominiums ranged from $117,500 for a 601 square foot one-bedroom unit ($195 psf) to $1,585,000 for a 4,104 square foot penthouse unit ($386 psf), averaging $242 per square foot.

Resale Condominium Apartment Building Profile – 5QQ Condominiums	
Developer/Builder:	**Pacific Century Group**
No. Units:	186
Opening Date:	July 1, 1997
Suite Size Range:	601 to 4,104 Square feet
Opening Price Range:	$117,500 to $1,585,000
Opening $PSF Range:	$130 to $386
Amenities:	Shuttle bus to Union Station; 24 hour concierge; bicycle storage; courtyard for barbecuing; equipped party room; extensive recreational fitness and social facility.
Retail At-Grade:	Vacant.

Source: Marketing Materials

Year	# Listed	# Sold	SLR	Avg. List Price	Avg. Sold Price	SLP	DOM	Avg. Size	Avg. PSF	Avg. Maint. Fee/Mo.
2003	33	20	61%	$438,152	$292,083	98%	53	954	$307	$510
2004	26	17	65%	$412,935	$408,171	96%	44	1,277	$312	$531
2005	33	23	70%	$563,085	$525,672	97%	59	1,337	$352	$654
2006	28	21	75%	$530,064	$485,382	96%	40	1,382	$348	$689
2007	21	17	81%	$545,443	$414,688	97%	31	1,084	$374	$554
2008	24	14	58%	$796,508	$475,429	98%	22	1,161	$404	$686
2009	16	12	75%	$649,025	$451,375	99%	27	1,115	$415	$641
2010	19	11	58%	$716,279	$551,273	98%	22	1,251	$441	$656
2011	17	9	53%	$765,482	$834,000	96%	45	1,653	$476	$728
2012	21	17	81%	$564,500	$482,059	95%	44	1,111	$438	$619
2013 (YTD)	10	4	40%	$736,980	$521,875	97%	33	1,121	$470	$733
Average Annual Increase				**5.3%**	**6.0%**				**4.4%**	

Source: Toronto Real Estate Board (TREB) Multiple Listing Services (MLS); RealNet, August 2013.

- Compared to Kings Landing, the maintenance fees at 5QQ Condominiums are much more affordable, averaging $640 per month in the past decade.
- Given the relatively low monthly fees, coupled with the shortage of spacious condominium apartments in the downtown area, the resale value of units at 5QQ have shown an appreciation of 79% between 2003 and 2013. This exceeds the typical condominium value increase in the C1 zone (71%) during the same timeframe, averaging a 6.0% increase in unit price each year.
- Overall, value appreciation is fairly steady at this building.

- One exception is a dip in average end pricing and index pricing in 2012. This can be explained by the sale of a $3.3 million ($609 psf) unit in 2011, which heavily skewed both indicators. With this sale removed, the average end price and index price in 2011 dropped to $547,625 and $459 psf; more in line with previous year averages.
- Units at 5QQ Condominiums tend to sell quickly, taking just over a month to reach a sale.
- The significant jump in end prices between 2003 and 2013 can be attributed to the size of the resale units at this location being resold in the first half versus the last half of the last decade. In 2003, about half the units that came to the market were smaller units, less than 1,000 square feet, with lower entry-level pricing. In later years, resale units were dominated by 1,000 square foot plus suites and some 2,000 square feet units, skewing pricing upwards.
- That being said, the index price at 5QQ Condominiums still increased steadily, at about 4.4% per year, from $307 psf in 2003 to $470 in 2013, with a peak in 2011, coinciding with the high-rise sales boom across the city.
- There was no spike in sales activity, or an evident effect on value appreciation before or after the introduction of Porter Airlines activity at BBTCA.

7.3 550 Queens Quay West

The condominiums at 550 Queens Quay are the second phase of 5QQ Condominiums, located immediately to the west of the first phase.

- Opening a year after the first phase, in 1998, 550 Queens Quay had lower starting prices, with units ranging from $99,000 for a 605 square foot one-bedroom unit ($164 psf) to $555,000 for a 1,705 square foot penthouse unit ($326 psf), averaging $265 per square foot.
- Similar to the 5QQ Condominiums, the purchasers at 550 Queens Quay appear to be mainly end-users. Given a larger proportion of smaller units, 550 Queens Quay attracted more young professional singles, who are “first-time homeowners”, and some more price-sensitive empty nesters.
- Over the past decade, resale units at 550 Queens Quay have appreciated by 49%, or 4.1% annually.
- To some extent, lower value appreciation is expected in a building with more “first-time homebuyers” and lower pricing, as these units are more likely to have fewer of the typical upgrades to fixtures and finishes between sales that contribute to rising end-selling prices.
- This building also has a mid-market positioning strategy, skewing pricing and price appreciation downwards; whereas the C1 Zone is much larger, with mixed mid-market, upscale and luxury projects as well.
- Despite lower price appreciation, there appears to be healthy demand for units in this building, with suites at 550 Queens Quay selling faster compared to 5QQ Condominiums, spending a month on the market on average.

