



AÉROPORT DE TORONTO  
**BILLY  
BISHOP**  
TORONTO CITY AIRPORT

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# 2022 NOISE SUMMARY REPORT



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

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Billy Bishop Toronto City Airport is committed 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 this spirit, the 2022 Billy Bishop Airport Noise Summary Report is now before you to detail our efforts to manage noise and introduce improvements to mitigate operational impacts. This is the first report issued under my leadership of PortsToronto, owner and operator of the airport, and builds on the strong and transparent reporting foundation that has existed at Billy Bishop Airport through this comprehensive annual report.

The year 2022 was one of resilience and rebuilding as the aviation industry, including airports and airlines around the world, gradually returned to pre-pandemic passenger volumes. Many readers of this report will be aware that Billy Bishop Airport welcomed back commercial airline service in September 2021 following an 18-month suspension of service due to the COVID-19 pandemic. This past year marked a return to a full calendar year of commercial airline operations at Billy Bishop Airport, and we saw passenger volumes reach 63 per cent of 2019 levels in 2022, while aircraft movements reached 83 per cent.

Non-commercial operations also continued in 2022 via General Aviation (GA) clients, flight schools, as well as smaller carriers such as Cameron Air and FlyGTA. Our partners at Ornge continued to carry out critical medevac services, operating 3,659 flights in 2022 and playing a critical role in transferring patients when GTA hospitals reached critical capacity during the summer months.

From a noise management perspective, it remains challenging to make direct comparisons between year-over-year data given the pandemic-related inconsistencies of the past couple of years. While this report presents data from a full calendar year of commercial service in 2022, where comparisons are made to the year prior, it is based on four months of commercial service in 2021. This is all in addition to reporting on other sources of noise including the ferry, general aviation and medevac activity.

With this in mind, the data for 2022 confirms that as commercial activity resumed and increased, overall noise complaints, not surprisingly, also increased. The Noise Management Office received 376 complaints in 2022, which is up from 257 complaints in 2021. Of these 376 complaints received, 21 were related to area noise associated with activities such as road construction and not related to airport operations. As such, the total number of complaints is actually 355. Broadly speaking, complaints related to aircraft activity accounted for the majority of noise complaints received in 2022.



**3,659**  
MEDEVAC MOVEMENTS

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**4**  
COMMUNITY LIAISON COMMITTEE  
(CLC) MEETINGS IN 2022

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**3**  
NOISE SUB-COMMITTEE  
MEETINGS

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

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With respect to the origin of the complaints, our Noise Management Office saw a decrease in complaints from Algonquin Island, which logged 46 complaints in 2022, down from 135 complaints in 2021. Wards Island registered 28 complaints in 2021, an increase from 21 complaints in 2021. BQNA and YQNA neighbourhoods both recorded more complaints, going from 21 to 133 and 60 to 146 respectively between 2021 and 2022.

We are pleased to see a decrease in complaints for Algonquin Island for the second consecutive year, as we have been working with our individual general aviation 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.

The community plays a significant role in the policies and procedures that guide our operations at Billy Bishop Airport, and we are pleased with the work and collaboration that has been undertaken this year with our community groups. The Community Liaison Committee (CLC) met four times in 2022, and the Noise Sub-Committee met three times over the last year. The Billy Bishop Airport team also attended community meetings at the request of community members and maintained an open dialogue to ensure a consistent flow of information.

As a sign of our commitment to acting on the ideas generated within these meetings, in 2022 we continued progressing our Noise Monitoring Study 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. We also saw the installation of our fifth Noise Monitoring Terminal at Ontario Place in August 2022 as per consultation and input from the Noise Management Sub-Committee.

Further, in response to feedback from the community and with full support from PortsToronto, our partners Nieuport Aviation announced in 2022 plans to make a significant and meaningful investment in introducing electric shuttle buses in 2023 which will reduce air and noise emissions for the benefit of passengers and the surrounding community.

Looking forward to 2023, we will continue to work towards our vision to be a leader in how a modern airport operates in an urban environment, and work collaboratively towards our goal to be among the cleanest, greenest and quietest airports in the world.



