

# Toronto Pearson Noise Management Forums Political Briefing

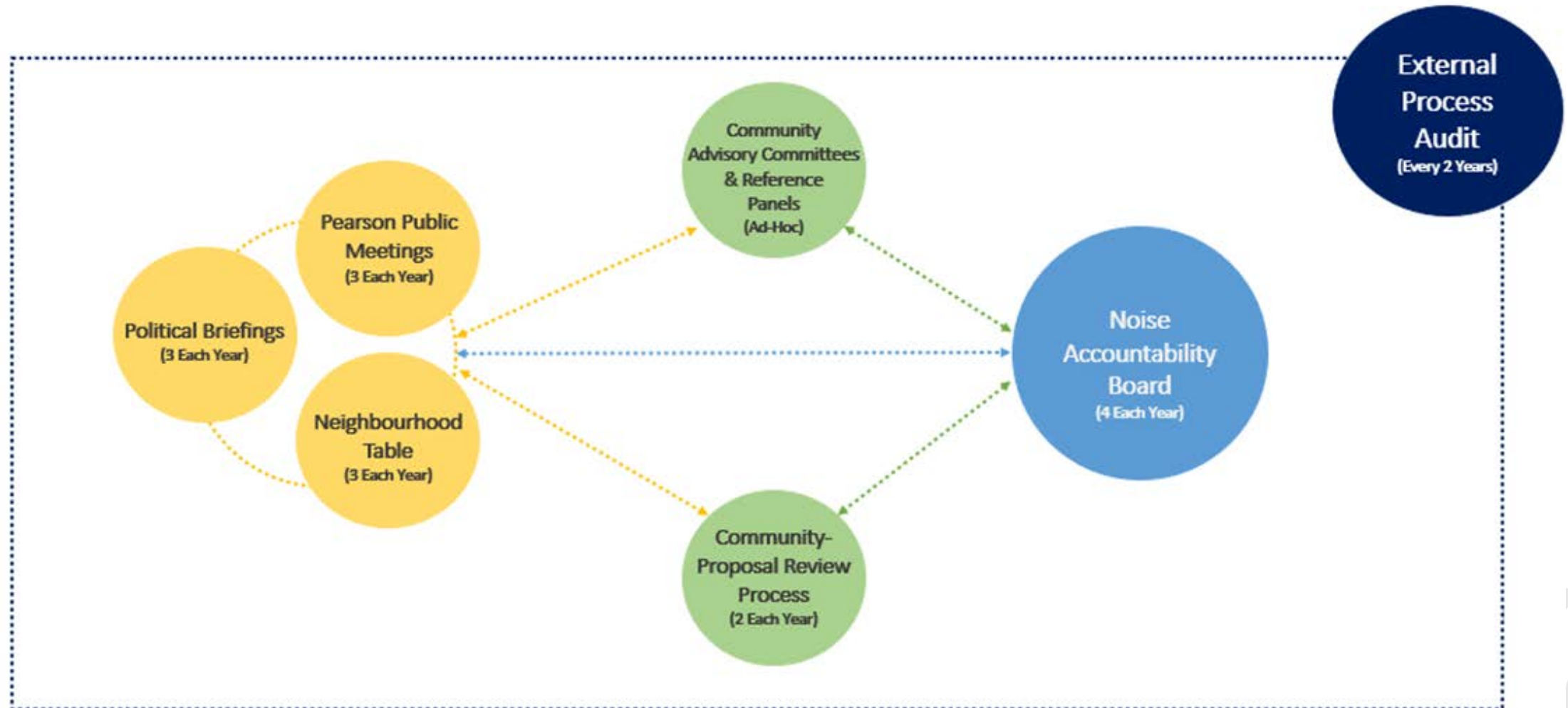
September 21, 2021



# Welcome + Introductions

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# Noise Management Forums



# Agenda

- Airport Updates
  - Healthy Airport Initiatives
  - Travel restrictions
  - Returning Traffic - Operations & Complaints
  - Briefing: 2021 Airside Maintenance
- NAV CANADA Updates
- GTAA Noise Management Program Updates
  - Discussion: Communicating Returning Traffic
  - Update: Noise Management Action Plan
- Discussion and Roundtable

# Airport Updates

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# OPERATING ON **DEBT** FINANCING



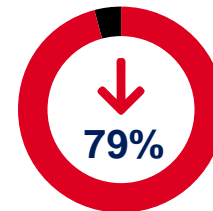
## Corporate Structure

GTAA a private, not-for-profit corporate structure with revenue tied to passenger



## \$746M Net Income Loss

In the last six quarters, the airport is operating almost exclusively on debt financing; it will take at least 5 years to recover this net loss

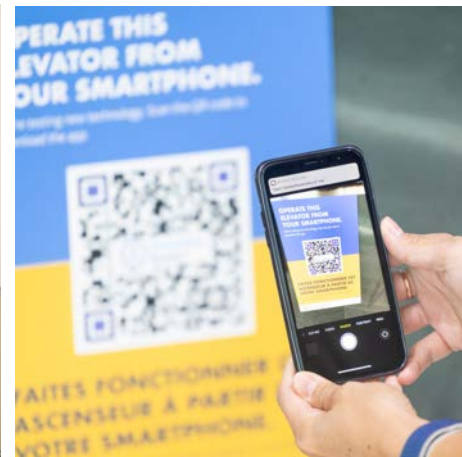
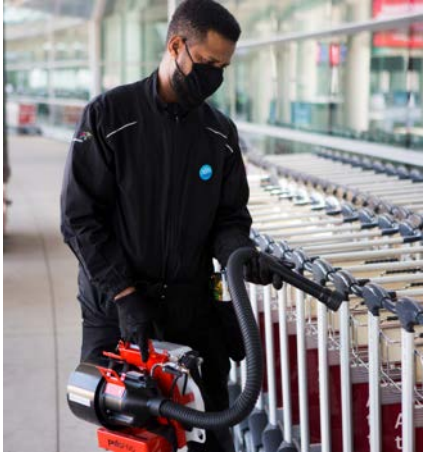


## Passenger Traffic Trends

A reduction of 79% in passenger traffic year-over-year through Q2 2021

# THE HEALTHY AIRPORT EXPERIENCE

Keeping passengers and employees safe:  
Enhanced cleaning, mask-wearing, air quality upgrades, UV disinfection and more.



# WHEN YOU'RE READY TO TRAVEL



**WHEN YOU'RE  
READY TO TRAVEL...**

WE'LL HELP YOU DO IT SAFELY.



The Government of Canada has slowly begun to lift travel restrictions, including allowing fully vaccinated travellers to enter by air without mandatory quarantine.

**Arriving Fully Vaccinated Passengers:** Must test before departure to Canada, submit health declarations through ArriveCAN, and are subject to random testing on arrival.

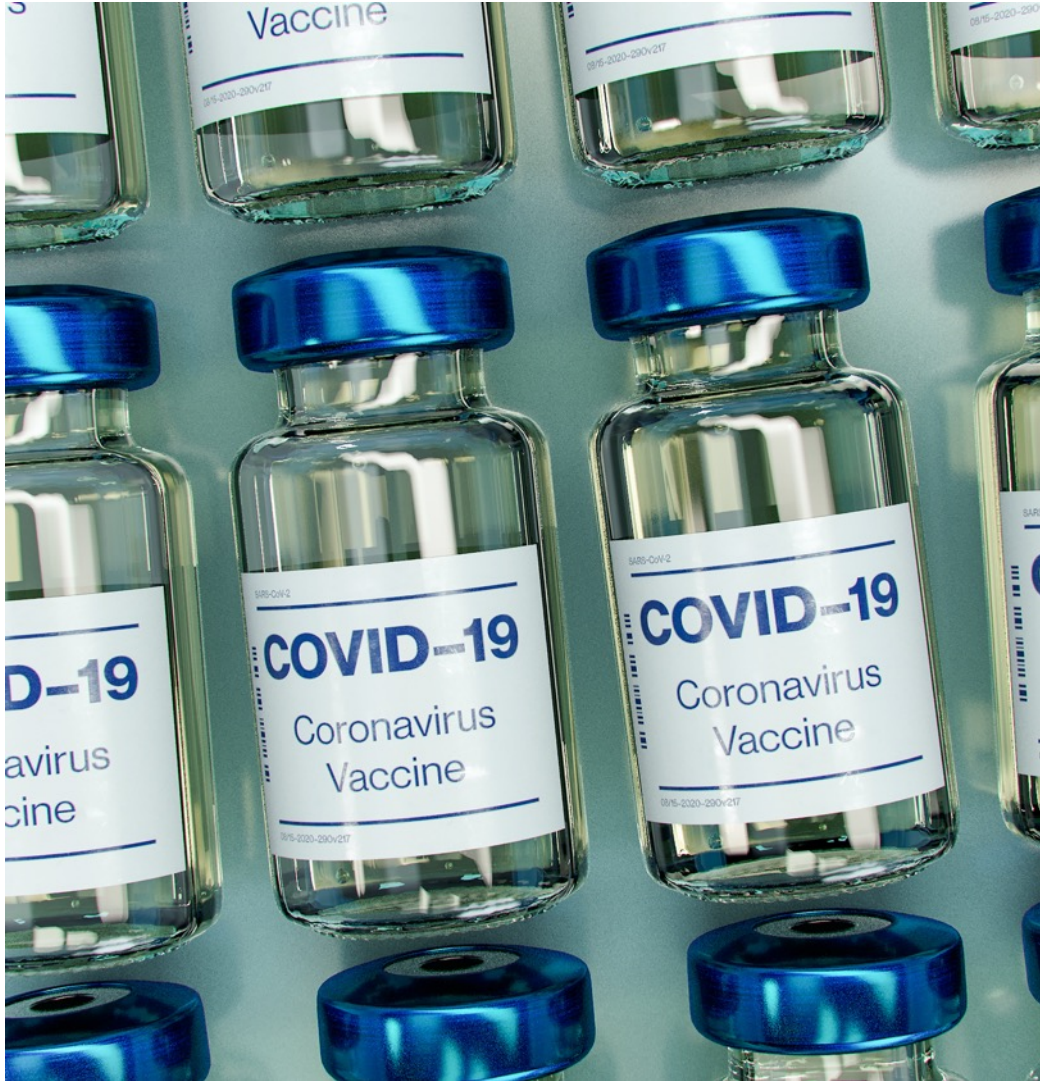
**Arriving Non-Vaccinated Passengers:** Must test before departure to Canada, on arrival and Day 8, submit health declarations through ArriveCAN.