Resale Condominium Apartment Building Profile – 550 Queens Quay West	
Developer/Builder:	**Pacific Century Group**
No. Units:	246
Opening Date:	June 1, 1998
Suite Size Range:	605 to 1,705 Square feet
Opening Price Range:	$99,000 to $555,000
Opening $PSF Range:	$164 to $326
Amenities:	Shuttle bus to Union Station; 24 hour concierge; equipped party room; recreational fitness and social facility.
Retail At-Grade:	Vacant, dental clinic.

Source: Marketing Materials

Year	# Listed	# Sold	SLR	Avg. List Price	Avg. Sold Price	SLP	DOM	Avg. Size	Avg. PSF	Avg. Maint. Fee/Mo.
2003	47	27	57%	$285,657	$280,167	98%	50	863	$327	$372
2004	46	37	80%	$288,137	$283,454	98%	39	861	$327	$411
2005	30	27	90%	$299,470	$288,256	97%	29	836	$343	$434
2006	42	33	79%	$331,155	$294,055	98%	29	809	$364	$463
2007	37	31	84%	$372,542	$335,416	99%	22	870	$385	$493
2008	28	20	71%	$369,088	$337,840	98%	32	787	$428	$471
2009	21	15	71%	$340,085	$327,407	98%	33	809	$407	$447
2010	23	16	70%	$384,126	$370,106	99%	18	798	$466	$469
2011	24	19	79%	$478,275	$465,700	98%	28	967	$479	$553
2012	18	13	72%	$442,006	$443,038	97%	34	902	$493	$500
2013 (YTD)	15	10	67%	$407,139	$416,950	98%	42	839	$499	$468
Average Annual Increase				**3.6%**	**4.1%**				**4.3%**	

Source: Toronto Real Estate Board (TREB) Multiple Listing Services (MLS)

- On a per square foot basis, the price increases at 550 Queens Quay and 5QQ are very similar, with the increase at 550 Queens Quay slightly lower at a 52% increase between 2003 and 2013, or 4.3% annual increase on average.
- Notwithstanding the above, a slight pricing dip was observed in 2009. This is largely attributed to a concentration of north and west facing units looking into the Gardiner Expressway that sold in 2009 rather than activity at BBTCA.
- There is also no indication that activities at BBTCA, pre- and post-Porter Airlines activity, have influenced sales activity.

7.4 Queen's Harbour (600 Queens Quay West)

Queen's Harbour is located immediately to the west of 550 Queens Quay, at the northeast intersection of Bathurst Street and Queens Quay West. This condominium development is composed of two towers which have a total of 276 units.

- Originally, units at Queen's Harbour ranged from $99,900 for a 450 square foot studio unit ($222 psf) to $416,990 for a 1,250 square foot penthouse unit ($336 psf), averaging $290 per square foot.

Resale Condominium Apartment Building Profile – Queen's Harbour	
Developer/Builder:	**Monarch and Urbancorp**
No. Units:	276
Opening Date:	March 1, 1997
Suite Size Range:	450 to 1,250 Square feet
Opening Price Range:	$99,900 to $419,990
Opening $PSF Range:	$206 TO $336
Amenities:	24 hour concierge; party room with patio; exercise room with saunas; whirlpool; guest suite; meeting room; underground visitor parking.
Retail At-Grade:	Japanese Restaurant

Source: Rafael + Bigauskas Architects

Year	# Listed	# Sold	SLR	Avg. List Price	Avg. Sold Price	SLP	DOM	Avg. Size	Avg. PSF	Avg. Maint. Fee/Mo.
2003	45	36	80%	$242,016	$237,653	98%	44	759	$314	$365
2004	33	26	79%	$227,197	$224,054	98%	49	700	$323	$348
2005	36	32	89%	$247,289	$236,825	98%	32	683	$351	$368
2006	30	27	90%	$240,413	$233,403	98%	21	655	$362	$371
2007	24	22	92%	$282,471	$276,972	99%	25	726	$386	$427
2008	20	16	80%	$323,095	$319,128	99%	20	748	$430	$455
2009	23	19	83%	$280,035	$280,147	103%	16	624	$455	$389
2010	25	21	84%	$320,339	$316,495	101%	16	658	$490	$439
2011	17	15	88%	$374,699	$358,892	99%	20	771	$471	$529
2012	11	10	91%	$350,218	$354,644	100%	18	691	$521	$479
2013 (YTD)	16	11	69%	$370,631	$365,162	98%	27	726	$514	$524
Average Annual Increase				**4.4%**	**4.4%**				**5.1%**	

