

# 2020 ANNUAL NOISE MANAGEMENT REPORT

BILLY  
BISHOP   
TORONTO CITY AIRPORT



# Message on Operations and Noise Management at Billy Bishop Toronto City Airport

What a difference a year can make. However, in reality, the change to Billy Bishop Toronto City Airport didn't take a year – the change came overnight with the emergence of a global pandemic and the resulting seismic disruption and disabling of airline service around the world.

For our part, our resident airlines – Porter Airlines and Air Canada – made the unprecedented but prudent decision in March 2020 to temporarily suspend air carrier service at Billy Bishop Airport until the conditions were appropriate to resume service. As I write this in February 2021, these airlines are still in a holding pattern awaiting a meaningful reduction in infection numbers that will provide for a lessening of government restrictions and the re-emergence of passenger demand for air travel. We are confident that conditions will improve and that our carriers will restart at Billy Bishop Airport this spring/summer, and anxiously await a return of passengers and a resumption of the world-class service that has won us awards and has given our staff, stakeholders and community a point of pride and purpose for so many years.

But as different as the airport is right now, it also remains the same in many respects. The PortsToronto/Billy Bishop Airport team continues

to maintain the airport and airfield in order to provide service to Ornge medevac, which has served an essential role during this pandemic from day one. The airport also remains open for General Aviation (GA) clients, the flight schools, as well as smaller carriers such as Cameron Air and FlyGTA.

What also remains is our commitment to working with the community to maintain balance in our operations and conduct our business in a way that reflects a commitment to sustainability, an emphasis on community initiatives, and an imperative to communicate and report with transparency.

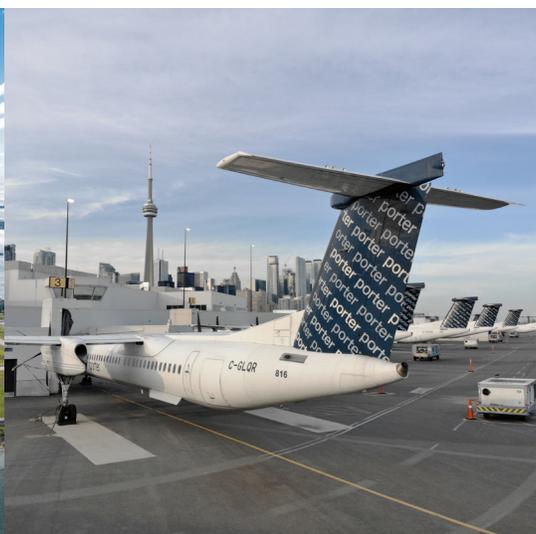
In an example of the latter, the 2020 Noise Report is now before you to report on our efforts to manage noise and introduce improvements to mitigate operational impacts. The report also details the number and nature of complaints received in 2020.

With commercial airline activity suspended in March 2020, our noise profile is different this year and reflects a unique reality of 2020. Interestingly, while commercial activity was mostly suspended during 2020, many residents now found themselves at home with governments encouraging people to stay home and work from their

residence as much as possible. With people home more, noise issues became more noticeable for some residents. Many airports in Canada have experienced a similar shift in complaints during this timeframe.

Against this backdrop I can report that the noise office received 333 complaints in 2020, which is down from 542 complaints in 2019. While complaints related to aircraft activity were down, complaints specific to the ferry were up in 2020. We are pleased to confirm that despite the current financial hardships being experienced by Billy Bishop Airport – and every airport in Canada and around the world – PortsToronto has chosen to continue work on the conversion of the Marilyn Bell I passenger ferry to electric power. This conversion will be complete in 2021 and will effectively eliminate noise and air emissions from the ferry operation.

Although overall community complaints were down in 2020, there were two areas that experienced increases: Wards Island logged 41 complaints in 2020, which is up from 35 in 2019; and Mimico had one complaint in 2020, whereas this area had zero complaints the year prior. All other complaints are down by neighbourhood.



# Message on Operations and Noise Management at Billy Bishop Toronto City Airport *(continued)*

The increase in complaints for Wards Island came from General Aviation and flight school activity. With many activities restricted in 2020, General Aviation was still permitted and Billy Bishop Airport and many GA airports experienced an increase in the number of GA movements in the year. This increased activity, combined with people spending more time at home, was likely a primary driver for the increase in complaints over Wards Island.

