## Noise Management Action Plan

2020 Mid-Year Update

Toronto Pearson is working towards a bold vision: to be the best airport in the world.

Prior to COVID-19, it was the sixth most connected airport in the world, facilitating 50.5 million passengers and over 450,000 aircraft movements in 2019, directly employing 49,000 people and enabling \$42 billion of Ontario's GDP.

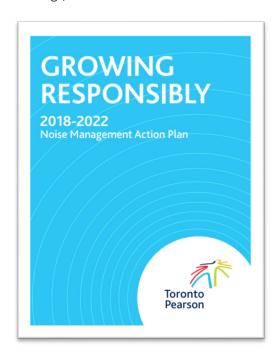
Toronto Pearson's Noise Management Program works to strike a balance in operating a growing airport and regional economic engine with the impact on surrounding communities.

The Program is based on the International Civil Aviation Organization's (ICAO) Balanced Approach to Aircraft Noise Management, which includes four principles:

- 1. Reduction of noise at source
- 2. Land use planning and management
- 3. Noise abatement procedures
- 4. Operating restrictions

In 2018, Toronto Pearson released an ambitious five-year plan, titled, **Growing Responsibly: 2018-2022 Noise Management Action Plan**, which includes a series of programs and policies designed to enhance the airport's existing Noise Management Program.

This Noise Management Action Plan Update shares the progress on the initiatives that are currently underway.



Learn more about how the plan was created, and read the Growing Responsibly: 2018-2022 Noise Management Action Plan on our website at torontopearson.com/NMAP

#### Questions?

To learn more about the Noise Management Program or the Noise Management Action Plan, contact the Noise Management Office at 416-247-7682 or visit torontopearson.com/noisemanagement

Monthly noise statistics are available on our website at torontopearson.com/noise-publications

To stay up to date on upcoming meetings, events and noise initiatives, sign up for the Checking In Newsletter at torontopearson.com/checkingin

# Communications, Outreach and Noise Committees Noise Management Forums

#### The Commitment

A strong relationship with our surrounding community is vital to ensure that our Noise Management Program is adapting as the airport evolves. We will provide residents with new avenues to share feedback so that we can have more meaningful dialogues and resolve future challenges together.

Launched in 2019, the Noise Management Forums offer a more inclusive approach to discussions with our neighbours, stakeholders and partners. Learn more about the Noise Management Forums on our website at torontopearson.com/en/community/noise-management/noise-forums.

### Update

- Held Noise Accountability Board meetings in March and June
- Ad-hoc meetings with the Neighbourhood Table in March and April to share updates on the Noise Management Action Plan and the 2020 Capital Construction
- Information sessions for the Neighbourhood Table in May and June on Airport Operations 101 and Healthy Airport Campaign/Airport Cargo
- Upcoming meetings are listed in the Community Engagement section of this update.
- Meeting materials or summaries are available on our website at <u>torontopearson.com/en/community/noise-management/noise-forums/meeting-materials</u>

### **Next Steps**

- Launch the new Community Proposal Review Process (CPRP)
  - o The process is a formalized way to have community-submitted noise management proposals reviewed by an independent panel of internationally recognized aviation experts

## Communications, Outreach and Noise Committees InsightFull

#### The Commitment

We will launch a new noise management website so residents can better understand our operations.

In May 2019, we held a workshop with the Neighbourhood Table to gather their input on the content and structure for the InsightFull web-portal. This new interactive noise information site provides residents with localized and personalized information and statistics about airport operations and impacts.

#### Update

- Toronto Pearson launched InsightFull in March 2020, becoming the first airport in North America to launch this self-serve web portal
- Residents can access InsightFull from our website at <u>torontopearson.com/en/community/noise-management</u>

## **Next Steps**

• This initiative is now complete. We will continue to gather feedback on improving the site and update the web portal on an ongoing basis to ensure the information continues to be meaningful for the community.

# Noise Reporting and Metrics Noise Reports

### The Commitment

The GTAA committed to developing noise reports from our 25 Noise Monitoring Terminals that will be valuable for the community.

## Update

- Worked with the Neighbourhood Table throughout 2019 to develop the reports, including a demonstration of prototypes and a workshop to gain input from the members
- Added an interactive dashboard of reports on <u>InsightFull</u> with aircraft, community, and ambient noise levels for community members to perform their own analysis on noise information for their neighbourhood

#### **Next Steps**

• This initiative is now complete. We will continue to update the noise reports on a quarterly basis.

## Quieter Fleet Incentive Program A320 Family Retrofit Compliance Program

## The Commitment

Many airports incentivize airlines to use the quietest aircraft in their fleets or expedite purchase of quieter aircraft. The GTAA will implement a new Quieter Fleet Incentive Program, starting with the A320 family retrofit program.

