

Appendix A: NSC 3 Meeting Agenda

Billy Bishop Toronto City Airport

Noise Sub Committee Meeting 3

November 7, 2018

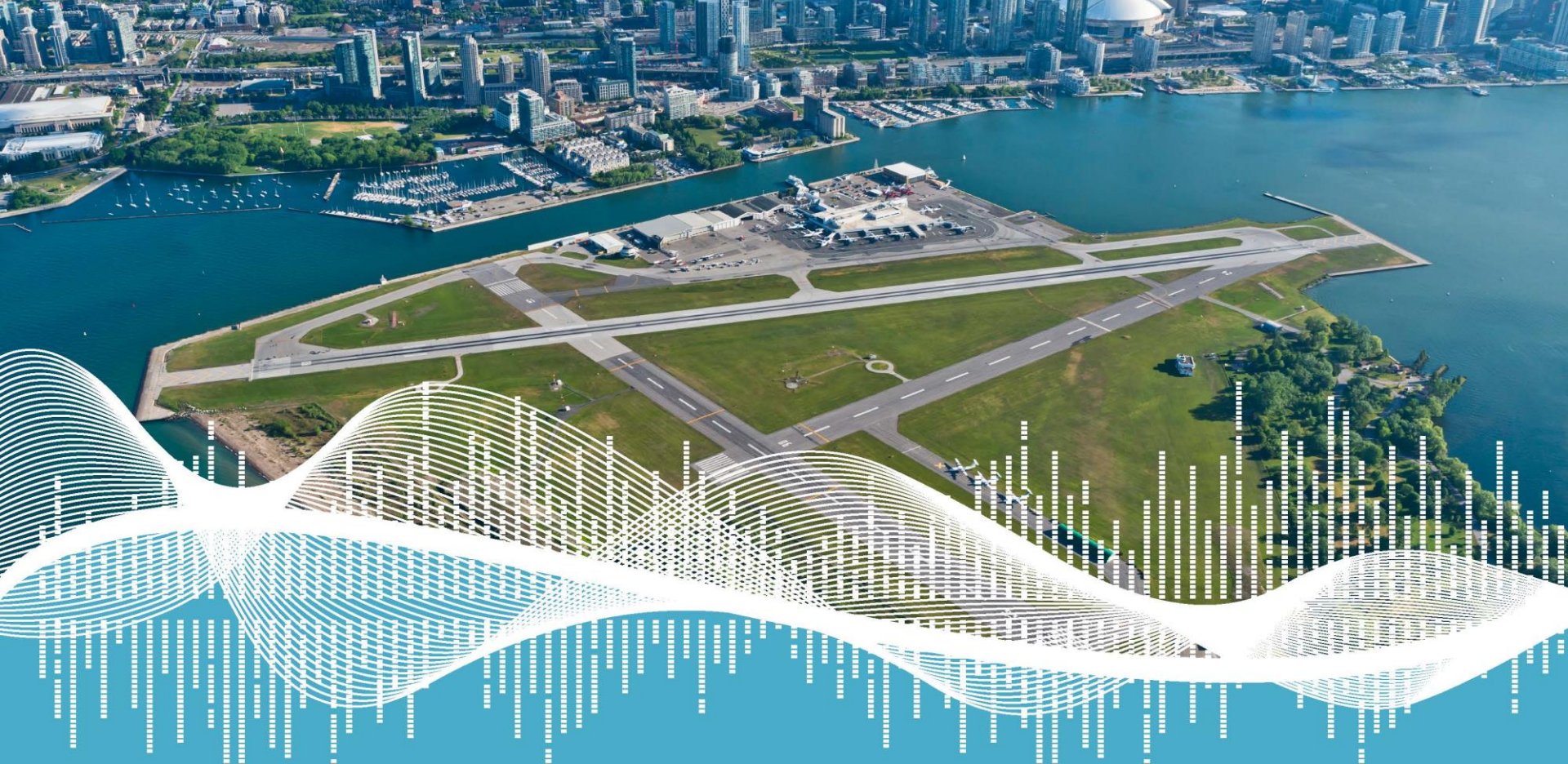
6pm to 8pm

Billy Bishop Airport Boardroom
(Mainland Passenger Transfer Facility, above Aroma Café)