The Billy Bishop Airport team continues to work with our individual pilots and businesses to adhere to our good neighbour policies specific to the Toronto Islands and other community areas. The vast majority of pilots follow our published policy and are complying with this framework. We continue to work with all involved to ensure awareness of the expectations for the community on overflights and compliance for our operators.

Our noise office also received complaints linked to construction activities associated with the Bathurst Quay Neighbourhood Plan (BQNP) being implemented by the City of Toronto in partnership with PortsToronto. This activity was specific to the BQNP and is now complete in terms of the work required for PortsToronto property.

We are thrilled with the results of this initiative that will provide new and enhanced public space, better access for the airport and the neighbouring TDSB Waterfront School, and a new promenade and trees. I would encourage you to read more about this project on pages 7 and 10.

I am also pleased to report that despite the COVID-19 pandemic and the lockdowns that prevented gatherings, the Community Liaison Committee (CLC) met as scheduled with the first of four meetings being held in person, and the remaining three meetings happening online via ZOOM. The Noise Sub-Committee also met in person and online for a total of three meetings.

Although we are always pleased when we can report a decrease in noise complaints, the circumstances that brought about this reduction has been linked to a detrimental decline in aviation overall, including Billy Bishop Airport. The year 2020 has been challenging for many of us and we are all looking forward to sunnier skies in 2021 and beyond with a return to travel when the time is right. When that time comes we will welcome back our passengers with a Safe Travels Program that will ensure that everyone's experience is positive and safe.

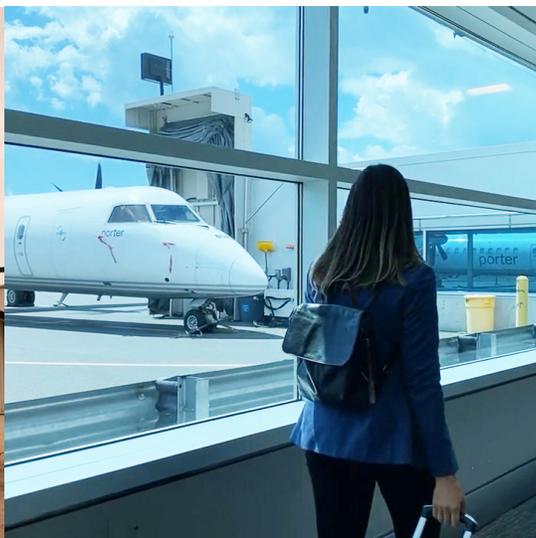
In the meantime, the Billy Bishop Airport team will continue to maintain the airport for the businesses that continue to operate, including Ornge medevac which is based at our airport and has been tasked with the important role of distributing vaccines to northern communities in an initiative dubbed Operation Remote Immunity.

We will also continue work on the electric conversion of the *Marilyn Bell I* with a view to having this newly modified vessel in service in 2021 (pg. 8); will continue to work with the community through CLC meetings; share the results of our Ground Noise Study (pg. 6); and of course welcome the restart of our commercial airlines when the time is right.

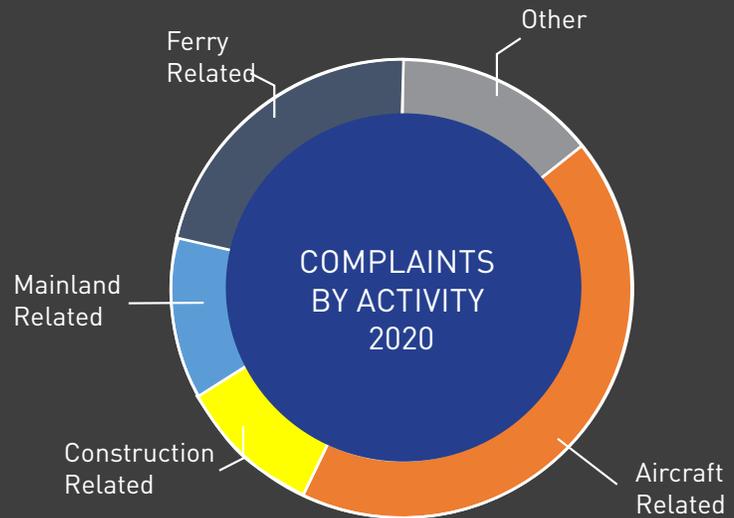
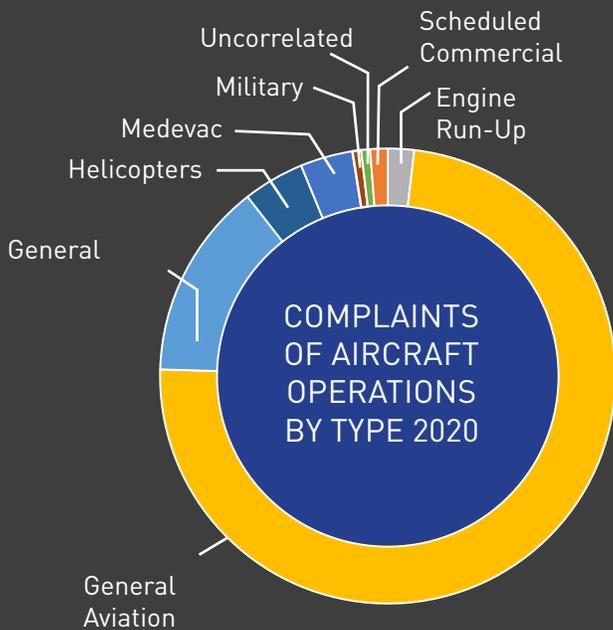
May the months ahead continue to keep everyone safe and healthy and we look forward to better times in 2021.



