



## STAFF REPORT FOR ACTION

### Request to Amend the Tripartite Agreement for Billy Bishop Toronto City Airport

<b>Date:</b>	November 21, 2013
<b>To:</b>	Executive Committee
<b>From:</b>	Deputy City Manager, Cluster B
<b>Wards:</b>	All
<b>Reference Number:</b>	P:\2013\WF\EX13008

#### **SUMMARY**

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The purpose of this report is to respond to City Council's direction to review a request from Porter Airlines to permit jet-powered aircraft, and to add extensions at both ends of the main runway at Billy Bishop Toronto City Airport (BBTCA). This report provides a summary of findings from staff and consultant reviews, and recommends a process for moving forward.

BBTCA has experienced significant growth following the launch of Porter Airlines in 2006, with annual passenger volumes rising from 26,000 in 2006 to 2.3 million in 2012. BBTCA is now the ninth busiest airport in Canada, with a reputation for positive passenger experiences. It provides connections to key regional business and leisure destinations such as Montreal, Ottawa, New York, Chicago, Boston and Washington. The close proximity of BBTCA to the downtown financial district is a significant asset to businesses operating in downtown Toronto, and the recent success and convenience of BBTCA has been an economic benefit to the City.

As part of the review, City staff retained specialized consultants in the following areas: aviation, coastal processes and water quality, economic impacts, health impacts including air quality and noise, land use and planning, polling and public consultation, and transportation impacts. Reports with status updates on the consultant findings were provided to Executive Committee on July 3 and September 24, 2013.

The consultant team was asked for additional information and review as a result of input from the public consultations, direction from Executive Committee, and in response to a

revised request from Porter Airlines to extend the runways from 168 to 200 metres at each end. As a result, a number of the final consultant studies have not been available until the release of this report, and so Porter Airlines, the Toronto Port Authority (TPA), and other interested stakeholders and members of the public have not had an opportunity to respond with their view of issues raised as well as how these issues can be mitigated.

The current review is premised on an expectation that:

- the proposed runway extensions would likely meet Transport Canada regulatory requirements, proceed through appropriate Environmental Assessment(s), and meet Council's stipulations respecting preservation of the Marine Exclusion Zone;
- the proposed jets, the Bombardier CS-100, would meet the noise restrictions contained in the Tripartite Agreement, and that this would be demonstrated by flight test data; and
- the proposal would provide a net improvement to the City, and be without adverse impacts as defined by the relevant Official Plan policy.

Despite the breadth of consultant studies, there remain outstanding questions. First, Transport Canada has not provided the City with confirmation of the feasibility and impacts of a runway extension. Second, the available flight test data, as provided by Bombardier to the City's aviation consultants on November 4 and on November 26, 2013, is insufficient to confirm whether the proposed jet aircraft will meet the noise guidelines set out in the Tripartite Agreement. Third, the TPA recently advised the City that an extension of the Tripartite Agreement would be necessary if Porter Airlines' request is approved. At present, the Tripartite Agreement expires in 2033 with no provision for renewal or extension, and additional information is needed to understand the implications for the City of its extension. These outstanding questions undermine the agreed-upon premises for this review, and substantiate that approval of the expansion request is premature.

This review has also highlighted conflicts which exist between the nearby schools, community centre, parks and residential community and BBTCA. Mitigation measures to address traffic congestion, emissions, noise from aircraft and maintenance operations and groundside conflicts are necessary in order to provide better conditions in the neighbourhood surrounding the airport.

BBTCA is one of the few downtown area airports in the world, and its waterfront location presents a unique condition. Review of the current request has led to a broader discussion of tools the City needs to more effectively assess current and future airport operations in the context of the central waterfront's revitalization.

Advances in jet technology have significantly improved the noise and emissions performance of such aircraft. Staff suggest that, in assessing changes proposed at BBTCA, the key question is not the type of aircraft technology proposed, but the number of passengers, flights and required infrastructure which may arise as a result of new

aircraft technology. Neither the TPA nor the City has a framework to evaluate or manage these key growth factors at BBTCA.

While BBTCA is not required to have a master plan legislatively, master plans are a standard operating requirement that provide information to regulators, funding partners and the community on airport growth and business planning. All other Canadian airports operate in accordance with an airport master plan. The TPA should have one prepared for BBTCA in accordance with industry best practices, and in consultation with the City, Transport Canada, relevant stakeholders and members of the public. Referencing the airport master plan, the City should follow with the necessary planning studies to assess how an expanded airport could fit within the context of a revitalized waterfront. Staff should report back to Council on both of these processes and, if appropriate, make recommendations for updates to the Official Plan.

The public consultation undertaken as part of the current review has received significant interest and participation. The airport master planning process and City planning studies will both include opportunities for continued public engagement respecting BBTCA. If this report is adopted, additional next steps include review by the public and interested stakeholders of the consultants' studies prepared through the current review, completion of necessary environmental assessment(s) for any future proposed runway extensions, and completion of the local transportation study and implementation of Eireann Quay improvements. Confirmation from Transport Canada of certification of the proposed jet aircraft as well as runway extension feasibility will be required, and further discussions respecting existing and future improvements to airport facilities both airside and groundside will continue.

This review has concluded that the expansion of an airport in a downtown area and on an active waterfront must consider, firstly, the fit of that airport within its surroundings. Staff believe it is essential to understand the airport's existing and planned size, volume of passengers, number of flights, and its role within the Southern Ontario regional system of airports, in order to complete this evaluation.

## **RECOMMENDATIONS**

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The Deputy City Manager, Cluster B recommends that:

1. City Council authorize the Deputy City Manager, Cluster B, to advise Porter Airlines, the Toronto Port Authority and Transport Canada that approval of this request is premature for the following reasons:
  - a. Transport Canada has not been able to comment on the feasibility and potential impacts of the proposed runway extension yet to be submitted by the Toronto Port Authority, and updated Noise Exposure Forecast modelling incorporating the revised runway configuration, growth projections and aircraft fleet mix have not been completed;

- b. the preliminary test flight data is insufficient to confirm that the CS-100 aircraft will comply with the terms of the Tripartite Agreement;
  - c. the Toronto Port Authority, Transport Canada, Porter Airlines and other stakeholders should review and respond to the issues raised through this review, including the consultant reports, so any identified or potential adverse impacts can be addressed and properly mitigated;
  - d. there is not a clear direction or plan for airport expansion, what airside and groundside infrastructure requirements are necessary, and how they will be funded; and
  - e. the Toronto Port Authority recently requested an extension to the Tripartite Agreement beyond 2033 which was not part of the original request from Porter Airlines.
2. City Council authorize the Deputy City Manager, Cluster B, to enter into discussions with the Toronto Port Authority and the Federal Government (Transport Canada) to determine the future role, scale, and function for the BBTCA. Such discussions shall proceed on the willingness of the parties to commit to:
- a. adopting measures to improve the existing conditions around the airport related to aircraft noise, airport and ferry operations, traffic congestion, conflicts with the Waterfront and City Schools and the Harbourfront Community Centre, construction management, taxi management, and public realm improvements;
  - b. preparation of an airport master plan which includes a business and finance plan outlining, among other things, a vision for the airport, assessment of the benefits of implementing advanced flight guidance systems, proposed passenger growth and flight volumes, aircraft slot coordination and allocation, groundside improvements, and an environmental sustainability program;
  - c. a robust public and stakeholder consultation program for the master plan and environmental assessments consistent with standards for public consultation in the waterfront;
  - d. confirming that all regulatory approvals are in place including for the aircraft, runway extensions and configuration, and all other required environmental assessments; and

- e. implementing a capital works program for airside and groundside facilities and infrastructure such as transportation, transit, pedestrian and public realm improvements.
3. City Council direct the Deputy City Manager, Cluster B, to undertake further studies and consultations that may be necessary arising from this review.
4. City Council direct the Deputy City Manager, Cluster B to prepare a report in conjunction with the City Solicitor for March 2015, providing an update to City Council on:
  - a. the status of discussions between the City of Toronto, the Toronto Port Authority and Transport Canada;
  - b. a summary of public and stakeholder consultations held by the Toronto Port Authority on airport expansion and related issues;
  - c. the airport master plan and capital works program prepared by the Toronto Port Authority and any related amendments to the Tripartite Agreement; and
  - d. a recommendation for any related amendments to the Official Plan to align the airport master plan with City policies and objectives.