**RJ Steenstra**  
President and CEO  
Billy Bishop Toronto City Airport and PortsToronto



**5**

NOISE MONITORING TERMINALS

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**2023**

ELECTRIC SHUTTLE BUSES

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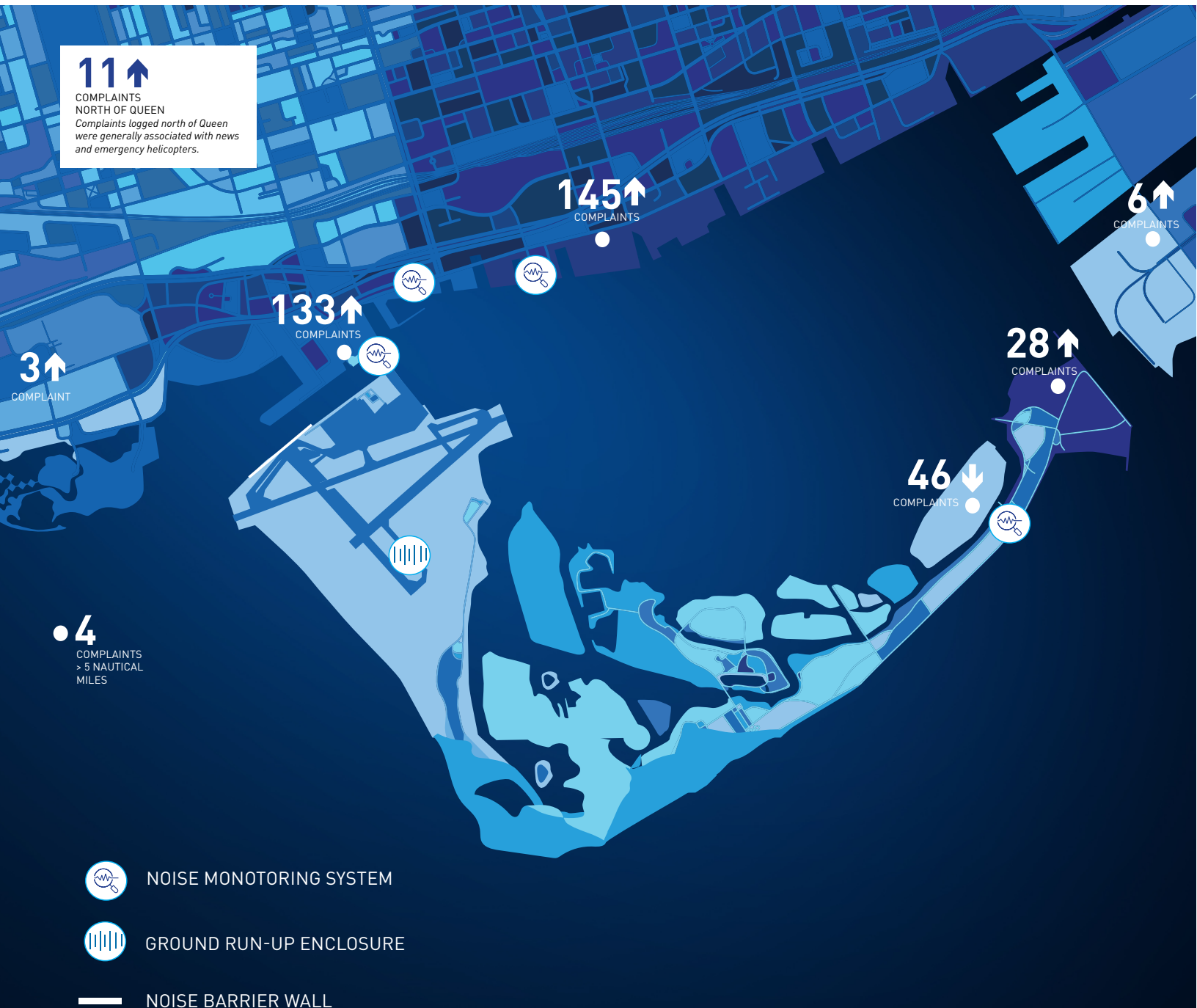
**ZERO-EMISSION  
FERRY**

MARILYN BELL CANADA'S FIRST  
TRULY ZERO-EMISSION,  
LITHIUM-ION FERRY

# 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. In 2022, 100 per cent of all noise complaints were responded to within five business days.