**U.S. to lift travel restrictions for fully vaccinated** foreign nationals in November, allowing these travellers once again to connect over Toronto Pearson.

**Toronto Pearson is working** in collaboration with airlines, CBSA, PHAC, and testing partners to manage number of passengers arriving and being processed throughout the terminal buildings.



# MANDATORY VACCINATIONS



**GTAA supports a requirement for vaccinations** in the workplace and on September 14<sup>th</sup> released a vaccination policy for our employees.

## **Our policy requires:**

- All GTAA employees to be fully vaccinated by October 31, 2021
- Accommodation provided for grounds covered by the Canadian Human Rights Act

We are **encouraging all businesses** operating at Toronto Pearson to do the same, and look to the Government of Canada to support with legislation.

**All travellers** will be required to be fully vaccinated by October 31, 2021.

# WORKING WITH GOVERNMENT



## **Airport Rent Waiver or Reinvestment**

GoC provide a full waiver of airport rent for 2021 and 2022, or allow Toronto Pearson to reinvest airport rent in critical projects.

## **Border Resourcing**

CBSA and US CBP resources to meet demand for travel and keep passenger wait times down as the airport grows

## **Digital Health Credentials**

Universal health verification certificates that can be integrated into existing border and airline processes, and streamlined for our passengers

## **Infrastructure Investment**

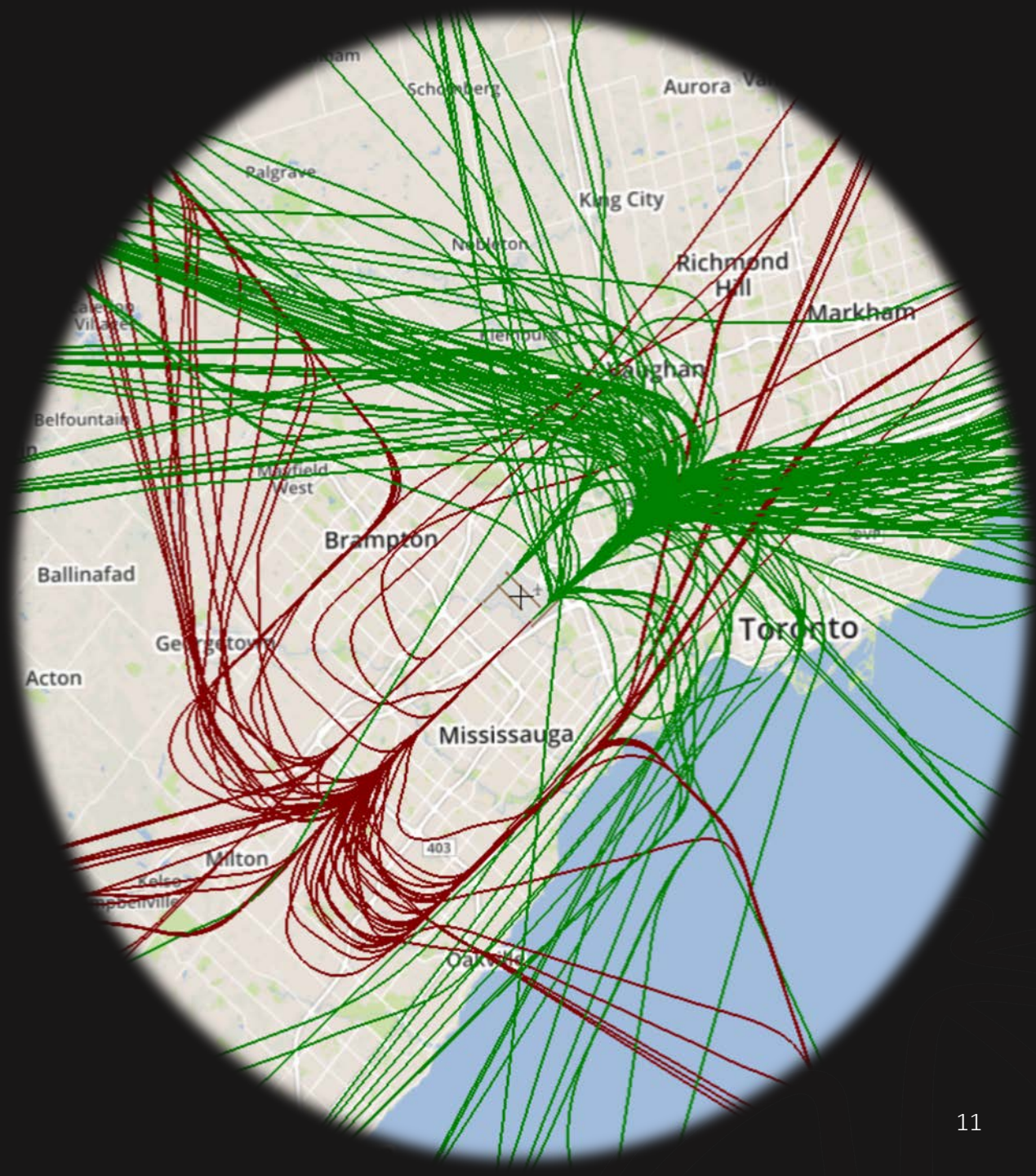
Funding to invest in critical airport infrastructure that supports Canada's competitiveness, including border modernization, runway rehabilitation, transit and COVID-19 testing

## **Revenue Opportunities**

Facilitate non-aeronautical revenue opportunities at the airport: Arrivals Duty Free; Dual Shop Stores; retail cannabis; iGaming

# Trends in Operations & Complaints

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# Returning Traffic – Operations and Complaints

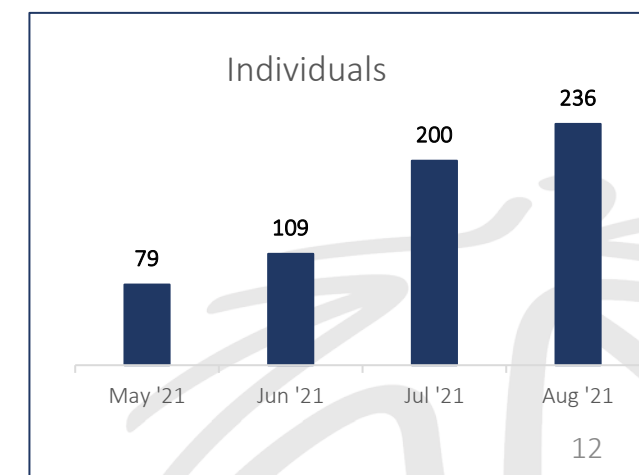
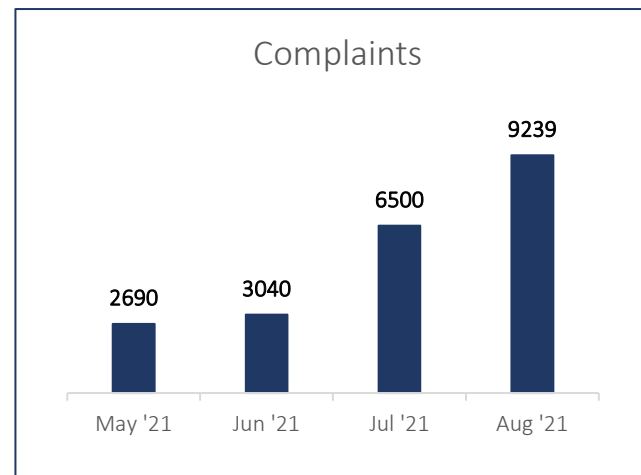
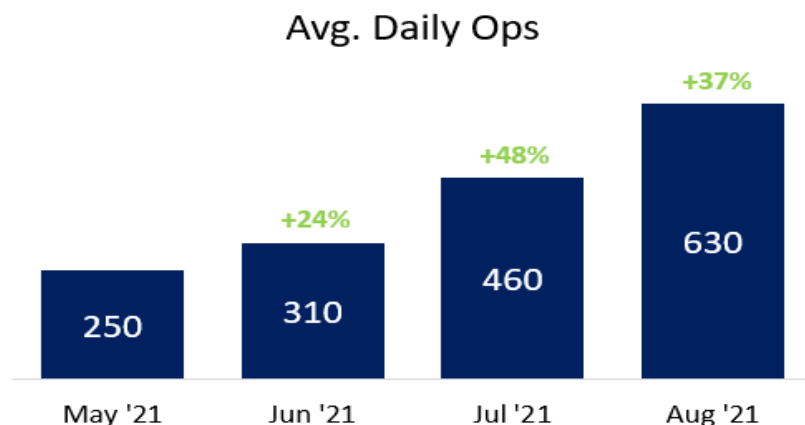
Air traffic in Canada has been at levels not seen since 1970 due to the pandemic. Changes made to government restrictions on air travel in early August resulted in a significant increase in traffic.