## **Financial Impact**

The cost to complete this review is \$1,121,090 which includes all consultants, public engagement costs (advertising, meeting room bookings) and polling but excludes the cost of staff time that was allocated to complete the review. The Toronto Port Authority (TPA) has provided all funds necessary for consultant and other expenses as directed by City Council.

This review required technical expertise that was not available within the Toronto Public Service such as aviation, marine navigation and coastal habitats, noise and environmental impacts, urban design modelling, traffic modelling, and analysis and economic impact review. In addition, third party consultants were required to assist with the public consultation process and to conduct independent City-wide polling on the issue. The City also retained the services of a fairness monitor to provide oversight of the procurement process and monitor any conflicts of interest between City staff, retained consultants and airport-related stakeholders. The information that has been obtained through these consultant reports can form the basis for the development of an airport master plan, a proposed planning framework for the airport and its surrounding area, and ensure that a final report on these matters can be completed in a timely fashion.

At its meeting on May 7-10, 2013, City Council adopted an incremental operating budget increase of \$275,000 for the City Planning operating budget. In order to complete this review, the following 2013 incremental operating budget change is required in addition to the previous budget adjustment:

	BBTCA/Porter Airlines Review		
<b>City Division</b>	2013 Gross	2013 Revenue	2013 Net
City Planning			
Waterfront Renewal	\$846,090	\$846,090	-
Total	\$846,090	\$846,090	-

The 2013 revenue budget increase represents funding from the Toronto Port Authority, which has been provided to the City to cover costs related to this review.

City Planning staff will identify funding for consideration in the 2015 City Planning capital budget to facilitate completion of studies that may be necessary, following upon the successful resolution of those items identified within Recommendation #2.

The Deputy City Manager and Chief Financial Officer have reviewed this report and agree with the financial impact information.

### **Equity Statement**

The principles articulated by the courts in relation to this report support the City's equity framework, and equity goals and objectives. All consultants were required to incorporate equity considerations in their work plans and reviews.

### **DECISION HISTORY**

At its meeting on May 7, 8, and 9, 2013, City Council adopted a report dated May 6, 2013 from the Deputy City Manager, Cluster B, regarding a request from Porter Airlines for an exemption from the commercial jet ban and permission for runway extensions at BBTCA and recommendations for proceeding with the next stage of the project.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2013.EX31.27>

At its meeting on July 3, 2013, City staff reported to the Executive Committee on the work undertaken by staff, including preliminary findings from the consultants, and information concerning the next steps in the process. The Executive Committee received the staff report for information and requested the Deputy City Manager, Cluster B to expand the traffic study area to incorporate from the Jameson ramps and York Street ramps to the Gardiner, north to Front Street.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2013.EX33.18>

On July 10, 2013, the Board of Health requested that the scope of work for the retained consultants also include a requirement to conduct a Health impact Assessment (HIA), in collaboration with the Medical Officer of Health. In addition, the Board of Health requested the Medical Officer of Health to report back to the Board of Health on the degree to which health impacts are being addressed in the studies and what the anticipated health impacts are.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2013.HL23.11>

At its meeting on September 10, 2013, Toronto and East York Community Council established a Sub-Committee to review BBTCA consultant reports insofar as the reports pertain to the issues that fall under its jurisdiction including planning, transportation, and impacts on local parks, schools and community centres. The Sub-Committee met on November 7, 2013 and will meet on December 3, 2013.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2013.TE26.116>

At its meeting on September 24, 2013, City staff provided two reports to the Executive Committee on the work undertaken by staff, including preliminary findings from the consultants; the public consultation program; and information concerning the next steps in the review process, including consultation with Toronto Public Health on the scope of work for completion of a Health Impact Assessment. Staff committed to providing a final report on this issue to meetings of the Executive Committee on December 5, 2013 and City Council on December 16, 2013. The Executive Committee received the staff reports for information.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2013.EX34.14>

## **ISSUE BACKGROUND**

This report summarizes the outcomes of City staff's efforts to respond to an April 2013 request from Porter Airlines for an exemption to the ban on operating jet-powered aircraft at BBTCA and permission to extend the airport runways, initially by 168m at each end, and in September revised to 200m at each end. Porter Airlines' correspondence requesting this review may be found at Appendix 1. The contractual lease agreement

respecting the airport's operation, the Tripartite Agreement, would need to be amended to allow for either of these requests. Such amendments require the consent of each of the three signatories to the Tripartite Agreement (City of Toronto, Toronto Port Authority and Government of Canada).

Porter Airlines indicated that the City's response was required in July of 2013 in order to amend the Tripartite Agreement and design and complete infrastructure prior to the first delivery of CS-100 aircraft in early 2016. Staff have undertaken an expedited, six month comprehensive review of this proposal.

In reviewing this proposal, staff were mindful of BBTCA's contribution to the City's economy. As reported in a 2012 InterVISTAS Consulting Group economic impact study commissioned by the TPA and the Toronto Board of Trade respecting BBTCA, the airport currently generates:

- \$1.9 billion in annual economic output and 5,700 jobs, including 1,700 directly associated with the airport;
- \$640 million in gross domestic product; and
- \$290 million in wages.

InterVISTAS found that BBTCA plays a "significant role in providing critical regional and continental transportation linkages to support and grow Toronto's economy".

The City's retained economic impact consultant for this review, HLT Advisory, also projected significant positive economic impacts with the proposed CS-100 service in addition to what was identified by InterVISTAS. Using low, medium and high projection scenarios for additional inbound flights, HLT found that BBTCA could generate a further:

- \$68 million to \$134 million annually in non-resident passenger spending;
- \$63 million to \$124 million annual in gross domestic product; and
- \$42 million to \$83 million in wages.

In addition, Bombardier manufacturing operations at Toronto's Downsview facility currently employ 4,000 people manufacturing Q400 turboprop airplanes. Future manufacturing of Q400s and additional 7000/8000 Series aircraft at Downsview will result in a \$2.1 billion investment and 12,000 direct and spin-off jobs throughout Canada. Respecting manufacture of the CS-100, six GTA companies and metal and aluminum production facilities would benefit from the business program, which could reach \$14 million in business value by 2020.

#### Consultants' areas of review

The City retained consultants, completed a detailed assessment, and undertook an extensive public consultation process including a range of public and stakeholder



outreach strategies as part of the current review. Consultants have reviewed and provided assistance in the following subject areas, at the City's request:

Aviation	Airbiz Aviation Strategies
Land Use and Planning	Urban Strategies Inc.
Economic Impacts	HLT Advisory and N. Barry Lyon
Coastal Processes and Water Quality	CH2M Hill
Transportation Impacts	BA Group Transportation Consultants
Health Impact Assessment, Air Quality Assessment, Noise Impacts Assessment	Golder Associates
Polling	Environics Research Group
Consultation Support	DPRA Consulting

The consultants' final reports are prefaced by a summary cumulative analysis prepared by Urban Strategies Inc. In addition to the economic impact findings noted previously, key points from the consultants findings are:

- BBTCA currently provides needed air transport capacity in the region, and supports Toronto's role as an important economic centre to the benefit of the City's economy;
- BBTCA's downtown location in the heart of an active waterfront limits the growth of both the airport and its carriers' travel distances, and will prevent it from playing a significant role in international air transport capacity planning for the region;
- airport and City planning objectives are not coordinated except through the Tripartite Agreement, and a stronger City planning policy framework addressing the airport would be useful;
- there are significant unknowns about the proposed airport expansion related to noise, traffic, runway extension feasibility, environmental and human health impacts, safety and security, and enjoyment of waterfront recreation; and
- optimal protection and enhancement of the health of central waterfront residents and the City as a whole calls for a reduction of current and future airport impacts.

