

## **PORTSTORONTO**

## BILLY BISHOP TORONTO CITY AIRPORT

# COMMUNITY LIAISON COMMITTEE MEETING #22

## **MEETING MINUTES**

Wednesday June 1, 2016 Harbourfront Community Centre Toronto, Ontario

Minutes prepared by:





These meeting minutes were prepared by Lura Consulting. Lura is providing neutral third-party consultation services for the PortsToronto Community Liaison Committee (CLC). These minutes are not intended to provide verbatim accounts of committee discussions. Rather, they summarize and document the key points made during the discussions, as well as the outcomes and actions arising from the committee meetings. If you have any questions or comments regarding the Meeting Minutes, please contact either:

**Gene Cabral** 

EVP- Billy Bishop Toronto City Airport **PortsToronto** 

Phone: 416-203-6942 ext. 16 GCabral@torontoport.com

Jim Faught
Facilitator
Lura Consulting

Phone: 416-536-2215 ifaught@lura.ca



OR

### **Summary of Action Items from Meeting #22**

Action Item #	Action Item Task	Who is Responsible for Action Item	
M#22-A1	Finalize and distribute minutes from CLC Meeting #21.	Lura/PortsToronto	
M#22-A2	Provide a presentation at the next CLC meeting on how the Noise Management Office data is used and analyzed.	PortsToronto	
M#22-A3	Provide the cost of the 2015 Traffic Survey.	PortsToronto	
M#22-A4	Follow up on whether a public meeting can be held as part of the study to determine the location of additional Noise Monitor Terminals.	PortsToronto	
M#22-A5	Inquire about noise impacts of runway grooving and report back to CLC.	PortsToronto	

### **Appendices**

Appendix A1-1: Noise Management Office 2015 Year End Summary Appendix A1-2: Results of the Fall 2015 Traffic and Passenger Surveys

Appendix A1-3: Noise Monitor Terminals Public Notice

Appendix A1-4: Airfield Rehabilitation Program Update Presentation

Appendix A1-5: Terminal A Presentation

### **List of Attendees**

Name	Organization (if any)	Attendance
COMMITTEE MEMBERS	1 6 7 7 7	
Andrew Hilton	Waterfront Toronto	Regrets
Brad Cicero	Porter Airlines	Present
Chris Glaisek	Waterfront Toronto	Regrets
Christian Ilumin	Sky Regional Airlines	Absent
Councillor Joe Cressy	City of Toronto, Ward 20	Regrets
Councillor Pam McConnell	City of Toronto, Ward 28	Regrets (staff present)
Bryan Bowen	City of Toronto – Waterfront Secretariat	Present
David Stonehouse	City of Toronto – Waterfront Secretariat	Absent
David Whitaker	Tourism Toronto	Absent
Hal Beck	York Quay Neighbourhood Association (YQNA)	Present
Heather Johnson	Bathurst Quay Neighbourhood Association (BQNA)	Regrets
Jim Panou	Bathurst Quay Neighbourhood Association (CLC#22 Meeting alternate for BYNA)	Present
Lia Brewer	Councillor Joe Cressy's Office	Regrets
Matthew Kofsky	Board of Trade	Absent
Robert Kearns	Ireland Park	Absent
Ron Conard	Toronto Island Community Association (TICA)	Regrets
Sean McIntyre	Councillor Pam McConnell's Office	Present
Trevor Stevenson	Resident	Present
Warren Lampitt	Air Canada	Absent
GUEST SPEAKERS AND SUBJECT	CT EXPERTS	
Bojan Drakul	WSP	Present
PORTSTORONTO REPRESENTA	ATIVES	
Angela Homewood	PortsToronto	Present
Deborah Wilson	PortsToronto	Present
Gary Colwell	PortsToronto	Present
Gene Cabral – Chair	PortsToronto	Present
Ken Lundy	Indy PortsToronto	
Mike Karsseboom	PortsToronto	Present
MEMBERS OF THE PUBLIC		
Jim McClocklin	Resident	Present
FACILITATION AND SECRETAR	IAT	
Jim Faught	Lura Consulting	Present
Leah Winter	Lura Consulting	Present

#### 1. WELCOME AND INTRODUCTIONS

Mr. Jim Faught, Lura Consulting, welcomed members of the Billy Bishop Airport Community Liaison Committee (BBTCA - CLC) to the twenty-second committee meeting. Mr. Faught reviewed the agenda and facilitated a round of introductions.

### 2. REVIEW OF PREVIOUS MEETING MINUTES

Mr. Faught noted that draft meeting minutes from meeting #21 were distributed via email to committee members for review. Based on no suggested edits or comments during the review period, the final minutes were posted on the PortsToronto website. Suggested revisions were received from the YQNA representative on June 1, 2016. The minutes will be revised and finalized prior to re-posting on the PortsToronto website.

#### Action:

M#22-A1. Finalize and distribute minutes from CLC Meeting #21.

#### 3. 2015 NOISE MANAGEMENT OFFICE REVIEW

Mr. Gene Cabral, PortsToronto, and Mr. Gary Colwell, PortsToronto, provided a presentation on the Noise Management Office 2015 Year End Summary. Key points from the presentation include:

- PortsToronto's 2015 Year End Summary of the Annual Noise Management Report will be released in June 2016.
- Key figures of total passengers and aircraft movements over the past three years were presented.
- Total complaints decreased by 6% from 2014 to 2015. A breakdown of complaints by activity was presented.
- Total aircraft related complaints increased by 6% from 2014 to 2015. A breakdown of the complaints of aircraft operations by type was presented.
- A commitment was made by BBTCA management to respond to noise complaints within 5 working days. In 2015, this goal has been achieved with a success rate of 99.5%.

Below is a summary of the comments and questions raised by committee members regarding the Noise Management Office presentation:

- The YQNA representative requested that the Noise Management Office be re-named to the Noise Complaints Management Office. It was noted that the word decibel was not mentioned in the presentation.
- The YQNA representative indicated that he is surprised to see the number of complaints remain roughly the same while there was an ongoing Environmental Assessment (EA) process at the time. There was also a Federal election that occurred during that time which may have put downward pressure on the number of complaints since the community may have been

anticipating change. He suggested that these two aspects should be included in the notes that are posted on the website. Mr. Cabral responded that the EA was ongoing for about 2.5 years and there likely is no direct correlation to the noise complaints. He also explained that PortsToronto is not just managing and reporting complaints. The presentation provided at this meeting is a pure summary of what was received in the office. There is analysis that happens and that information is used to identify improvements to mitigate concerns. One improvement this year is a system called Vortex that tracks the information that comes in and allows PortsToronto to look at trends and patterns.

- The YQNA representative requested to see exactly how the noise complaint data is going to be used at the next CLC meeting.
- The BQNA representative inquired about what is happening with the RWDI studies conducted during the EA process and whether that information could be shared. Mr. Cabral responded that the information collected during the EA process served the purpose for a proposal for jets which is no longer being discussed. Sectioning off the work that was done is not something PortsToronto feels is appropriate considering the EA will not be completed.
- The BQNP representative expressed that the noise that existed back then still exists today and if there is concrete data where measurements are taken it should be looked at. Mr. Cabral responded that the data outputs like the traffic information that would support the City led BQNP could be used as it makes sense, but PortsToronto are not planning to issue sections of the EA that have not been completed.

### Action:

M#22-A2. Provide a presentation at the next CLC meeting on how the Noise Management Office data is used and analyzed.

#### 4. CITY OF TORONTO BUSINESS

Mr. Bryan Bowen, City of Toronto Waterfront Secretariat, provided an update on the review process for the Ground Run-up Enclosure (GRE) and the Bathurst Quay Neighbourhood Plan (BQNP). Key points from the GRE update include:

- The GRE is proceeding through a site plan approval process at the City of Toronto. Since the City
  owns the property, the process will conclude with a binding Memorandum of Understanding
  (MOU) which will lay out the specifics on the design and operation of the facility, in lieu of a
  formal site plan agreement.
- A formal application submission from PortsToronto has been received and deemed complete. It
  has been circulated to internal and external departments and agencies for review (i.e. City of
  Toronto Urban Design, Legal Services, Heritage Preservation Services, Real Estate Services,
  Parks, Forestry, and Recreation; Waterfront Toronto; NAV Canada). The comments being
  collected are due in advance of a public meeting scheduled for June 28, 2016 at the Waterfront
  Neighbourhood Centre.
- The public meeting will be an opportunity for members of the public to hear remarks from City
  of Toronto representatives about the review process and a summary of comments received
  back through the circulation process. A presentation will be given by PortsToronto

- representatives to provide additional details on the facility, followed by a question and answer period.
- Prior to the public meeting there will be an opportunity to participate in an on-site meeting on airport property. It will take place on June 23, 2016 from 6:30pm-7:30pm in a boardroom at the airport with unobstructed sightlines to the proposed GRE location.
- The comments received will be incorporated into the feedback record on the application and used to provide a formal response back to PortsToronto outlining the City's position on the facility and a draft of the terms of the MOU. Following the execution of the MOU, the City will grant authority for construction to begin.
- The public meeting notice was recently finalized and it is being circulated by Councillor Cressy and Councillor McConnell's offices as well as by email and social media. The City has also set up a project website which has links to the full technical submission by PortsToronto.

Key points from the BQNP update include:

- The City had been targeting a date of June 20, 2016 for the final public meeting on the BQNP.
   Due to unforeseen circumstances, the timing of the public meeting and the Staff Report will be delayed until mid-late September.
- In the meantime, on June 15, 2016 City staff will be attending the BQNA meeting to provide an overview on emerging directions from the plan. Also, on June 18, 2016 the Waterfront Neighbourhood Centre will be hosting a neighbourhood fun fest and City staff will be hosting a booth to provide stakeholders with an overview of where the process stands and next steps.

Below is a summary of the comments and questions raised by committee members regarding the GRE review process:

- The BQNA representative suggested that the link to the City's GRE project website be shortened and the meeting notice be recirculated. Mr. Bowen agreed to arrange this. (Following the CLC meeting, the public meeting notice was reissued with a shortened website link.)
- The BQNA representative inquired about the timeframe for the City to give PortsToronto approval for construction of the GRE. Mr. Bowen responded that the timeframe depends on the scope and type of comments received through the consultation process.
- The BQNA representative inquired if the City is considering posting the public meeting notice near Hanlan's Point beach. Mr. Sean McIntyre representing Councillor McConnell's office responded that, in addition to a mailout, the notice will be posted at various locations along the waterfront and Toronto Islands including Hanlan's Point.

### 5. PORTSTORONTO UPDATES – BBTCA OCTOBER 2015 TRAFFIC SURVEY

Mr. Gene Cabral, PortsToronto, provided a brief presentation on the BBTCA October 2015 Traffic Survey. Key points from the presentation include:

- PortsToronto has conducted traffic surveys in and around the airport for several years dating back to 2012.
- The Fall 2015 Traffic Survey and accompanying News Release are available on PortsToronto's website.

- In the spring of 2015, PortsToronto conducted a modal split analysis of passengers travelling to and from the airport. They also identified various traffic sources in the surrounding area.
- One highlight from the results is that 40% of travellers utilized walking, biking or transit (TTC or airport shuttle) from the airport.
- The study also confirmed a notable ease in traffic and passenger flow at the mainland terminal and along Eireann Quay with the opening of the tunnel.
- The overall traffic count hasn't changed dramatically from spring to fall. What has changed it the surge of vehicles leaving.

Below is a summary of the comments and questions raised by committee members regarding the traffic survey:

- The BQNA representative asked how much time Dillon Consulting spent on the ground capturing data for the traffic surveys. Mr. Cabral indicated that this information is detailed in the report provided. Dillon Consulting spent two days collecting data during morning and afternoon peak periods. The methodology is consistent with previous studies.
- The BQNA representative inquired if any estimation was involved in the data. He was made aware of an email from PortsToronto in response to a community member indicating that estimations were made. Mr. Cabral noted that all of the details are provided in the report. Data was collected on passenger loads, parking information, and observed vehicles.
- The BQNA representative expressed that he conducted his own observations on Monday of the long weekend using a time lapse camera for one hour. He expressed that the number of people going to/from the airport was staggering. He suggested that the City needs to adjust the phasing of the traffic lights at the Queens Quay and Bathurst intersection to accommodate the growing number of pedestrians and cyclists. Mr. Bowen, City of Toronto, responded that as part of the Bathurst Quay Neighbourhood Plan implementation strategy there will be short, medium and long term actions. The phasing of the intersection lighting has been identified as a short term immediate action. Mr. Cabral added that the City has received the traffic survey report for consideration and it is also available publically.
- The YQNA representative asked about the cost of the traffic study. Mr. Cabral responded that he does not know the cost off hand but would be happy to follow up.