AGENDA

- 6:00 Proposed meeting time change 7-9pm
- 6:05 Finalize Terms of Reference for the Committee
- 6:30 Improving Understanding of Noise Management
 - Gary Colwell will provide an overview of the current Noise Management process, followed by discussion.
- 7:05 Noise Standards
 - Presentation from Angela Homewood followed by discussion.
- 7:50 Discuss potential topics for next meeting
- 8:00 Adjourn

**Appendix B: “BBTCA Noise Mitigation Program”
Presentation by Gary Colwell**



BBTCA Noise Mitigation Program

Noise Sub Committee Meeting Nov 7, 2018



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TORONTO CITY AIRPORT 



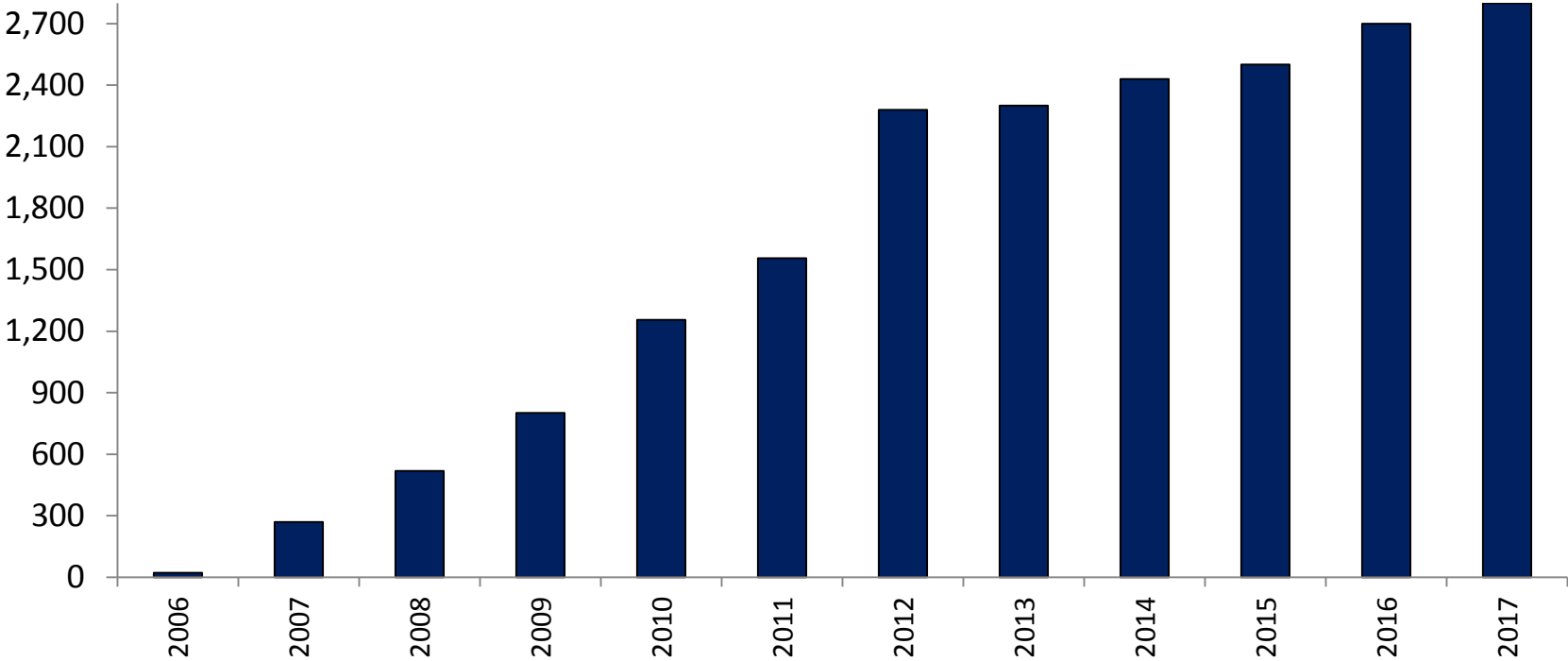
Billy Bishop Toronto City Airport

- Billy Bishop Toronto City Airport, owned and operated by PortsToronto, is located on an island just a few short minutes from downtown Toronto – Canada’s largest city. PortsToronto is a financially self-sufficient government business enterprise that operates in accordance with the Canada Marine Act and is guided by a nine-member board with representation from all three levels of government.
- The airport’s operations are governed by a Tripartite Agreement between PortsToronto, Transport Canada and the City of Toronto.