## What is the A320 retrofit program?

The Airbus A320 family aircraft produce a high-pitch whining sound on approach caused by small vents on the aircraft's wings designed to help equalize and mitigate over-pressurization (Fuel tank Over Pressure equalization Ports – FOPP). The A320 family includes the A318, A319, A320 and A321 aircraft. Retrofit kits can be installed to eliminate the high-pitch sound and reduce noise by up to 9dB, resulting in a significant noise reduction for communities.

## Update

• We are monitoring usage of the A320 family operations at Toronto Pearson against the audit conducted in 2019

#### A320 Family Aircraft at Toronto Pearson – Usage Report

The following tables shows the A320 family movements at Toronto Pearson for January-June 2020 against the 2019 audit by total movements and by aircraft.

The tables highlight the number of operations that used retrofitted/modified aircraft, the number of operations that used aircraft that are scheduled to be retrofitted, and the number of operations conducted by non-retrofitted aircraft.

Based on the report, more than 90% of A320 movements will be performed by retrofitted aircraft by the end of 2021.

## By Total Movements

January - June 2020								
Airline		Retrofitted	% Retrofitted	Scheduled for Retrofit*	% Scheduled for Retrofit	Not Scheduled for Retrofit	% Not Scheduled for Retrofit	Total A320 Movements
Air Transat	Air transat	479	68%	0	0%	228	32%	707
Air Canada	😩 AIR CANADA	9,584	56%	7,391	44%	0	0%	16,975
American Airlines	American Airlines 🔪	231	36%	414	64%	0	0%	645
United Airlines	UNITED	60	21%	0	0%	228	79%	288
Interjet	* Interset	23	7%	0	0%	303	93%	326
Avianca	Avianca	0	0%	0	0%	149	100%	149
Delta Airlines	<b>▲</b> DELTA	0	0%	0	0%	184	100%	184
Azores Airlines	azores >	0	0%	0	0%	116	100%	116
Sunwing	sunwing	0	0%	0	0%	64	100%	64
TOTAL		10,377	53%	7,805	40%	1,272	7%	19,454

<sup>\*</sup>Although not currently retrofitted, the airline has indicated these aircraft will be retrofitted in the near future.

## By Aircraft

January - June 2020								
Airline		Retrofitted	% Retrofitted	Scheduled for Retrofit*	% Scheduled for Retrofit	Not Scheduled for Retrofit	% Not Scheduled for Retrofit	Total A320 Movements
Air Transat	Air transat	7	54%	0	0%	6	46%	13
Air Canada	🛞 AIR CANADA	56	52%	51	48%	0	0%	107
American Airlin	es American Airlines	35	34%	67	66%	0	0%	102
United Airlines	UNITED	24	26%	0	0%	70	74%	94
Interjet	* Interset	8	22%	0	0%	28	78%	36
Avianca	Avianca	0	0%	0	0%	14	100%	14
Delta Airlines	<u></u> DELTA	0	0%	0	0%	39	100%	39
Azores Airlines	azores >	0	0%	0	0%	3	100%	3
Sunwing	sunwing	0	0%	0	0%	2	100%	2
TOTAL		130	32%	118	29%	162	40%	410

<sup>\*</sup>Although not currently retrofitted, the airline has indicated these aircraft will be retrofitted in the near future.

## **Next Steps**

- Continue to provide usage reports of retrofitted A320 family aircraft against the 2019 audit
- Determine timing for the next A320 family audit
- Explore options for Phase 2 of the Quieter Fleet Incentive Program

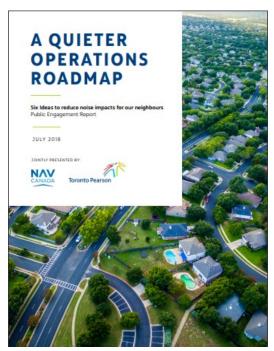
## Runway Usage

## The Six Ideas – A Quieter Operations Roadmap

## Background

The Six Ideas: A Quieter Operations Roadmap is a joint initiative between the GTAA and NAV CANADA to explore noise mitigation ideas that would reduce noise impacts for the surrounding communities. Ideas 1 to 4 focused on how aircraft approach and depart Toronto Pearson and were led by NAV CANADA. Idea 5 and 6, which are being led by the GTAA, explore the way the runways are used by aircraft arriving to and departing from Toronto Pearson.