#### Action:

M#22-A3. Provide the cost of the 2015 Traffic Survey.

### 6. PORTSTORONTO UPDATES – NOISE MONITOR TERMINALS

Mr. Gene Cabral, PortsToronto, provided a brief update on the Noise Monitor Terminals (NMTs). Key points from the presentation include:

 PortsToronto issued a public notice on May 31, 2016 stating that the two Noise Monitoring Terminals (NMTs), located on the Toronto Police Marine Unit building and the airport's onisland Fire Hall, will be upgraded this year.

- PortsToronto is also trying to implement additional NMTs in strategic locations. The initial step is looking at areas of concern that have been highlighted from a community perspective and areas in close proximity to the airport.
- A third location that has been approved is the mainland passenger transfer facility.
- Ports Toronto will be looking to commission a study to look at ideal locations for NMTs.

Below is a summary of the comments and questions raised by committee members regarding the Noise Monitor Terminals:

- The YQNA representative inquired about when the study will begin. Mr. Colwell responded that the study is currently underway. PortsToronto will be setting up noise monitors in different areas throughout the city in close proximity to the airport to get noise readings to find out which areas are most effective and benefit the most people.
- The YQNA representative requested that a public meeting be held to share the findings of the ideal locations for the noise monitors. He was expecting a more systematic approach involving all agencies together and looking at targeted offsets and elevations. Part of the targeted elevations problem is access to properties. It should all be laid out to the public including the rationale for the locations. Access to locations over a longer period of time is important to monitor the progression of the noise at a specific location. Looking back at the studies, there are very few points in common. Mr. Cabral responded that his request will be considered. PortsToronto will discuss it with the City and is open to garnering public input.
- The YQNA representative asked if a marine noise expert will be engaged in the study. He expressed that Pearson airport is used to dealing with land based noise and it is a completely different scenario on the waterfront. Mr. Cabral reiterated that the objective is to increase the number of noise terminals and the first step is identifying ideal locations. PortsToronto will speak to the City and Waterfront Toronto on how to share that information and seek feedback. They have previously run into some road blocks in gaining approval for noise monitors in certain locations.
- The YQNA representative expressed that he is more interested in the ambient noise assumptions.
  He would like to know what level the filters on the noise monitors will be set and what noise
  profile will be used. He would also like to know the make and model of the noise monitors and
  how the community can verify the results independently.
- The BQNA representative reiterated that having data that can be looked at over a 10 year period is very important in terms of development of the Portlands and the work that Waterfront Toronto is going to be doing. Having historical information is vital. Mr. Cabral noted that this is a good point and that PortsToronto also feels it is important that people understand where the current noise exists when a new development is proposed.

#### Action:

M#22-A4. Follow up on whether a public meeting can be held as part of the study to determine the location of additional Noise Monitor Terminals.

### 7. AIRFIELD REHABILITATION PROGRAM - UPDATE

Mr. Gene Cabral, Mr. Ken Lundy, and Mr. Mike Karsseboom provided an update on the BBTCA Airfield Rehabilitation Program. Key points from the presentation include:

- PortsToronto has been planning a full rehabilitation program for all major airside components of the Airport for over 7 years and it has been contained within their Capital Program. This was also part of the 2012 Master Plan.
- PortsToronto has been providing updates at CLC meetings since meeting #19 and today was a more detailed update on the plan.
- Changes made on the rehabilitation strategy include: runway 08-26 now mill/pave to reduce cost and risk (previously full depth reconstruction); no impact on quality/service life; runway 06-24 design also modified to reduce cost; and replacement of 2400V Feeders added to the project.
- The pre-qualification process resulted in the selection of three fully qualified contractors and consequently three strong bids were received.
- The project team includes PortsToronto, WSP Canada Inc., Peto MacCallum Ltd., Pave-Al Limited, and subcontractors. The project team is committed to completing runway 08-26 and runway 06-24 in 2016.
- The overall scope for the 3-year project was described in detail.
- PortsToronto's rationale for closing runway 15-33 was presented in addition to the itinerant movements by runway over the past four years.
- The project milestones and construction schedule were presented. It was noted that the bulk of construction will be happening over the summer. Asphalt will be brought through the Portlands and carried over the water on a barge.
- PortsToronto will be launching a project-specific website on June 8, 2016 which will contain regular project status and construction activity updates (<a href="www.billybishopairfieldproject.com">www.billybishopairfieldproject.com</a>). A public notice was issued to let people know about the website. PortsToronto has made it clear with the contractor that they need to provide definitive details about what is coming up to be able to share that information with the community.

Below is a summary of the comments and questions raised by committee members regarding the Airfield Rehabilitation Update:

- The YQNA representative inquired if the grooving on the runway results in a noticeable noise increase for the community. Mr. Karsseboom responded that the Ottawa airport has not noticed any noise increase. The grooves are very tight and would not create the same effect as a rumble strip. PortsToronto can follow up by inquiring at other airports that have grooving.
- The YQNA representative asked if there are any emergency impacts or risks of eliminating runway 15-33. Mr. Cabral stated there are none.
- The BQNA representative asked how often and for how long are the engine run ups. Mr. Cabral responded that engine runs occur roughly once per day. There were 360 in 2015. Mr. Karsseboom added that there are different kinds of engine run ups. The high power runs are most intrusive and there are others that are less intrusive and are generally not noticed by the community.

- Mr. Cabral indicated that PortsToronto implemented conditions for carriers regarding engine
  run ups including restricted hours. These are available online. As part of the implementation of
  the GRE facility, PortsToronto does not anticipate any changes to the protocol.
- The BQNA representative asked if there will be sample of the GRE noise absorbent material available at the public meeting. Mr. Lundy noted that PortsToronto has asked for a sample of the panelling.
- The Porter Airlines representative asked if there were any adjustments made to the design of the GRE facility since the previous CLC meeting. Mr. Lundy indicated that the width of the structure has been adjusted to allow an aircraft to power in and power out. The final orientation has also been adjusted to get the best predominant wind so that the maximum number of run ups can occur within the enclosure. If there is a crosswind, there may be the possibility of having to do run ups outside of the enclosure. A 14 m wall was also added to the design to achieve a greater noise reduction. The illuminated sign was also removed from the design specifications.
- The BQNA representative inquired about RESA and the TP312 requirements. Mr. Cabral responded that the airport will still operate under the 3<sup>rd</sup> Edition of TP312. RESA come in under the 5<sup>th</sup> edition. An NPA has been issued by Transport Canada recently that has information on RESA. PortsToronto is currently reviewing that and will be responding.
- The YQNA representative stated that the dedicated website for the tunnel project didn't work out well. It caused confusion and complaints. He suggested that a link to the airfield rehabilitation project be included on PortsToronto's noise complaint website. Mr. Cabral confirmed that they can provide a link directly from the BBTCA's noise management website.
- The YQNA representative asked if the public presentation on the GRE will have more fulsome
  information on what the targeted noise levels would be at the south face of buildings across the
  waterfront. The community wants to know the maximum magnitude of those peaks. Mr. Lundy
  responded that there will be design modelling on what the noise reduction will be. It is aiming
  for a minimum reduction of 15 decibels. Plans will be presented that show the actual decibel
  levels.
- The YQNA representative inquired if the noise coming off the GRE site is it designed to meet the DBA profile of the south facing buildings on the waterfront. The noise that is received from the airport should be meeting the DBA noise profile. Mr. Cabral requested that he be sent this specific question by email so that BDI can respond in advance of the June 28 public meeting. Mr. Bowen requested to be copied on this email so it can become part of the public record on the site plan review process.

#### Action:

M#22-A5. PortsToronto to inquire about noise impacts of runway grooving.

#### 8. TERMINAL A

Mr. Ken Lundy, PortsToronto, provided a brief presentation to introduce the Terminal A project. Key points in the presentation include:

• Terminal A is a significant heritage building built in 1938 that PortsToronto would like to preserve. The goal of the project is to restore and revitalize the building, preserve its heritage

and aviation origins, and create an exciting and self-sustaining public destination on Centre Island.

- The proposed relocation of Terminal A was shown on an aerial photograph. It will remain on airport property, and moved closer to the property boundary so that public access will be provided.
- The project developers are Alexander Younger and Mark Robert. The revitalization will be filmed as part of a television show hosted by Sarah Richardson and Thomas Smythe. The heritage architect on the project team is ERA Architects.
- Photos of the current condition were shown as well as artist renderings of the refurbished building.
- The benefits of the project include: preservation of the historic Terminal A Building; offloads the
  costs of restoration from PortsToronto/City; increases visitation (locals/tourist) to the islands
  further animating this area; creates goodwill with neighbours/stakeholders; reduces general
  aviation/commercial conflicts and streamlines general aviation operations; and it offers
  international exposure for Toronto via potential television show.
- Next steps include: (1)Secure approval of various stakeholder groups; (2)Finalize Lease terms with PortsToronto; (3)Finalize architectural plans/working drawings; (4)Confirm final renovation budget; and (5)Finalize Financing and Restore Building.
- More information will be provided at the next CLC meeting.

#### 9. BUSINESS ARISING

Ms. Deborah Wilson, PortsToronto, provided a brief summary of the Doors Open event at BBTCA on May 28, 2016. Key points include:

- Over 10,000 people came to visit BBTCA at Doors Open on Saturday May 28.
- It was a very positive and exciting event where community members and the public could have a behind-the-scenes look at the airport.
- Areas of the airport that were showcased include the tunnel, atrium, Ornge hangar, and Fire Hall
- PortsToronto plans to participate in Doors Open again next year.

#### Future CLC Site Visits for 2016 include:

- Firehall and maintenance facility tour
- Fuel storage facilities and management
- De-icing fluids management (potentially during Q4 of 2016)

### Additional Comments:

- The BQNA representative made a request that meeting materials be circulated a week in advance.
- The YQNA representative indicated that arranging a meeting with Transport Canada, as was discussed at the previous CLC meeting, would be suitable during the summer months.

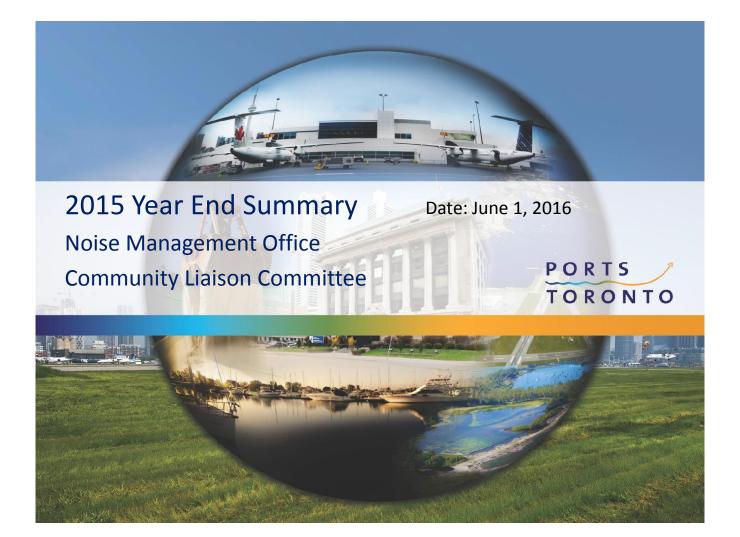
### 10. WRAP UP

Mr. Faught thanked CLC members for attending the meeting, and informed members of the dates for the two remaining meetings taking place in 2016. Next CLC meeting is September 21, 2016.

### **ADJOURN**

## Appendix A1 – 1

Noise Management Office 2015 Year End Summary



# **Key Figures**

	2013 Passengers	2014 Passengers	2015 Passengers
Non Connecting	1.9 million	2.0 million	2.0 million
Total Passengers (Incl. Connecting)	2.3 million	2.4 million	2.48 million

International Enplaned Travellers (US Bound)					
Actual 2013	357,000				
Actual 2014	390,000				
Actual 2015	400,620				



# Key figures (Cont'd)

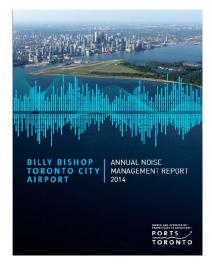
## Aircraft Movements (Take off and Landing)

	2013	2014	2015
Total Movements	113,186	114,356	120,646
Air Carrier Movements	58,436	58,250	58,431



# 2015 Year End Summary

❖ To be released later in June 2016, the BBTCA Management Team will publish our Annual Noise Management Report.