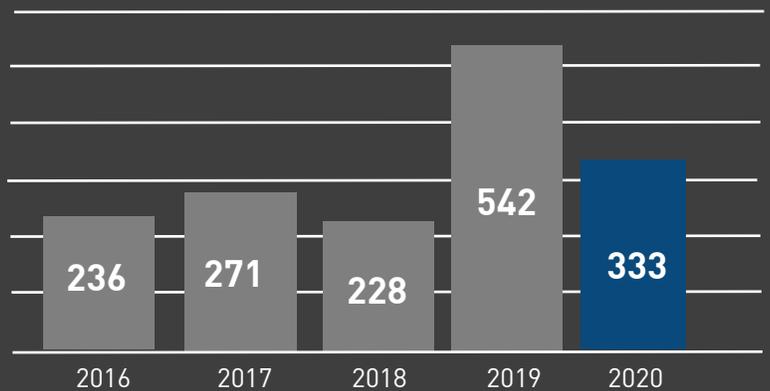
**Gene Cabral**  
*Executive Vice President,  
PortsToronto and Billy Bishop  
Toronto City Airport*



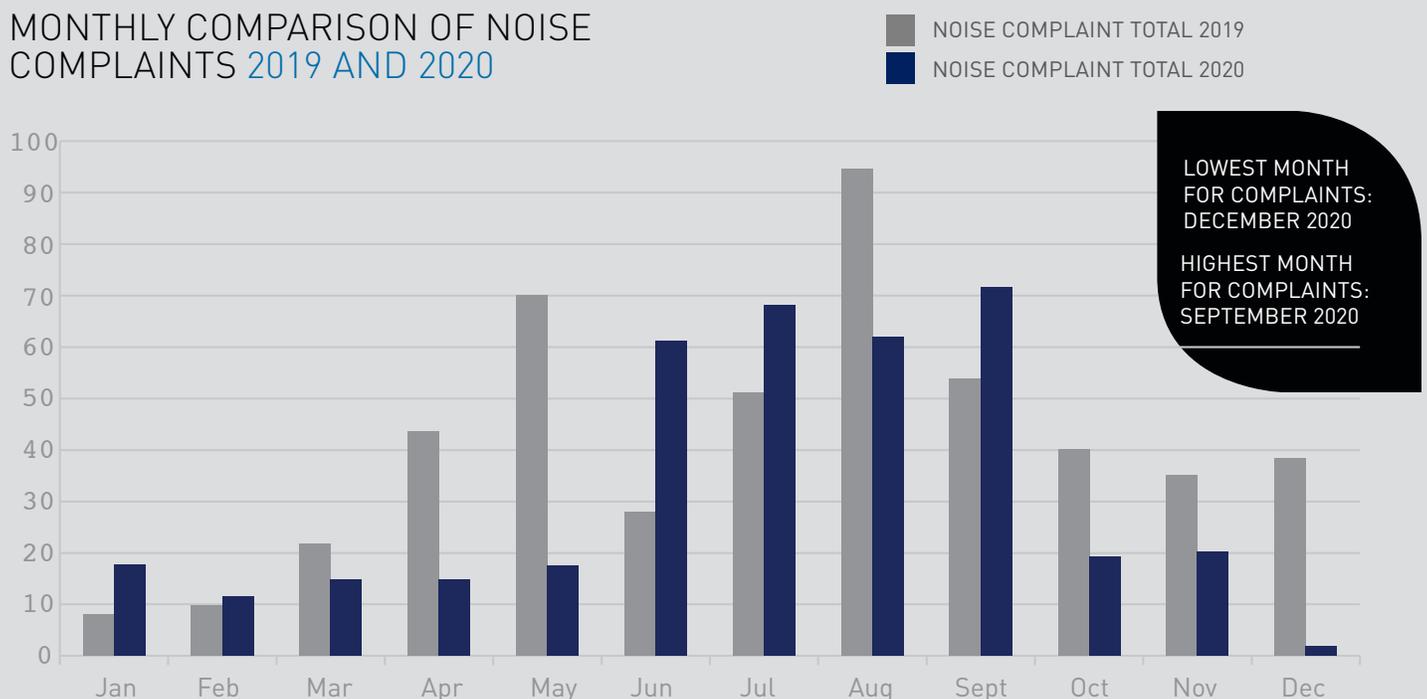
# By the numbers



FIVE YEAR ANNUAL COMPARISON OF NOISE COMPLAINTS



MONTHLY COMPARISON OF NOISE COMPLAINTS 2019 AND 2020



# Noise Management Office

Part of our commitment to our noise management program includes dedicated staff in our Noise Management Office who collect, analyze and respond to noise complaints and monitor daily operations. Staff at the office use Vortex, a customizable tracking and logging software platform, designed specifically for the needs of an airport environment, to track, document and respond to noise complaints.

A response time policy has been in place at the Noise Management Office since 2011, and mandates a response time of five business days. The economic impacts of the COVID-19 pandemic and resulting staffing changes at the airport led to slower response rates in 2020. In 2020, 98.5% per cent of all noise complaints were responded to within five business days.

# Noise Monitor Terminals

Noise Monitoring Terminals (NMTs) 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.

As part of our continuing efforts to ensure improvements between operations at Billy Bishop Toronto City Airport and the surrounding community, PortsToronto currently operates four NMTs:

- One located on the Toronto Police Marine Unit building;
- One located at Toronto Fire Station 335 on the Toronto Islands;
- One currently installed on the mainland ferry terminal to be relocated to a building in the community in 2021; and
- One at 480 Queens Quay in the Kings Landing condominium building.

Through consultation and input from the Noise Management Sub-Committee, as part of the airport Community Liaison Committee, Ontario Place was selected as the ideal location for PortsToronto's fifth NMT, which will be installed in 2021.