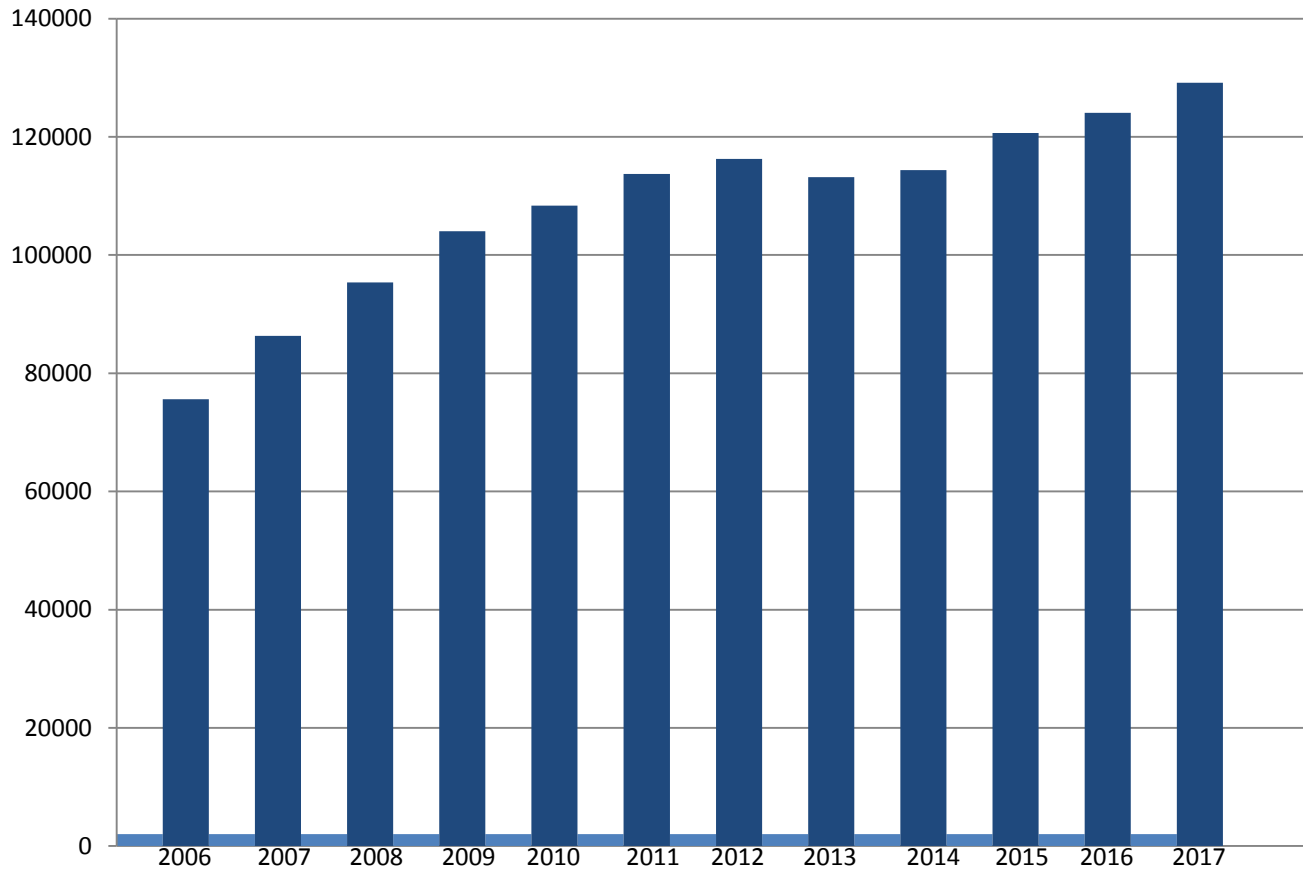
Passengers

Passengers (000s)





Aircraft Movements





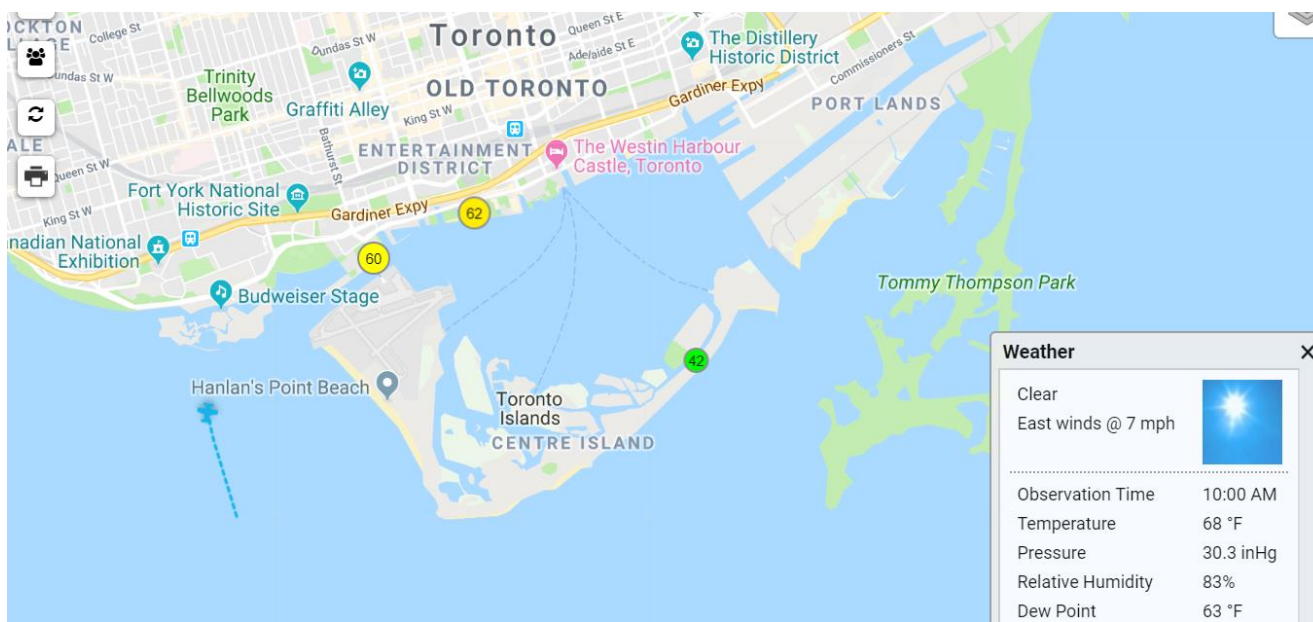
Operating in a Mixed-Use Neighbourhood

- Billy Bishop Airport is one of the most noise restricted airports in North America and operates within a strictly enforced curfew.
- To ensure the right balance is struck so that operations don't overwhelm the surrounding community, PortsToronto has implemented a number of measures to mitigate noise.