All of the consultants' final reports are attached to this report, at Appendix 2. The results of the Health Impact Assessment are more fully discussed in an upcoming report to the December 9, 2013 Board of Health meeting. All consultants' analyses have also been posted on the project website, at: [http://www.toronto.ca/bbtca\\_review](http://www.toronto.ca/bbtca_review). These final reports replace the draft technical analyses which were posted following the launch of the project website in mid-June, and reflect the continuing work of the consultants to address issues raised during the public consultations process.

#### Summary of public consultation process

Over 1000 people attended four public meetings respecting this proposal. Comments were predominantly negative for a range of reasons, from highly localized noise, traffic and environmental concerns to broader concerns about scale and fit of the airport within

the emerging revitalized waterfront. Those in favour spoke of the convenience and service offered, and the number of jobs associated with its growth.

In addition to these public forums, telephone polling, face-to-face intercept surveys and an online survey were completed. The City retained Environics Research Group to complete telephone polling on the proposed expansion. This polling, deemed statistically valid, was conducted in late August and consisted of 1,002 telephone interviews on a variety of questions related to the airport's impact and possible issues associated with expansion. Residents were divided between support (47%) and opposition (45%) for the expansion of the airport and use of jet aircraft. Eight percent had mixed feelings or were unsure of their position. Convenience was the number one reason for support, while opposition was driven by concerns about the environment and noise.

A face-to-face or intercept survey was conducted during the week of August 26, 2013 by DPRA Consulting. A total of 324 people reflecting a range of gender, age and ethnic origins were interviewed in various public locations throughout Toronto. This was not a statistically representative sample of the population but was intended as a snapshot of opinions among the Toronto public. A strong majority of those engaged felt that the airport was important in serving needs of travellers in the City, and that it was important to the City's economy. Primary reasons for support (convenience) and opposition (environment and noise) were consistent with the Environics poll.

Finally, an online survey was posted on the City's website from August 27 to October 11, 2013, accompanied by an information booklet outlining the major issues. The survey was open to the public and did not require any identification from those completing it. Like the intercept surveys, it was not statistically representative of Toronto's demographic makeup but rather a collection of opinions from residents and businesses. A total of 41,879 surveys were considered, with a majority supporting the expansion, and with convenience and environmental damage again cited as primary reasons for support and opposition respectively.

## **COMMENTS**

The purpose of this report is to provide results of staff's review of the request to amend the Tripartite Agreement to permit jets and to extend the runways at BBTCA, and to provide findings in support of the report recommendations.

Porter Airlines has, since its launch in 2006, fundamentally changed the nature of BBTCA. A small, general aviation-focused airport has, in 6 years, become the ninth busiest airport in Canada. BBTCA now provides a convenient link between the Toronto central business district and regional premiere business destinations (especially New York, Montreal and Ottawa), and also reliable, affordable service to Northern Ontario destinations along with Central Ontario and the Eastern Seaboard.

Demand for commercial air travel is growing generally in Canada, with Toronto Pearson International Airport (Pearson) growing 17.5% from approximately 29.7 million passengers in 2006 to 34.9 million passengers in 2012. The growth of BBTCA over the same period, from 26,000 to 2.3 million passengers, is exponential, an 82 fold increase. This increase indicates that BBTCA is a significant asset to Toronto's economy.

Overall, the City has benefitted from Porter Airlines' success. The significant growth of BBTCA has far outstripped projections. BBTCA is one of the few downtown, central city airports in the world, and is surrounded by an active waterfront. Consequently, its operations must be considered in the context of objectives of the central waterfront redevelopment and a broader review of airport operations currently and into the future. This will assist in achieving the City's objective to balance the success of BBTCA with the waterfront revitalization.

Under existing operations and with no additional permissions required, the City's aviation consultant estimates a maximum annual passenger volume of 3.8 million passengers could be achieved. There are existing operational conflicts between the airport and its neighbourhood which require resolution at current passenger levels; passenger volume is an issue irrespective of the current request to amend the Tripartite Agreement.

The proposed new aircraft, the Bombardier CS-100, and others in its class are expected to meet the Tripartite Agreement noise standards once fully certified by Transport Canada. Today's jet technology is significantly improved from that which existed when the Tripartite Agreement was signed in 1983, and Bombardier and Pratt and Whitney Canada have played a significant role in this progress. This review identifies that the key question is not technology itself but the number of passengers, flights and required infrastructure, ground and airside, which may arise as a result of new technology.

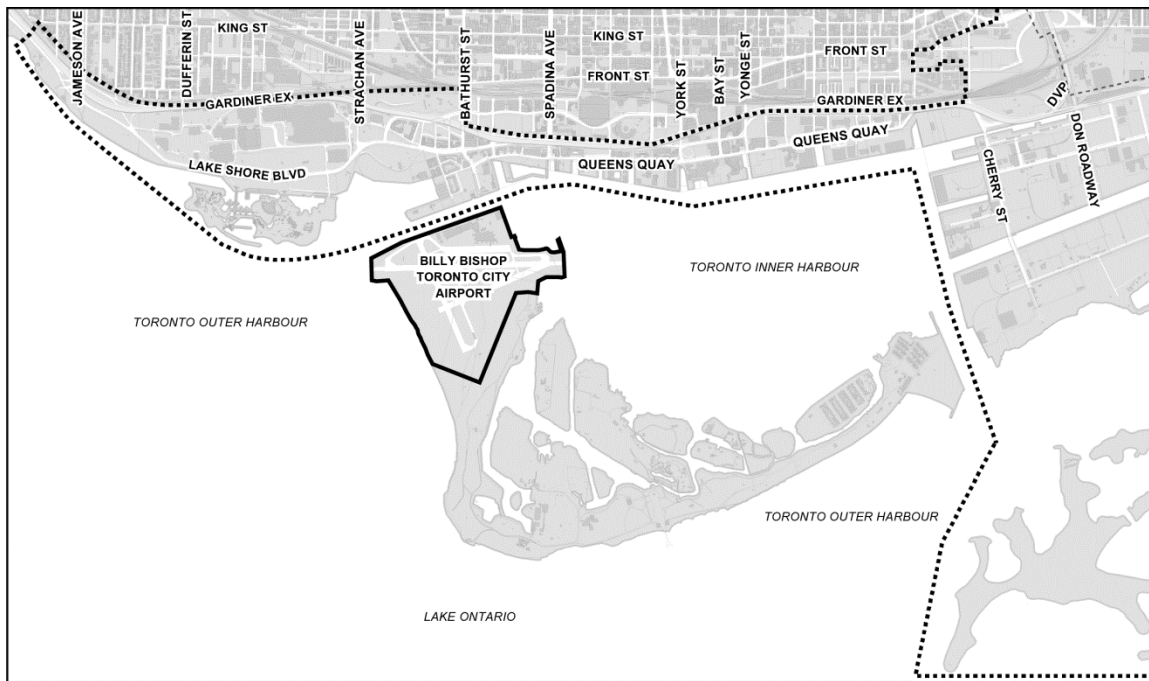
## **1. BBTCA and Toronto's Central Waterfront**

BBTCA is located on the northwest corner of the Toronto Islands Park on lands owned in part by the City. It is adjacent to the central waterfront of the City of Toronto, the site of significant long-term urban revitalization with committed direct public investment of \$1.5 billion over 800 hectares of designated waterfront area. The central waterfront contains a mix of uses, including active industrial facilities, cultural facilities, commercial uses, regional and local parks, community facilities, institutional users and growing residential communities. Groundside, the airport is adjacent to the community of Bathurst Quay, a mixed-use neighbourhood containing residential buildings, the Waterfront and City Schools, Harbourfront Community Centre, a daycare, parks, small scale retail businesses and the designated heritage site of the Canada Malting silos.