## Operations

- **Aug '20:** 10,344 movements (330 per day)
- **Aug '21:** 19,238 movements (620 per day)
  - Movements are **+86%** compared to this time last year
- **However,** traffic levels are still **-54%** compared to Aug '19 and remain years away from full recovery

## Complaints

- **Aug '20:** 1,516 complaints from 88 individuals
- **Aug '21:** 9,239 complaints from 236 individuals



# Operations by Type

**AUG '20**

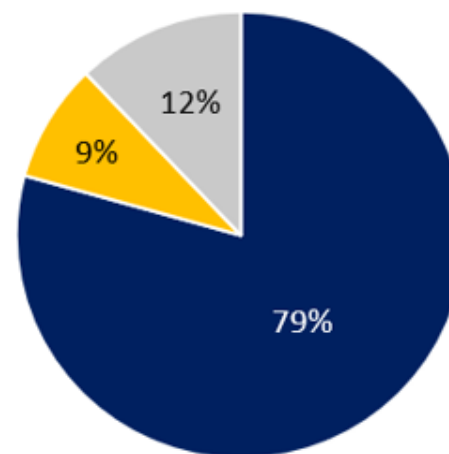
**AUG '21**

PAX: 8,225 → 15,102 +6,877 (+84%)

Business Aviation: 1,257 → 3,131 +1,874 (+149%)

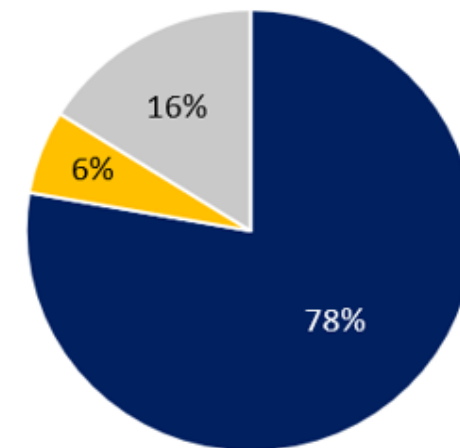
Cargo: 889 → 1,188 +299 (+33%)

AUG '20



■ PAX ■ Cargo ■ BA

AUG '21

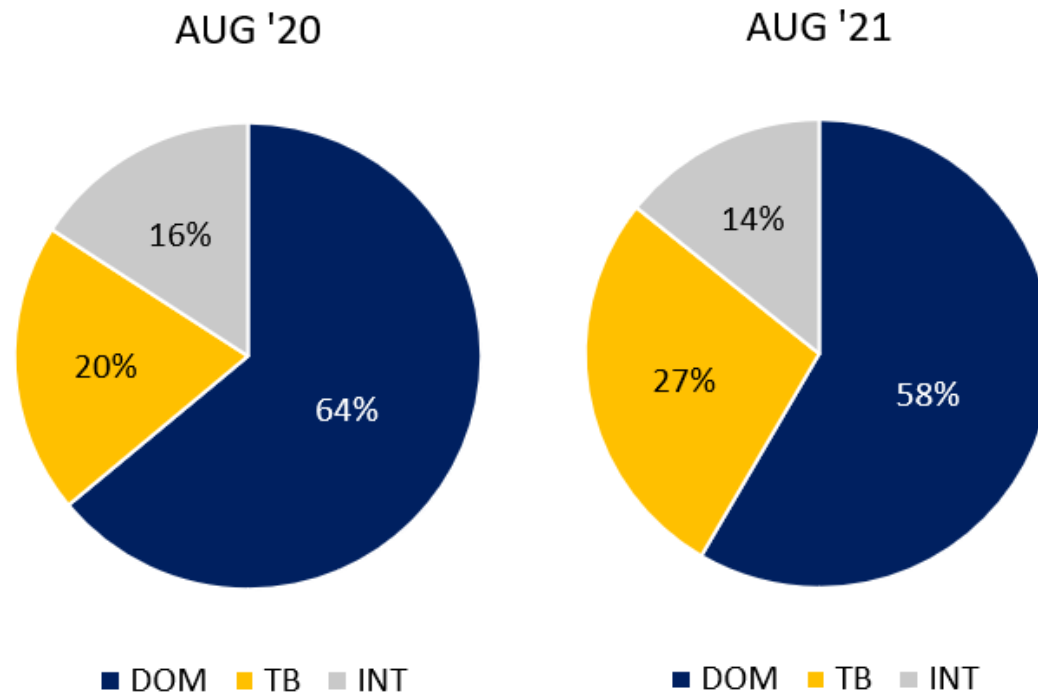


■ PAX ■ Cargo ■ BA

- Total Movements +86% compared to same time last year:
  - PAX traffic has increased substantially, but still represents just under 80% of traffic
  - Business Aviation traffic has outpaced the overall increase in operations and is up 149% vs. August 2020
    - Currently >100 BA flights per day
  - Cargo operations have increased slightly compared to August 2020, but have lagged behind the increases seen in PAX and GA/BA operations

# Operations by Sector

	<u>AUG '20</u>		<u>AUG '21</u>	
DOM:	6,643	→	11,369	+4,726 (+71%)
TB:	2,086	→	5,290	+3,204 (+154%)
INT:	1,642	→	2,762	+1,120 (+68%)

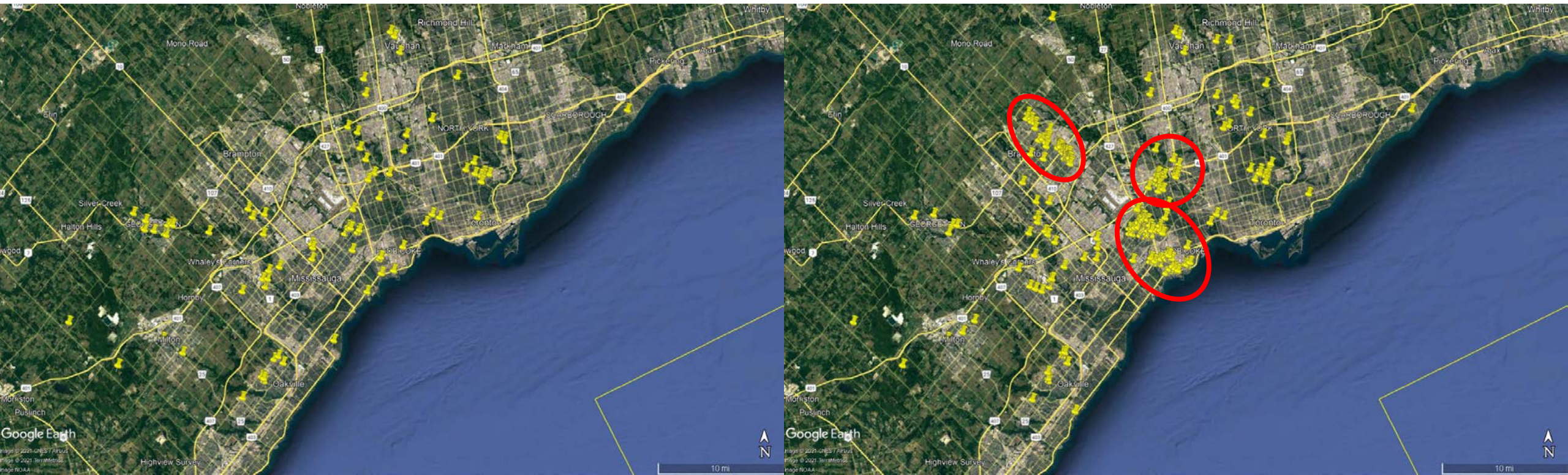


- Domestic and International flights have each increased by about 70% compared to the same time last year
- Transborder flights have surged due to the easing of travel restrictions and are up 154% compared to the same time last year