Community Outreach

- In 2010 PortsToronto established a Community Liaison Committee (CLC) to provide our neighbours with a forum for discussing issues and concerns related to airport operations – including airport noise.
- The committee is composed of key members of neighbourhood community groups and stakeholders, including local city councillors, and follows best practices of community engagement meeting four times a year.



Enhanced Tracking

- Billy Bishop Airport's Noise Management Office has dedicated staff in place to collect, analyze and respond to noise complaints and monitor daily operations through such tracking tools as Webtrak and Vortex.
- The office also produces monthly and annual reports that are posted to the PortsToronto website.
- Two Noise Monitoring Terminals (NMTs) were upgraded in 2016, and a third NMT was installed to enable enhanced tracking of noise generated by aircraft run ups and the airport's ferry operation.

Aircraft Noise Monitoring Results in Support of NMT Expansion Study – Billy Bishop Toronto City Airport (YTZ)



Potential New NMT Locations

- In 2018 a study was commissioned for potential new sites for Noise Monitoring Terminals (NMT's) which will be discussed in the CLC meeting for community input



Minimizing Noise from Vehicle Traffic

- According to a study conducted by *Dillon Consulting* on behalf of PortsToronto, 40 per cent of travellers walk, bike or take transit to and from the airport – something we regularly encourage and promote.
- The study also indicated that on average, only 10-16 per cent of all traffic in the surrounding area can be attributed to the airport.



Billy Bishop Ferry Operations

- To further reduce the noise from our ferry operations, mufflers were installed on the engine stacks.
- In 2018 an expression of interest was put out to “electrify” the ferry to all but eliminate engine noise.



Billy Bishop Airport Pedestrian Tunnel

- The pedestrian tunnel, which enables passengers to walk between the mainland and the airport, 100 feet beneath the surface of Lake Ontario, has delivered on its promise to improve convenience and efficiency at the airport by significantly improving passenger flow and reducing lineups both within the terminal and on the mainland.
- With more than 90 per cent of passengers choosing to take the free, convenient, six-minute walk through the tunnel, a significant reduction in noise associated with airport vehicular traffic has been achieved.



GROUND RUN-UP ENCLOSURE QUICK FACTS

- Billy Bishop Toronto City Airport's Ground Run-up Enclosure (GRE) is the first facility of its kind in eastern Canada, and only the second such facility in the country.
- The GRE is a 200 tonne, three-sided, open-roofed enclosure designed to reduce aircraft noise from engine run-ups by absorbing and dampening sound.
- The GRE is 63 metres wide by 66 metres deep.
- The enclosure's north wall stands 14 metres tall and the east and south walls are 11 metres tall.
- The three walls are lined with approximately 1,750 sound-absorbing panels supported by an external frame; all three walls are perforated by several louvered vents to allow proper air flow and aerodynamic purposes.
- Over 1,400 cubic metres of concrete were used to build the enclosure and adjoining apron.
- The primary users of the GRE are maintenance operators from Porter Airlines testing their turboprop aircraft the Bombardier Dash 8 Q400.
- The facility will be the primary location for high power engine run-ups performed by all operators at Billy Bishop Airport.
- An engine run-up refers to the testing of engines at various power settings to ensure all is in proper working order. Transport Canada mandates engine run-ups every time an aircraft engine undergoes certain maintenance procedures.



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GROUND RUN-UP ENCLOSURE

Engine run-ups, which are required and regulated by Transport Canada as part of standard aircraft maintenance, have been cited by the community as a primary source of noise. In 2013, 161 noise complaints related to engine run-ups were received, which made up 32% of all noise complaints for that year. In order to mitigate the effects of engine testing on the community, a GRE was opened at Billy Bishop Airport in April 2017. The GRE was constructed at a cost of \$9 million which was paid for by Ports Toronto and not taxpayers.

Located on the south-west side of the airfield, the three-sided, open-top facility accommodates commercial aircraft at the airport and is designed to dampen the noise associated with high-power aircraft engine ground run-up operations. It is only the second of its kind in Canada.