# Community Liaison Committee

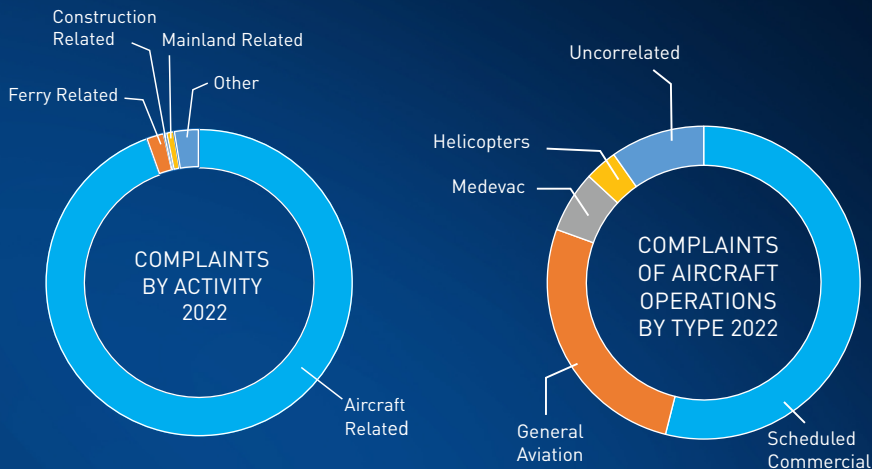
PortsToronto established a Community Liaison Committee (CLC) in 2010 to further expand engagement with the residents and businesses surrounding Billy Bishop Airport. The CLC gives our community a forum to discuss issues and concerns related to airport development, activities and operations. The committee also enables airport management to communicate operational activities and information with stakeholders and the broader community.

Key representatives from neighbourhood community groups, local businesses and stakeholders, as well as local city councillors and members of provincial and federal parliaments, make up the membership of the CLC. The committee follows best practices of community engagement, meeting regularly and addressing matters such as airport noise management, air quality and transportation access. The CLC's quarterly meetings are open to the public and minutes taken by third-party consultant Lura Consulting are posted to the PortsToronto website. In 2022, four meetings of the CLC were held.

# CLC Noise Management Sub-Committee

A Noise Management Sub-Committee of the CLC was formed in late 2017 to further research, understand and address noise impacts from airport operations. The Noise Sub-Committee consists of three 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 2022.