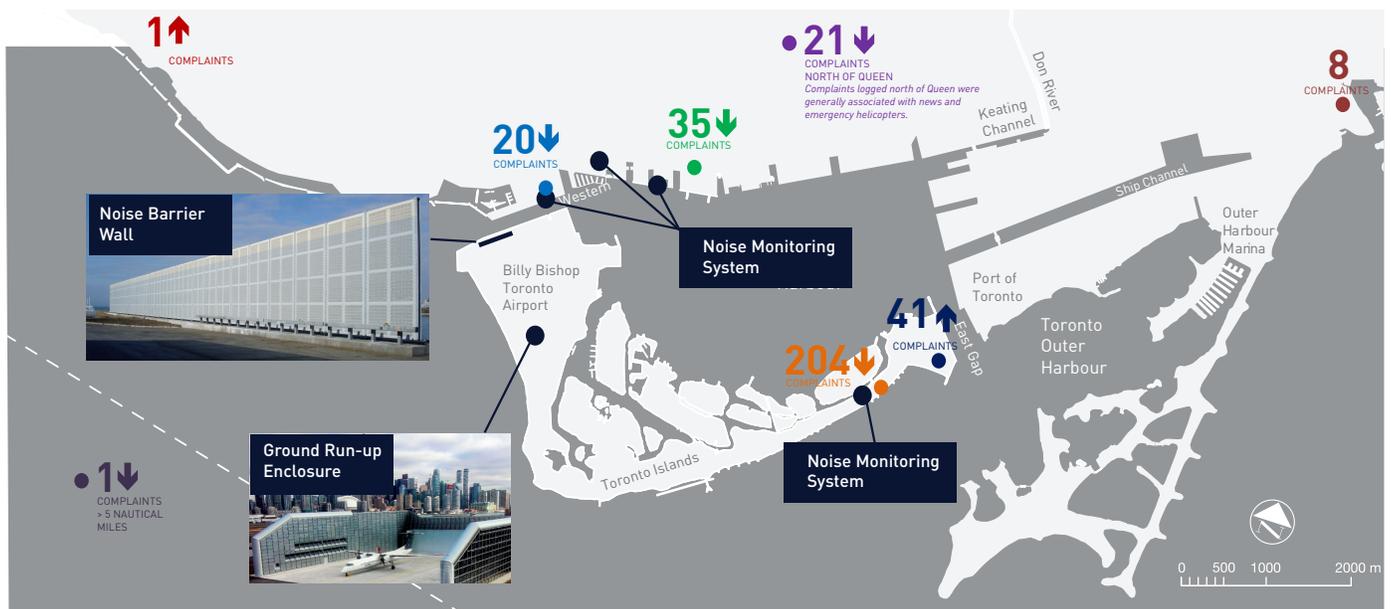
# Noise-Sub Committee

A Noise Management Sub-Committee of the Community Liaison Committee (CLC) was formed in late 2017 to further research, understand and address noise impacts from airport operations. The Noise Sub-Committee consists of four community members, two staff members from PortsToronto, one staff member from the City of Toronto and a facilitator from Lura Consulting.

The committee has two co-chairs, one from the community and one from PortsToronto. The committee met three times in 2020.

# WebTrak

We continue to offer free access to Webtrak, which enables anyone with a computer, smartphone or tablet to gather information on any aircraft activity they may hear overhead. This service combined with our four Noise Monitoring Terminals (NMTs) provide ongoing noise-level data to the airport's Noise Management Office. This data is used in long-term noise mitigation planning and to aid in responding to noise complaints from the surrounding community. The noise data transmitted by the NMTs is also viewable through the WebTrak website.



# NAV CANADA Airspace Enhancements at YTZ

---

Enhanced arrival procedures for aircraft operators have been in effect at Billy Bishop Airport since December 2019. By leveraging satellite-based navigation capabilities, these NAV CANADA arrival procedures keep more aircraft over the water on approach to Billy Bishop Airport, reducing noise exposure to residentially populated areas. Further, aircraft operators save as much as five minutes of flying time, which is estimated to add up to an annual reduction of 970 metric tonnes of greenhouse gas emissions. Enhanced arrivals procedures also serve to improve ground positioning for departures at the airport, reducing ground idling and associated emissions, and noise from aircraft waiting to depart.

# Ground Noise Study

---

The 2018 Airport Master Plan included the recommendation to conduct a Ground Noise Study, which is currently being undertaken by Billy Bishop Airport management in consultation with the Noise Management Sub-Committee. This study seeks to identify sources of ground noise at the airport, and through analytical noise modelling techniques, assess opportunities to reduce the impact of ground-sourced noise on the community.