# 2014 vs. 2015 Comparison

Total Complaints

$$2014 = 410$$
  $2015 = 386$  Decrease of approx. 6%



## 2014 vs. 2015 Statistics

- Total 2014 Complaints = 410
- Total 2015 Complaints = 386

Complaints by Activity Comparison

2014	2015
❖ Aircraft Related − 334 (82%)	354(92%)
❖ Ferry Related – 54 (13%)	22 (6%)
❖ Mainland Operations – 13 (3%)	4 (1%)
❖ Construction related – 9(2%)	6 (1%)

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# 2014 vs 2015 Comparison

• Total Aircraft Related Complaints



## 2015 Statistics

- Complaints of Aircraft Operations by Type
- Total = 354
  - ❖ Scheduled Commercial Service = 115 (32%)
  - ❖ General = 95 (27%)
  - General Aviation = 92 (26%)
  - ❖ Medevac = 45 (13%)
  - Helicopters = 6 (2%)
  - Uncorrelated = 1 (0%)
  - . Other = 0



## 2015 Statistics

- Overview of changes year over year for Aircraft Operations by Type
  - With the increase of approx. 6% over 2014 the key areas where we experienced changes in complaints were as follows:

2014 total 334

Scheduled Commercial Service = 122

General = 75

General Aviation = 45

Medevac = 46

Uncorrelated = 42

Helicopters = 0

Other = 4

2015 Total 354

Scheduled Commercial Service = 115

General = 95

General Aviation = 92

Medevac = 45

\*Uncorrelated = 1

Helicopters = 6

Other = 0



# Complaint Turnaround Time Metric

- ❖ A commitment was made by BBTCA management to respond to noise complaints within 5 working days
- ❖ Tracking commenced in the later part of 2011
- ❖ In the year 2015 this goal has been achieved with a success rate of 99.5%



<sup>\*</sup> Uncorrelated only if no identifiable noise source

# Questions?

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## Appendix A2 – 1

Results of the Fall 2015 Traffic and Passenger Surveys



## **PORTSTORONTO**

# **Billy Bishop Toronto City Airport**

**Results of Fall 2015 Traffic and Passenger Surveys** 



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## **Executive Summary**

This report documents the results of the mainland traffic and pedestrian surveys undertaken in October 2015 in the vicinity of Billy Bishop Toronto City Airport (BBTCA). These surveys follow up from a similar survey program undertaken in April 2015, and allow for a comparison of operating conditions before and after the opening of the pedestrian tunnel to BBTCA.

The survey program yielded the following data:

- Intersection traffic volumes during the AM and PM peak hours;
- Two-way traffic flows along Eireann Quay;
- The level of compliance with signed turn prohibitions in the vicinity of the airport;
- Variation in the length of northbound queues along Eireann Quay at the Queens Quay intersection;
- Variation in the length of the queue of traffic waiting to board the ferry;
- Ridership on the shuttle traveling between Union Station and the airport;
- Variation in the number of taxis queued in the taxi corral;
- The number of deadheading taxis, including "double deadheading" taxis;
- Vehicle occupancy levels in taxis and private vehicles picking up and dropping off passengers; and
- Calculated modal splits indicating the proportion of passengers using different transportation modes to travel to and from the airport.

The primary difference between the pre- and post-tunnel traffic conditions has been a smoothing of traffic demand and reduced queue lengths along Eireann Quay. Below is a summary of the main findings of the October 2015 survey.

### **Modal split**

(see Section 2.0)

The modal split for trips to and from the airport — the proportion of trips made using the various travel modes — was determined based on observed shuttle usage, auto and taxi pickups and drop-offs, pedestrian activity, and parking statistics.

Overall, approximately 35% of trips to the airport and 40% of trips from the airport were made by non-auto modes (the airport shuttle; TTC streetcar service; and pedestrian access):

- The Union Station shuttle bus carries one out of every four to five airport trips (20% of trips to the airport; 27% of trips from the airport);
- Approximately 13% to 15% of trips are other non-vehicular trips (likely most traveling by TTC streetcar and walking between Queens Quay and the airport, but some potentially making the trip entirely by foot or by bicycle).



- The greatest percentage of trips are made via taxi (36% of trips to the airport; 49% of trips from the airport);
- Pick-up and drop-off trips make up 22% of trips to the airport and 5% of trips from the airport; and
- Approximately 6% of trips drive to the airport and park in one of the three lots.

When comparing the survey results against the spring 2015 pre-tunnel surveys, the following was noted:

- A decrease in taxi drop-offs, and a corresponding increase in private vehicle drop-offs, potentially related to an increase in the use of Uber and similar services (which would have been indistinguishable from private drop-offs);
- A decrease in shuttle usage, and a corresponding increase in TTC usage, for travel to the airport.
- Continued decrease in the proportion of passengers being picked up in private vehicles (although this may also indicate that pick-ups are occurring in short-term parking facilities rather than in the pick-up / drop-off loop).
- Notwithstanding the variation at the individual mode level, the proportion of automobile-based travel (including taxis) and the proportion of non-auto travel (including shuttle and TTC riders) were only slightly changed for travel to the airport, and were virtually unchanged for travel from the airport.

### Peaking of traffic and queues

(see Sections 6.4; 7.1; 3.0)

Before the opening of the tunnel, traffic flows were characterized by periods of lower volume related primarily to drop-offs, with regular surges in traffic flow every 15 to 20 minutes following the arrival of a ferry. The surges in activity would be especially pronounced following ferry trips that accommodated passengers from two or more arriving flights. The Queens Quay and Eireann Quay intersection experienced periods of queuing and congestion following the arrival of a ferry, followed by a "recovery" period to allow queues to dissipate before the arrival of the next ferry. Queues on northbound Eireann Quay regularly reached 10 vehicles in length during the morning peak, and 15 to 18 vehicles during the afternoon peak.

With the opening of the tunnel, the flow of passengers arriving on the mainland is better dispersed rather than concentrated into surges. The flow of taxis and other vehicles associated with passenger pick-up has similarly been better dispersed. Although the traffic flows and queues along Eireann Quay still experience some variation associated with the flight schedule, the variation is much more moderate and the northbound queues were observed to be



substantially reduced compared to conditions observed in spring 2015. Queues on northbound Eireann Quay were rarely observed to exceed five vehicles. When comparing the queues observed in the fall (post-tunnel) against the queues observed in the spring (pre-tunnel), the queues were reduced by approximately 50% in the morning, and by approximately 65% to 75% in the afternoon.

Similar observations were made when reviewing ridership on shuttle trips leaving the airport. Both the proportion of overcrowded trips and the proportion of empty trips were observed to be reduced now that passengers are arriving at the shuttle pick-up location in a more dispersed pattern.

### **Traffic volumes on Eireann Quay**

(see Section 6.4)

Two-way traffic volumes on Eireann Quay were recorded immediately south of Queens Quay.

- During the morning peak period, Eireann Quay carries approximately 600 vehicles per hour; this peak occurs after the end of the main commuting peak.
- During the afternoon peak period, Eireann Quay carries approximately 800 vehicles per hour in the mid-afternoon (prior to the start of the main commuting peak). During the main commuting peak period, airport traffic drops to approximately 500 to 600 vehicles per hour.
- The fall 2015 data were compared against the volumes observed during the Thursday and Friday surveys in spring 2015. The fall 2015 data were found to be generally comparable to the spring 2015 Thursday data.
- In both the morning and the afternoon, the airport peak and the roadway peak do not coincide.

## Airport traffic as a proportion of total traffic

(see Section 6.2)

In general, airport traffic makes up approximately 10–16% of all traffic in the surrounding area; however, the proportion of traffic varies by roadway.

- On Lake Shore Boulevard, which serves a commuter function, airport traffic makes up 2–4% of all traffic.
- On Bathurst Street north of Queens Quay, which is a key airport approach route, 50-60% of traffic in the block between Queens Quay and Lake Shore Boulevard is airport related.
- Within the neighbourhood to the west (Queens Quay to the west; Stadium Road), airport traffic comprises 5% of all traffic in the morning peak and 7-8% of all traffic in the afternoon peak.



• The proportion of airport traffic has risen in some instances compared to previous surveys because the volume of through traffic along Queens Quay has seen a reduction following the reconfiguration of the street east of Spadina Avenue, resulting in airport traffic comprising a greater proportion of the reduced volumes.

### **Turning prohibitions**

(see Section 6.3)

Three turn prohibitions were enacted near the airport in 2012. Northbound left turns from Eireann Quay to Queens Quay are prohibited at all times, and time-of-day prohibitions are in effect at Lake Shore Boulevard and Stadium Road during peak periods (no eastbound right turns from 7-9 AM; no northbound left turns from 4-6 PM).

- A high rate of compliance was observed at Queens Quay and Eireann Quay, with an average of three to four northbound left turns (primarily private vehicles) observed during the peak periods.
- On average, 10 vehicles per hour (all private vehicles) were observed making prohibited right turns at Lake Shore Boulevard and Stadium Road during the AM peak period.
- On average, 101 vehicles per hour (of which 16% were taxis) were observed making prohibited left turns at Lake Shore Boulevard and Stadium Road during the PM peak period. Given the minimal number of northbound left turns from Eireann Quay to Queens Quay over the same two-hour period (six vehicles in total), it is believed that most of this traffic is unrelated to the airport.
- Notwithstanding the number of vehicles violating the turn prohibitions at Lake Shore Boulevard and Stadium Road, the volume of traffic on those movements was observed to decrease compared to the volume during the "shoulder" intervals before and following the two-hour peak period.

## Taxi queues and corral usage

(see Section 4.1)

The taxi corral on the Canada Malting lands can accommodate approximately 32 to 38 taxis (depending on the spacing between taxis), in addition to approximately 16 to 18 taxis standing at the loading platform. Ideally, the supply of waiting taxis is balanced such that the corral is never full (there is room to allow additional arriving taxis to enter the corral without being turned away) and is never empty (there are always taxis waiting to serve arriving passengers).

• During most of the morning, the corral was typically half full or less; on the Thursday survey, a half-hour period with few queued taxis (9:00–9:30 AM) was followed by a



- substantial increase over a ten-minute period (possibly as a result of airport staff making a request for taxis), to the extent where the corral was at its practical capacity for most of the last survey hour.
- During the afternoon surveys, the corral was observed to be near or at practical capacity for much of the period before 5:45 PM, especially on Thursday. Much less variation in the queue length was observed compared to pre-tunnel conditions, with more regular turnover of taxis due to the more evenly spaced arrival of passengers on the mainland.

### Taxi deadheading

(see Section 4.2)

Taxi movements were observed to determine the number of deadhead trips to and from the airport (i.e., a taxi being driven to or from the airport without any passengers).

- The majority of taxis accessing the airport generated one deadhead trip (either arriving empty before picking up a fare, or dropping off a fare and then leaving empty).
- At most times, there are also some taxis that enter the corral to pick up a fare immediately after dropping off passengers, generating no deadhead trips.
- At some times, however, this is offset by taxis that arrive empty when the taxi corral is full and are turned away, generating two deadhead trips and serving no passengers. This typically occurs later in the morning and throughout much of the afternoon.

The rate of deadheading varies by time of day.

- For most of the morning, the rate of deadhead trips tends to range from 0.5 to 0.75 deadhead trips per fare (lower than the range of 0.7 to 0.9 deadhead trips per fare observed in the spring surveys).
- In the latter part of the morning, the corral was full with a lower level of turnover, and a sizeable increase was observed in the number of taxis arriving empty and being turned away. During the last 15-minute interval observed in the morning, more than two-thirds of the taxis on Eireann Quay were empty.
- In the afternoon, the deadheading rate was found to be in the order of 0.7 deadhead trips per fare for most of the afternoon. This is reduced from the pre-tunnel rate (approximately 1.0 deadhead trips per fare), likely related to the reduced variability in queue length in the corral and more regular turnover associated with the tunnel opening.

## **Vehicle occupancy**

(see Section 5.0)



Taxi and auto occupancy is generally in the order of 1.2 to 1.25 passengers per vehicle (not including the driver, and not including "deadhead" trips. This is approximately comparable to the results observed in the spring of 2015.

### **Effect of the opening of the airport pedestrian tunnel**

When comparing pre- and post-tunnel conditions, a number of changes in traffic patterns were observed following the opening of the tunnel. Before the tunnel opening, passengers would arrive on the mainland in large groups every 15 to 20 minutes, causing large surges in travel demand at the mainland terminal and along Eireann Quay. Now that most passengers are traveling to the mainland via the tunnel, the arrival of passengers onto the mainland is more dispersed, with the following effects:

- Smoothing out of the peaks in traffic flow, queuing and congestion on Eireann Quay that were previously experienced following the arrival of a ferry;
- More frequent and more gradual turnover of taxis queued in the corral (rather than an extended build-up period followed by a brief surge of outbound taxis);
- A reduction in the number of deadheading taxis during the afternoon; and
- More even distribution of ridership on shuttle trips leaving the airport.

