

# Noise Management Action Plan

2022 Mid-Year Update

## Communications, Outreach and Noise Committees

### Noise Management Forums



Toronto Pearson

#### 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](https://torontopearson.com/en/community/noise-management/noise-forums).

#### Recent

- Held 2022 Runway 06L/24R Rehabilitation briefings in April and July to provide residents and elected officials with details about the project and related community impacts

#### Next Steps

- We will continue to hold Noise Management Forum meetings. These will be virtual meetings until further notice.
- Meeting materials or summaries are available on our website at [torontopearson.com/nmf](https://torontopearson.com/nmf)

## 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 continue to monitor the usage of the A320 family operations at Toronto Pearson based on updated retrofit status provided by airlines
- Latest reports with updated database demonstrate the following:
  - A320 operations have continued to increase with the rise in traffic, going from 10,850 operations in Q1 to 14,767 operations in Q2 (+36%)
  - Overall % of operations performed by retrofitted aircraft remains below what was seen in 2021. The second half of 2021 saw 90-95% of A320 movements performed by retrofitted aircraft, compared to <80% so far in 2022
  - Reasons for the decrease include:
    - increasing operations and return to services of some un-retrofitted aircraft
    - Returning airlines that operate un-retrofitted aircraft
    - Non-updated data on retrofit status of returning operations may

## A320 Family Aircraft at Toronto Pearson – Usage Report











The following tables show the A320 family movements at Toronto Pearson for April-June (Quarter 2) and are based on updated details provided by airlines operating these aircraft. We are encouraged by the progress we are seeing with the A320 Family Retrofit program.

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.

### By Total Movements

The total movement by retrofitted aircraft is the most meaningful of the two reports as it is the proportion of *operations* by retrofitted versus non-retrofitted aircraft that has noise implications, not the proportion of retrofitted versus non-retrofitted *aircraft in the fleet*.











## By Aircraft

Q2 2022							
Airline	Retrofitted	% Retrofitted	Scheduled for Retrofit/Retirement*	% Scheduled for Retrofit/Retirement	Not Scheduled for Retrofit/Retirement	% Not Scheduled for Retrofit/Retirement	Total A320 Aircraft
Air Portugal 	10	100%	0	0%	0	0%	10
Azores Airlines 	5	100%	0	0%	0	0%	5
Aer Lingus 	7	100%	0	0%	0	0%	7
Scandinavian 	3	100%	0	0%	0	0%	3
Air Canada Family 	56	85%	10	15%	0	0%	66
Air Transat 	12	71%	0	0%	5	29%	17
American Airlines 	50	37%	86	63%	0	0%	136
United Airlines 	16	25%	0	0%	48	75%	64
Delta Airlines 	4	3%	0	0%	122	97%	126
Avianca 	0	0%	0	0%	28	100%	28
<b>TOTAL</b>	<b>163</b>	<b>35%</b>	<b>96</b>	<b>21%</b>	<b>203</b>	<b>44%</b>	<b>462</b>

\*Although not currently retrofitted, the airline has indicated these aircraft will be either retrofitted or retired in the near future.

- 35% of A320 family aircraft that operated at CYYZ in Q2 were retrofitted, compared to 40% in Q1
- 462 unique A320 family aircraft operated in Q2 vs. 339 in Q1
- 10 airlines operated A320 family aircraft in Q2

## By Movements

Q2 2022							
Airline	Retrofitted	% Retrofitted	Scheduled for Retrofit/Retirement*	% Scheduled for Retrofit/Retirement	Not Scheduled for Retrofit/Retirement	% Not Scheduled for Retrofit/Retirement	Total A320 Movements
Air Portugal 	145	100%	0	0%	0	0%	145
Azores Airlines 	134	100%	0	0%	0	0%	134
Aer Lingus 	182	100%	0	0%	0	0%	182
Scandinavian 	55	100%	0	0%	0	0%	55
Air Canada Family 	9,348	88%	1,223	12%	0	0%	10,571
Air Transat 	1,063	72%	0	0%	416	28%	1,479
American Airlines 	369	32%	789	68%	0	0%	1,158
United Airlines 	41	26%	0	0%	117	74%	158
Delta Airlines 	8	1%	0	0%	548	99%	556
Avianca 	0	0%	0	0%	329	100%	329
<b>TOTAL</b>	<b>11,345</b>	<b>77%</b>	<b>2,012</b>	<b>14%</b>	<b>1,410</b>	<b>10%</b>	<b>14,767</b>

\*Although not currently retrofitted, the airline has indicated these aircraft will be either retrofitted or retired in the near future.