# Complaint Distribution

August 2020: 1,516 complaints from 88 individuals

August 2021: 9,239 complaints from 236 individuals



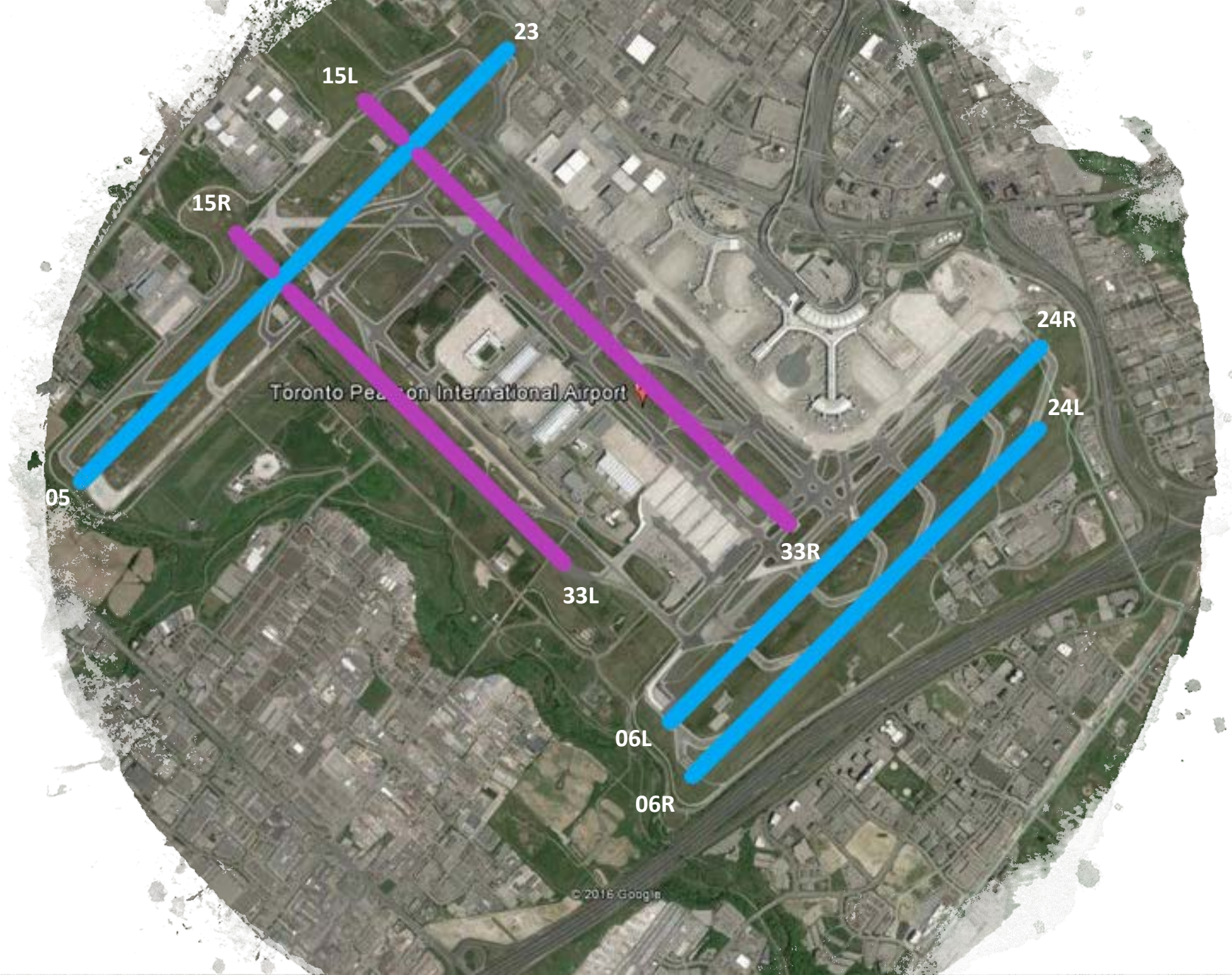
More residents submitting complaints. Most evident in areas to the north and south of the airport and the east. This is likely related to the airfield construction program and the use of the north/south runways and departures off Runway 06R.

# Airside Maintenance Updates

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Toronto Pearson International Airport

23

15L

15R

24R

24L

05

33R

33L

06L

06R

© 2016 Google

East-West  
North-South

# 2021 Ongoing Airside Maintenance Work

## 1. Work on the airfield, restricting usage of some runways:

- Closure of Runway 06L/24R (work on Taxiway C) – 6:30AM to 6PM Mon-Fri
  - Late April to October 15
- Threshold work on Runway 05/23
  - September 7 to 30 (piggybacking on Bombardier nighttime closure)
  - October 3 to 7, full 24hour closure to repaint

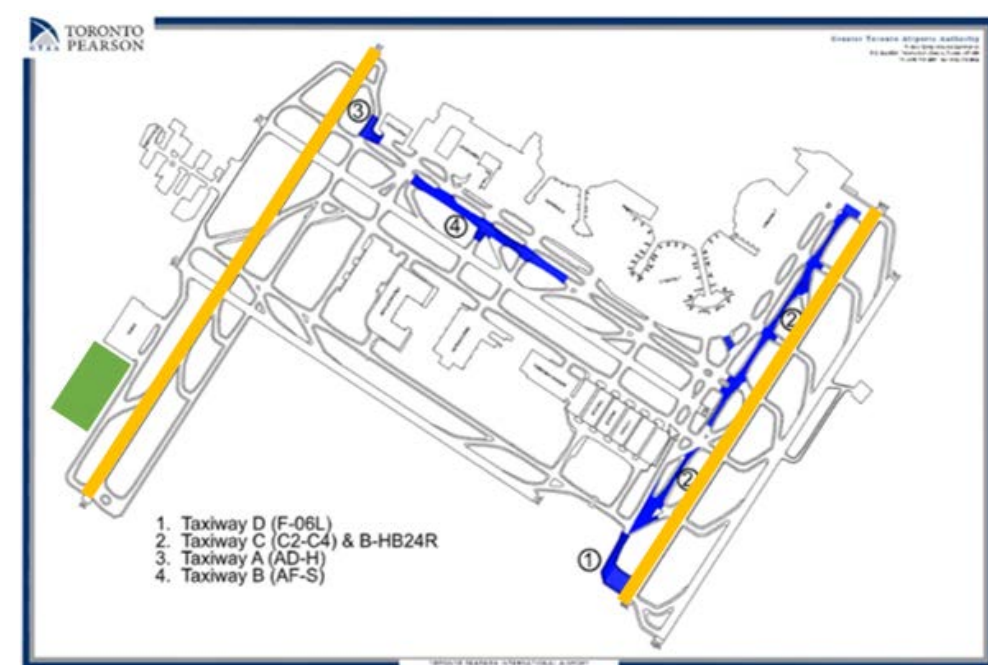
## 2. Bombardier is constructing a new facility (green box on the map)

Nighttime closures of Runway 05/23 – 9PM to 7AM Mon-Fri

- August until December
- Moved to nighttime in August to accommodate traffic demand

## 3. Routine maintenance and offsite crane operations

- Routine maintenance affecting runway availability can lead to configurations using available runways