## 1.0 Introduction

This memo documents the results of the mainland traffic and pedestrian surveys undertaken in October 2015 in the vicinity of Billy Bishop Toronto City Airport (BBTCA). These surveys follow up from a similar survey program undertaken in April 2015. The scope of the updated surveys was the same as in April 2015, allowing for a comparison of operating conditions before and after the opening of the pedestrian tunnel to BBTCA.

The survey included three separate components:

- Passenger counts leading to modal split and auto occupancy calculations;
- Queue length measurements; and
- Traffic counts at key intersections near BBTCA.

Intersection surveys (six locations) were undertaken on Thursday, October 15, 2015. Surveys on Eireann Quay, south of Queens Quay, and at the mainland airport terminal were undertaken on Thursday and Friday, October 15–16, 2015. In both cases, the surveys were undertaken for four hours in the morning (6:30 to 10:30 AM) and for four hours in the afternoon (3:00 to 7:00 PM).

The survey data was augmented by parking and shuttle data obtained from Stolport (local parking operators) and from Pacific Western (shuttle bus operators), respectively.



## 2.0 Modal Split

**Figure 1** shows the number of passengers traveling to and from the airport by each mode. **Figure 2** shows the same data, but by the percentage of passengers using each mode (modal split). **Figure 2** also shows the average mode split for the four-hour morning period, the four-hour afternoon period, and the total survey period.

The average modal split for travel to and from the airport is presented in *Table 1*. This table also shows the modal splits that were obtained in 2012 from the passenger surveys, as well as the modal splits obtained from the spring 2015 traffic and pedestrian surveys. The spring and fall 2015 survey methodology was different from the 2012 surveys; in 2012, rather than observing passenger movements, a random sample of passengers was interviewed within the terminal. As well, the 2012 modal split represents average values across the day, whereas the 2015 modal splits were specific to the four-hour morning and afternoon periods.

When comparing the spring and fall 2015 data, the modal splits were little changed for trips from the airport (arriving passengers), while some variation was observed for trips to the airport (departing passengers).

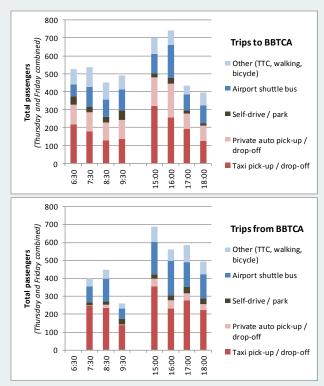
The primary change that has occurred since the spring 2015 surveys is a noticeable decrease in the proportion of departing passengers being dropped off by taxi, and a corresponding increase in the proportion of departing passengers being dropped off by a private vehicle. Notably, a similar trend was not observed for arriving passengers, for whom the proportion leaving the airport via taxi remained stable or increased slightly, and the proportion via private auto remained stable or decreased slightly. It is possible that the changes observed for departing passengers are related to an increase in the use of services such as Uber, which would not have been distinguishable from a private vehicle drop-off.

A second change observed from the spring 2015 surveys is a decrease in the proportion of trips using the airport shuttle to travel to the airport, and an increase in pedestrian access. This may reflect increased usage of TTC to travel to the airport, now that full service has been restored to the reconfigured 509 Harbourfront streetcar and the new low-floor streetcars have begun to be placed into service.

In the morning, the proportion of passengers being picked up at the terminal has decreased to negligible levels, less than the proportion parking at the airport. Given that the "self-drive / park" proportion increased during the AM peak period, it is possible that some motorists are parking in the airport lots (or elsewhere) while they wait for their passengers, rather than picking up at the terminal.



### FIGURE 1: PASSENGER MOVEMENTS BY TRAVEL MODE



### FIGURE 2: HOURLY VARIATION IN MODAL SPLIT

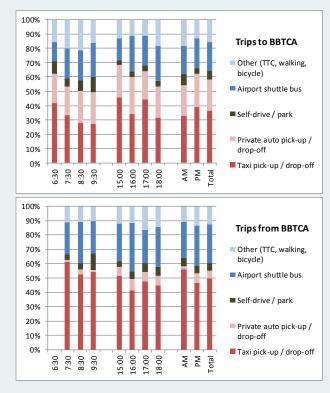


TABLE 1:MODAL SPLIT FOR TRAVEL TO/FROM BBTCA

Travel made to /free DDTCA	Fall 2015			Spring 2015			2012
Travel mode to/from BBTCA	AM	PM	Avg.	AM	PM	Avg.	24h
Trips to BBTCA (drop-offs):							
Taxi drop-off	33%	39%	36%	41%	47%	44%	49%
Private auto drop-off	21%	23%	22%	14%	8%	11%	19%
Self-drive / park	8%	4%	6%	10%	5%	8%	5%
Airport shuttle bus	19%	21%	20%	26%	25%	25%	17%
Other (TTC, walking, bicycle)	18%	13%	15%	9%	15%	12%	10%
Total taxi / auto	62%	66%	64%	65%	60%	63%	73%
Total shuttle / transit / active	37%	34%	35%	35%	40%	37%	27%
Trips from BBTCA (pick-ups):							
Taxi pick-up	55%	47%	49%	54%	44%	47%	46%
Private auto pick-up	2%	7%	5%	7%	8%	8%	14%
Self-drive / park	6%	5%	6%	3%	7%	6%	5%
Airport shuttle bus	25%	28%	27%	30%	26%	27%	25%
Other (TTC, walking, bicycle)	11%	14%	13%	6%	15%	12%	10%
Total taxi / auto	63%	59%	60%	64%	59%	61%	65%
Total shuttle / transit / active	36%	42%	40%	36%	41%	39%	35%

Note: Percentages may not add to 100% due to rounding.

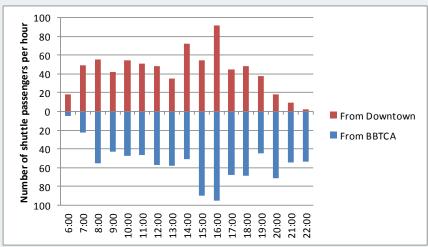
If the individual modes are aggregated into "auto" and "non-auto" modes for the 8 survey hours, the following observations are made when comparing the pre- and post-tunnel surveys:

- For departing passengers (drop-offs), the proportion using non-auto modes remained stable when measured over the full survey period, with a slight increase in the morning and a slight decrease in the afternoon.
- For arriving passengers (pick-ups), the proportion using non-auto modes remained stable during all survey periods.

## 3.0 Shuttle Usage

Shuttle passenger data was provided by the operator, Pacific Western, who was under contract to Nieuport Aviation, the terminal operator. *Figure 3* illustrates the number of passengers per hour (and shows the average of the Thursday and Friday data).

### FIGURE 3: HOURLY AIRPORT SHUTTLE RIDERSHIP



The passenger levels shown in *Figure 3* represent the average of the Thursday and Friday data. However, there was considerable variation in the number of riders per trip, particularly for shuttle trips leaving BBTCA, as shown in *Figure 4*.

The introduction of the tunnel has resulted in more evenly distributed ridership across shuttle trips. Prior to the tunnel opening, shuttle trips connecting with incoming flights would be heavily used, whereas other trips not connecting with flights would have to leave empty to return to Union Station. With the opening of the tunnel, passengers no longer emerge on the mainland simultaneously in a group (as they did when disembarking from the ferry). This has eliminated most of the empty shuttle trips, and has reduced the loading on the busier trips from roughly 25–30 passengers per trip to roughly 20–25 passengers per trip. The maximum observed load was 48 passengers on Friday approximately 5:15 PM (similar to the spring 2015 surveys).

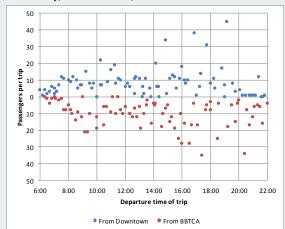
For shuttle trips destined to BBTCA, there remains less variation associated with the flight schedule because passengers have different thresholds of comfort in terms of how early they wish to check in for their flight. Generally each trip carried 5 to 20 passengers, similar to the spring 2015 surveys. The maximum observed load destined to the airport was 45 passengers at approximately 7:00 PM on Thursday.



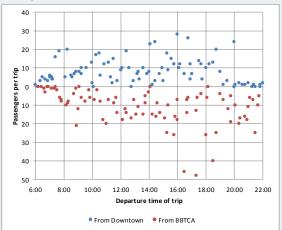
**DILLON**CONSULTING

#### FIGURE 4: SHUTTLE PASSENGERS PER TRIP

#### Thursday, October 15, 2015



#### Friday, October 16, 2015



## 4.0 Taxi Usage

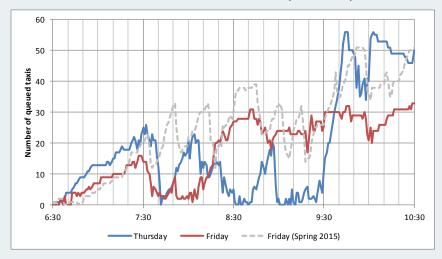
### 4.1 Taxi Corral Queues

Surveyors recorded the number of taxis queued in the corral at one-minute intervals. The survey includes taxis queued in the corral and at the loading area.

The capacity of the corral itself is in the order of 32 to 38 taxis, depending on how tightly spaced the queued taxis are in each lane. In addition, approximately 16 to 18 taxis may be stored in the loading area beyond the corral stop bar.

**Figure 5** and **Figure 6** show the length of the taxi queue through the morning period and afternoon period, respectively. The figures show the surveyed Thursday and Friday data, as well as the Friday pre-tunnel data for comparison purposes.

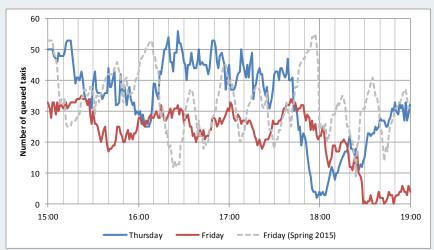




For most of the morning, the queue reached a maximum level of 20 to 30 taxis. Thursday experienced greater variability; in particular, a half-hour period with few queued taxis (9:00–9:30 AM) was followed by a substantial increase over a ten-minute period (possibly as a result of airport staff making a request for taxis), to the extent where the corral was at its practical capacity for most of the last survey hour.







During the afternoon surveys, the corral was observed to be near or at practical capacity for much of the period before 5:45 PM, especially on Thursday. Much less variation in the queue length was observed compared to pre-tunnel conditions, with more regular turnover of taxis due to the more evenly spaced arrival of passengers on the mainland.

### Taxi Deadheading

4.2

One way to mitigate traffic levels is to decrease the number of "deadhead" taxi trips (i.e., taxis leaving empty after dropping off a passenger, or taxis arriving empty to enter the corral).

Surveyors tracked every taxi movement and categorized each taxi according to whether they picked up or dropped off passengers and if they:

- Arrived with passenger and entered corral (no deadhead trips);
- Arrived empty and entered corral (one deadhead trip);
- Arrived with passenger and left empty (one deadhead trip); and
- Arrived empty and left without entering corral (e.g., because the corral was full two deadhead trips).

**Figure 7** and **Figure 8** show the number of taxi trips made during the morning and afternoon survey periods, respectively, according to the above four categories.

For the taxis that dropped off passengers and left empty, it was not recorded whether the driver preferred to seek the next fare off-site or if the driver had intended to rejoin the corral but was turned away. This should be considered when reviewing the results for times when the corral was frequently at capacity (late morning; much of the afternoon).

Figure 7 and Figure 8 also show the average number of deadhead trips per fare during the morning and afternoon survey periods, respectively. Previous traffic analyses for BBTCA have been based on a value of one deadhead trip per fare (i.e., every taxi arrives empty before picking up a passenger; every taxi dropping off a passenger leaves empty). A lower value is positive (i.e., preferred) and indicates that taxi drivers are entering the corral after dropping off a fare. A higher value is negative and indicates that taxi drivers are being turned away from entering the corral, whether they arrived with a fare or not.

The proportion of deadhead trips fluctuates throughout the day depending on two factors:

- The balance between arriving and departing flights (generally more departing flights earlier in the morning and afternoon, and more arriving flights later in the morning and afternoon); and
- The occupancy level of the corral (both because taxis cannot enter the corral when it is full, but also potentially because there is a shorter wait time to get a second outbound fare if the corral queues are short).

Finally, *Figure 7* and *Figure 8* also show the percentage of taxis traveling along Eireann Quay (both directions combined) that are carrying one or more passengers, compared to those that are carrying the driver only.