Source: Toronto Real Estate Board (TREB) Multiple Listing Services (MLS)

- Demand appears to have increased steadily at this building since its completion in the early 2000's, with the days on market required to sell a unit reduced from over a month in 2003 and 2004 to 20 days, and less since 2008. This has occurred as activity at BBTCA has rapidly increased; indicating that new residents of this building are buying into an urban lifestyle, and the nuances of the area that were discussed in Section 4 of this report (i.e. noise, concerns about pollution, traffic congestion, etc.).
- Average sold price of resale units at Queens Harbour appreciated by 54% between 2003 and 2013, at an average rate of 4.4% per year. On a per square foot basis, units at Queens Harbour increased about 64% between 2003 and 2013, equating to an annual average increase of 5.1%.

7.5 Atrium at Queen's Quay (650 Queens Quay West)

Atrium at Queen's Quay is the closest project to the airport mainland facilities, at the intersection of Bathurst Street and Queen's Quay. It is therefore, potentially most impacted by vehicle and pedestrian traffic increases associated with the airport.

- This 16 storey, 289 unit condominium project was originally priced from $74,900 for a 332 square foot studio to $239,000 for a 1,034 square foot penthouse unit when its sales first started in September 1997, averaging about $247 per square foot.
- With this low-entry level pricing, the initial buyers at this project included young singles and couples, as well as a small number of investors.
- In this building, resale activity was highest in the early-2000. In part, this was due to investor activity, with initial owners "flipping" their original investments. Following, 2006 the level of resales dropped off.
- From 2007 to 2009 units in the building achieved asking or above asking pricing, suggesting significant demand despite increasing traffic at BBTCA.
- When comparing the 2013 to 2003, the average sold price increased by only 33%, equating to an average increase of 2.9% annually over the last ten years. This lower rate of appreciation is skewed by sales in 2013, where resales were much smaller units (average 450 square feet) with lower entry-level pricing.
- Removing 2013 year to date sales, the average end prices at Atrium at Queens Quay increased by 65%, over a nine year period, equating to a 5.7% annual increase on average.
- Between 2003 and 2013, the index price increased by 66% from $310 to $514 per square foot, averaging a 5.2% increase annually.
- Additionally, resale units at Atrium at Queens Quay used to spend over a month on market before selling in the years before 2006. In the five years since 2007, excluding the current year (2013), units spend half a month to a month on market before selling.
- The above indicates healthy demand for units in this location, at a time when aircraft activity was rapidly increasing in the local area, along with associated traffic.

Resale Condominium Apartment Building Profile – Atrium at Queen's Quay	
Developer/Builder:	**Sheppard Group**
No. Units:	289
Opening Date:	September 1, 1997
Suite Size Range:	322 to 1,034 Square feet
Opening Price Range:	$74,900 to $239,000
Opening $PSF Range:	$175 to $271
Amenities:	Interior atrium features tropical landscaping waterfall and fountain; 24 hour concierge; electronic card activated entry system; equipped exercise room; rooftop sky-deck terrace.
Retail At-Grade:	Harbour Farms Convenient Store

Source: Marketing Materials

Year	# Listed	# Sold	SLR	Avg. List Price	Avg. Sold Price	SLP	DOM	Avg. Size	Avg. PSF	Avg. Maint. Fee/Mo.
2003	61	42	69%	$198,785	$183,293	97%	45	591	$310	$285
2004	57	46	81%	$204,896	$196,453	98%	42	641	$312	$322
2005	46	42	91%	$205,501	$199,893	98%	34	611	$330	$324
2006	52	48	92%	$240,700	$231,892	99%	33	682	$344	$362
2007	32	31	97%	$237,784	$239,785	101%	19	605	$401	$337
2008	20	17	85%	$257,090	$255,112	100%	17	623	$414	$360
2009	24	21	88%	$253,925	$246,160	101%	13	574	$434	$350
2010	43	30	70%	$296,235	$284,435	98%	30	613	$476	$402
2011	27	24	89%	$307,996	$306,738	99%	27	665	$465	$489
2012	20	13	65%	$316,480	$302,500	99%	19	641	$478	$495
2013 (YTD)	19	9	47%	$282,568	$243,389	98%	40	480	$514	$405
Average Annual Increase				**3.6%**	**2.9%**				**5.2%**	

Source: Toronto Real Estate Board (TREB) Multiple Listing Services (MLS)

7.6 Tip Top Lofts (637 Lake Shore Boulevard)

The Tip Top Lofts building was previously the headquarters building of Tip Top Tailors Ltd. and was built in 1929. In 2002, Context Developments converted the former industrial building into 242 condominium loft units.