- 77% of A320 family movements in Q2 were performed by retrofitted aircraft compared to 80% in Q1 (-3%)
- 3.5% of A320s operated during the restricted hours in Q2 compared to 3.3% in Q1

### Next Steps

- Continue to provide [usage reports](#) of retrofitted A320 family aircraft operations
- Continue to update records for retrofit status of aircraft based on details provided by airlines
- Outreach to returning airlines with low retrofit status
- Explore options for Phase 2 of the Quieter Fleet Incentive Program
- Working to understand recent and upcoming fleet changes and associated noise implications

## Quieter Fleet Incentive Program Phase 2

### The Commitment

The intent of a Quieter Fleet Incentive program is to encourage operators to use quieter aircraft. The first phase of this program was to introduce the A320 Family Retrofit Program. The GTAA is now exploring options for Phase 2 of the Quieter Fleet Incentive Program looking at a potential phase out of noisier aircraft

The GTAA committed to the implementation of a new Quieter Fleet Incentive Program

Many airports incentivize airlines to use quieted aircraft in their fleet or expedite purchase of quieter aircraft.

### Underway

- The [International Civil Aviation Organization \(ICAO\) define noise standards known as Chapters](#), for aircraft manufacturers. Over the years, the standards have become increasingly more stringent
- Developed a database of aircraft operating at Toronto Pearson by Noise certification 'chapter' to have an up-to-date inventory of what is currently, operating at Toronto Pearson to identify potential opportunities for phase 2 of this program
  - Findings showed a significant percentual decrease in overall use of Chapter 3 aircraft in favour of the quieter Chapter 4 or higher (Chapter 3: 32% of operations in 2019, 29% in 2020 and 19% in 2021)
- Prepare proposals for Phase 2 of the Quieter Fleet Incentive Program

## Fly Quieter & Greener Program

### The Commitment

The GTAA committed to developing a Fly Quieter and Greener Program that compares the performance of airlines operating at Toronto Pearson using a variety of noise and environmental related metrics.

### Update

- Airline Consultation continues in 2022 to determine first phase metrics and development of reporting.

### Next Steps

- Continue consultation with industry and community stakeholders around this program
- Prepare draft Fly Quieter and Greener report in 2022

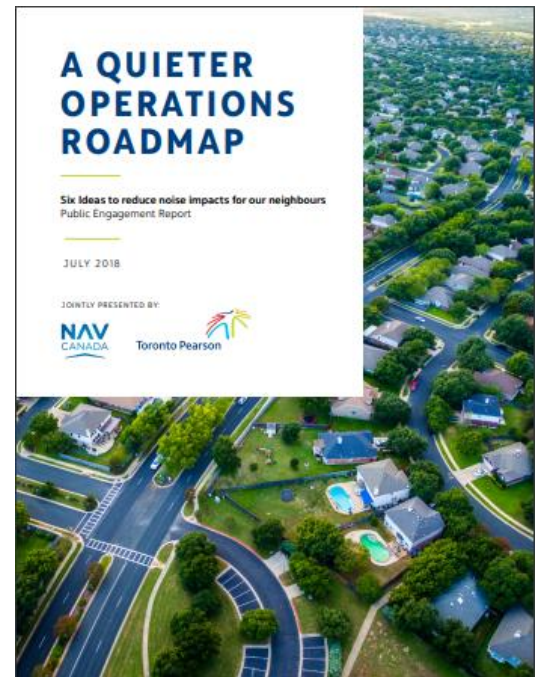
# Runway Usage`

## 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 Approaches (12:30 – 6:30 am)	Implemented November 8, 2018
Idea 2: New Nighttime Departures (12:30 – 6:30 am)	Implemented November 8, 2018
Idea 3: Increase Downwind Speed	Implemented April 27, 2017
Idea 4: Increased use of Continuous Descent	Implemented February 28, 2019
Idea 5: Summer Weekend Runway Alternation Program	Tested Summer 2018   Trialed Summer 2019 <i>Will not be pursued based on trial results and community feedback</i>
Idea 6: Review of the Preferential Runway System	Trial Underway Commenced February 27, 2020 – ongoing Application submitted to Transport Canada for formalization of Trial as new Nighttime Preferential Runway System