As part of this study, temporary noise terminals will be installed in the community for a short period in order to gather data on sources of non-airport background noise in the community. This information will assist in best informing airport management with regard to the implementation of future mitigation measures aimed at reducing the impacts of airport ground operations on the surrounding residential community.

PortsToronto is researching initiatives to further reduce ground-sourced noise, including the increased use of electric powered ground transportation vehicles such as the airport shuttle buses, and the implementation of additional operational procedures such as managing aircraft operations during noise-sensitive periods.

# Calm Wind Trial

---

In 2019, Billy Bishop Airport implemented a Calm Wind Runway procedure in collaboration with NAV CANADA. For this procedure, aircraft take off and land at the airport from west to east during periods when wind speeds are below five knots.

During a trial period, public feedback indicated that this new practice aided in the reduction of noise on the surrounding community.



# Billy Bishop Airport City Side Modernization Project

The Billy Bishop Airport City Side Modernization Project, which focused on the improvement of passenger and vehicle traffic operations at the airport, is part of the multi-partner, multi-phase Bathurst Quay Neighbourhood Plan (BQNP) being led by the City of Toronto. Among other improvements, the BQNP will improve the pedestrian experience and comfort in the vicinity of the airport and improve the public realm for the enjoyment of both the community and travellers.

In 2019, as part of the first phase of the City Side Modernization project and in alignment with changing traffic patterns at the airport, Billy Bishop Airport consolidated passenger pick-up locations within a streamlined and optimized arrivals curb. Improvements included additional signage and colour-coded pavement markings to indicate pedestrian routes to public transportation, taxi corral and passenger pickup, as well as signage throughout the traffic circle and Eireann Quay to connect transportation partners, including ride-share operators, with arriving passengers.