Public and private investment in revitalization is meeting the objectives of the Central Waterfront Plan. The population of the central waterfront area doubled in five years, from 14,000 in 2006 to 30,000 in 2011 (the last census period). In addition, there are 430

businesses in the central waterfront area employing 22,000 people, as well as 38 institutions employing 1,300 people.

Over the next ten years, the City and Waterfront Toronto, the revitalization agency for the central waterfront, will be adding new waterfront neighbourhoods, to be supported by new parks and community services and facilities. The City and Waterfront Toronto has also set aside 25% of the waterfront revitalization area for parkland, and since 2004, 23 new or improved park spaces have opened. Combined with the existing significant City parks at the Toronto Islands and along the waterfront, as well as planned new substantial park spaces at Ontario Place, Promontory Park and Lake Ontario Park, the collective parkland and recreational draw of the waterfront is a valuable asset to City residents and visitors.



**Toronto** City Planning  
**Study Area**

**Billy Bishop Toronto City Airport**

File # 13 185086 STE 28 TM

-  Billy Bishop Toronto City Airport
-  Central Waterfront Secondary Plan

↑  
 Not to Scale  
 11/18/2013

BBTCA: Existing Operations

BBTCA's significant passenger growth and local population growth through redevelopment of Toronto's central waterfront have occurred concurrently. This has resulted in conflict between the airport and its surrounding community, exacerbated by the airport's proximity to sensitive uses such as residential buildings (200 metres), schools (275 metres) and parks (125 metres).

Conflicts between the airport and the community have not been adequately addressed. A principle source of conflict is localized traffic. Eireann Quay, which terminates at the water's edge, provides sole vehicular access to the ferry terminal for BBTCA, the taxi queuing area on the Canada Malting site and, in the future, the entrance to the pedestrian tunnel to the airport. The local roads are, at peak times, chaotic and overwhelmed.

The airport's neighbourhood experiences almost daily special events due to its proximity to key athletic, cultural and recreational amenities. Peaks of traffic related to airport passengers also arrive at traditionally quiet times, such as in late evening and on weekends. Temporary construction on Queen's Quay for boulevard improvements and on Eireann Quay for the BBTCA passenger tunnel have made the situation worse.

Because passengers arrive back to groundside by ferry, travellers arrive and disembark simultaneously. While the peaking associated with the ferry will be improved with the completion of the pedestrian tunnel in 2014, the only real method to dramatically improve the groundside transportation situation at BBTCA is through mode shift from private vehicles to transit. Currently, nearly 50% of BBTCA's passengers travel to and from the airport by taxi, and a further 20% by private vehicle.

Noise is also a significant source of conflict between the airport and the surrounding community. A Community Liaison Committee was established for BBTCA in 2010, however, the lack of significant remedial actions arising out of committee discussions has led to reduced participation and confidence in this process by the community members.

#### *Correspondence between the City and the TPA*

The City has communicated directly with the TPA as part of its review, seeking to determine the TPA's position on the proposed airport expansion as well as to resolve existing operational issues. Initial correspondence dated May 1, 2013 to both the TPA and Porter Airlines described what information the City would require in order to respond to Porter Airlines' request. The TPA and Porter Airlines were forthcoming in providing the requested information, and TPA provided the required funding. The City also requested from the TPA and the Government of Canada (Transport Canada) written agreement to pursue a thorough analysis of the request. This analysis has, to date, only been conducted by the City.

In September, the City asked that the TPA attend at a Town Hall meeting to address the BBTCA proposal in a public forum. The TPA declined that invitation in a September 11, 2013 reply, indicating that it had made clear that "the TPA will not consider any change of use to the airport until a determination is first made by the elected representatives on Toronto City Council regarding Porter's proposed changes to the Tripartite Agreement".

The City responded on September 18, 2013, by noting that the TPA would need to indicate willingness, in principle, to address concerns raised through the public consultation process, as well as ongoing unresolved issues between the TPA and the City including noise, traffic and Payment in Lieu of Taxes (PILTs). To this, the TPA replied

on October 4, 2013 that the PILTs issue would be most easily resolved by amending the expiry of the Tripartite Agreement a further 50 years beyond its current, 2033 expiry.

On October 24, 2013, the City provided the TPA with an itemization of current operational issues that must be addressed. Issues include mode-shift transportation measures which encourage further use of Porter Airlines' airport shuttle or public transit; further efforts to address the traffic safety concerns of the schools; noise enclosures and operating practices which limit run-up noise on the existing turboprop fleet; a real-time noise monitoring website that identifies all aircraft movements and activities; and revitalization of the Community Liaison Committee.

The TPA responded on November 7, 2013, citing recent investments in the airport's airside and groundside facilities and a range of criteria, as noted at an October Board of Trade luncheon, that the TPA would use to review the airport expansion proposal including:

- an intent to maintain the Tripartite Agreement's noise restrictions;
- improved utilization of the airport's existing commercial slots, and a note that the TPA does not "foresee a major expansion of the airport's current commercial flight activity levels";
- a commitment to have no negative impact on the natural environment;
- a commitment to ensure that the Bathurst Quay community be "every bit as livable for our neighbours," so that "the area surrounding Billy Bishop is no less livable than any other multi-purpose neighbourhood in Toronto";
- engagement with traffic solutions along Eireann Quay through a redevelopment of the Canada Malting site, including a commitment to contribute to solutions financially;
- a commitment to remain "aircraft agnostic" – namely, open to any aircraft that meets the noise standards in the Tripartite Agreement; and
- preserving access for sailors and for private aviation.

The TPA did not respond to the majority of the City's issues as listed. The TPA did respond, however, respecting lease extension and groundside infrastructure:

- Lease extension: The City has indicated that an extension to the Tripartite Agreement beyond 2033 is not being considered as part of the current request. The TPA responded that, "the significant commitment of long term capital investment that would be required to make Porter's proposal a reality... would be financially imprudent, if not unviable, in the absence of a contemporaneous extension of the existing 2033 lease end date";
- Groundside infrastructure: the City requires commitment that the TPA will be responsible for its appropriate share of costs related to groundside infrastructure. The TPA responded that, "hundreds of new condominium units have recently been built in the immediate area since 2006," that that they "do not believe the airport's passengers are the primary source of increased traffic congestion in the surrounding neighbourhood".

The City's correspondence with the TPA throughout the current review may be found at Appendix 3.

### Existing Contractual and Regulatory Obligations

#### i. Tripartite Agreement

In 1983, the City of Toronto, Toronto Harbour Commission (later the Toronto Port Authority) and the Government of Canada (represented by the Minister of Transport) entered into a Tripartite Agreement for a term of 50 years. The Agreement governs the operation of the airport by the TPA and contains specific terms regarding types of aircraft permitted to operate at the airport, hours of operation, noise conditions and access limitations. The Agreement expires in 2033 and does not contain any provisions for renewal.

In general, municipalities have little or no ability to apply any of their regulatory regimes over airports within their jurisdiction. The City of Toronto is in a unique position with the BBTCA as a portion of the airport lands are owned by the City and leased to the TPA pursuant to the Tripartite Agreement. This arrangement permits the City to have a role in allowing proposed changes to airport operations, which Council should consider when evaluating requests to amend the Tripartite Agreement.