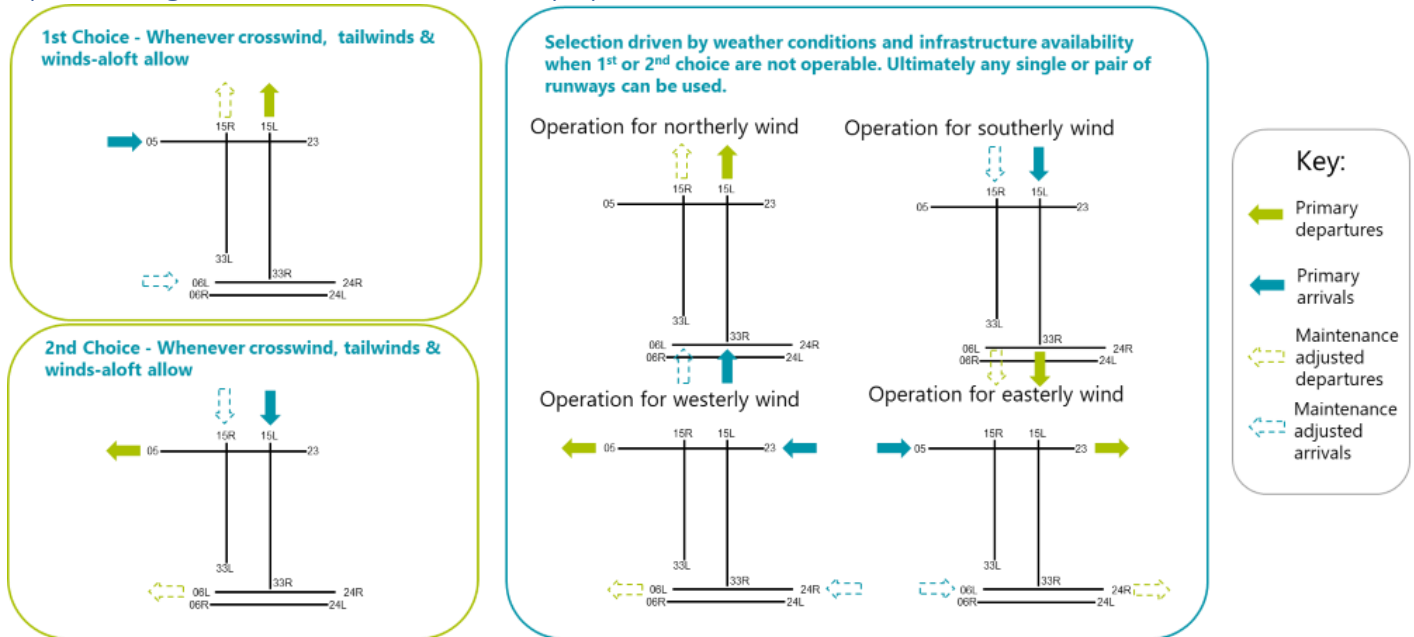


### Idea 6 – Nighttime Preferential Runway System Review

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.

## Updated Nighttime Preferential Runway System



### Update

- The GTAA began the trial of the updated Preferential Runway System on February 27, 2020
- The Trial was intended to last for one-year to test usage of the updated system across multiple weather conditions, during runway maintenance season, and winter operations
- Regular [quarterly reports](#) produced on the usage of the updated Nighttime Preferential Runway System indicate high adherence to the system
- A survey was open during the one-year period to gather feedback from residents
- At the end of the one year, the Trial was found to have met its objectives of providing clear guidelines for runway assignment under various circumstances (e.g., weather, maintenance) and enabled clear reporting for residents
- The system was designed to be effective under much higher traffic levels than in recent months, however based on community feedback the Trial has been extended to allow for further testing of the system under higher traffic levels
- Application submitted to Transport Canada for formalization of Trial as new Nighttime Preferential Runway System
- For information on impacts and benefits, visit [torontopearson.com/en/community/get-involved/community-conversations/quieter-operations-roadmap](https://torontopearson.com/en/community/get-involved/community-conversations/quieter-operations-roadmap)