The GRE has made a significant and positive impact to our noise mitigation program. In 2016, Billy Bishop Airport received more than 36 complaints related to engine run-ups, however since the facility opened in April 2017, only one noise complaint related to engine run-ups has been received.



97%

REDUCTION OF COMPLAINTS RELATED TO ENGINE RUN-UPS YEAR-OVER-YEAR SINCE GRE OPENING.





Idle run 0957.mp4



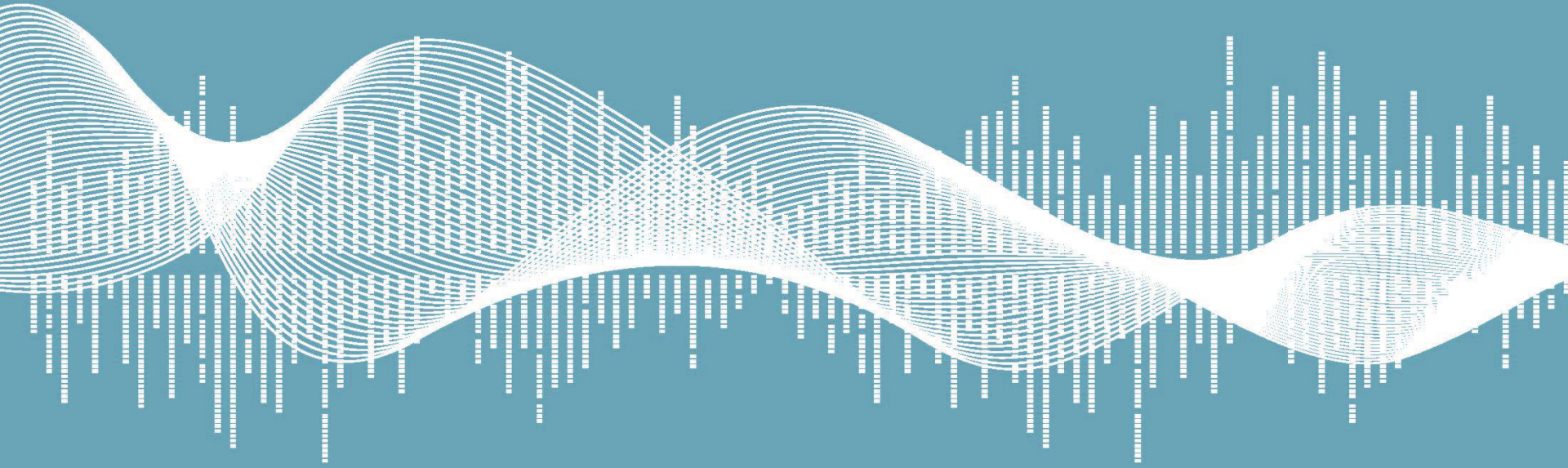
Case Study: Airfield Rehabilitation

- In June 2016 work began on a three-year rehabilitation and resurfacing of the runways, taxiways including lighting at Billy Bishop Airport.
- PortsToronto implemented a number of unique measures to minimize the impact of construction activities on local residents, including barging materials, equipment and personnel from the Port of Toronto across Toronto's Harbour to a temporary dock at the airport to reduce truck traffic and noise in the local community.



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Questions?



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An aerial photograph of Toronto, Ontario, Canada, showing the city skyline, the CN Tower, and the waterfront. The image is taken from a high angle, looking down on the city. The CN Tower is the most prominent feature, standing tall in the center-right. To its left is the Rogers Centre, a large stadium with a white, retractable roof. The city is densely packed with skyscrapers and buildings. In the foreground, there are several large, modern high-rise buildings. The waterfront is visible on the left, with a large green area and a marina. The water is a deep blue color. The sky is clear with some light clouds. The text "THANK YOU" is overlaid in white, bold, sans-serif font on the left side of the image.

THANK YOU