# Possible Community Impact

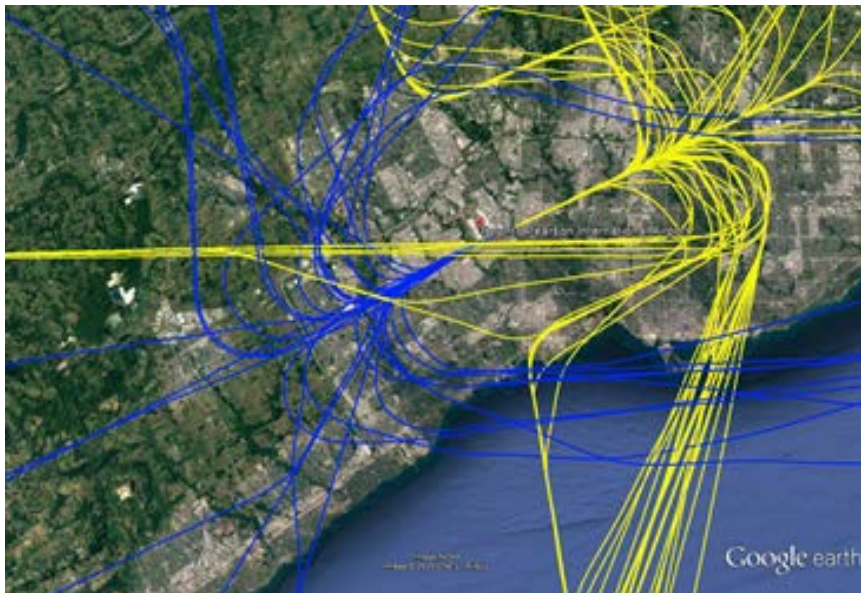


## **Increased use of the parallel east/west Runways 06L/24R and 06R/24L**

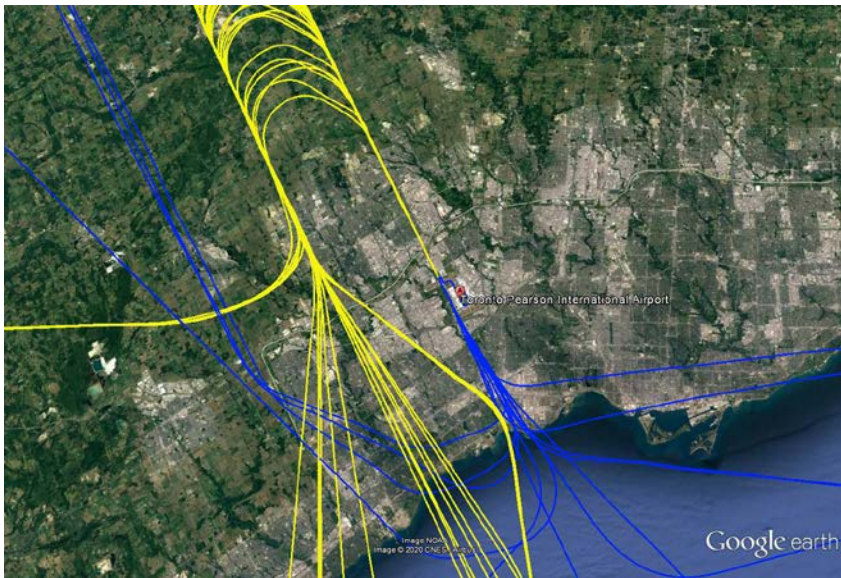
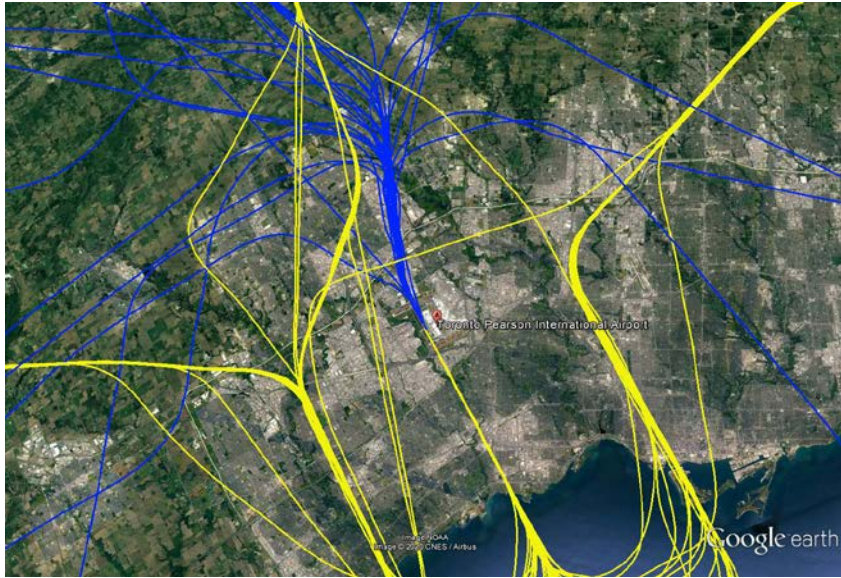
- When Runway 05/23 is closed for Bombardier work 9:00pm – 7:00am through to December (evening and early morning)

## **Increased use of Runway 06R/24L which is slightly further south than 06L/24R and is closer to communities**

- When Runway 06L/24R is closed- through to mid-October (daytime)



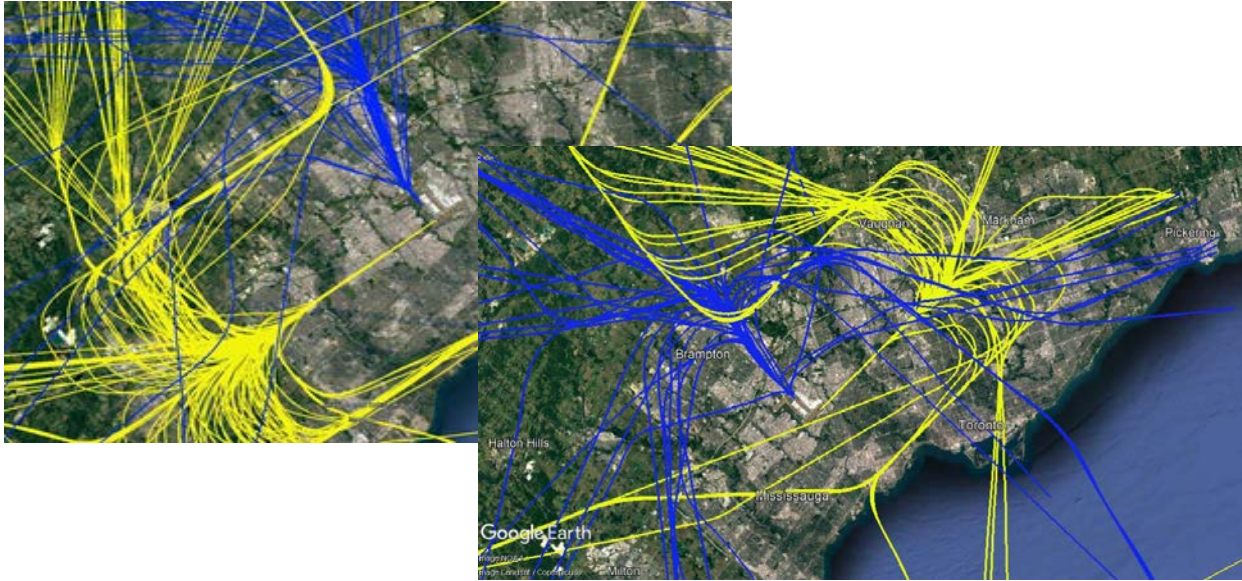
# Possible Community Impact



## **Increased north/south operations - arrive Runway 33L/R and depart Runway 33R or arrive Runways 15L/R and depart Runway 15L/R**

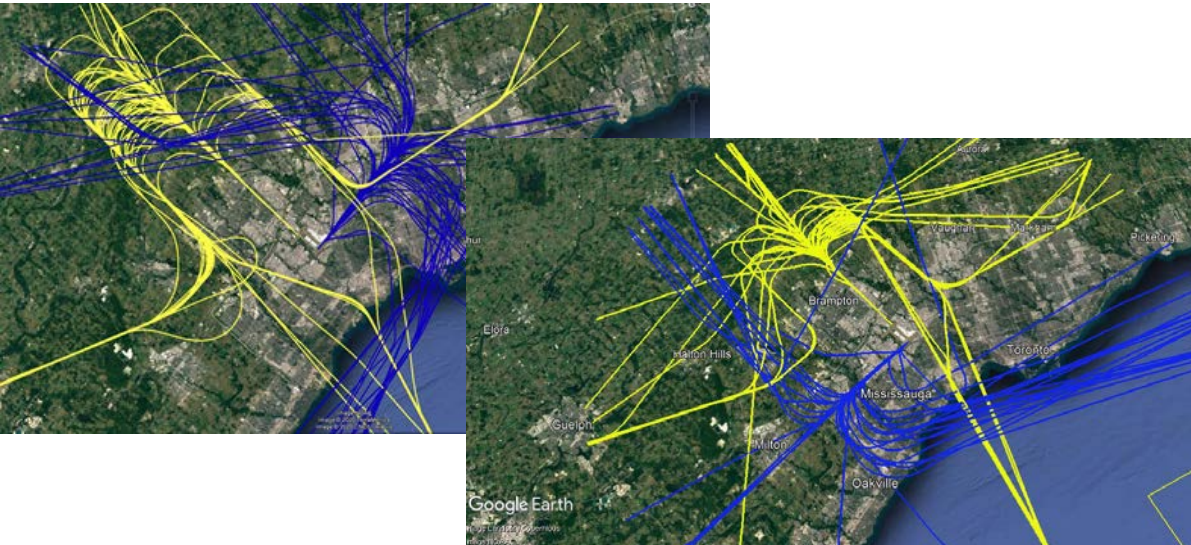
- When Runway 05/23 is closed for Bombardier work 9:00pm – 7:00am through to December and demand cannot be handled on available east/west runway (evening and early morning)
- When Runway 05/23 is closed for 5-days for threshold work October 3-7 (daytime)

# Possible Community Impact



**Two directional configurations - depart Runway 33R/L and arrive Runway 06L/R or 24L/R or arrive Runways 15L/R and depart Runway 24L/R or 06L/R**

- When Runway 05/23 is closed for Bombardier work 9:00pm – 7:00am through to December (evening and early morning)
- When Runway 05/23 is closed for 5-days for threshold work October 3-7 (daytime)

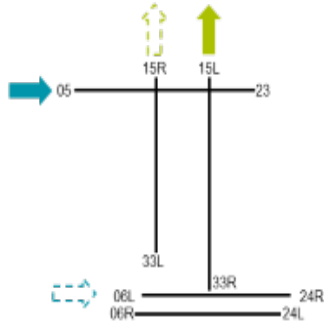


# Possible Nighttime Impact

Maintenance adjusted preferential runways will be used during preferential hours (12:00am – 6:30am) when work is affecting the availability of primary preferential runways.