#### *Prohibition on aircraft generating excessive noise*

The Tripartite Agreement requires that the TPA not permit aircraft generating excessive noise to operate to and from BBTCA, with exceptions for Medivac emergency aircraft and for the annual Canadian National Exhibition airshow. In Canada, the metric of Noise Exposure Forecast (NEF) Contours is used to represent noise exposure with a single number rating of overall aircraft noise, and the Agreement requires the TPA to regulate overall frequency of aircraft movements in order to contain the NEF Contour to within established parameters.

NEF contours are typically used for land use planning in Canada to guide airport operators and municipal planning authorities in ensuring that sensitive uses are located away from airports. In the case of BBTCA, an NEF contour is used as a noise compliance tool for the airport to ensure that yearly aircraft movements do not exceed the noise standards within the Tripartite Agreement. Each year, Transport Canada completes an analysis of aircraft movements at BBTCA and confirms whether the "actual" NEF contours based on actual aircraft movements exceed the contours contained within the Tripartite Agreement. For the years 2008, 2009 and 2010, cumulative airport noise has not exceeded the NEF contours contained in the Tripartite Agreement. The standards and NEF contours set within the Tripartite Agreement are the most stringent noise standards for an airport in Canada. The TPA self-imposes a flight "slot cap" of 202 flight movements per day in order to ensure the airport's compliance with the terms of the Agreement. Other comparable airports have adapted a combination of metrics,

particularly caps on number of daily flights and/or passenger caps, and operational practices to better regulate airport noise impacts, in addition to other impacts.

Reliance on NEF contours has several limitations in terms of capturing the full impact of aircraft noise on surrounding communities. NEF contours are a measure of cumulative noise throughout a given day. The model does not capture noise impacts of individual flights or movements or how individuals perceive aircraft noise events.

NEF contours also do not capture run-up noise, a significant source of noise complaints at BBTCA due to turboprop engine run-ups' frequency, duration and very high sound levels. Engine run-ups are required for the operation and maintenance of turboprop aircraft. An engine run-up is when the throttle is advanced to full power for an extended period to test whether the engines produce sufficient thrust for takeoff. Engine run-up activities are primarily related to the maintenance and operation of turboprop aircraft. In order to minimize the impact of run-ups on adjacent uses, some airports have installed acoustically engineered aircraft enclosures that absorb engine run-up noise. To date, BBTCA has not installed such an enclosure.

The NEF contours contained within the Tripartite Agreement were established in the 1970s based on an aircraft fleet mix that was in operation at that time. It is appropriate to remodel the airport's NEF contours based on the current aircraft fleet operating at the airport to determine the new standards for noise containment. It should be assumed that the revised NEF contours should not exceed the existing boundaries of the current NEF contours contained within the agreement. Also, there is the possibility that a physical expansion of the airport will be required at BBTCA to satisfy Runway End Safety Area (RESA) requirements regardless of whether jet aircraft are approved. In that case, an updated NEF contour should be established.

#### *Prohibition on jet powered aircraft*

An amendment to the Agreement in 1985 allowed the introduction of the Dash-8 aircraft, which at the time was a 39 seat aircraft. It has since evolved into the current, 70 seat Q400 turboprop aircraft operating out of BBTCA (the aircraft are the same from a regulatory perspective). The current request to permit the CS-100 jet aircraft with a capacity of 107 passengers or similar class of plane could also result in larger passenger volumes over time.

As reported in the June 17, 2013 report to Executive Committee, there are a number of principles from various international trade treaties and the 2007 US-Canada Open Skies Agreement that apply to Transport Canada and the Toronto Port Authority. Were City Council to decide to amend the Tripartite Agreement to remove any part of the exclusion of jet aircraft from the airport, the amendment would need to establish a comprehensive list of specific performance-based standards in line with these principles to apply equally to any aircraft that seeks operation at BBTCA. As confirmed by discussions with our consultants, outside expertise from Transport Canada and others is needed to develop such standards.



Part of the reason why consideration of the Porter Airlines' requests require simultaneous consideration of BBTCA expansion is that the CS-100 is only one of several different jet aircraft that the BBTCA might have to also permit under such performance-based standards, with several of these other aircrafts accommodating an even greater number of passengers than the CS-100. The City's aviation consultant, AirBiz, notes that the Bombardier CS-100 is the first of a series of aircraft in development from all major aircraft manufacturers (Airbus, Boeing, Embraer, Mitsubishi) that will incorporate new technologies resulting in reduced overall aircraft noise, fuel consumption and emissions. These aircraft have an array of passenger capacities, with a maximum of 140 passengers.

In addition, very light jets, which do not require runway extensions, could be permitted to operate at BBTCA if the prohibition were lifted.

#### *Prohibition on runway additions or extensions*

AirBiz has indicated that the airport will require improvements to its existing airside and terminal facilities in order to accommodate the CS-100 or similar aircraft. The main east-west runway (08-26) is expected to be revised from a Code 2 runway to a Code 3 runway. Code 3 runways have higher standards for clearance and separation around the runway as outlined in Chapter 6 of the AirBiz report. The runway will also require lengthening by 400 metres (200 metres at either end) in order to provide the necessary length for the CS-100 or similar aircraft. Runway End Safety Areas (RESA) requirements which are an overrun area for aircraft may be required to be provided at the airport regardless of the outcome of this proposal.

Exemptions which are already in place respecting approach into BBTCA are further evidence of the airport's context. Ideally, airports are centred within significant buffer lands which allow clear, unobstructed approaches and departures for aircraft. BBTCA is within a built-up urban environment where such buffering is not possible.

BBTCA currently operates with exemptions from Transport Canada with regard to the Obstacles Limitation Surfaces (OLS) approach surfaces. OLS are defined areas around an aerodrome that should be kept free of obstacles in order to minimize the risk to aircraft operations.

Airport Zonings Regulations (AZR) are a regulatory instrument that can be enacted in accordance with the Aeronautics Act to enforce the compliance to the Obstacle Limitation Surfaces (e.g. natural growth, building heights). Exemptions to the AZR are in place to account for transient obstructions (harbour navigation) as well as the Hearn Stack on the Port Lands, permitting a 4.8 degree instrument approach on Runway 26 and 3.5 degree instrument approach on Runway 08. The proposed layout of the expanded runway in the current proposal retains the approach surfaces at their existing locations, as these are deemed appropriate and allow protection of the integrity of the Marine Exclusion Zone, but these approach exemptions need to be confirmed by Transport Canada.

Porter Airlines, the TPA and the City have all corresponded by telephone, email and letter with Transport Canada but no confirmation or indication of comfort that submissions will be able to meet regulatory requirements have been received. Transport Canada's response to the City's formal request for such may be found at Appendix 4.

ii. Toronto's Official Plan

Toronto's Official Plan (OP) sets the policy framework for growth and change within the City. The OP has a significant number of policies which address aspects of the central waterfront. There is also a Council-adopted and partially Ontario Municipal Board approved Secondary Plan for the area. The extensive discussion of Toronto's waterfront in the OP signals its importance as a City-wide asset and regeneration area. Within this framework, the airport is designated *Park*.

The OP deals specifically with airports through several references to the importance of Pearson International Airport as an economic generator. It also speaks to airports generally through policies relating to the natural environment, describing how such major facilities should be buffered from sensitive uses and that mitigation measures may be required to do so. Natural environment policies in the OP also specifically address lakefilling projects in Lake Ontario, indicating that such will only be supported where the land created will be used for public recreation purposes or essential public works, and if the project has been the subject of an Environmental Assessment that ensures protection or enhancement of water quality and quantity.

The OP does not specifically address BBTCA in the general text or the secondary plan for the central waterfront. It only addresses BBTCA specifically through an area-specific policy, Site and Area Specific Policy (SASP) 194, which, while supportive of the continued use of the airport lands for aviation purposes, requires that the airport operate in accordance with the lease arrangement between the City, the TPA and the Government of Canada (the Tripartite Agreement); that the lands revert to a park or a mix of park and residential uses should the airport close; and that revisions to the Tripartite Agreement "may be undertaken, provided that the City is satisfied that improvements to airport facilities and operations can be made without adverse impacts on the surrounding residential and recreational environment" [emphasis added].