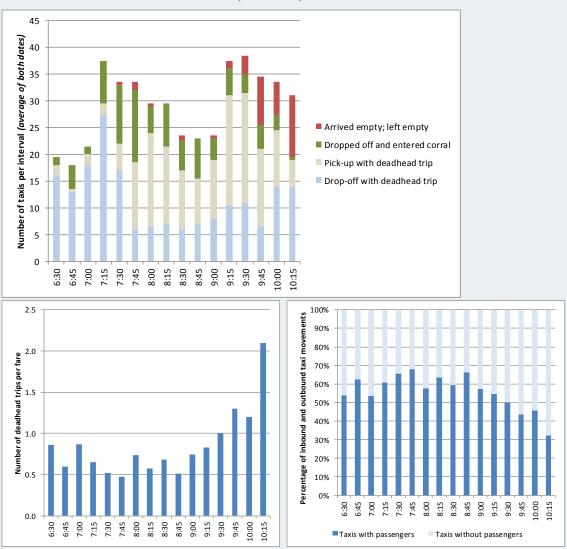


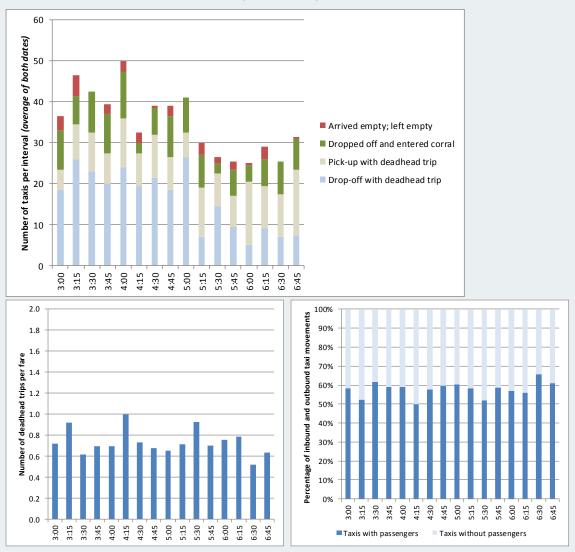
FIGURE 7: TAXI DEADHEADING STATISTICS (MORNING)

In the morning, some taxis were observed dropping off a passenger and entering the corral. This reflects a heavier proportion of drop-off demand earlier in the morning and plenty of space available in the corral, and also shows that taxi drivers tend to anticipate the latemorning peak for visitors arriving from out of town. For most of the morning, the rate of deadhead trips tends to range from 0.5 to 0.75 deadhead trips per fare (lower than the range of 0.7 to 0.9 deadhead trips per fare observed in the spring surveys).

By the end of the morning period, a sizeable increase was observed in the number of taxis arriving empty and being turned away. The rate of deadhead trips during the last 45 minutes increased substantially, to the point where more than two-thirds of the taxis on Eireann Quay were empty after 10:15 AM. This corresponds to the portion of the morning period where the corral was full with a lower level of turnover.

Although a similar pattern was observed on both Thursday and Friday, the greatest level of double deadheading was observed on Thursday, corresponding to the time period with the longest observed queues in the taxi corral.

FIGURE 8: TAXI DEADHEADING STATISTICS (AFTERNOON)



There was a moderate to low level of double-deadheading observed throughout the afternoon (generally in the order of 5 per 15-minute interval or fewer). This was more than offset by the number of non-deadheading taxis entering the corral after dropping off passengers. The level of double-deadheading was substantially reduced compared to the spring 2015 surveys. Whereas the spring 2015 surveys found a deadheading rate in the order of one deadhead trip per fare, or slightly above, the fall 2015 surveys found this rate to be reduced to approximately 0.7 deadhead trips per fare for most of the afternoon. The lower level of double deadheading is likely related to the reduced variability in queue length in the corral and more regular turnover associated with the tunnel opening.

#### **Taxi and Auto Occupancy Levels** 5.0

One way to mitigate traffic levels is to increase the number of passengers sharing a ride to or from the airport, either in a taxi or in a private vehicle.

Surveyors recorded the number of passengers picked up or dropped off by each taxi and each private vehicle at the pick-up / drop-off loop and at the taxi corral loading area. The taxi and private vehicle occupancy level was observed to be generally in the order of 1.20 to 1.25 passengers per auto / taxi (not including the driver, and not including the "deadhead" trip). Occupancy levels were more variable for private vehicle pick-ups; however, the sample size for that subset is lower and it is possible that not all of these trips were captured (i.e., some pickups may have occurred at off-site locations, such as the short-term parking area, rather than at the loop in front of the ferry terminal).

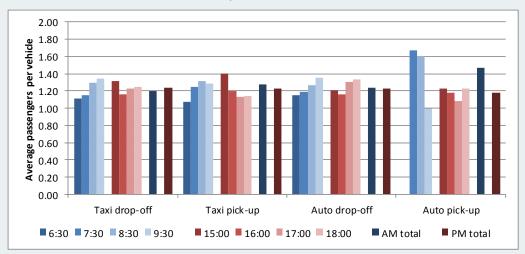
Occupancy levels were approximately comparable to the spring 2015 data in most cases, or slightly reduced.

Table 2 shows the average number of passengers per vehicle during the peak periods. Figure 9 shows the hourly fluctuation of occupancy by mode (private auto vs. taxi) and passenger type (arriving vs. departing).

TABLE 2:AVERAGE NUMBER OF PASSENGERS PER TAXI AND PER AUTO

	Fall 201	.5 data	Previous data	data (Spring 2015)			
	Morning (6:30–10:30)	Afternoon (3:00-7:00)	Morning (6:30–10:30)	Afternoon (3:00-7:00)			
Taxi drop-offs	1.20	1.24	1.25	1.23			
Taxi pick-ups	1.27	1.23	1.25	1.26			
Private auto drop-offs	1.23	1.23	1.24	1.17			
Private auto pick-ups	1.47	1.18	1.36	1.39			

#### FIGURE 9: HOURLY VARIATION IN AUTO / TAXI OCCUPANCY LEVELS



## **Intersection Traffic Volumes**

#### **Scope of Intersection Surveys** 6.1

6.0

Intersection traffic counts were undertaken at six locations:

- Lake Shore Boulevard at Stadium Road
- Lake Shore Boulevard / Fleet Street at Bathurst Street
- Lake Shore Boulevard at Dan Leckie Way
- Queens Quay at Stadium Road
- Queens Quay at Bathurst Street / Eireann Quay
- Queens Quay at Dan Leckie Way

Previous surveys had been affected by construction on Queens Quay east of Dan Leckie Way, wherein the eastbound lanes were closed and the westbound lanes were slightly constrained. By the time of the October 2015 surveys, Queens Quay had been reopened to traffic for approximately four months, allowing sufficient time for traffic patterns to become reestablished. As a result, the traffic volumes along and related to Queens Quay can generally be considered to be representative.

Conversely, there was a new feature that affected traffic volumes in the study area. During the summer of 2015, a westbound right turn prohibition was enacted at Lake Shore Boulevard and Bathurst Street, effective during the weekday AM and PM peak periods (7:30-9:30 AM; 3:30-6:30 PM). This had the effect of reducing (but not eliminating) westbound right turn demand at the subject intersection, and increasing westbound right turn demand at Lake Shore Boulevard and Dan Leckie Way due to motorists seeking an alternate route to Bathurst Street. Through discussions with City staff, we understand that the right turn prohibition was implemented as a temporary measure for the summer 2015 Pan Am Games; it has since been rescinded. Notwithstanding, the traffic volumes have been presented without adjustment as a reflection of the conditions that existed at the time of the survey, recognizing that traffic may have returned to historical patterns now that the prohibition has been rescinded.

#### **Intersection Traffic Volumes 6.2**

Figure 10 and Figure 11 illustrate the AM and PM peak hour intersection traffic volumes (all vehicles; taxis only).

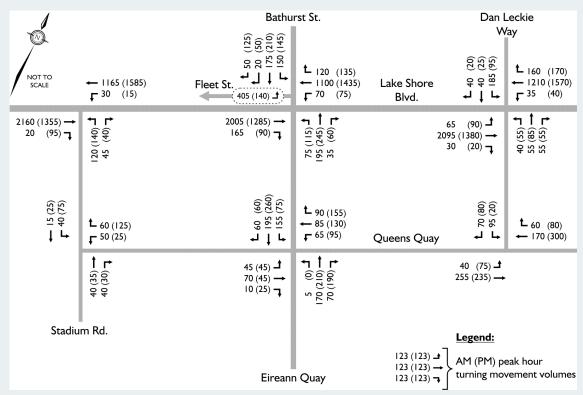
From the existing volumes, the amount of airport traffic at each intersection was estimated (all vehicles; taxis only). These estimated volumes are illustrated in Figure 12 and Figure 13.



The volume of non-airport related traffic was estimated by subtracting airport-related traffic from the total traffic volumes. The estimated non-airport traffic (or background traffic) volumes are illustrated in Figure 14.

During the previous spring 2015 surveys, eastbound Queens Quay was closed east of Dan Leckie Way, and therefore traffic volumes were estimated based on historical data. Conversely, the volumes shown in Figure 10 through Figure 14 were surveyed following the full re-opening of Queens Quay to traffic, including sufficient time for traffic patterns to become re-established. The fall 2015 surveys found eastbound traffic levels to be substantially less than had been assumed based on historical data.

#### FIGURE 10: TYPICAL FALL 2015 PEAK HOUR TRAFFIC VOLUMES



#### FIGURE 11: TYPICAL FALL 2015 PEAK HOUR TRAFFIC VOLUMES (TAXIS ONLY)

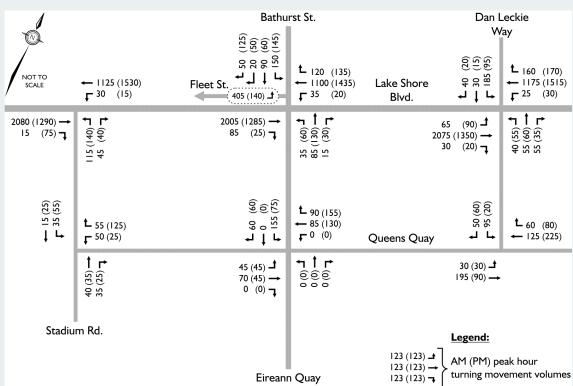
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	† <b>r</b> (0) 0	5 (5) <del>1</del> 0 (5) <del></del>	0 (0) \$\dagger\$ 50 (60) \$\dagger\$ 20 (50) \$\dagger\$		5 (15) <b>土</b> 20 (40) →		
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		Eireanr	n Quay	123 (123) 123 (123) 123 (123) This is a second of the second of th			

#### FIGURE 12: ESTIMATED FALL 2015 PEAK HOUR AIRPORT TRAFFIC VOLUMES

		Bathu (© (© 1) (© (© 1)	Bathurst St.			Dan Leckie Way		
NOT TO SCALE	← 40 (55) <b>F</b> 0 (0)	© © ∵ © ○ ○ ₩ ○ ○ ₩ ○ ○ ₩ ○ ○ ₩ ○ ○ ₩ ○ ○ ○ ₩ ○ ○ ○ ₩ ○ ○ ○ ○ ₩ ○ ○ ○ ○ ₩ ○	<b>L</b> 0 (0) <b>L</b> 0 (0) <b>L</b> 35 (55)	Lake Shore Blvd.	↑ 0 (0) ↑ 0 (10) ↑ 0 (0)	<b>1</b> 0 (0) ← 35 (55) <b>1</b> 0 (10)		
80 (65) → 5 (20) ¬	<b>†</b> (6) 0	0 (0) → 80 (65) ¬	40 (55) <b>4</b> 110 (120) <b>→</b> 20 (30) <b>→</b>		$ \begin{array}{ccc} 0 & (0) & \xrightarrow{1} \\ 20 & (30) & \longrightarrow \\ 0 & (0) & \longrightarrow \end{array} $	0 (0) \$ 5 (25) ₹ 5 (20) \$		
← 0 (0) <b>t</b> 5 (20)	<b>t</b> 5 (0) <b>p</b> 0 (0)	<b>t</b> <sub>0</sub> (0) ← 195 (265) <b>f</b> <sub>0</sub> (0)	<b>t</b> 0 (0) ← 0 (0) <b>r</b> 65 (95)	Queens Quay	\$\bigsize 20 (20) \\ \bigsize 0 (0) \end{array}\$	<b>t</b> 0 (0) ← 45 (75)		
	† <b>†</b> (0) 0	0 (0) <del>1</del> 0 (0) <del>→</del> 10 (25) <del>1</del>	5 (0) <del>1</del> 170 (205) <del>1</del> 70 (190) <del>1</del> 70 (190) <del>1</del>		10 (45) <b>- 1</b> 60 (145) <b>-→</b>			
Stadium Rd.				Legend:				
		Eireann	123 (12 123 (12 Eireann Quay 123 (12		AM (PM) pe	eak hour vement volumes		

#### FIGURE 13: ESTIMATED FALL 2015 PEAK HOUR AIRPORT TRAFFIC VOLUMES (TAXIS ONLY)

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5 (5) → 0 (5) ¬	7 r 660 000	0 (0) → 5 (5) ¬	0 (0) <b>4</b> 40 (45) <b>→</b> 10 (15) <b>→</b>		$ \begin{array}{c} \mathbf{t}_{(0)\ 0} \\ \leftarrow (21)\ 01 \\ \mathbf{r}_{(0)\ 0} \end{array} $	1 (0) 0 1 (0) 5 1 (0) 0
(5) 0 <b>→</b> (0) (0)	t 0 (0)	↑ 0 (0) ↑ 50 (70) ↑ 0 (0)	<b>L</b> <sub>0</sub> (0) ← 0 (0) <b>Γ</b> 15 (20)	Queens Quay	<b>↓</b> 10 (10) <b>↓</b> 0 (0)	<b>1</b> 0 (0) ← 5 (10)
	† r (6) 0	0 (0) <del>1</del> 0 (0) <del></del>	0 (0) D 50 (60) D 20 (50) D		5 (15) <b>土</b> 15 (35) <b>→</b>	
Stadium Rd.				_	Legend:	
		Eireann	n Quay	123 (123) 123 (123) 123 (123) turning movement volume		



#### FIGURE 14: ESTIMATED PEAK HOUR FALL 2015 NON-AIRPORT TRAFFIC VOLUMES

#### **Observance of Signed Turn Prohibitions** *6.3*

Turn prohibitions were implemented near the airport in 2012; specifically:

- No left turn northbound from Eireann Quay to Queens Quay at any time;
- No right turn eastbound from Lake Shore Boulevard to Stadium Road during the morning peak period; and
- No left turn northbound from Stadium Road to Lake Shore Boulevard during the afternoon peak period.