- The building features concrete columns and extra ceiling heights ranging from 11 to 17 feet, and attracts more affluent professionals and empty nesters.
- Units at Tip Top Lofts started to appear on MLS in 2004. However, all of the listings in 2004, 2005 and half of the 2006 listings were listed by the developer. They are therefore not considered true "resales".

Resale Condominium Apartment Building Profile – Tip Top Lofts	
Developer/Builder:	**Context Developments**
No. Units:	261
Opening Date:	May 6, 2002
Suite Size Range:	501 to 2,603 Square feet
Opening Price Range:	$159,900 to $1,406,500
Opening $PSF Range:	$319 to $727
Amenities:	24 hour concierge/security service underground residents parking fitness center with sauna; lounge with kitchen facilities
Retail At-Grade:	N/A

Year	# Listed	# Sold	SLR	Avg. List Price	Avg. Sold Price	SLP	DOM	Avg. Size	Avg. PSF	Avg. Maint. Fee/Mo.
2006	22	12	55%	$507,132	$466,104	99%	112	937	$479	$396
2007	56	35	63%	$555,160	$448,539	98%	51	972	$484	$479
2008	50	26	52%	$563,566	$401,904	98%	41	913	$448	$532
2009	33	23	70%	$526,888	$380,233	99%	22	856	$451	$521
2010	52	29	56%	$584,135	$404,359	97%	32	823	$500	$602
2011	49	35	71%	$619,330	$585,869	97%	41	1,055	$546	$650
2012	35	25	71%	$511,769	$438,716	98%	26	843	$536	$581
2013 (YTD)	36	21	58%	$535,323	$483,043	97%	36	944	$517	$605
Average Annual Increase				**0.8%**	**0.5%**				**1.1%**	

**Average Annual Increase counted from 2006*

Source: Toronto Real Estate Board (TREB) Multiple Listing Services (MLS)

- 2006 was used as the base year for our resale analysis as a result, as it is the listed date of first occupancy.
- Between 2006 and 2013, units at Tip Top lofts appreciated modestly by 4%, which equates to only about a 0.5% annual increase in end price.
- During the same time period, the average size of the units listed for resale decreased slightly, which may have contributed to a slower increase in average end price.
- On a per square foot basis, prices at Tip Top Lofts increased by 8% in the past 7 years, averaging a 1.1% increase each year.
- As the only hard loft conversion in the study area and with many distinct features, Tip Top Lofts achieved a higher resale value than its competitors. Looking at the base year of 2006, Tip Top Loft units

were sold at an average of $479 per square foot, whereas none of the other buildings in the area achieved an average index price of over $400 per square foot in 2006.

- The effects of higher end pricing and index pricing leaves less room for price appreciation. This is one reason for below C1 Zones levels of growth.
- NBLC called sales representatives to specifically discuss low value appreciation at this building and sales to list price differences. Sales representatives noted that many occupants of the building sold their units early on and during the construction of the adjacent Quay West at Tip Top development, with concerns over an anticipated decline in value due to loss of views. During this period, suites were sold well below initial asking prices.
- Another factor explaining the SLP, according to a sales agent, is that suites in this building have uncommon layouts, and it is difficult to pin-down an appropriate asking price as a result.
- All sales representatives noted no concern selling units due the airport. One noted that it is an advantage, given that some tenants walk to the airport from the Tip Top lofts.

7.7 Quay West at Tip Top (90 Stadium Road)

Quay West at Tip Top was brought to the market in 2006 by Monarch as a 23-storey tower with 9-storey podium development, totaling 336 units, after Porter Airlines' started providing services at BBTCA. South facing units of this building are within 700 metres of the centreline of the main runaway, and this is one of the closest buildings to the BBTCA in our sample.

- Similar to Tip Top Lofts, the developer used the MLS system to sell new units in 2008 when construction started. As such, all of the MLS listings in 2008, 2009 and the majority of the 2010 listings are "new sales" instead of true "resales". Occupancy of the building first started in November 2010
- In the first resale year (2011) after occupancy, 79 of the 103 listed units were absorbed after spending an average of 32 days on market.
- The amount of listings in the first year after occupancy suggests that many of the buyers were "flipper investors" who purchased pre-construction units at the lowest price and sold them upon building completion. This was confirmed by a sales representative selling units in the area. These units achieved an average index price of $553 per square foot in 2011, which is a 30% jump from the opening price of the project in 2006 (about a 6% annual increase on average).
- After the first resale year, the number of listings reduced significantly in 2012 and 2013, while the price per square foot continued to go up, at an average rate of 2.2% per year.
- Going forward, NBLC expects that the sales performance at this building could be slightly weaker. Sales representatives indicate that when showing south facing units, if a plane is landing or taking off, some prospective purchasers leave the open house as a result of aircraft noise.
- Sales representatives also note that there appear to be construction quality issues in this building, which may also contribute to slower than expected sales.