### Next Steps

- Continued reporting on trial usage on a quarterly basis
- Provide Transport Canada with any additional requested information
- Once approved, publication of new Nighttime Preferential Runway System

## NMAP Workplan & Accomplishments

### NMAP Accomplishments to Date

- ✓ Launched Noise Management Forums
  - ✓ Community Proposal Review Process launched in June 2021
- ✓ Published updated Complaint Process
- ✓ Completed A320 Family review and began tracking usage at Toronto Pearson against 2019 and 2021 database
- ✓ 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 one-year trial began February 2020, (extended, application submitted to Transport Canada)
- ✓ Launched InsightFull, a new noise management website
- ✓ Began publishing standard noise reports
- ✓ Working with selected school on the Pilot School Air Conditioning Program

### Community Engagement

#### Pearson Airport Explorers Club Continues

Launched in April 2020, our Explorers Club was created to teach children in grades 3 through 8 about all things aviation and give them a behind-the-scenes look at Toronto Pearson through fun activities and virtual camps. We continue to engage our young aviation enthusiasts both virtually with on-line visits to elementary students in Dufferin-Peel Catholic School board and our virtual Pearson Airport Explorers Camps, and now that social distancing restrictions have lifted, at various March Break Activities and STEM camps with local youth organizations. To date, we have engaged with over 175 very keen airport explorers. See all our presentations, activities, camp recordings and more at [airportexplorers.club](https://airportexplorers.club).

#### Pearson Connects Virtual Coffee Chats

Pearson Connects Virtual Coffee Chats were created to provide a unique look at what it takes to keep the airport operating safely every day, and these continue to be a successful means to connect with our neighbours. Communities virtually meet with the Toronto Pearson subject matter experts to learn about the history of the airport and its economic impact, the operations, and how Pearson is giving back to local communities. These coffee chats provide the opportunity for an open dialogue with the community and helps build trust with our neighbors. In the first half of this year, we've met with over 50 community members at five coffee chats across the region. Keep us in mind for your next community event! We'd love to join the conversation! [Pearson Connects Virtual Coffee Chat - Topics](#)

## Back in the Community

Now that social restrictions have been lifted, we've been re-activating our partnerships with the City of Brampton at a number of its events such as the Brampton Farmers' Markets. We've sponsored the Canada Day Celebrations in Brampton and Malton and we've partnered again with City of Mississauga with its Community Rides. We've also sponsored a number of events this year: the Toronto Outdoor Picture Shows in Etobicoke's Bell Manor Park, the Lakeshore village BIA's Grilled Cheese Festival, the Rosethorn Elementary Schools Funfair, Streetsville's Bread and Honey Festival, and the Canadian Indo Caribbean Festival. These events have provided us exposure to over 500,000 people.

## Runway Rehabilitation Community Engagement

Starting in early April 2022, Pearson temporarily closed east/west runway 06L/24R, the airport's second-busiest runway, for a full rehabilitation. To keep our communities well informed about the project, we launched a very robust communications and engagement campaign that included:

- a [dedicated website](#) to keep community members informed about project updates and provided monthly e-newsletters to a distribution list of approximately 12,000 residents
- leveraging our social media accounts to include "gamification" content on Instagram to add an element of fun
- automated phone messages to over 133,000 households around the airport to notify residents of the rehabilitation project and expected impacts
- Canada Post mailers to over 50,000 households
- three runs of full page false front print advertisements in Metroland Papers to keep the over 500k of our neighbours informed

The Toronto Pearson Ice cream truck visits communities and local events handing out free ice cream and novelties to our neighbours for their support as we complete rehabilitation of Runway 06L/24R. To date, we have visited a total of 13 communities and given out over 11,200 ice creams!



## Noise Management Forums –Virtual Meetings

Presentations and other relevant information from all meetings can be accessed under [Meeting Materials](#)

### 2022 Public Meetings held to date:

April 7<sup>th</sup>

June 27 – Runway Rehabilitation Project Update

### Remaining scheduled meetings:

September 28th

December 8th