The current policy test, that revisions to the Tripartite Agreement should only occur for improvements to airport facilities that will not result in adverse community impacts, does not facilitate the City's assessment of the scale and scope of the airport in its context. The City should complete the Eireann Quay transportation study, and future planning studies should reference the forthcoming BBTCA master plan. Recommendations should be brought forward to Council for its consideration.

Clarity on the airport's future will provide certainty to airport users and the adjacent community about the airport's contributions to the community and the economy, its future direction, and how impacts will be mitigated.

## **2. Approval of the current BBTCA expansion request is premature**

The staff and consultant review of the current proposal has confirmed a number of current operational issues at BBTCA. The review has also identified the impacts of approving the expansion request at this time.

The City's aviation consultant, AirBiz, found that the introduction of the CS-100 could increase the number of passengers at BBTCA in a high growth scenario to 4.8 million per year. In an absence of clear airport master planning from the TPA, the City and its consultants have developed likely scenarios, including the above high growth scenario.

Below are the highlights of key findings from the consulting studies supporting the current review, including, in particular areas, where additional information is required prior to Council being able to render an informed decision on the airport expansion request.

### Aviation

The Bombardier CS-100 is a new aircraft which incorporates recent developments in aviation technology such as advanced design and increased use of lighter composite materials. The most significant advancement is the geared turbofan engine which is expected to reduce fuel consumption, emissions, and aircraft noise.

It should be noted that other aircraft manufacturers such as Boeing (737MAX), Airbus (A319NEO), Mitsubishi (MRJ) and Embraer (E-2) are developing comparable aircraft using similar advances in aviation technology. These "next-generation" aircraft are expected to enter the commercial marketplace over the next five years and will represent a significant improvement over aircraft that existed at the time of the drafting of the Tripartite Agreement in the early 1980s. It is possible that these comparable aircraft may be able to meet the noise requirements in the Tripartite Agreement subject to testing and certification processes which will not require re-opening the Tripartite Agreement.

The Tripartite Agreement states that the TPA shall not permit aircraft generating excessive noise to operate from the BBTCA. Such aircraft will be deemed to generate excessive noise if it generates a noise level in excess of 84.0 EPNdB on takeoff (flyover), or in excess of 83.5 EPNdB on sideline at takeoff (lateral to the flight path), or in excess of 92.0 EPNdB on approach. Trade-offs are permitted when one or two of the measurements exceed the limit as long as the sum of the excesses is not greater than 3 EPNdB and any excess at any single point is not greater than 2 EPNdB. Any excesses must be offset by corresponding reductions at the point or points.

Staff and AirBiz have corresponded extensively with Bombardier, the CS-100's engine manufacturer Pratt and Whitney and Porter Airlines during the review to confirm whether the CS-100 could comply with the Tripartite Agreement's noise criteria. In August, Bombardier agreed to undertake to provide clarity through both modelling and test flight data.

On October 3, 2013, Bombardier committed to providing the City and its consultants with preliminary noise assessment data for the CS-100. This data was expected to be based on static engine test data from Pratt and Whitney and preliminary certification data from Bombardier based on multiple test flights. On October 31, 2013 and November 26, 2013, Bombardier provided preliminary and updated data packages to the City's consultants which included noise data from a limited number of test flights.

The table below compares the noise standards within the Tripartite Agreement, the noise levels for the existing fleet of Q400 aircraft and preliminary test results for the CS-100 provided by Bombardier.

	<b>Tripartite Agreement Requirement</b>	<b>Dash8-Q400</b>	<b>CS-100 (Based on Preliminary Data)</b>
Approach (EPNdB)	92.0	93.1	90.7
Lateral (Takeoff) (EPNdB)	83.5	84.0	85.2
Flyover (EPNdB)	84.0	78.6	80.7
<b>Cumulative (EPNdB)</b>	<b>259.5</b>	<b>255.7</b>	<b>256.6</b>

The preliminary data contained within the original and updated noise package provided by Bombardier indicated that the CS-100 is likely to comply with the noise regulations contained within the Tripartite Agreement. However, staff and our consultants advise that this data set is based on a limited number of flights and as such, does not provide the level of certainty that additional flights under a variety of testing conditions would provide.

At this time, based on all available information provided to the City and the consultants, the CS-100 is trending towards compliance with the terms of the Tripartite Agreement. Staff and the consultants will continue to work with Bombardier to verify the noise data set for the CS-100 as the aircraft moves towards certification by Transport Canada.

### Economic Impacts

BBTCA is an economic asset to the City which has consistently shown growth in inbound and outbound passengers since the 2006 launch of Porter Airlines, with the exception of 2008/2009. BBTCA sees an even split of inbound and outbound passengers, with typical stays of 2-3 days. BBTCA's convenient link between the Toronto central business district and regional premiere business destinations is a significant benefit to Toronto's economy.

The City's economic impact consultant, HLT Advisory, conducted interviews directly with commercial entities most likely to be affected by airport expansion. The most common concern, especially among passenger tour operators, was about possible impacts

on the Marine Exclusion Zone. Traffic congestion was also identified by a majority of businesses, and many identified the need for a strategic transportation solution for the area. In addition, boating restrictions, loss of tranquility, safety, and impacts on special events were identified as potential concerns to commercial operators. Island businesses and the GTAA did not identify concerns about economic impacts to their operations.

A literature review of airport proximity effects on real estate values found that airport noise has some negative effect on property values, most significantly on higher-value and single family dwellings. A condominium market analysis found that housing adjacent to BBTCA has experienced stable demand through the recent period of significant airport growth. Increases in pricing in adjacent condominiums are in keeping with the overall Toronto condominium market.

Strong demand in the central waterfront area for recently launched projects (Harbour Plaza Residence – West Tower, by Menkes, and Aqualina at Bayside, by Tridel and Hines) is evidenced by continued strong sales despite a weakening in overall market conditions over the study period of summer and fall of 2013. Interviews with area realtors found that the waterfront had a "clientele of its own", who value the waterfront views, access to recreational amenities as well as close proximity to downtown.

#### Emergency Preparedness

Appropriate City Agencies and Divisions have commented on emergency preparedness at BBTCA in an expansion scenario, and their responses may be found at Appendix 5.

Toronto Water staff have provided specific advice to Toronto and East York Community Council's Subcommittee on this matter respecting source water protection issues, noting that BBTCA operations do not present a risk to intake pipes south of the Toronto Islands.

In addition, Toronto Police have indicated that continued passenger increases and related traffic congestion will affect response times. In light of this, the Toronto Police Service recommends that the TPA develop and fund a comprehensive protocol for emergency services for BBTCA, including traffic management for emergency situations, the provision of emergency medical facilities on BBTCA, and a direct telecommunication line from BBTCA to the appropriate dispatch services for emergency medical situations. This protocol is recommended to be prepared in consultation with a newly-formed working group, led by the City's Office of Emergency Management in addition to Toronto Fire Services, Emergency Medical Services, Ministry of Transportation and the Office of the Coroner. This protocol should be submitted to the Deputy City Manager, Cluster B, for review and approval.

#### Environment

One of the concerns most consistently voiced during the public consultation process was related to the potential of the runway extensions to create negative impacts on environmental factors, particularly with respect to noise, air and water quality. The City's

Marine and Coastal Processes consultant, CH2M Hill, indicates that further analysis is required with respect to impacts on wave length, currents and sediment transport as well as a natural heritage survey to quantify the aquatic habitat features potentially impacted by the proposal.