Resale Condominium Apartment Building Profile – Quay West at Tip Top										
Developer/Builder:	**Monarch**									
No. Units:	364									
Opening Date:	July 29, 2006									
Suite Size Range:	360 to 1,567 Square feet									
Opening Price Range:	$149,740 to $911,990									
Opening $PSF Range:	$416 to $582									
Amenities:	24-hour concierge; private landscaped courtyard; state-of-art fitness centre with fitness equipment and aerobic area; whirlpool; sauna; billiards; theatre; lounge; party room with kitchen; guest suites.									
Year	**# Listed**	**# Sold**	**SLR**	**Avg. List Price**	**Avg. Sold Price**	**SLP**	**DOM**	**Avg. Size**	**Avg. PSF**	**Avg. Maint. Fee/Mo.**
2008	9	2	22%	$412,601	$351,240	103%	31	790	$438	$359
2009	21	3	14%	$467,442	$343,783	103%	106	866	$393	$389
2010	11	2	18%	$600,266	$515,490	100%	72	1,002	$515	$458
2011	103	79	77%	$421,507	$415,244	98%	32	746	$553	$354
2012	48	34	71%	$445,138	$414,240	98%	28	725	$569	$388
2013 (YTD)	35	19	54%	$478,406	$420,310	98%	25	726	$577	$439
Average Annual Increase*				**6.5%**	**0.6%**				**2.2%**	
**Average Annual Increase was counted from 2011*										
Source: Toronto Real Estate Board (TREB) Multiple Listing Services (MLS)										

7.8 South Beach (28-38 Stadium Road)

As indicated in Section 4 of this report, South Beach is the only stacked townhome project along Toronto's waterfront at this point in time. This project consists of five blocks of stacked townhomes, located immediately north of the Western Gap Channel, which makes this project the closest to BBTCA.

- Completed in 2002, the project offers suites from 480 square foot one-bedroom units, originally priced at $149,900 to 2,685 square foot three-bedroom suites.
- Units are available in single storey, two-storey and three-storey forms, and most of the units have large terrace or patio areas.
- This project has attracted move-down buyers, young singles and couples, young families, and a more modest number of investors.
- As the only ground-oriented condominium project at the waterfront, the project found significant demand on the resale market. Between 2003 and 2013, the end price increased by 68%, or 5.3% annually on average.

Resale Condominium Apartment Building Profile – South Beach	
Developer/Builder:	**Landmark Building Group**
No. Units:	223
Opening Date:	May 1, 1999 (Phase I) November 1, 1999 (Phase II)
Suite Size Range:	480 to 2,685 Square feet
Opening Price Range:	$149.900 to $799,900
Opening $PSF Range:	$225 to $333
Amenities:	Coded intrusion alarm enter-phone at garage, "Roger's Wave" high speed wiring
Retail At-Grade:	N/A

Source: Marketing Materials

Year	# Listed	# Sold	SLR	Avg. List Price	Avg. Sold Price	SLP	DOM	Avg. Size	Avg. PSF	Avg. Maint. Fee/Mo.
2003	53	27	51%	$319,034	$292,107	96%	44	1,035	$297	$159
2004	49	33	67%	$325,327	$299,464	98%	54	1,028	$303	$184
2005	40	37	93%	$331,477	$319,692	98%	41	1,095	$309	$193
2006	25	24	96%	$396,168	$382,567	98%	26	1,190	$331	$232
2007	21	21	100%	$410,474	$406,490	99%	23	1,159	$358	$246
2008	28	22	79%	$426,221	$409,145	99%	24	1,128	$380	$237
2009	30	25	83%	$408,320	$403,246	100%	17	1,054	$402	$226
2010	22	22	100%	$457,168	$459,794	101%	16	1,114	$428	$218
2011	25	25	100%	$488,452	$487,102	100%	17	1,101	$460	$229
2012	20	17	85%	$545,745	$553,112	99%	26	1,201	$485	$244
2013 (YTD)	14	10	71%	$498,414	$491,400	99%	33	987	$525	$240
Average Annual Increase				**4.6%**	**5.3%**				**5.9%**	

Source: Toronto Real Estate Board (TREB) Multiple Listing Services (MLS)

- We expect this to continue to be the case, as land for ground-oriented product continues to diminish in Toronto and the GTA.
- The sales-to-listing-price (SLP) ratio was close to 100% in the majority of the years, and in 2010, many sellers sold their units at a price higher than the listing price.
- In addition, units spend about a month on market before selling. This was particularly true between 2009 and 2011, when the SLP ratio was the strongest, units spent slightly over half a month on market before selling.
- With no amenities provided at this project, maintenance fees are low, at about $220 per month over the past 10 years, which contributes to the popularity of this project.