A small number of vehicles were observed making illegal left turns from Eireann Quay to Queens Quay — an average of approximately three to four per hour during the AM and PM peak periods. The majority of these were private vehicles. This is marginally higher than the spring 2015 observations.

A larger number of vehicles were observed violating the turn prohibitions at Stadium Road and Lake Shore Boulevard, as shown in *Figure 15* and *Figure 16*.



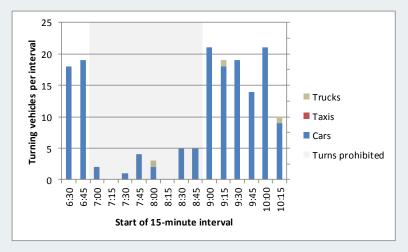


FIGURE 15: EASTBOUND RIGHT TURNS AT LAKE SHORE BOULEVARD AND STADIUM ROAD

During the morning, a minor number of vehicles were observed violating the eastbound right turn prohibition — an average of ten per hour between 7:00 and 9:00, or approximately one vehicle every two to three cycles. No taxis were observed making this movement. This is roughly comparable to the spring 2015 observations.

Given that 11 right turns were observed from Queens Quay to Eireann Quay over the same two-hour period, it is likely that some of this traffic is airport-related.

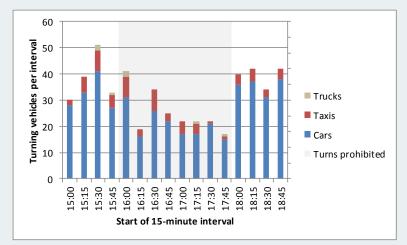


FIGURE 16: NORTHBOUND LEFT TURNS AT LAKE SHORE BOULEVARD AND STADIUM ROAD

During the afternoon, a greater number of vehicles were observed violating the northbound left turn prohibition — an average of 101 vehicles per hour between 4:00 and 6:00, or approximately four vehicles per green signal. Of the total during this period, 16% were taxis.

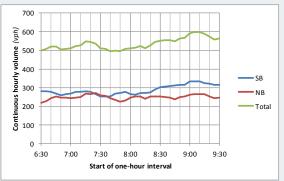
Given the minimal number of northbound left turns from Eireann Quay to Queens Quay over the same two-hour period (six vehicles in total), it is believed that most of this traffic is unrelated to the airport.

#### **Eireann Quay Traffic Volumes** 6.4

The traffic volumes along Eireann Quay were determined from the turning movement counts at the intersection of Queens Quay and Bathurst Street / Eireann Quay.

Figure 17 illustrates the hourly traffic volumes observed along Eireann Quay. The volumes reflect continuous ("rolling") hourly traffic volumes (e.g., the data point at 8:25 AM reflects the number of vehicles observed during the one hour between 8:25 and 9:25).

FIGURE 17: HOURLY TRAFFIC VOLUMES ON EIREANN QUAY





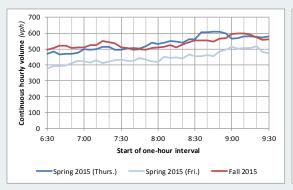
During the morning, the heaviest demand was observed near the end of the survey period (after 9:00 AM), peaking at approximately 600 vph.

During the afternoon, the heaviest demand was observed between approximately 3:00 and 4:00 PM, prior to the start of the commuting peak hour, with two-way flows peaking at just under 800 vph. By the 5:00-6:00 PM interval, during the main part of the commuting peak period, traffic on Eireann Quay had decreased to approximately 500 vph. It is notable that the airport peak hour and the background (commuting) peak hour do not coincide.

The fall 2015 data were compared against the volumes observed during the Thursday and Friday surveys in spring 2015. As shown in Figure 18, the fall 2015 data were found to be generally comparable to the spring 2015 Thursday data.



FIGURE 18: HOURLY TRAFFIC VOLUMES ON EIREANN QUAY (SPRING VS. FALL 2015)



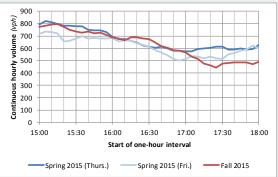
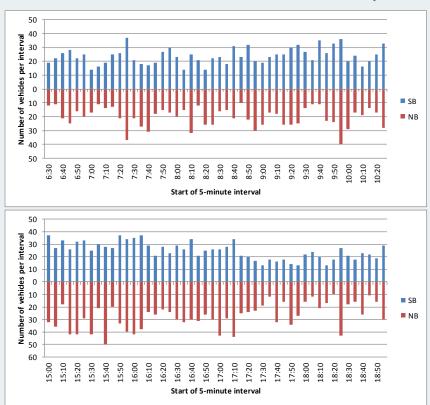


Figure 19 illustrates the variation in traffic demand from one five-minute interval to the next. The five-minute volumes illustrate the difference between traffic flow patterns toward and away from the airport, with greater variability for northbound (away) traffic. The opening of the tunnel has assisted in smoothing out the surges in pedestrian activity and reducing the variability in northbound demand, although there remains variability associated with the flight schedule.

FIGURE 19: 5-MINUTE INTERVAL TRAFFIC VOLUMES ON EIREANN QUAY



## **Queue Surveys**

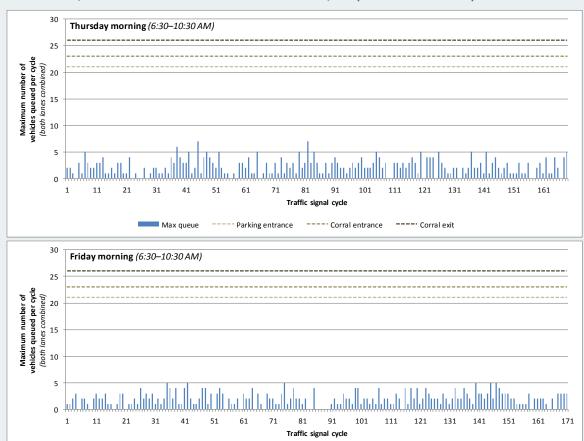
7.0

#### **Northbound Queues on Eireann Quay** 7.1

Surveyors recorded the number of vehicles queued on northbound Eireann Quay at the Queens Quay traffic signals. The number of queued vehicles was recorded at the start of every northbound green signal. Including the northbound right turn lane at Queens Quay, there is room to accommodate a queue of approximately 26 vehicles before blocking the exit to the taxi corral (depending on the number of trucks and buses in the queue, and the spacing between queued vehicles).

Figure 20 illustrates the maximum length of the northbound queue per cycle during the morning surveys; *Figure 21* illustrates the results from the afternoon surveys.

FIGURE 20: QUEUE LENGTH ON NORTHBOUND EIREANN QUAY (MORNING SURVEYS)



Parking entrance

---- Corral entrance

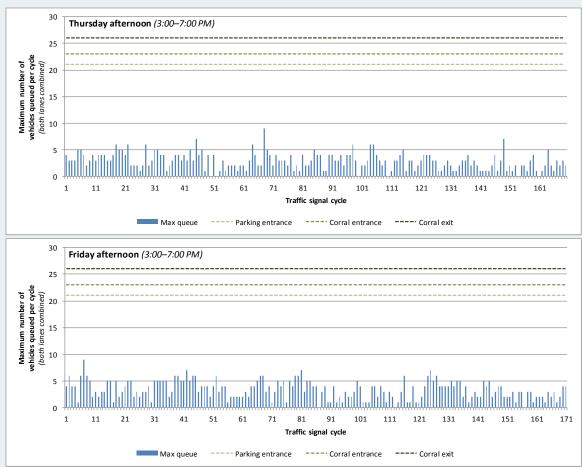


FIGURE 21: QUEUE LENGTH ON NORTHBOUND EIREANN QUAY (AFTERNOON SURVEYS)

During both the morning and afternoon surveys, the queues were typically in the order of five vehicles or less. The maximum observed queue was nine vehicles, at approximately 4:45 PM on Thursday afternoon. Northbound queues were not found to reach the entrances to the taxi corral or Canada Malting site parking facilities. These queues can be reasonably managed and can typically be served on one green signal.

Figure 22 and Figure 23 illustrate the morning and afternoon queue lengths surveyed in the spring of 2015, prior to the tunnel opening. There are substantial differences between the queuing conditions observed during the pre-tunnel (spring 2015) surveys and those observed during the post-tunnel (fall 2015) surveys:

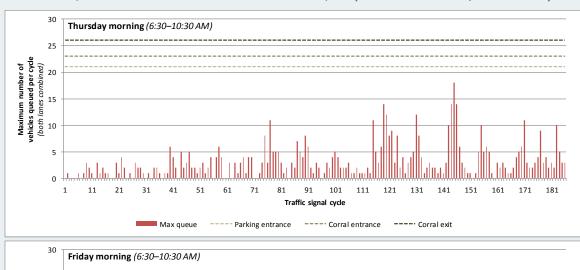
- Queue lengths are shorter. During the spring 2015 surveys, 10-vehicle queues were regularly observed in the morning, and 15- to 18-vehicle queues were regularly observed in the afternoon. During the fall 2015 surveys, queue lengths were rarely observed to exceed five vehicles.
- Queue lengths are less variable. During the spring 2015 surveys, the northbound queue was observed to vary substantially from one cycle to another, with some cycles

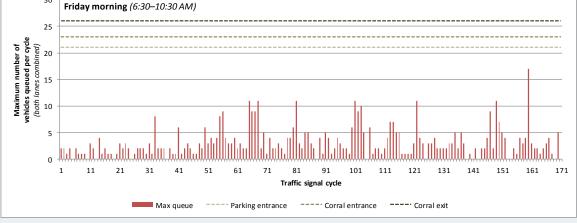


with little queuing followed by periods where the northbound queue began to approach the parking entrance. During the fall 2015 surveys, much less variation was observed from one cycle to the next.

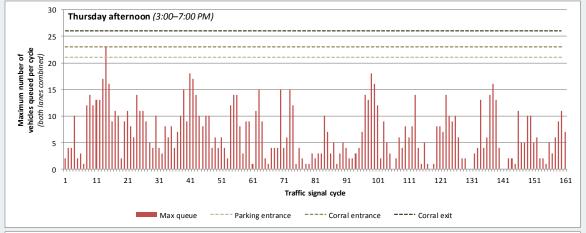
The reduction in the magnitude and variability of the northbound queue is an indication of the effect of the tunnel in dispersing the flow of passengers traveling from the island to the mainland, rather than concentrating passenger movements into surges associated with ferry arrivals.