On the basis of comments received through the public process, CH2M Hill was asked to complete additional investigations to report on the potential effects of jet blast on passing marine vessels, and on the potential impacts on the environment of additional jet fuel storage tanks being placed on the Toronto Island to accommodate the fuel requirements of the proposed aircraft. Respecting jet blast, the proponent has made a number of changes to the runway touch down and take off locations. This has an immediate impact on jet blast assessment, and as a result the potential impacts are unknown at the time of this report.

The CS-100 has a fuel capacity three times larger than the existing Q-400 turboprop plane, which could increase the number of tanker deliveries from 3 to 4.5 per day. Staff have not received confirmation of fuel delivery and/or storage plans, but it seems likely that this additional capacity requirement will drive the need for new or expanded fuel storage tanks on-site, within the existing fuel farm's footprint.

An additional study has been requested by the Toronto and Region Conservation Authority on the potential impacts of the introduction of jets to the island airport on migratory bird flight patterns. In 2000, Tommy Thompson Park/Leslie Street Spit was declared a Globally Significant Important Bird Area by BirdLife International in recognition of the globally significant numbers of colonial waterbirds that nest there. TRCA is very concerned about the potential impact the introduction of jets could have on these colonies.

Given the substantial increases in the populations of birds and the increase in activity at BBTCA, TRCA has stated that without some form of plan the combination will likely result in increased numbers of bird strikes. Although not required by Canadian law, TRCA is of the opinion that a wild-life management program as part of a master plan should be required at BBTCA to prevent undue hardship for the bird colonies and migratory birds. The TRCA's letter in this regard may be found at Appendix 6.

### Health Impact Assessment

Toronto Public Health (TPH) retained Golder Associates Ltd. to conduct a Health Impact Assessment (HIA), which examined the potential health implications of the BBTCA's current operations as well as potential expansion to include jets. Highlights of the findings are described below, and will also be addressed independently in a report from the Medical Officer of Health to the Board of Health meeting on December 9, 2013.

The HIA found that the central waterfront population is already exposed to elevated health risks from air pollution, noise, and traffic that originate from many sources, including the airport:

- Current levels of air pollutants exceed health benchmarks and contribute to the overall existing burden of respiratory, cardiovascular, and cancer-related illness in Toronto. The BBTCA including related traffic contributes 10-15% of air pollution for people closest to the airport, with the balance originating from non-airport traffic, small industrial and commercial sources, home furnaces, and air pollution from other parts of Ontario and United States.
- In the absence of BBTCA, noise levels would already exceed health guidelines which have been established to prevent annoyance, sleep disturbance and impaired children's learning performance in most locations considered, mainly as a result of traffic in the area. The HIA suggests that BBTCA noise increases some adverse effects by up to 12% in some locations.
- Current traffic conditions around the airport increase the risk of injuries especially for vulnerable pedestrians including children. Traffic congestion hampers access to recreational, health, and community services in the area, which provide a health benefit to people who use them.

The airport is an important contributor to these risks, based on the HIA of current operations compared with a baseline of no airport.

The HIA also indicates that the airport is currently affecting health by diminishing the quality of local parks, community character, and cultural events. As well, the airport contributes to climate change and introduces risks of aircraft accidents and spills or explosions from fuels and other chemicals in a densely populated area.

It is well established that some groups of people are more vulnerable to health risks than others, including groups with lower incomes, children and seniors, and those with underlying medical conditions such as pre-existing respiratory illness. An examination of the TPH Ward Health Profiles for this diverse and evolving area showed that, compared to the Toronto average, their residents are more likely to be living on low income. They may also include a higher proportion of children who are vulnerable in terms of readiness to learn, higher injury rates especially among children, and higher rates of lung and heart disease. The airport may contribute to the existing health burden among vulnerable people living in these areas.

Based on the available estimates and data, the additional health impacts of expanding the airport's operations from the existing conditions to include jets are mixed overall. For example, traffic is already a significant issue; without significant improvements in transit and other infrastructure, an increase in the risk of injuries would be expected and people's ability to access recreational, health, and community services could be negatively affected. Based on available modelling and assuming a modal shift towards fewer vehicles, cardiovascular and respiratory health impacts from air pollution may also increase.

On the other hand, health impacts from noise may improve slightly because the newer jets are expected to be as quiet as the turboprops. While the expansion of service at

BBTCA has economic benefits, these benefits may not accrue to the populations which experience associated health risks.

The findings of the HIA suggest that the long-term presence of the airport on the City's central waterfront is more important in determining the health of the people who live and spend time there than the proposed incremental changes to the airport's operations. The current vision in the City's Official Plan for the central waterfront as a densely populated, vibrant area that celebrates and provides connections to the lakefront aligns with the characteristics of a Healthy City. Optimal protection and enhancement of the health of central waterfront residents and the City as a whole calls for a reduction of current and future airport impacts.

### Land Use Planning

As noted above, the Official Plan's specific policy respecting BBTCA provides for improvements to airport facilities and operations that can be made without adverse impact on the surrounding residential and recreational environment. Further information is required to confirm that airport expansion could meet these policy tests. A preliminary planning applicable policy summary may be found at Appendix 7.

### Runway Extension

Transport Canada is the only party to the Tripartite Agreement that can advise as to the feasibility of a 200m runway extension at each end of Runway 08-26 at BBTCA. The implications on safety and operations are not presently clear: outstanding issues include steep aircraft angle of approach guidelines and exemptions, placement of the Marine Exclusion Zone, runway pavement ratings, the need for additional taxiway construction, airport terminal reconfigurations and transitional zoning specifications listed within the Airport Operations Manual and The Toronto Island Airport Zoning Regulations (AZRs). A number of these unknowns include corollary concerns; for instance, if the Marine Exclusion Zone is moved there could be impacts on boaters and ferries. The impact of jet blast on boaters is also unknown.

Runway extension, and the associated facility improvements at BBTCA, would require significant investment. AirBiz has projected that the extension of Runway 08-26 by 200m at each end will cost in the range of \$90-100 million for the lakefilling portion alone, with runway surfacing, taxiway, and airport terminal facilities all being additional costs. There are two possible methods identified to construct the runway extensions: lakefilling to extend the land area; or a pile-supported deck structure. Each construction method has its own potential impacts on the natural environment, specifically the impact on vegetation and habitat. The TPA has not indicated a preferred method of construction (either by lake filling or decking) or how construction will be coordinated with active aircraft movements on the runway.

The TPA recently advised in its November 7, 2013 letter that an extension of the Tripartite Agreement lease past 2033 must be considered at the same time as the current



proposal, as this, in the TPA's opinion, is the only way in which to fund the runway extension and other required improvements. Previous correspondence identifies a 50 year extension request, bringing the Agreement's end-date to 2083. This was not part of Council's May 2013 direction to staff; staff has not considered this request and is not in a position to report on it. The extension request raises significant issues that need to be properly reviewed including whether it is an appropriate time for the City to consider an extension of the agreement when it does not expire for another 20 years.

### Transportation

As noted in the above review of current operational issues at BBTCA, existing traffic and congestion conditions have a negative effect on the adjacent community, schools, parks and community and recreational facilities. The local street network is, at peak hours, overwhelmed – the Lake Shore Boulevard and Bathurst Street intersection in particular experiences operational problems due to lack of capacity at the Bathurst Street and Queens Quay Boulevard intersection. The close proximity of the area to a number of entertainment venues and frequent special events further compounds traffic congestion issues.

The City's transportation consultant, BA Group, determined that if jets are introduced there would be substantial traffic changes needed to mitigate the increased passenger flow at peak hours. The public realm impacts of these solutions are significant and their introduction may lead to a new set of problems given the Official Plan goals to build an exemplary public realm.