- The index price of the units at South Beach increased more significantly at 77% over the past 10 years, which equals to a 5.9% annual increase on average.
- The increase in index value at this project represents the most steady, yet the steepest increase amongst all projects surveyed in the local area.
- No sales performance indicators show a value impact pre- and post-commercial aircraft activity at BBTCA.

7.9 Key Findings

The table provided on the following page summarizes the average price appreciation at all selected projects, posting resales for at least ten years. From this data and our more qualitative analysis, the following are some key conclusions:

- Over the last decade, each of the buildings has experienced price growth consistent with broader market trends.
- No sales indicators show a negative impact post-Porter Airlines activity at BBTCA; particularly at the height of passenger activity in the late 2000's.
- All of the projects surveyed achieved a very high 55% to 85% sale-to-listing ratio (SLR). Normally a resale market is considered balanced when an SLR is between 35% and 50%. An SLR above 50% is indicative of a seller's market.
- Among the projects surveyed, a higher SLR has been achieved in more affordable mid-market positioned buildings, such as Queens Harbour and Atrium at Queens Quay, which are closer to the airport mainland facilities. This supports the previously discussed notion that the local area is not a luxury location, like waterfront communities in other cities, or in other locations in Toronto (e.g. Bloor-Yorkville).
- Looking at days on market (DOM), all of the projects surveyed, with exception of Kings Landing, spent about a month on the market before being sold over the past 10 years. Normally, luxury buildings with larger units took longer to sell compared to units that have more affordable pricing, targeting a larger pool of purchasers. These units are more expensive and combined with a higher maintenance fee, naturally have a smaller pool of prospective purchasers to draw from.
- In addition to prices and maintenance fees, suite view exposures are also factors affecting the DOM. Units with a view of the Gardiner Expressway have a slower pace of sales.

Figure 8: Resale Summary Table of Building on the Resale Market for 10 or Greater Years

Value Appreciation, 2003 to 2013			
		Incr. 2003-2013	**Avg. Annual Increase**
TREB C1 Zone	**End Price**	**71%**	**5.5%**
Kings Landing	End Price	57%	4.6%
	Index Price	42%	3.6%
5QQ	End Price	79%	6.0%
	Index Price	53%	4.4%
550 Queens Quay	End Price	49%	4.1%
	Index Price	52%	4.3%
Queens Harbour	End Price	54%	4.4%
	Index Price	64%	5.1%
Atrium at Queens Quay*	End Price	33%	2.9%
	Index Price	66%	5.2%
South Beach	End Price	68%	5.3%
	Index Price	77%	5.9%
Projects Average	**End Price**	**56%**	**4.5%**
	Index Price	**59%**	**4.7%**

Source: Toronto Real Estate Board (TREB) Multiple Listing Services (MLS)
** From 2003 to 2012, the average price appreciation is 66%.*
***Tip Top Lofts and Quay West at Tip Top were removed given occupancy dates later in the last decade.*

- One of the most significant observations from the above analysis is that most buildings have average end pricing and index pricing appreciation below that experienced in the TREB's C1 Zone over the same period of time. Again, during this period, the average end price of units in a condominium building in the C1 Zone increased from $250,000 to $427,000, or an increase of 71% over the past 10 years (5.5% per year on average). In the local area, the average end price of a condominium building increased 56% over the past 10 years (4.5% per year on average). When removing low sales at Atrium at Queen's Quay in 2013, this average goes up to 62% growth (rather than 56%) over the last decade.
- The difference in end value appreciation between the broader C1 Zone is expected, given the very limited number and unique characteristics of the surveyed buildings in the waterfront area.

In at least one case, we found negative market reaction to airport noise impacting on the potential sales of a resale unit. It is likely that some buyers are discouraged from purchasing a unit on the waterfront for this reason alone. However, the data does not indicate that these concerns are impacting either price or demand for resale condominium units in proximity to the airport. Overall, the resale condominium apartment market in the Central Waterfront is generally consistent with market trends in the larger C1 Zone.

8.0 REAL ESTATE AGENT INTERVIEWS

As part of NBLC's review process, interviews were conducted with eight real estate representatives who have direct experience selling condominium apartment units in existing and new buildings along Toronto's waterfront. All interviewees have sold suites in this area before and after 2006, when commercial aircraft activity started at BBTCA.

The following table is a list of pros and cons to living in the study area, given by sales agents, when asked about the popularity of Central Waterfront living and the benefits and shortcomings expressed by prospective residents when trying to sell / lease units near the airport.