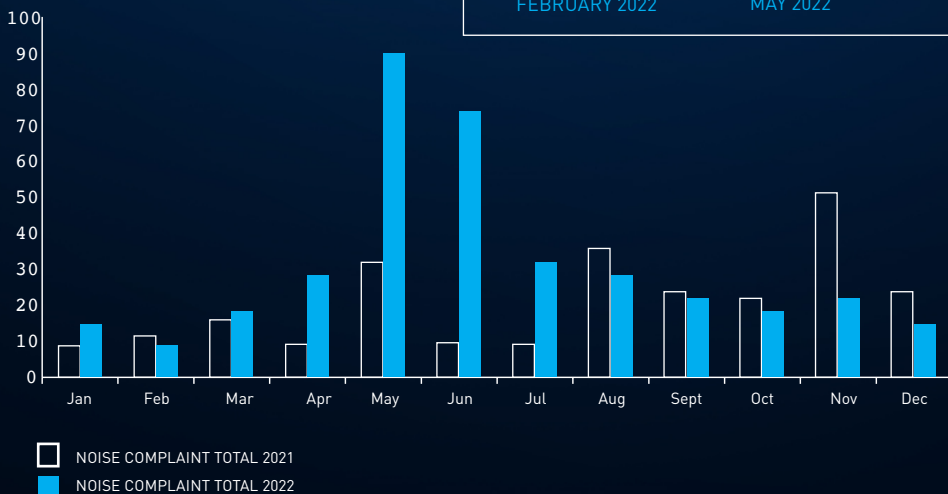
# By the numbers



TEN YEAR ANNUAL COMPARISON OF NOISE COMPLAINTS



MONTHLY COMPARISON OF NOISE COMPLAINTS 2021 AND 2022



LOWEST MONTH FOR COMPLAINTS: FEBRUARY 2022  
 HIGHEST MONTH FOR COMPLAINTS: MAY 2022



## Noise Monitoring Terminals

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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 five NMTs:

- One located on the Toronto Police Marine Unit building;
- One located at Toronto Fire Station 335 on the Toronto Islands;
- One located on the mainland ferry terminal;
- One at 480 Queens Quay in the Kings Landing condominium building; and,
- One installed at Ontario Place in August 2022 as per consultation and input from the Noise Management Sub-Committee.



## WebTrak

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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 five 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.



## Ground Noise Study

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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.

# Cleaner, Greener, Quieter: *Marilyn Bell* Canada's First Truly Zero-Emission, Lithium-Ion Ferry



Working toward its Master Plan vision to be the global leader in how a modern airport operates in an urban environment, Billy Bishop Airport has long embraced measures large and small to reduce its environmental footprint. This includes seeking new and innovative measures to complement sustainable practices and infrastructure already in place with the aim of mitigating emissions and noise from its operations.

In 2022, the Marilyn Bell celebrated its first anniversary as the first ferry service in Canada powered by a zero-emission power and propulsion system containing no diesel components. Powered entirely by electricity from clean wind and solar sources provided by Bullfrog Power, the retrofitted Marilyn Bell will eliminate greenhouse gas emissions from the ferry operation and reduce the airport's Scope 1 emissions by approximately 530 tonnes per year.

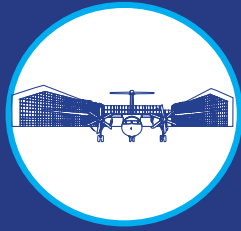
This project builds on Billy Bishop Airport's Noise Management Program, as ferry noise from diesel engines was among the primary sources of airport operations-related noise complaints. In addition to operating more efficiently and eliminating related air emissions, the retrofitted Marilyn Bell now operates far more quietly, dramatically reducing related noise to the benefit of our local community.

The airport's ferry operation not only transports passengers, airport staff and essential supplies to and from Billy Bishop Airport – including emergency vehicles supporting Ornge's medevac operations – but also serves as a vital link for City of Toronto service vehicles to gain access to the Toronto Islands.

CLEANER  
GREENER  
QUIETER







## 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 significant. In 2022, Billy Bishop Airport received one complaint connected to an engine run-up which occurred outside the GRE facility. This complaint was related to an idle power engine run, which is permitted at the gate as per our Noise Management Policy.





## Traffic Management

The pedestrian tunnel continues to be a strong contributor to the airport’s noise mitigation program. Prior to the tunnel’s opening in 2015, 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. Further, as part of its Billy Bishop City Side Modernization Project, PortsToronto implemented a reconfigured approach to airport traffic operations to better streamline passenger flow and improve pick up and drop off at the airport. In line with the City of Toronto’s anti-idling bylaw, the design aims to decrease the amount of time each vehicle spends on site, reduce idling and noise and minimizing the number of vehicles entering onto community streets.

As part of the City of Toronto-led Bathurst Quay Neighbourhood Plan (BQNP), this project included re-building portions of Eireann Quay to complement the new approach to traffic operations by further reducing congestion and idling, and better streamlining passenger and traffic flow. The BQNP also included the reconfiguration and optimization of our uses on the Canada Malting site, including the airport taxi corral and increased curb space for pick up and drop off.



## Electrifying Billy Bishop Airport’s Shuttle Fleet

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.