- When Runway 05/23 is closed for Bombardier work through to December

**1st Choice - Whenever crosswind, tailwinds & winds-aloft allow**

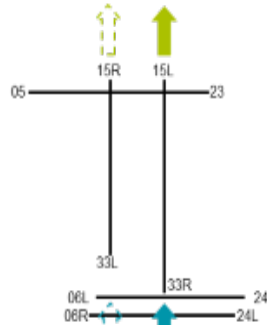


**2nd Choice - Whenever crosswind, tailwinds & winds-aloft allow**

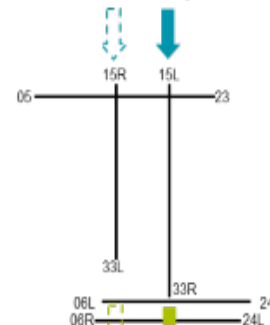


**Selection driven by weather conditions and infrastructure availability when 1st or 2nd choice are not operable. Ultimately any single or pair of runways can be used.**

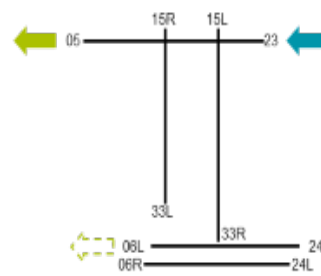
Operation for northerly wind



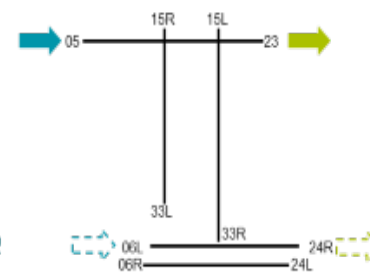
Operation for southerly wind



Operation for westerly wind



Operation for easterly wind



**Key:**

← Primary departures

← Primary arrivals

↔ Maintenance adjusted departures

↔ Maintenance adjusted arrivals



## How we're Communicating

- Noise Management Forums
  - Elected Officials briefing
  - Neighbourhood Table meeting
  - Public meeting
- Emails to Elected Officials
- Checking In – community monthly e-newsletter
- Social media
- Residents can find the most up-to-date information on the [Noise Advisory webpage](#)

# NAV CANADA Update

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September 2021

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# NAV CANADA UPDATE

Serving a world in motion  
[navcanada.ca](https://navcanada.ca)



## OVERVIEW



Currently focused on preparations for public consultation of RNP-AR approaches



Working with the GTAA on technical analysis



Consultation plan being developed subject to prevalent public health conditions



Combined with new ICAO standard to deliver noise benefits



Designed only on the north side

# RNP-AR – THE PROJECT

- › Leveraging RNP-AR to introduce new procedures to Toronto Pearson
- › Originates from recommendations made in the Helios Report
- › Opportunity to reduce the need for the High-Low split
- › Delivers CDO and shorter track mileage
- › No changes to departures or existing RNAV procedures
- › Leverages new ICAO standard (Established on RNP)

HELIOS

Canada's Agency of Egis

INDEPENDENT TORONTO  
AIRSPACE NOISE REVIEW  
Report and Recommendations

In partnership with:

**Recommendation 3A:** NAV CANADA should design Required Navigation Performance Authorization Required procedures that can reduce the need for a high / low operation, taking due consideration of the location of the tracks, and proceed to consultation to facilitate implementation as soon as is practicable.

**Recommendation 3B:** NAV CANADA should maximise the use of the Required Navigation Performance Authorization Required (RNP AR) procedure to incentivise those airlines not already capable of RNP AR to invest, as the RNP AR approach route will offer airlines a more fuel efficient arrival route.

company



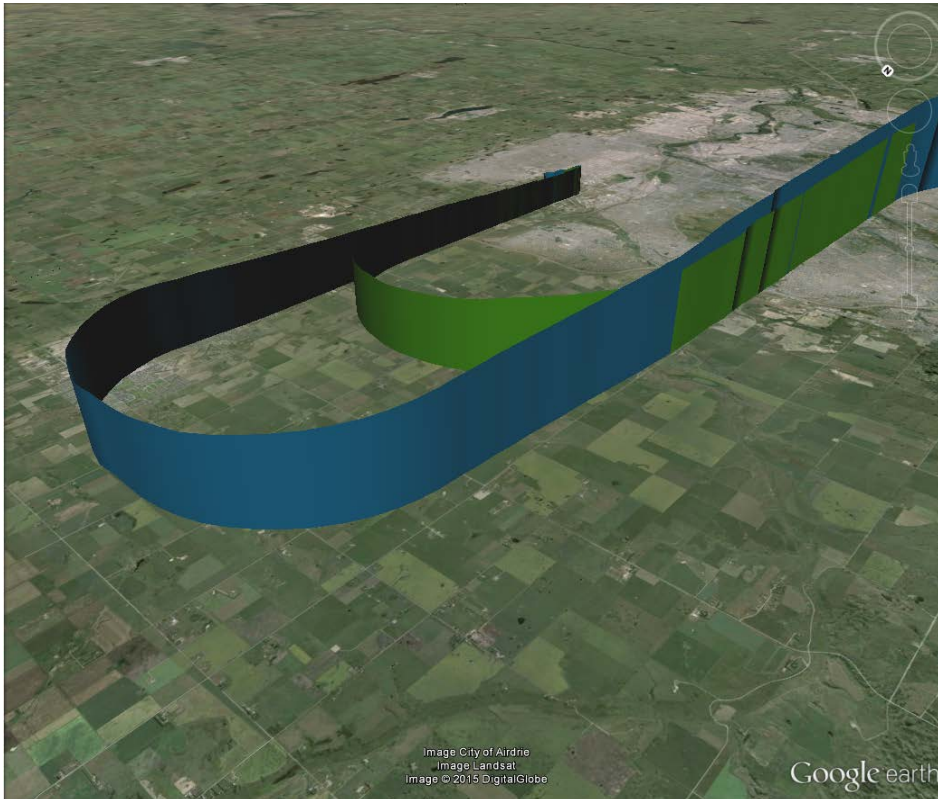
# SOME BACKGROUND ON RNP

# WHAT IS RNP?

- › Required Navigation Performance (RNP) is a form of Area Navigation (RNAV)
- › Uses the aircraft's flight management system and satellite positioning to fly a precise three-dimensional path in the sky.
- › RNP makes it easier to design safe efficient, predictable routes.
- › It is being used to update approach paths to airports for appropriately equipped aircraft and certified crews.
- › Currently implemented at 29 Canadian airports.



# WHY IMPLEMENT RNP?



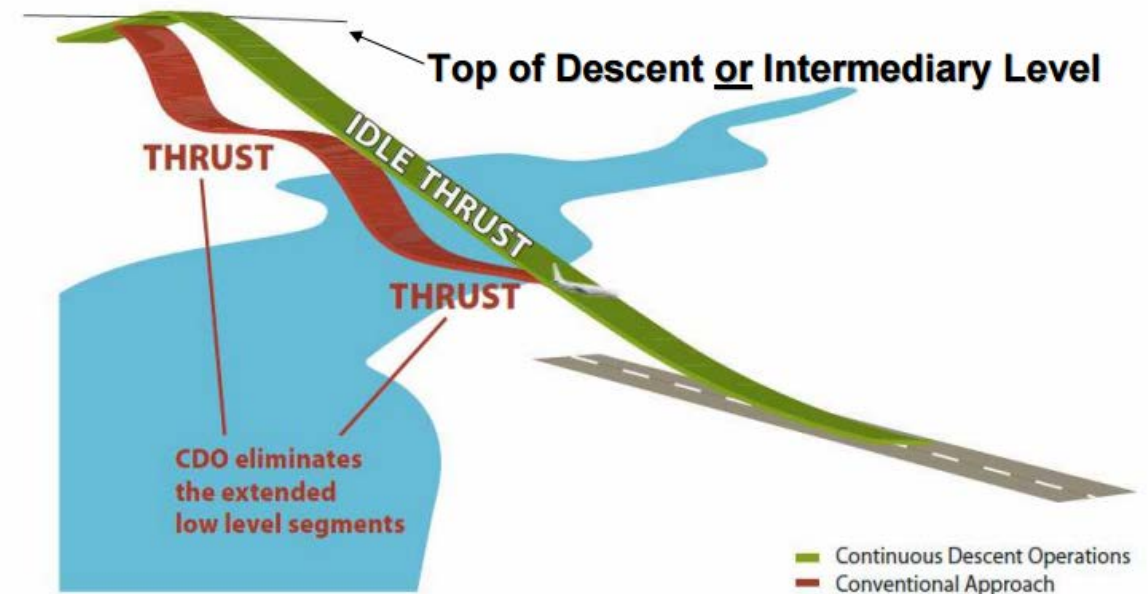
Teal: Conventional RNAV flight path  
Green: Shorter RNP approach path

- › Reduces track miles for arriving flights.
- › Allows for a continuous descent.
- › Reduces flight time, fuel burn and related greenhouse gas emissions.
- › Reduces radio frequency congestion.