Strengths	Shortcomings
▪ View of Lake Ontario and the Inner Harbour (from both local and international buyers) ▪ Access to recreational trails ▪ Ability to lead an active lifestyle ▪ Short distance to Union Station ▪ Proximity of access to the Gardiner Expressway ▪ Improved streetcar lines ▪ Situated near the downtown lifestyle, yet separated from the high activity in the core ▪ Access to Toronto Ferry Terminal and activities on Toronto Island ▪ Access to the airport, for some buyers ▪ Older buildings, with larger units, than can be found elsewhere in the city ▪ Queen's Quay Revitalization work (once complete)	▪ Traffic congestion from cars around the airport, throughout the downtown and around tourist attractions ▪ Noise from the Gardiner Expressway and Lakeshore Boulevard West ▪ Traffic noise and decline in air quality in general ▪ Concern over future health impacts ▪ Views of the Gardiner Expressway to the north ▪ Concern about traffic and accessibility of emergency services (particularly for older buyers) ▪ Noise from the airport ▪ Difficulty driving to grocery stores ▪ Difficulty getting out of parking garages, crossing busy roads or sidewalks ▪ Lack of privacy due to visitors coming into the community ▪ For some, the distance to Union Station and the downtown is too far to walk ▪ Feels isolated because of the Gardiner Expressway and it is increasingly difficult to use a car due to traffic congestion ▪ LRT traffic construction and other improvements are testing patience ▪ Loss of vehicle lanes on Queen's Quay to redesign

As can be seen on the previous page, there are both a number of positive and negative attributes to waterfront living.

When asked to discuss the popularity of waterfront living, many real estate agents noted that the waterfront area has a clientele of its own. A significant attraction for buyers is views of the waterfront and proximity to recreational trails, enabling an active, outdoor lifestyle while living close to the downtown. No other community in central Toronto offers these combined features. While these purchasers are fewer in number and they are a very specific pool of prospective purchasers, they are not expected to disappear; with or without the airport. Those purchasers who "appreciate" the waterfront, but value less the lifestyle it offers, are expected to look elsewhere, according to a few real estate agents. They will look to alternative neighbourhoods, such as the Entertainment District, Queen West or the Bay Street Corridor.

The above sentiments generally indicate that, while there may be an increase in traffic, noise, etc. from the airport and other sources, there will always be some buyers who will still want to purchase units in the area.

However, a central theme in all interviews was strong concern about the increasing level of vehicular traffic and congestion in the area, and the expectation that this will continue to get worse over time. This sentiment is true without, but certainly with, jet activity at the airport from the perception that car noise and pollution will be an increasing issue in the local area, and that this will deter purchasers. For older purchasers, this creates a concern with respect to accessibility by emergency services and accessibility by car to purchase groceries.

Sales representatives appear to be less concerned about the attractiveness of the area to younger "first time home buyers". These buyers:

- Typically purchase goods on the way home from work;
- Are less likely to own a car;
- Are more likely to have already "bought into" an urban lifestyle and all the nuisances this can bring;
- Are more likely to work in the downtown, benefitting more from its proximity; and,
- They are more likely to use the airport, according to some real estate agents.

Some buildings in the immediate area (e.g. Atrium at Queen's Quay) also have lower per square foot values and entry-level pricing. Therefore, some interviewees expect there will also be some demand for these units by first-time homeowners. However, turnover of these units may also be high.

Marketability of the area, according to many agents, is equally impacted by the presence of the Gardiner Expressway. North facing units are exposed to constant noise from the Gardiner Expressway. This deters investors and contributes to prices that can be twenty to twenty-five percent less than units to the south. This road traffic noise is as much of a concern as the airport, according to many of the interviewees.

Overall, older buildings, like Kings Landing, are expected to continue to sell well. This is because they have good views, are of good quality construction, and they are typically larger units than can be found elsewhere in the city.

Overall, it was expressed by many of the interview sales people that transactions have slowed in today's market, but sales are still good.

Participants were less confident when asked to consider the impact of the proposed changes at the airport on demand for waterfront condos and on appreciation in values.

- Few of the interviewees felt that potential buyers identify the airport as a reason for walking away from a purchase.
- One participant stated that at Quay West at Tip Top project, while having an open house, some potential purchasers have walked away after hearing or seeing planes landing.
- Another agent noted some buyers are showing resistance given the "uncertain future" of BBTCA and the entire waterfront area as whole.
- The sales agents interviewed felt that traffic congestion and the overall neighbourhood atmosphere (honking horns, pedestrian / driver conflicts) will continue to get worse due to several factors such as continued construction in the South Core and the likely continuance of the Gardiner Expressway.

9.0 CONCLUSIONS

9.1 BBTCA Impact on Condominium Property Values from 2003 to 2013

Overall, the Central Waterfront is considered one of City's most desirable communities in which to live. The research from this study indicates that demand from developers, investors and end users alike has been consistent with that of the broader market over the last ten years.