Idea	Status			
Idea 1: New Nighttime	Implemented			
Approaches (12:30 – 6:30 am)	November 8, 2018			
Idea 2: New Nighttime	Implemented			
Departures (12:30 – 6:30 am)	November 8, 2018			
Idea 3: Increase Downwind	Implemented			
Speed	April 27, 2017			
Idea 4: Increased use of	Implemented			
Continuous Descent	February 28, 2019			
Idea 5: Summer Weekend Runway Alternation Program	Tested Summer 2018   Trialed Summer 2019 Will not be pursued based on trial results and community feedback			
Idea 6: Review of the	Trial Underway			
Preferential Runway System	February 27, 2020 to February 26, 2021			



### Idea 6 – Nighttime Preferential Runway System Review

Toronto Pearson operates 24 hours a day, seven days a week. We know that nighttime noise can be particularly bothersome for some. Between midnight and 6:30 a.m. each night, the airport prioritizes the use of runways so that planes fly over the fewest people. This is called the Nighttime Preferential Runway System.

Following technical analysis, the GTAA consulted on an updated Preferential Runway System in Spring 2018.

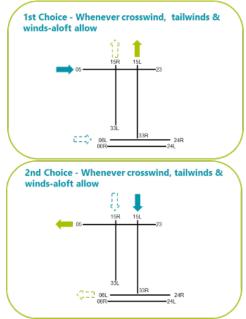
## What's changed from the Spring 2018 consultation?

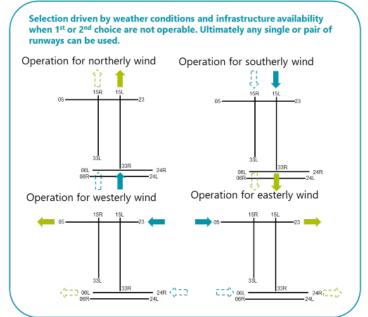
More of the regular runway maintenance is now being conducted in the overnight period when traffic levels are lowest. This allows the work to be completed with less disruption to the operation and increased ability to maintain capacity.

Because the increased nighttime maintenance work was not factored into the technical analysis of Idea 6, the GTAA conducted additional analysis and added new maintenance contingency runways to the system.

The anticipated impacts and benefits are still in line with what was communicated during the Spring 2018 consultation with communities under these runways.

## Updated Nighttime Preferential Runway System





## Update

- The GTAA began a trial of the updated Preferential Runway System on February 27, 2020
- Trial will last for one-year to test usage of the updated system across multiple weather conditions, during runway construction season, and winter operations
- The first <u>quarterly report</u> was published on the usage of the updated Nighttime Preferential Runway System and shows that adherence thus far has been very high
- Feedback survey will be open during trial for residents to provide their input
- For information on impacts and benefits, visit <u>torontopearson.com/en/community/get-involved/community-</u>conversations/quieter-operations-roadmap

#### **Next Steps**

- Gathering feedback through our survey
- Continue reporting on trial usage on a quarterly basis

Key:
Primary departures
Primary arrivals
Maintenance

adjusted

departures

Maintenance adjusted arrivals

## 2020 NMAP Workplan at a Glance

- Trial continues for Idea 6: Review of the Preferential Runway System with quarterly reports
- Update on the School Air Conditioning Pilot Program
- Launch Community-Proposal Review Process
- External Process Audit Terms of Reference and RFP
- Develop metrics and engage with industry and community stakeholders for the Fly Quieter and Greener Reporting Program
- Continue review of the Night Flight Restriction Program
- Continue to publish noise data and enhance content on InsightFull

## NMAP Accomplishments to Date

- ✓ Launched Noise Management Forums
- ✓ Published updated Complaint Process
- ✓ Completed A320 Family Audit and began tracking usage at Toronto Pearson against 2019 audit
- ✓ Six Ideas:
  - ✓ Ideas 1-4 implemented
  - Idea 5 tested summer 2018, trialed summer 2019 (will not be pursued based on trial results and community feedback)
  - ✓ Idea 6 trial began February 2020
- ✓ Launched InsightFull, a new noise management website
- ✓ Began publishing standard noise reports
- ▼ Began working with selected school on the Pilot School Air Conditioning Program

## Community Engagement

## Community Open Houses

Given the rapid pace of change in relation to COVID-19 and Public Health recommendations on social distancing, please note that upcoming Pearson Open Houses will postponed to a later date. For updates, please check <a href="torontopearson.com/en/community/get-involved/open-houses">torontopearson.com/en/community/get-involved/open-houses</a>

## Noise Management Forums – Upcoming Virtual Meetings

- Political Briefing: September 22
- Neighbourhood Table: September 23
- Pubic Meeting: September 24

For more information, visit TorontoPearson.com/NMF

While not every forum is open to the public, presentations and other relevant information from all meetings can be accessed by anyone at torontopearson.com/en/community/noise-management/noise-forums/meeting-materials