In early 2020, when the COVID-19 pandemic caused much of the world to stand still and a temporary suspension of commercial airline service at Billy Bishop Airport came into effect, we leveraged the significant reduction in vehicle and passenger traffic at the airport to bring forward and maximize efficiency in completing the second phase of the project ahead of schedule.

The second phase of the project consisted of various improvements in the vicinity of the airport and Eireann Quay designed to further reduce congestion and idling, improve pedestrian safety and experience, and better streamline passenger and traffic flow, including:

- A full reconstruction of the Eireann Quay roadway and its east and west sidewalks;
- A reconstruction of the Billy Bishop Airport finger lot;
- A reconfiguration of the airport taxi corral to improve passenger loading and reduce its footprint; and,
- The relocation and improvement of an existing surface parking lot on the Canada Malting site, which features a new student pick up/drop off area at the Toronto District School Board (TDSB) Waterfront School.



*As part of this project, Billy Bishop Airport will implement permeable paving to reduce storm water runoff and urban heat island effect.*



*Among other improvements, the Bathurst Quay Neighbourhood Plan will improve pedestrian experience and comfort in the vicinity of the airport and improve the public realm for the enjoyment of both the community and travellers.*

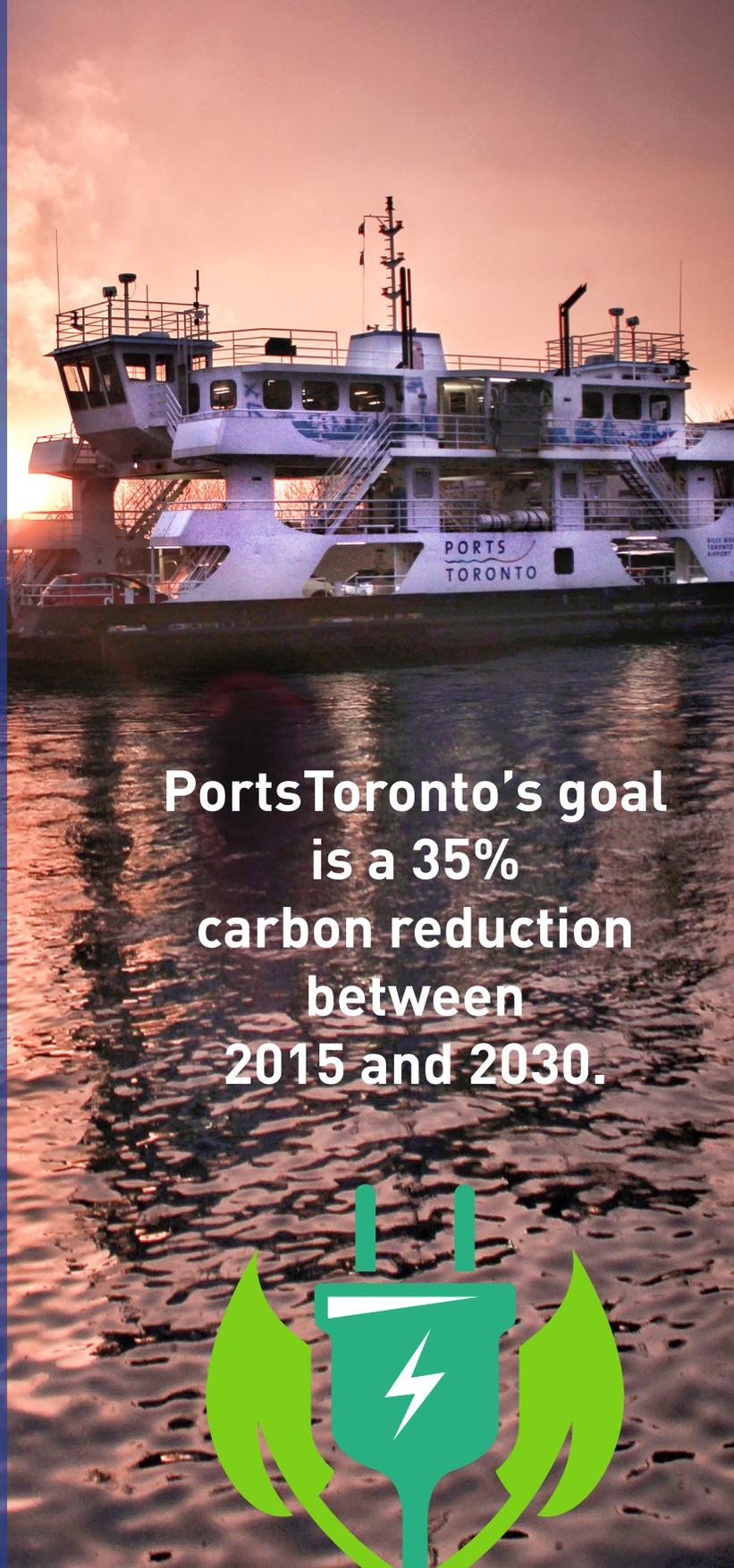


# Billy Bishop Airport Converting *Marilyn Bell I* Airport Ferry to Electric-Power

In November 2019, PortsToronto announced that the airport's *Marilyn Bell I* passenger/vehicle ferry will be converted to electric-power. The airport's ferry operation not only transports passengers, airport staff and essential supplies to and from Billy Bishop Airport, but serves as a vital link for City of Toronto service vehicles to gain access to the Toronto Islands as well as for critical Air Ornge emergency services.

This innovative retrofit represents a unique technological advancement in the airport's fleet as the vessel will be the first 100 per cent electric lithium-ion powered ferry in service in Canada. In addition to operating more efficiently and eliminating related air emissions, the retrofitted vessel will build on the airport's Noise Management Program, as it will operate far more quietly, dramatically reducing related noise in the surrounding community.

Due to the onset of the COVID-19 pandemic in early 2020, the original target date to complete the conversion of the *Marilyn Bell I* ferry to 100 per cent electric power has been delayed to 2021. This was due in part to COVID-19 work restrictions as well as the economic impact that the pandemic has had on Billy Bishop Airport, in particular the significant reduction in Airport Improvement Fees as a result of the temporary suspension of all commercial airline services. Despite this, major project milestones were achieved in 2020, including the delivery of the lithium-ion batteries that will be needed to power the *Marilyn Bell I*, as well as the build of the vessel's electrical backbone – a critical piece of infrastructure that will contain power distribution commands and controls for the vessel's zero-emission power and propulsion system.