While the BBCTA is highly visible, and clearly generates significant activity, and has some traffic and noise issues, there is no evidence in our research that the BBCTA has had a pricing impact on either the sale of new condominiums by developers, or later in the resale market. Based on our interviews it is likely that some owners have moved from waterfront condominiums due to airport traffic, congestion on Queen's Quay or noise, but there appears to be a steady supply of buyers willing to live with these issues.

If traffic impacts alone had an impact on condominium pricing in the local area, we would have expected to see a decline in waterfront housing demand in our research, especially in the last six to seven years when BBTCA passenger traffic increased from 256,000 to 1.9 million persons. If this change in condition was viewed as a serious detriment to living in the area, we would have expected to see a significant increase in listings in the resale market, with long days on the market, lower than expected end pricing and index appreciation, and an overall "buyer's market".

- Overall, we observed stable demand and increasing pricing, in keeping with the overall Toronto condominium market.
- Suites in the local area have experienced healthy value appreciation, low days on market and a sales-to-listing ratio indicative of a "seller's market".
- This is true of condominium buildings closest to the airport that are arguably the most impacted by existing activity levels at the area. These buildings (e.g. South Beach, Atrium at Queen's Quay) have experienced strong demand in terms of pricing as well as days on market.
- In the new condominium market, Tridel's East Bayfront waterfront project, "Aqualina" recently opened with a strong response, despite a market that is lagging in most other areas.

Given the above, to date the increasingly popular BBTCA has not had a negative impact on local waterfront condominium values.

9.2 Outlook for Longer Term Impacts as a Result of CS100 Aircraft Service

We expect that levels of demand for condominium apartments across the GTA and the local market will continue to moderate as a result of broader conditions in the high-rise marketplace. These include, but are not limited to:

- *Significant new high-rise supply* – This include: a very large supply of condominium units that are for sale, in standing inventory in the new housing market across Toronto and the GTA; a steady supply of new units that will be completed and occupied in the GTA and Toronto over the next several years in

the new housing market, potentially added to the private rental or resale market by investors; plus a large supply of projects that are in the development approval stage with the City. In the emerging East Bayfront community alone, there is a total of 6,000 new residential units planned, shifting growth to the east.

- *Prevailing interest rates* - The threat of interest rate increases could reduce the affordability of condominium units overall, therefore affecting the overall demand from first-time home buyers, who would be attracted to resale in the local area.
- Continued *reduction in investor demand* overall compared to the previous five year period.

There is no evidence from our research that alerts us to a market issue that may negatively impact property values as a result of the proposed changes to the Tripartite Agreement. In addition, demand for condominium living along the waterfront is likely to persist, while the supply, especially in the area north of the airport is more or less fixed. As observed in the past we expect some owners will move as the activity levels in the area increase. But as we have noted, there seems to be a steady demand from new buyers who are willing to accept the compromises associated with the area.

One factor in this discussion that is still unknown is the operating experience of the CS100. However, there is no operating experience of the CS100 to observe. It may be that the additional vehicular traffic or operational issues associated with the expansion of Porter Airlines service will cross a threshold which could begin to impact the value of a condominium unit in the area. We have not been provided with any information with respect to the exact noise levels and impacts from air pollution as well, and can therefore not comment on the future marketability of the area due to these factors. This is also true of the impacts associated with a lengthened main runway, or a new aircraft landing/take-off profile, as we do not have final airport redesign drawings, or the expertise to assess impacts on marketability from these changes alone. This uncertainty, as well as the broader economic uncertainties discussed on the previous page, make a forecast of the demand characteristics for condominium housing in in the local area impossible to provide in any meaningful way.

Appendix A:

Sales Agent Interview Questions

1. Were you selling waterfront condos when Porter Airlines first started in 2006?
2. Do you use the airport yourself?
3. Have you sold in buildings located between Strachan and Lower Spadina?
4. What changes have you noticed in the character of waterfront condo resales in the Central Waterfront area, south of the Lakeshore Rd., from 2003 to 2013?
    - Popularity of waterfront lifestyle?
    - Impact of streetcar line?
    - Investor versus end users activity?
    - Change in suite mix and sizing?

5. What are the most popular condo buildings in the Central Waterfront area, and why?
6. What is the typical price differential between waterfront and city views in the same building?
7. What are the differences in the character and pricing of the resale market north and south of the Gardiner?
8. Do waterfront condos turn over any more often than downtown condos?
9. Rank these areas for popularity with condo buyers (and why):
    - Mid-town
    - Entertainment district
    - South core
    - Downtown east
    - Central waterfront

10. What are the central waterfront's sales/leasing strengths and shortcomings?
11. Will the Queen's Quay improvements add to the waterfront popularity? Why? Why not?
12. Can you comment on the impact of commercial jet service at Billy Bishop Toronto City Airport on sales activity?
13. What impact do you think the proposed BBTCA changes will have on the marketing and pricing of waterfront condo sales and rentals?