# WHAT DOES IT MEAN FOR COMMUNITIES?

Outcomes can include:

- › Less variability of flight path location for those aircraft that are equipped to use RNP.
- › Better avoidance of populated areas in some instances (though it is often not possible to entirely avoid populated areas).
- › A “cleaner” aircraft profile (less increases or decreases in throttle, reduced flap use) compared to other approaches.



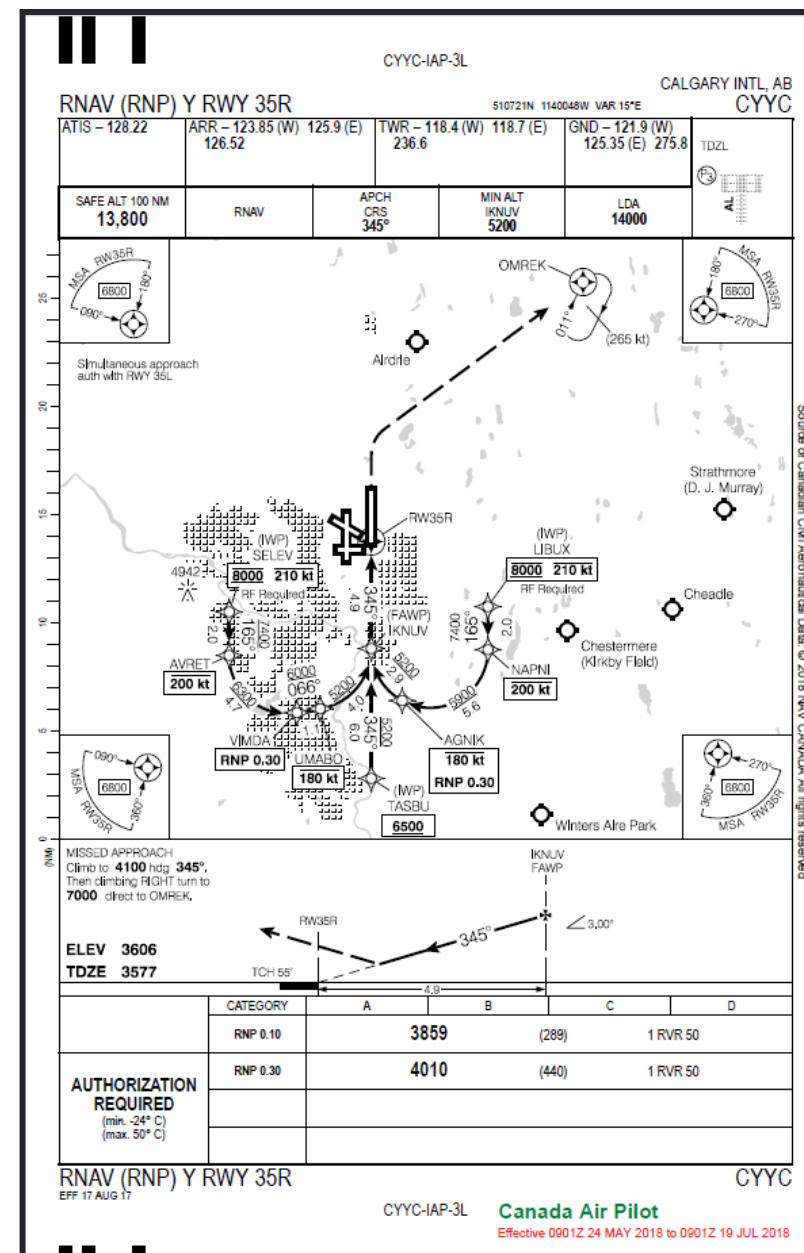


ESTABLISHED ON RNP-AR (EoR)



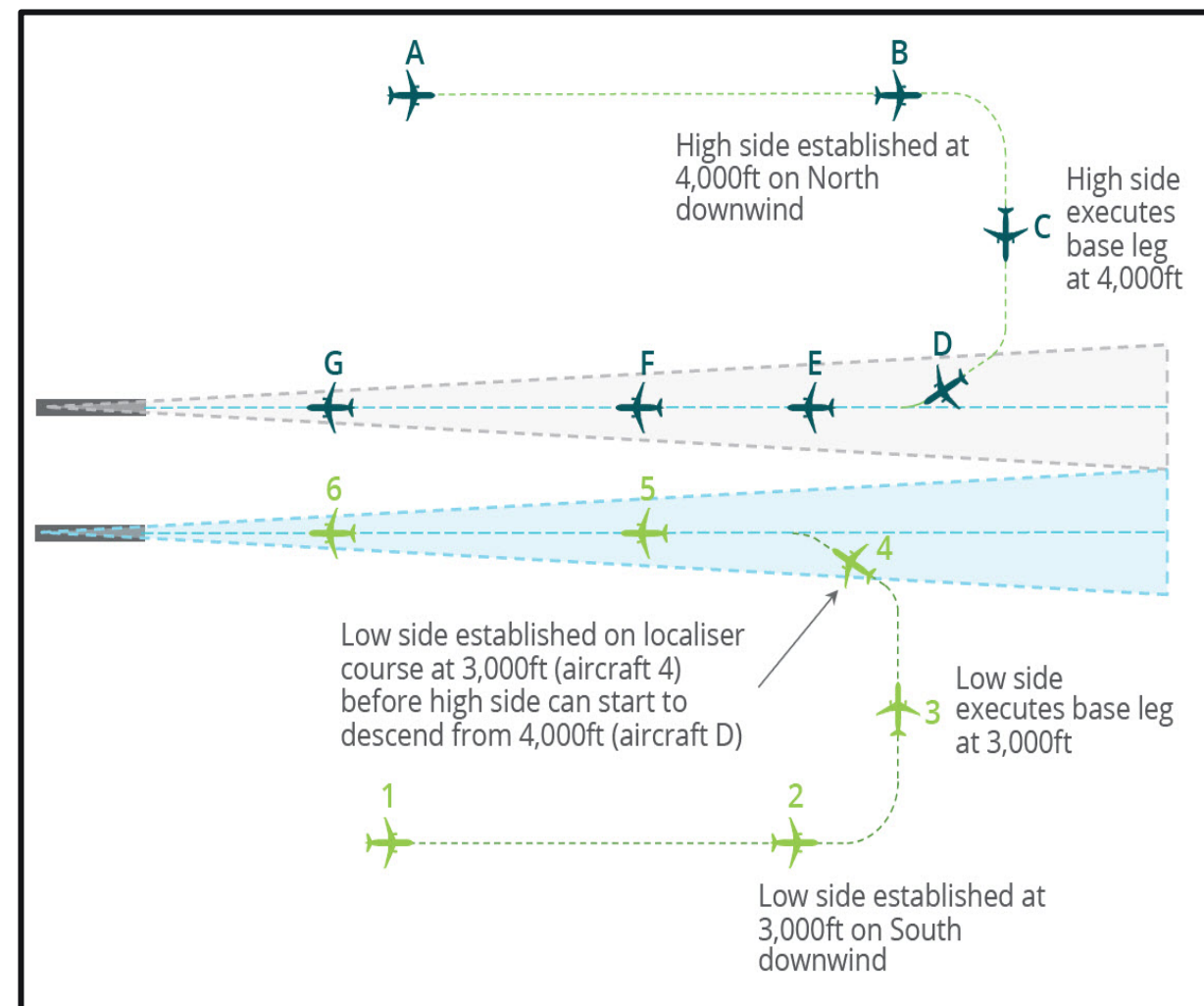
# EoR – WHAT IS IT?

- > New ICAO standard for use in Simultaneous Independent Parallel Operations
- > Allows integration of RNP-AR operations into busy parallel runway operations
- > Leverages the accuracy of RNP-AR approaches to reduce the requirement for a 'high side' and 'low side'.