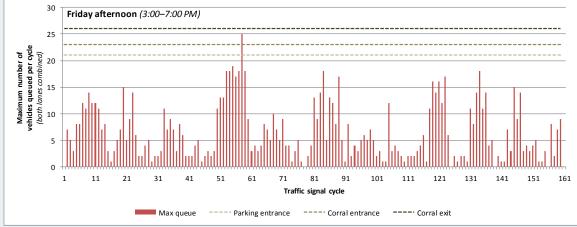
FIGURE 22: QUEUE LENGTH ON NORTHBOUND EIREANN QUAY (MORNING SURVEYS, SPRING 2015)





#### FIGURE 23: QUEUE LENGTH ON NORTHBOUND EIREANN QUAY (AFTERNOON SURVEYS, SPRING 2015)



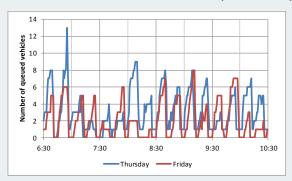


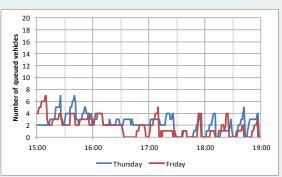
### **Ferry Queue**

7.2

Surveyors recorded the number of vehicles in the Finger Lot waiting to board the ferry; measurements were taken at one-minute intervals. The results are shown in Figure 24.

FIGURE 24: SURVEYED FERRY QUEUES (FINGER LOT)





Ferry queues were longest between 6:30 and 7:30 AM, when up to 13 vehicles were observed waiting for the ferry for a brief period on Thursday. For the rest of the morning, ferry queues were generally in the order of eight vehicles or less.

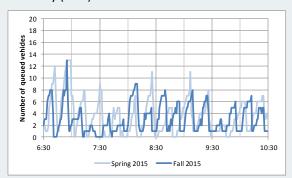
During the afternoon, the ferry queues largely remained at five vehicles or less.

Figure 25 shows a comparison of the ferry queues under pre-tunnel and post-tunnel conditions. Prior to the opening of the tunnel, the ferry was frequently unable to maintain its 15-minute frequency due to the time needed to serve boarding and disembarking passenger flows. With the diversion of most passengers to the tunnel, the ferry is now able to better maintain a 15-minute schedule. However, other than early on Friday morning (when very long queues were observed in the spring of 2015), the tunnel has not substantially affected ferry queue length. This is because the longer vehicle queues are typically observed early in the morning when passenger volumes were not historically a constraint to ferry options. On Thursday, a reduction in queue length was observed between 7:00 and 8:00. This may be due in part to the ability to better maintain the ferry schedule, but it could also reflect the removal of construction traffic now that the tunnel is complete.

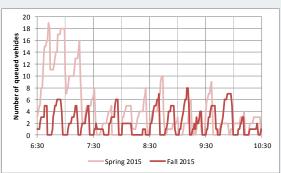
**DILLON** CONSULTING

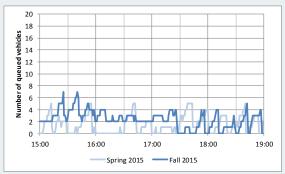
#### FIGURE 25: FERRY QUEUES, SPRING VS. FALL 2015

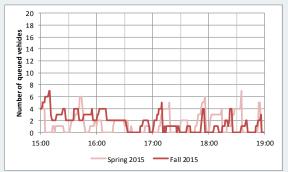
#### Thursday (blue):



#### Friday (red):







#### **Effect of Airport Pedestrian Tunnel** 8.0

This report documents the results of the mainland traffic and pedestrian surveys undertaken in October 2015 in the vicinity of Billy Bishop Toronto City Airport (BBTCA). These surveys follow up from a similar survey program undertaken in April 2015, and allow for a comparison of operating conditions before and after the opening of the pedestrian tunnel to BBTCA.

The primary difference between the pre- and post-tunnel traffic conditions has been a smoothing of traffic demand and reduced queue lengths along Eireann Quay.

Before the opening of the tunnel, traffic flows were characterized by periods of lower volume related primarily to drop-offs, with regular surges in traffic flow every 15 to 20 minutes following the arrival of a ferry. The surges in activity would be especially pronounced following ferry trips that accommodated passengers from two arriving flights. The Queens Quay and Eireann Quay intersection experienced periods of queuing and congestion following the arrival of a ferry, followed by a "recovery" period to allow queues to dissipate before the arrival of the next ferry.

With the opening of the tunnel, the flow of passengers arriving on the mainland is better dispersed rather than concentrated into surges. The flow of taxis and other vehicles associated with passenger pick-up has similarly been better dispersed. Although the traffic flows and queues along Eireann Quay still experience some variation associated with the flight schedule, the variation is much more moderate. The following effects were observed when comparing pre- and post-tunnel conditions:

- Smoothing out of the peaks in traffic flow, queuing and congestion on Eireann Quay that were previously experienced following the arrival of a ferry;
- More frequent and more gradual turnover of taxis queued in the corral (rather than an extended build-up period followed by a brief surge of outbound taxis);
- A reduction in the number of deadheading taxis during the afternoon; and
- More even distribution of ridership on shuttle trips leaving the airport.



# PORTSTORONTO COMMUNITY LIAISON COMMITTEE MEETING #22 Minutes – Wednesday June 1, 2016, 6:30 p.m. – 8:30 p.m.

### Appendix A1 – 3

Noise Monitor Terminals Public Notice

# SITE MAP (/SITE-MAP.ASPX) | SEARCH (/SEARCH.ASPX) | FAQS (/PORTSTORONTO/FAQS.ASPX) | MEDIA ROOM (/PORTSTORONTO/MEDIA-ROOM.ASPX) | CONTACT US (/PORTSTORONTO/CONTACT-US.ASPX)

About PortsToronto (/portstoronto.aspx) > Media Room (/portstoronto/media-room.aspx) > Public Notices (/portstoronto/media-room/public-notices.aspx) > New and Upgraded Noise Monitor Terminals to Enhance Noise Tracking at Billy Bishop Toronto City Airp

**■** Open Sub Menu

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# New and Upgraded Noise Monitor Terminals to Enhance Noise Tracking at Billy Bishop Toronto City Airport

Toronto (May 31, 2016) – As part of PortsToronto's commitment to managing noise generated by operations related to Billy Bishop Toronto City Airport (Billy Bishop Airport), the two Noise Monitoring Terminals (NMTs), located on the Toronto Police Marine Unit building and the airport's on-island Fire Hall, will be upgraded this year. The terminals are the foundation of the airport's noise monitoring system and provide ongoing noise-level data to the airport's Noise Management Office. This data is then used in long-term noise mitigation planning and in responding to noise complaints from the surrounding community.

The noise data transmitted by the NMTs is also viewable through the airport's free, publically-accessible WebTrak website – an Internet-based software service that enables individuals to locate and track aircraft on their computer or tablet screen and research information on the aircraft, including the aircraft type, the destination and point of departure.

In addition to the upgrade of the two existing NMTs, a third additional NMT will be installed on the mainland ferry terminal building. This new NMT will enable enhanced tracking of noise generated by aircraft run-ups and the airport's ferry operation, specifically – two key areas of focus under Billy Bishop Airport's overall noise management program. The new NMT will fully integrate into the airport's existing noise management system and back-end equipment.

These and all other capital improvements made at Billy Bishop Airport are financed entirely by PortsToronto.

Read more (/portstoronto/media-room/public-notices/new-and-upgraded-noise-monitor-terminals-to-enhanc.aspx)

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You (https://www.youtube.com/channel/UCrg1g2iQloHymU1dBV7RFZA)



# PORTSTORONTO COMMUNITY LIAISON COMMITTEE MEETING #22 Minutes – Wednesday June 1, 2016, 6:30 p.m. – 8:30 p.m.

# **Appendix A1 – 4**Airfield Rehabilitation Program Update Presentation

Billy Bishop Toronto City Airport
Airfield Rehabilitation Program Update
Community Liaison Committee

TORONTO

## **Agenda**

- Update on Progress
- Project Team
- Project Scope Overview
- Status of Project Procurement
- Project Construction Phasing and Schedule
- Major Constraints / Considerations
- Questions?







## **Progress/Update**

#### **Changes Made on Rehabilitation Strategy**

- Runway 08-26 now mill/pave to reduce cost and risk (previously full depth reconstruction)
- No impact on quality/service life
- Runway 06-24 design also modified to reduce cost
- Replacement of 2400V Feeders added to the project

#### **Procurement Process**

- Pre-qualification process resulted in selection of 3 fully qualified contractors and consequently three strong bids received
- Post-tender meeting with PortsToronto/WSP confirmed the understanding of the scope of work and innovative solutions to the movement of materials/personnel
- Project Team is well qualified to complete the work
- Committed to completing Runway 08-26 and Runway 06-24 in 2016



PORTS TORONTO

## **Project Team**

- PortsToronto
  - Project Owner
- WSP Canada Inc.
  - Providing planning, design, non-resident and full time on-site resident construction inspection services for the project
  - 4 full time inspection staff on site to cover two shifts
- Peto MacCallum Ltd.
  - Providing Quality Assurance testing services



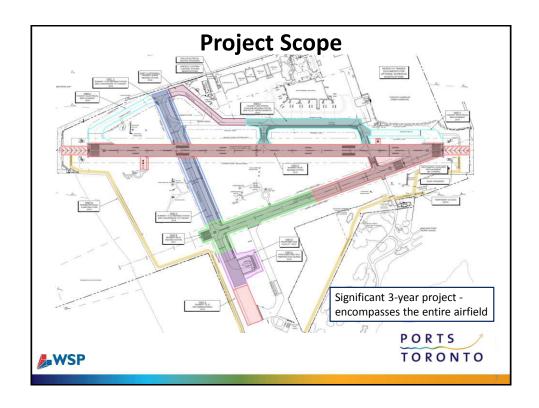


### **Project Team**

- Pave-Al Limited
  - General Contractor for the project experienced local contractor; completed similar scope projects at Pearson Airport
  - All earthwork, granular, asphalt milling and paving and overall construction management
- Pave-Al's Major Subcontractors:
  - TriStar Electric all electrical work on the project
  - Blast Deflectors Inc. GRE facility design-builder
  - McKeil Marine Barging operations
  - J&R Surveys Quantity surveying / layout
  - Liberty Airport Systems FEC / ALCMS
  - Belmont Structural concrete, concrete paving
  - Dol Hydroseeding Landscaping
  - MP Services Pavement line marking / removals









### PROJECT SCOPE ELEMENTS

#### Runway 08-26 Rehabilitation

- Full length and width rehab of Runway 08-26 necessary due to significant deterioration – maintenance efforts no longer cost effective due to age of pavement
- Mill and overlay approach to reduce risk of delayed opening in the morning
- Replace existing Runway electrical infrastructure edge lighting, approach slope indicators and signage (30+ years old)
- Install new runway centerline inset lighting no change in runway certification - additional pilot guidance benefits
- FEC modifications to accommodate new infrastructure
- Reconstruct portion of Runway 06-24 as a part of this phase to ensure impacts on Runway 08-26 in one construction season only
- · Utilize removed asphalt to construct airfield perimeter service roads
- Runway 08-26 pavement grooving (in 2017)







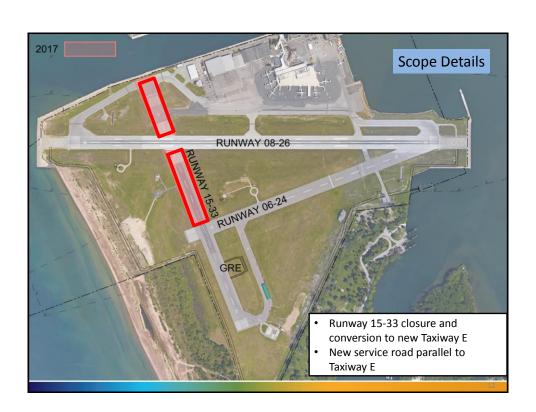
### **PROJECT SCOPE ELEMENTS**

#### Runway 06-24 Rehabilitation

- Reconstruction of the centre 30m of the runway necessary due to very poor pavement condition
- Reduce runway length from to approximately to improve runway conspicuity
- Install new electrical infrastructure, runway edge lighting, and signage to allow night time operations
- FEC modifications to accommodate add'l electrical infrastructure
- · No runway grooving







### PROJECT SCOPE ELEMENTS

#### Decommission Runway 15-33 and convert to Taxiway Echo

- Partial depth milling of 23m western portion of Runway 15-33 and conversion to new Taxiway Echo
- Rehabilitate western portion of the runway to 5.0m wide oneway service road
- Establish / Improve fillets at Runway 08-26 and 06-24
- Rehabilitate the southern portion of existing Runway 15-33 and convert to a private apron (additional aircraft parking)
- Install new electrical infrastructure (taxiway edge lighting / signage)
- FEC modifications





# CLOSURE OF RUNWAY 15-33 – PORTSTORONTO RATIONALE

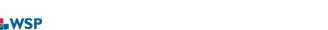
- Pavement conditions are in Poor shape based on pavement assessment and require immediate full depth restoration; cost is significant
- Restrictions in place for arrivals and departures and prevailing winds drive very low annual usage
- Provides no business case for future investment
- Northern end of runway is planned for future development opportunity as per the 2012 MP





# CLOSURE OF RUNWAY 15-33 – PORTS TORONTO RATIONALE

- Keeping Runway operational would require moving GRE facility much further east (OLS clearances) or to a completely different location south of 06-24 and east of 15-33. The site works / access cost would increase significantly and the airport would lose valuable future development land.
- Current GRE location minimizes development costs and reduces impacts on developable lands.
- Maintenance costs in a long run are smaller for a narrower taxiway then a wider runway.
- Closure opens up space for overflow aircraft parking at the south end during peak times.