**PortsToronto's goal  
is a 35%  
carbon reduction  
between  
2015 and 2030.**



The electric ferry will reduce >530 tonnes of GHG emissions.



Since 2010, PortsToronto has displaced more than 28,091 tonnes of CO<sub>2</sub>.



This is the equivalent of taking 6,208 cars off the road for one year.



## The Ground Run-up Enclosure

Engine run-ups are required and regulated by Transport Canada as part of standard aircraft maintenance. However, engine run-ups have been cited by the community as a primary source of noise given testing is often done at high power. 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 noise associated with engine run-ups on the community, a GRE was constructed at Billy Bishop Airport in April 2017. The facility was built at a cost of \$9 million which was paid for by PortsToronto through the Airport Improvement Fee.

Standing 14 metres in height, the 63-by-66 metre enclosure is located on the southwest side of the airfield

and is only the second of-its-kind in Canada. The enclosure effectively absorbs noise with specialized acoustic panels that line the interior of the three walls, which feature vents for optimal aerodynamic performance.

The positive impact of the GRE has been immediate and significant. Since the GRE opened nearly four years ago, the Noise Management Office has received 14 complaints related to engine run-ups—the majority of which occurred as a result of engine runs that were conducted outside of the facility due to extremely high wind conditions. In 2020, Billy Bishop Airport received two complaints related to idle engine run-ups, which are permitted at the gate as per our Noise Management Policy.

# Traffic Management

---

The pedestrian tunnel, which opened in 2015, continues to be a strong contributor to the airport's noise mitigation program. Prior to the tunnel's opening, passengers would arrive and depart in large groups according to the ferry's schedule which caused vehicle congestion and increased traffic noise at the mainland terminal and along Eireann Quay. With more than 90 per cent of travellers using the tunnel, passengers come and go on their own schedule which smooths out the flow of traffic and eliminates surges corresponding to the ferry arriving and departing to/from the mainland.

In order to encourage alternative means of access to the airport to further decrease traffic related noise, Billy Bishop Airport offers anyone wishing to access the airport with complimentary regular shuttle service between the airport and downtown Toronto. According to a 2018 Dillon Consulting study, nearly 30 per cent of passengers departing the airport take the shuttle to Union Station, which highlights the important role the airport plays in not only connecting people to the heart of downtown Toronto but in providing convenient access to the region's broader transportation network.