In 2022, Nieuport Aviation, owners and operators of the passenger terminal, announced plans to purchase six electric buses in 2023 to replace the current, diesel-powered shuttle bus fleet that provides complimentary service to passengers and staff between Union Station and Billy Bishop Airport.

- In 2019, more than 500,000 people used the shuttle bus service between Union Station and Billy Bishop Airport.
- Every electric bus in operation takes approximately 65 cars off the road
- All six electric buses will be charged on-site at Billy Bishop Airport – meaning they will be powered by 100 per cent renewable electricity through our partnership with Bullfrog Power.

As the owner and operator of Billy Bishop Airport, PortsToronto has focused on making the airport among the cleanest, greenest and quietest in the world. This has included significant investments in infrastructure including Canada’s first all-electric ferry and the Ground Run-up Enclosure to reduce noise. At the same time, it is necessary for us to encourage airport partners to contribute to this effort and we applaud Nieuport Aviation for making a significant and meaningful investment in introducing electric buses to reduce air and noise emissions for the benefit of passengers and the surrounding community.





## 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. A bicycle maintenance station is also in place for cyclist convenience, and features a full complement of commonly required tools and two bike hangers able to accommodate any style of bicycle.

The popularity of biking to the airport has made the Bike Share station located at the Bathurst Street and Eireann Quay intersection one of the 10 busiest in the city's network<sup>1</sup>. In fact, this is the third busiest Toronto intersection for Bike Share, behind only York Street and Queens Quay and Yonge Street and Dundas St.



TOP  
**10 BUSIEST**  
BIKE SHARE STATION



**FOUR**  
COVERED  
BIKE RACKS



## Regulations and Policies

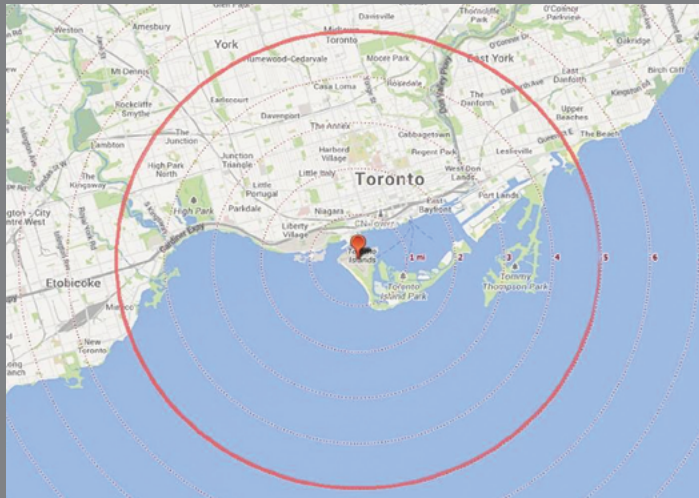
Billy Bishop Airport's management and regulations are regulated by a Tripartite Agreement among the federal government, as represented by the Minister of Transport, the City of Toronto and PortsToronto. As part of the Tripartite Agreement Billy Bishop Airport adheres to noise restrictions, a limit on 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 2022, the airport experienced zero curfew violations.

# 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 2022, 100% per cent of all complaints were responded to within five business days.*



**BILLY  
BISHOP**  
TORONTO CITY AIRPORT

FOR FURTHER INFORMATION:

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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**

# Glossary of Terms

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## DEFINITIONS

**General** – A report with no identified/ specified aircraft in relation to the complaint. (eg. “airport was very noisy this afternoon”)

**No Aircraft** – A report which refers to an aircraft that cannot be associated with the specific complaint.

**Uncorrelated** – A report with the source of noise unable to be confirmed as being associated with the airport or aircraft specific operations.

**General Aviation** – All civil aviation aircraft operations excluding any commercial air operations. Refers to light aircraft such as Cessna, Pipers, Twin Engine or aircraft for personal use.

**Scheduled Commercial** – Any commercial air operations, operated by an air carrier. (eg. Porter, Air Canada) excluding Charters.