Transportation options discussed by BA Group which could improve the area network in order to accommodate additional passengers include: new transit service directly to the airport; tunnels to the airport to accommodate either transit, pedestrians or cars; a bridge over Dan Leckie Way to create a safe school-park connection; an extended westbound left turn lane on Lake Shore Blvd. at Dan Leckie Way, and the creation of a new road extension of Dan Leckie Way (with some lake filling). These options have significant impacts on the public realm, require significant EA approvals, and must be done as a suite of measures (addressing both road and transit capacity). The order of magnitude cost for this suite of measures is estimated to be between \$180-\$300 million. For these reasons, BA Group suggests that caps on airport growth may be a reasonable approach.

In staff's correspondence with the TPA, the TPA's commitment to participate appropriately in funding transportation improvements was a key concern. The TPA has responded in its November 7, 2013 letter that it does not believe increased airline passenger traffic is the primary source of increased traffic congestion in the area; rather, that new residential populations are the traffic generator. The TPA has indicated it is not in a position to commit to funding what it terms "major city-side infrastructure projects".

### **3. An Airport Master Plan is necessary to discuss the future of BBTCA**

While the City has a clear vision for the waterfront that is articulated through policies, adopted by City Council, in the Official Plan and the Central Waterfront Plan, BBTCA operates without a master plan. In domestic and international established practices, airport master plans are a standard operating requirement, for all airports. In Canada, airport authorities are required to prepare detailed master plans under their leases with the Government of Canada. For reference, a selection of links to Canadian airport master plans are found in Appendix 8.

Operationally, master plans are generally compulsory for airports requiring financing. Airport master plans are typically commissioned by the owner-operator, and prepared by an independent third party. An airport master plan provides information on the airport's business plan, strategic directions, and identifies necessary tools for growth.

The TPA should have a master plan prepared for BBTCA which can be reviewed by the City, the public and other stakeholders. Without this, there remains a gap in knowledge as to how BBTCA's operations fit into the Central Waterfront Area and the Official Plan. The master plan should be developed in accordance with the framework found in all airport leases entered into pursuant to the Airport Transfer Act.

The consultant studies and staff review conducted as part of the current proposal serve as a starting point for the BBTCA master plan. The BBTCA master plan should also address the following matters:

- the role and scale of the airport;
- the continued revitalization and redevelopment of the overall waterfront and locally on Bathurst and Eireann Quay;
- projected passenger volumes and flights;
- the pedestrian tunnel to BBTCA (anticipated completion in 2014);
- the impact of the Union-Pearson rail link (anticipated completion in 2015);
- the function of BBTCA within the air travel context of the Greater Toronto and Hamilton Area;
- the impact of proposed airport legislative changes such as the potential requirement for an extension of Runway 08-26 of 50m to comply with harmonized runway-end safety areas (RESA);
- TPA's position on the requests made by Porter to amend the Tripartite Agreement to permit jet aircraft and extend Runway 08/26 by 168 or 200m;
- any potential regulatory or airport certificate amendments that Transport Canada would require in connection with its long-term plan for the BBTCA; and
- details as to how the public will be included in the development of the BBTCA master plan (including the existing Community Liaison Committee) and the ongoing operation of the airport.

Council should request that this master plan be completed concurrently with the above-referenced slate of planning studies, targeting a March 2015 completion.

#### **4. The City needs a long-term planning vision for the airport in its urban and waterfront context**

Current controls on the airport's operations have not proven sufficient to manage its recent growth, and voluntary measures discussions with the operator have not been productive. A long-term planning vision for the airport in its urban and waterfront context should be developed in consultation with the community and affected stakeholders, to address the scope and scale of the airport in the context of the implementation of the Central Waterfront Plan.

The airport should be more prominently reflected in City planning documents and other policy considerations. With reference to the BBTCA master plan, matters to be addressed include:

- objectives for the airport's economic contribution to the City;
- objectives for the airport's optimal integration with the surrounding urban waterfront context;
- a comprehensive transportation plan for Eireann Quay and its surrounding transportation network, with the central objective of dramatically shifting modal choice towards more sustainable and traffic-reducing modes such as walking, cycling, public transit and a greatly improved airport shuttle service. The transportation plan would need to consider the following:
  - improving the signalization and intersection marking in the local street network to improve pedestrian safety and traffic flow;
  - carefully managing taxis to reduce conflict in the local community;
  - improving the transit station infrastructure and pedestrian connections to promote walking and transit use;
  - significantly increasing the frequency and geographic reach of the airport shuttle service;
  - increasing the pick-up/drop-off locations of the airport shuttle service, and potentially establishing remote collection stations; and
  - advertising the convenience of transit and airport shuttle services, and potentially including ticket price incentives.

This effort should build on the studies completed as part of this review to reduce both the cost and time required for forthcoming work.

## **CONCLUSION**

The request by Porter Airlines to amend the Tripartite Agreement to allow jet powered aircraft at BBTCA, along with an extended runway, has been given careful consideration by staff and the retained consultant team, and received considerable input through its public consultation process. Staff have concluded that the primary issue is less about airplane technology than about the scale of BBTCA's operations and its fit within the

central waterfront, including increased passenger volumes which would result from an airport expansion.

The sudden, significant growth of BBTCA, combined with its current expansion proposal, has increased the current review beyond the immediate proposal and into a discussion of the airport's appropriate scale into the future. While answers to questions of planned development, population, scale, scope, fit and balance for the central waterfront are more generally mapped out through the planning policy framework, no such map exists for BBTCA either through an airport master plan or current City planning policy.

BBTCA is an asset to the City and a great benefit to Toronto businesses, residents and visitors. However, BBTCA's operations currently have negative impacts, principally related to traffic congestion, noise and lessened enjoyment of the City's waterfront. Negotiations respecting groundside improvements to mitigate these impacts have not commenced. These negotiations, and their outcomes, will be important inputs into whether staff would recommend in future amending the Tripartite Agreement. An HIA has been completed by TPH and its results will be reported on separately. Many of the measures the City has requested through correspondence with the TPA in relation to the current proposal are standard practice and would normally be reviewed as part of the master plan process. These will be the City's starting points for future discussions.

The current proposal has significant unknowns: Transport Canada has not provided the City with confirmation of the feasibility and impacts of a runway extension, and an EA has not been completed; in the absence of sufficient flight test data staff are unable to confirm whether the proposed jet aircraft will meet the noise guidelines set out in the Tripartite Agreement; the review did not consider the implications of an extension to the Tripartite Agreement, which the TPA recently advised was a necessary precondition for the proposed expansion to proceed; and TPA has not provided information on the long-term vision for the BBTCA, including the airport's fit, and appropriate scale in its downtown waterfront setting. In addition, an emergency preparedness protocol has not been established; the environmental impacts have not been clearly mapped on the basis of data provided; and the TPA and the City have not resolved the traffic issues at Eireann Quay.

This review has concluded that all potential impacts related to the expansion of an airport in a downtown area and on an active waterfront must be considered. This report also recommends that the parties continue to move forward to address existing conflicts at the BBTCA. This report recommends that both TPA and the City develop plans to address the scope and scale of the airport.

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## **SIGNATURE**

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John W. Lively F.C.I.P  
Deputy City Manager, Cluster B

## **APPENDICES**

1. Letter from Porter Airlines to Mayor Rob Ford (April 22, 2013)
  - a. Letter from Porter Airlines to Deputy City Manager, Cluster B, John Lively (September 3, 2013)
2. Consultants' Reports
  - a. Urban Strategies Inc.
  - b. AirBiz Aviation Strategies
  - c. BA Group Transportation Consultants
  - d. CH2MHill
  - e. DPRA Consulting
  - f. Environics Research Group
  - g. HLT Advisory and N. Barry Lyon
3. Correspondence between the City and the TPA
4. Letter from Transport Canada to Deputy City Manager, Cluster B, John Lively (November 8, 2013)
5. Circulation responses from Toronto Police Services and the Office of Emergency Management
6. Letter from the TRCA
7. Planning Policy Summary
8. Airport Master Plan Examples