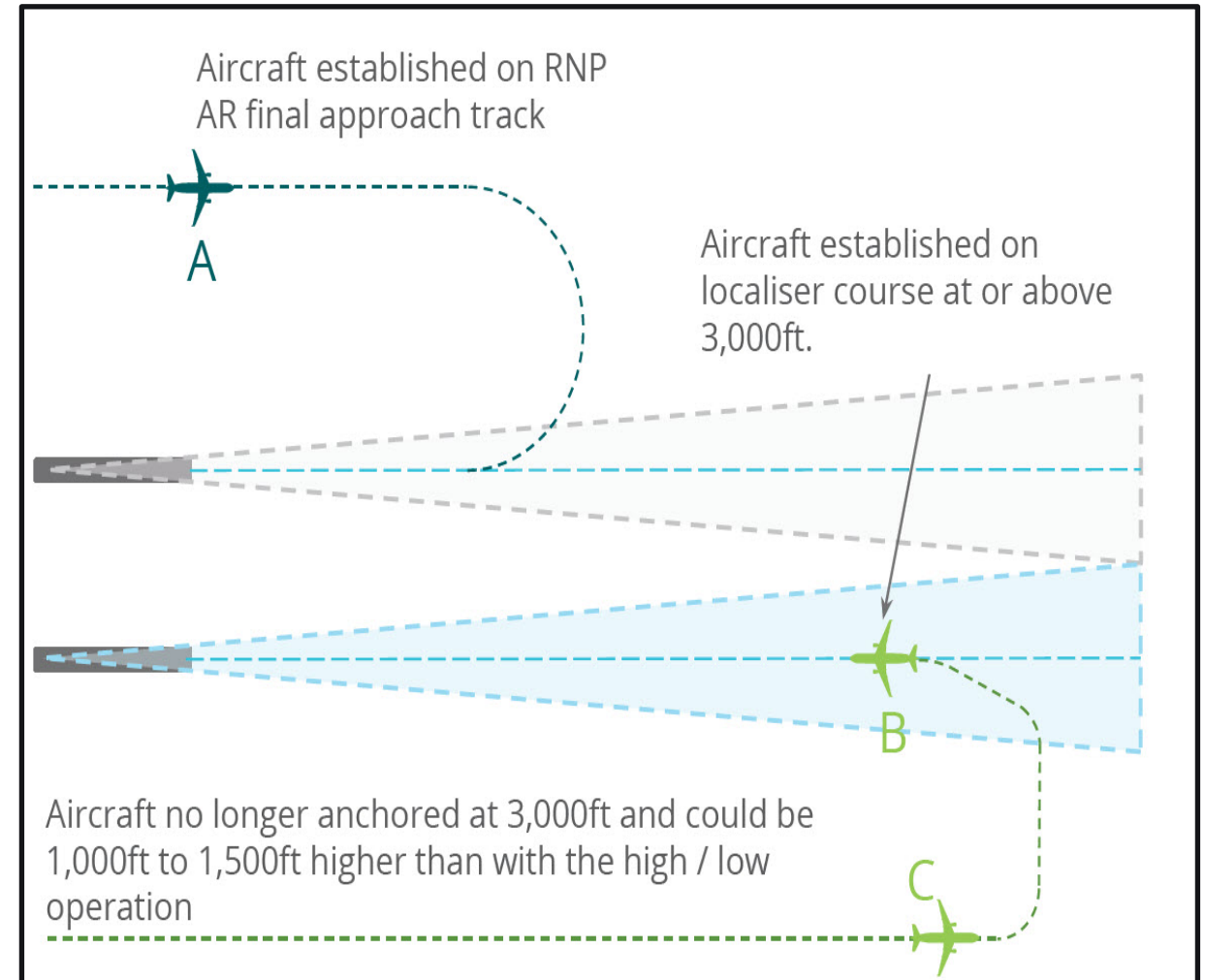
# CURRENT PARALLEL OPERATIONS

- > 1000 feet or 3 nautical miles separation applied until aircraft are established on the straight in portion of the approach
- > “Low” side arrivals required to level off, increasing noise at low altitudes
- > Longer downwind required in “High – Low” ops (20-25nm final common)



# EOR PARALLEL OPERATIONS

- › RNP-AR arrivals considered “Established” when they commence the procedure
- › No “High – Low” requirement between EoR and parallel runway leading to noise benefits for “Low side” downwind
- › Significant reduction in mileage, fuel burn and GHG emissions





# WHY ARE WE DOING THIS?

# THE BENEFITS

- › Improved operations
  - › Reduction in track miles
  - › Reduced time in system and fuel savings
- › RNP AR approach track containment
  - › No risk to safety
  - › Reduces use of parallel visual approaches
- › Environmental benefits
  - › Reduces the requirement for low altitude level segments on downwind
  - › Overall community noise benefit
  - › Significant reduction in GHG

## RNP-AR Usage at Calgary International Airport (CYYC)

- › Since EoR – over 3000 approaches per month\*
- › Approx. 35,000 track miles saved per month
  - › Roughly equates to a reduction of 140 hours of low altitude, power on flight in populated areas per month

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## WHY NOW?

- › Continuing to advance Helios work and noise mitigation
- › Supports airline recovery through reduced fuel burn
- › Aligns with environmental goals
- › Benefits to ANS, operators, the airport, and the community



# PUBLIC CONSULTATION

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# CONSULTATION GOALS

- › To accurately communicate and seek feedback on expected impacts and benefits to affected areas, as per the Airspace Change Communications and Consultation Protocol.
- › To highlight the overall environmental benefits of EoR, both in terms of GHGs and Continuous Descent Operations, while proactively communicating potential changes to the soundscape.



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# CONSULTATION PLANNING

- › Focused on virtual channels due to COVID-19 public health measures
- › Provide multiple avenues to providing input
- › NAV CANADA is the proponent with GTAA supporting
- › Content to be developed in collaboration with GTAA
- › Draws on work by GTAA Community Relations

# PRE-CONSULTATION ENGAGEMENT

## Community & Elected Officials

- › Noise Forums
  - Noise Accountability Board
  - Political Briefing
  - Neighbourhood Table
  - Public Forum
- › Advance Elected Official Briefings

## Industry

- › Industry Noise Management Board
- › Targeted operator engagement

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## HIGH LEVEL STEPS

- › Pre-Briefing of Noise Accountability Board and Noise Management Forums
- › Outreach to elected officials prior to consultation
- › Consultation – minimum 45 days
- › Post-Consultation Report
- › Implementation – Subject to Consultation

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THANK YOU



# GTAA Noise Management Program Updates

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# Returning Traffic

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## Preparing for Increasing Traffic

Since the start of the pandemic, air traffic in Canada has been at low levels not seen since 1970.

As government restrictions on air travel are eased in a measured and health-focused way, Canadians are beginning to think about air travel again.

As volumes slowly begin to increase, residents may begin to again notice some of the aircraft noise they heard in the past, though traffic won't reach pre-pandemic levels for some time.

We continuously promote ways to understand operations overhead:

- Noise Forums
- Checking In newsletter
- InsightFull
- WebTrak
- Elected official briefings
- One on one conversations between residents and Noise Office staff

# Noise Management Action Plan

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# 2021 NMAP Workplan at a Glance

2021 NMAP mid-year update available under Action Plan updates on the [NMAP webpage](#)

- Six Ideas - Trial extension continues for Idea 6: Review of the Preferential Runway System with quarterly reports. *Propose that process for concluding the Trial begins given the easing of travel restrictions.*
- Completion of the School HVAC Pilot Program – *project nearing completion*
- Launch Community-Proposal Review Process – *launched, received first submissions*
- Work with major operators to complete status update of the A320 family aircraft operating at Toronto Pearson and continue to monitor operations of retrofitted vs non retrofitted aircraft. *Updated database, reports now indicate that 94% of A320 series aircraft are performed by retrofitted aircraft. Reports available under [A320 Retrofit program usage reports](#)*
- Identify aircraft operating at Toronto Pearson by Noise certification ‘chapter’ and determine Phase 2 of Quieter Fleet Incentive Program. - *By fleet type complete, by chapter underway*
- Develop metrics and engage with industry and community stakeholders for the Fly Quieter and Greener Reporting Program. - *underway*
- Continue to publish noise data and enhance content on InsightFull. *[InsightFull](#) reporting and enhancements continue.*

# Quieter Fleet Incentive Program

- Many airports incentivize airlines to use the quietest aircraft in their fleet or expedite purchase of quieter aircraft.
- The GTAA committed to the implementation of a new Quieter Fleet Incentive Program

## Phase 1 – A320 series retrofit program

- Phase 1 involved the implementation of the A320 series retrofit program.
- Airlines were encouraged to retrofit or replace these aircraft
- Considerable progress has been made since implementation in 2020  
**Operations by retrofitted A320 series aircraft increased from 52% in Q4 2020 to 94% in Q3 2021**

## Phase 2 – Explore further options for the Quieter Fleet Incentive Program

- Phase 2 of the QFIP expands to other aircraft types operating at Toronto Pearson
- This phase begins with an understanding recent and upcoming fleet changes and associated noise implications

# Discussion + Questions

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# Thank You

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Next Meeting: November 30, 2021

# Complaints At-a-Glance

**August 2020**

1516 complaints  
from **88** individuals

VS

**August 2021**

9239 complaints  
from **236** individuals

**147 complaints** per 1000 movements  
**8.5 individuals** per 1000 movements

**480 complaints** per 1000 movements  
**12 individuals** per 1000 movements

The increase in complaints - August 2020 vs 2021 reflects increasing traffic levels and construction related impacts:

- Complaints up by 509%
- Number of individuals submitting complaints up by 168%
- Approx. 65 new individuals in the month of August 2021
- The increase in complaints is more pronounced than the increase in individuals. This difference could be attributed to a small number of individuals submitting vast numbers of complaints