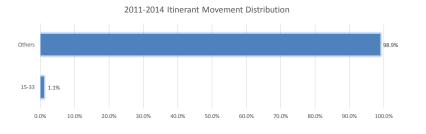






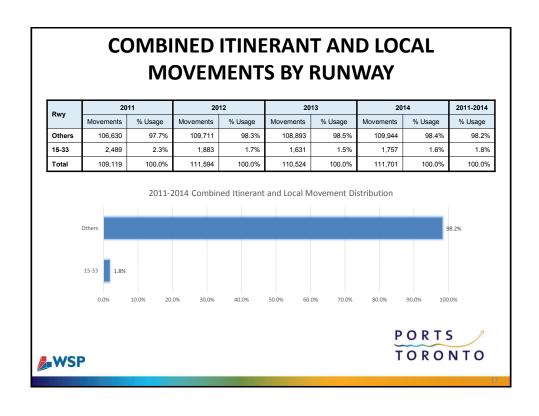
### **ITINERANT MOVEMENTS BY RUNWAY**

Rwy	20	11	20	12	2013		2014		2011-2014
	Movements	% Usage	% Usage						
Others	75,446	98.6%	82,966	99.0%	82,333	99.1%	83,291	99.1%	98.9%
15-33	1,074	1.4%	872	1.0%	759	0.9%	776	0.9%	1.1%
Total	76,520	100.0%	83,838	100.0%	83,092	100.0%	84,067	100.0%	100.0%











## PROJECT SCOPE ELEMENTS

#### Ground Run-up Enclosure (GRE) Facility

- Design-build Element
- Sized to accommodate power-in power-out Q400 operations
- General location established south of Runway 06-24;
- Optimizing orientation through design-build analysis (250 degrees orientation)
- Access via new Taxiway E south of Runway 06-24
- Approximately 60m x 60m footprint
- 14m high north wall and 11m high south wall
- To be operational in first quarter of 2017
- Updated engine run-up operational procedures to include GRE





## **PROJECT SCOPE ELEMENTS**

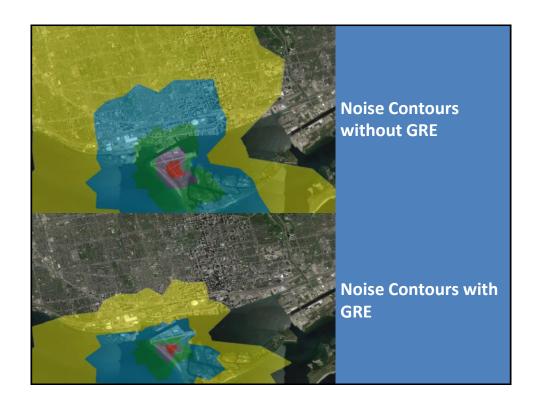
## City of Toronto Site Review process

- Submittal made to the City on May 24<sup>th</sup>
  - Photographs taken from 6 locations and GRE facility renderings superimposed on it to get a sense of visual impacts









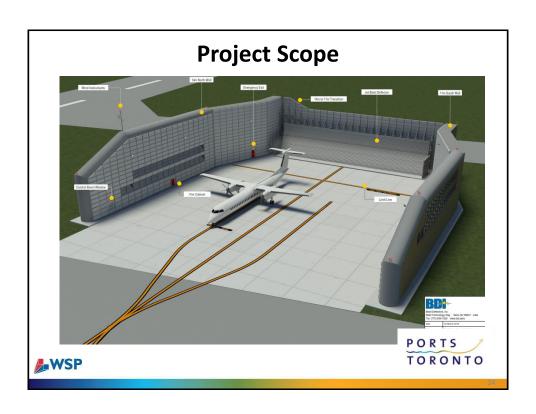
## **PROJECT SCOPE ELEMENTS**

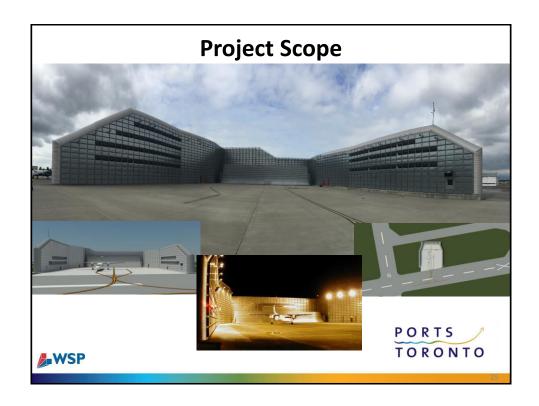
### **Ground Run-up Enclosure (GRE) Facility**

- Public site visit at Billy Bishop Airport scheduled for June 23<sup>rd</sup> (6:30pm – 7:30pm)
- Public consultation session scheduled for June 28<sup>th</sup> (6:30pm – 8:30pm) – facilitated by the City
- MOU to be issued by the City following the review process











## **PROJECT SCOPE ELEMENTS**

### **Apron Widening and Reconstruction**

- Construct new asphalt pavement to widen the existing apron by 11.5 m – allows additional room for taxiing behind pushbacks and additional room for service road access during deicing operations
- Full depth reconstruction of existing deteriorated pavements needed due to significant deterioration
- Rehabilitation of Taxiways C and F due to deteriorated pavements and fillet improvements to bring them up to Q400 operational standards (based on TP312 5<sup>th</sup> Ed.)

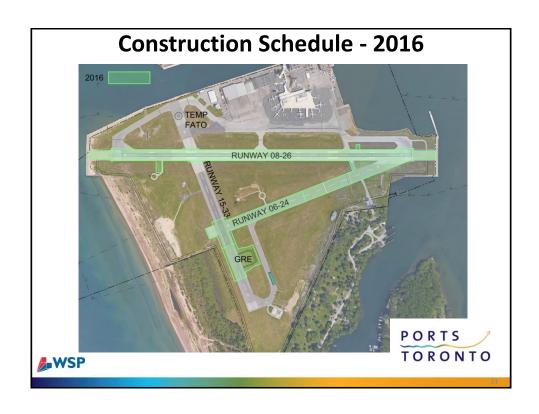








Milestone	Date
Award of Construction Contract	May 13, 2016
Contractor Mobilization Start	May 19, 2016
Start of Major Construction Activities	Early June
Runway 08-26 Nightly Closures Start	June 13, 2016 (electrical work on 08-26)
Runway 06-24 Day/Night Closure Start	June 13, 2016 (approx.)
Runway 15-33 Conversion to Temporary Taxiway Echo	July 2016 (approx.)
Runway 08-26 Commissioning	September 30, 2016
Runway 06-24 Commissioning	September 30, 2016
GRE Commissioning	February/March 2017
Taxiway Echo Reconstruction	2017 Construction Season (TBD)
Apron Widening/Rehabilitation	2018 Construction Season (TBD)
Construction Completion (approx.)	October 2018
WSP	PORTS







## MAJOR CONSTRAINTS / CONSIDERATIONS

#### 2016 Construction Season:

- Work hours restrictions for Runway 08-26 and Apron work are 2300 0600 nightly
  - Significant penalties for late re-opening of Runway 08-26 and Apron in the morning
  - Contractor will work on other areas of the project outside those hours
  - Runway 06-24 and Runway 15-33 full day/night closures
- Contractor anticipates to work two shifts anticipated work hours are:
  - Day Shift 0700h-1900h
  - Night Shift 2200h-0800h

#### 2017 Construction Season:

- Work on Taxiway Echo the only scheduled activity for 2017
- · Day/Night closures

#### 2018 Construction Season

- Taxiways C and F to be closed one at a time for up to a week in 2018
- Phasing of work in front of Terminal gates: closing 1 gate at a time for up to a week following apron widening completion
- Additional aircraft parking position at the Terminal to allow for these closures



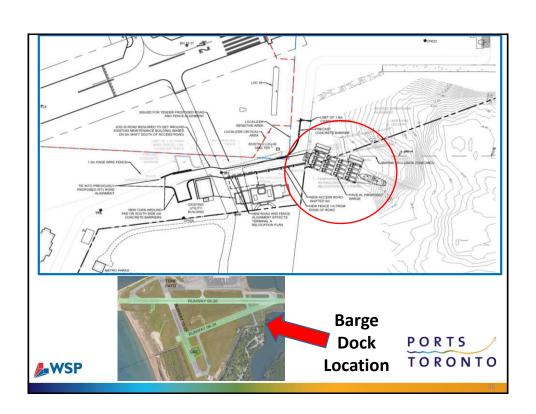


## **MAJOR CONSTRAINTS / CONSIDERATIONS**

- Measures to minimize the impact of construction noise and lighting on local residents will be implemented
- Site Access: Construction of barge dock and barge deliveries for equipment / material to reduce construction traffic through neighborhood and to due airport ferry capacity / operating hours constraints
- Some use of ferry (during existing hours) anticipated until barging ops start mid-June





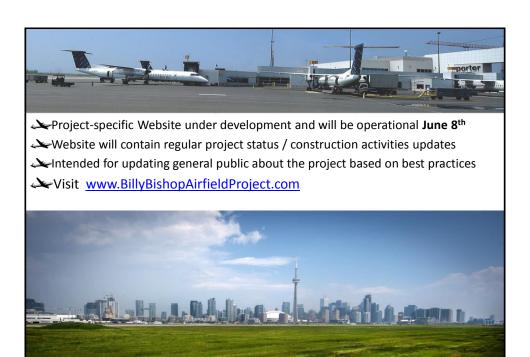


## **OTHER CONCURRENT PROJECTS**

- Other major concurrent construction projects at the airport
  - Intrusion Detection System Installation (June-July 2016)
  - NAV CANADA's ILS Replacement (July-September 2016)
  - Terminal A Relocation (Fall 2016-2017)
  - NPSV Work permanent facilities (2016-2017)
- Coordination between projects will be undertaken to ensure no conflicts





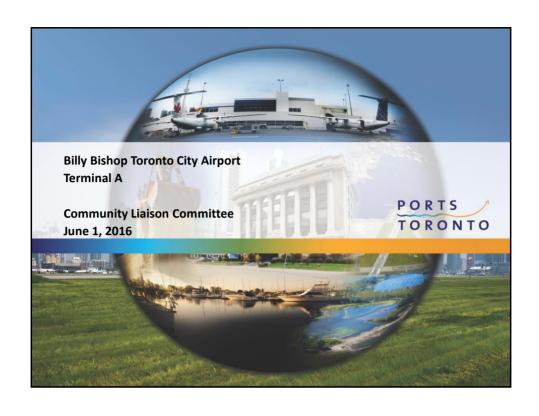


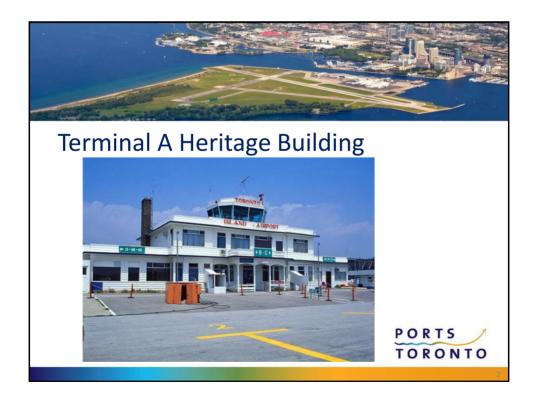




# PORTSTORONTO COMMUNITY LIAISON COMMITTEE MEETING #22 Minutes – Wednesday June 1, 2016, 6:30 p.m. – 8:30 p.m.

**Appendix A1 – 5**Terminal A Presentation











## **Proponent Team**

Developers: Alexander Younger

Mark Robert

Interior Designers & Sarah Richardson
Television Hosts: Thomas Smythe

Heritage Architects: ERA Architects

PORTS















## **Benefits**

- Preserves historic Terminal A Building
- Offloads costs of restoration from TPA/City
- Increases visitation (locals/tourist) to the islands further animating this area
- Creates goodwill with neighbours/stakeholders
- Reduces GA/Commercial conflicts and streamline GA operations
- Offers international exposure for Toronto via potential television show
   PORTS

TORONTO



## **Next Steps**

- 1) Secure approval of various stakeholder groups
- 2) Finalize Lease terms with TPA
- 3) Finalize architectural plans/working drawings
- 4) Confirm final renovation budget
- 5) Finalize Financing and Restore Building