# Bike to YTZ

---

As part of continued efforts to reduce vehicle traffic associated with the airport, PortsToronto has incorporated bike racks that are conveniently located on both the island and mainland. The four covered racks on the island enable cyclists to leave their bikes for the duration of their trip, knowing they are secure and safe from the elements. PortsToronto collaborated with the City of Toronto to install new bike racks near the mainland ferry terminal. Primarily used by employees at the airport, these bike racks encourage staff to choose more sustainable forms of transportation for their commute. In 2019, PortsToronto implemented a new Bicycle Maintenance Station for cyclist convenience. A valuable addition to cycling infrastructure at the airport, the maintenance station features a full complement of commonly required tools and two bike hangers able to accommodate any style of bicycle.



# Regulations and Policies

---

Billy Bishop Airport's management and regulations are regulated by a Tripartite Agreement among the federal government, as represented by the Minister of Transport, the City of Toronto and PortsToronto.

As part of the Tripartite Agreement Billy Bishop Airport adheres to noise restrictions, a limit on total daily flight activity and follows a strict curfew on hours of flight.

Due to the regulations in place as a result of the Tripartite Agreement, Billy Bishop Airport is one of the most noise restricted airports in North America, operating within a Noise Exposure Forecast (NEF) of 25. Specific noise-parameters are also placed on the type of aircraft that can fly to and from the airport.

Billy Bishop Airport also operates within a curfew that prohibits any aircraft, other than emergency flights or Medevac aircraft, from taking off and landing between the hours of 11:00 p.m. and 6:45 a.m. We also further restrict operations with management policies between 6:45 a.m. to 7:00 a.m. and 10:00 p.m. to 11:00 p.m. This curfew is strictly enforced, with significant penalties for any violations. In 2019, PortsToronto instituted an Airport Curfew Fine Policy that will redirect funds from curfew violation fines toward community organizations. In 2020, the airport experienced two curfew violations.

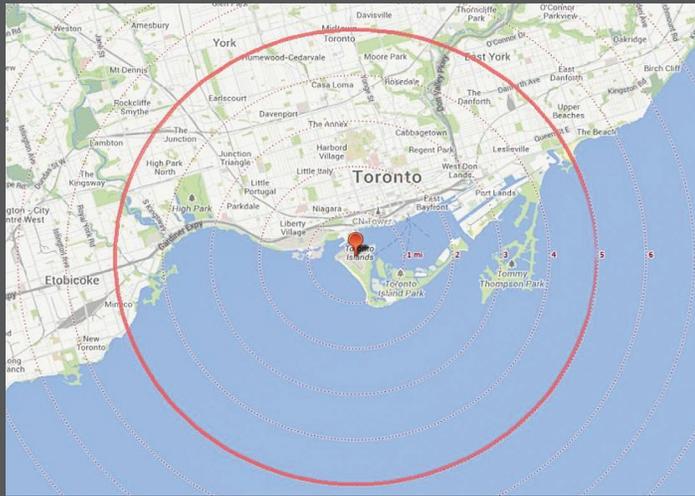
In February 2020, the departure of a General Aviation pilot delayed due to a medevac flight was erroneously

approved nine minutes beyond the nighttime curfew. In keeping with the Curfew Fine Policy, the penalty for this violation was paid by PortsToronto and the funds were directed to an approved community group.

In September 2020, a General Aviation pilot performed a touch-and-go on the airport's runway 36 minutes beyond the nighttime curfew. Following an investigation and in light of the exceptional circumstances leading to the event, PortsToronto did not levy any fines for this violation.



**BILLY BISHOP TORONTO CITY AIRPORT  
AREA OF RESPONSIBILITY**  
5 Nautical Miles for Aircraft Arriving/Departing at Billy  
Bishop Toronto City Airport



*PortsToronto Noise Management Policy states that:*

- *PortsToronto is responsible for reviewing and responding to the noise complaints received at Billy Bishop Airport.*
- *Complaints which are not associated with the operation of Billy Bishop Airport, are referred to Transport Canada or the related airport.*
- *Response time policy has been in place since 2011 and mandates a response time of five business days. In 2020, 98.5 per cent of all complaints were responded to within five business days.*



**BILLY  
BISHOP**  
TORONTO CITY AIRPORT

FOR FURTHER INFORMATION:

PortsToronto  
Billy Bishop Toronto City Airport  
1 Island Airport  
Toronto, ON  
M5V 1A1  
Canada

Noise Management Office: 416 203 8490  
Website: [www.BillyBishopAirport.com](http://www.BillyBishopAirport.com)

OWNED AND OPERATED BY :  
PROPRIÉTAIRE ET EXPLOITANT :

**PORTS  
TORONTO**