# Noise Statistics Update

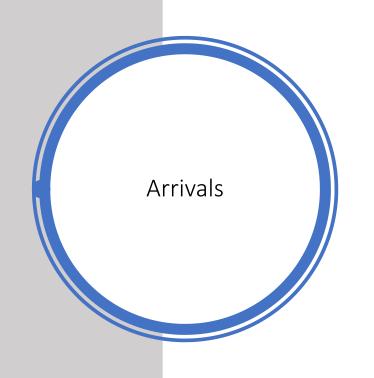
Year End 2022



# Complaints

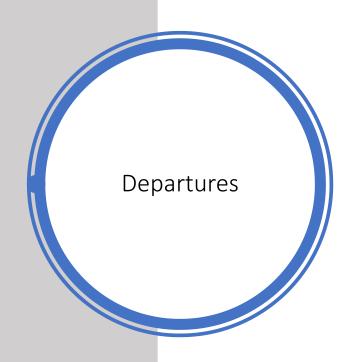
## Complaints Analysis

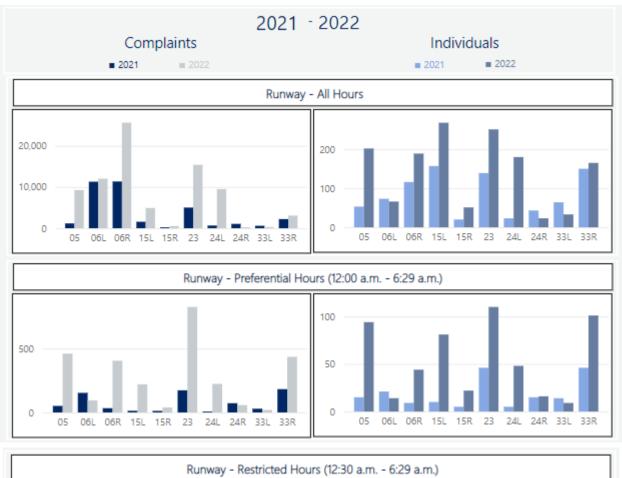
- In 2022, complaints and individuals were higher by 125% and 30% respectively compared to 2021. This can be attributed to the overall increase in traffic and return of traffic patterns like the downwind. Another factor in 2022 was the rehabilitation of Runway 06L/24R, which resulted in the use of less typical runway configurations.
- The split of complaints against arrivals compared to departures remained consistent with 2021 numbers. More individuals submitted complaints against departures versus arrivals in 2022, whereas in 2021 more individuals complained about arrivals than departures.
- The percentage of complaints submitted by the top 10 individuals were lower in 2022 at 70.59%, compared to 79.99% in 2021. This reflects the overall increase in individuals in 2022 compared to 2021.

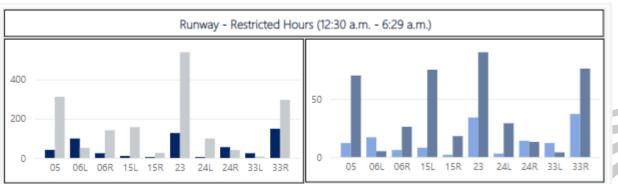




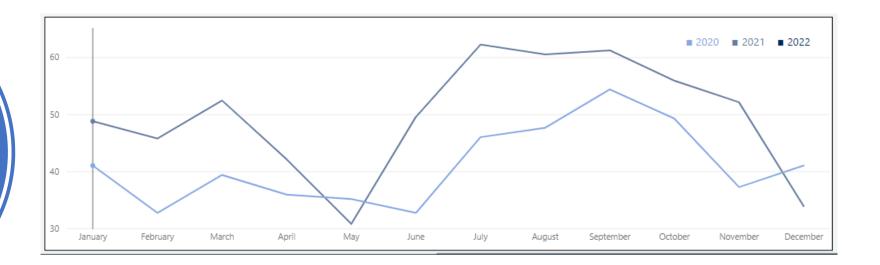




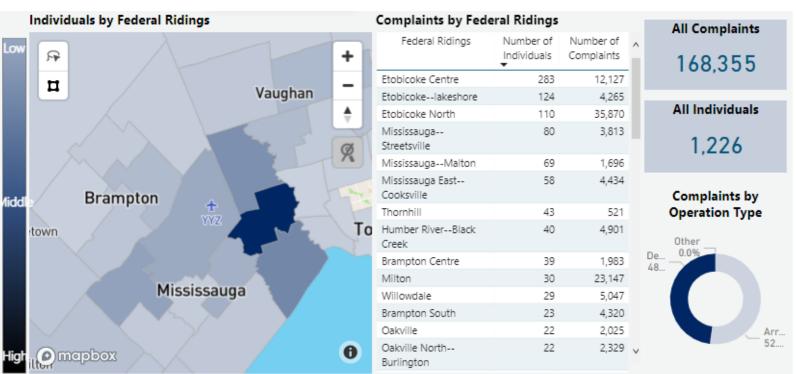




Complaints per 100 Operations







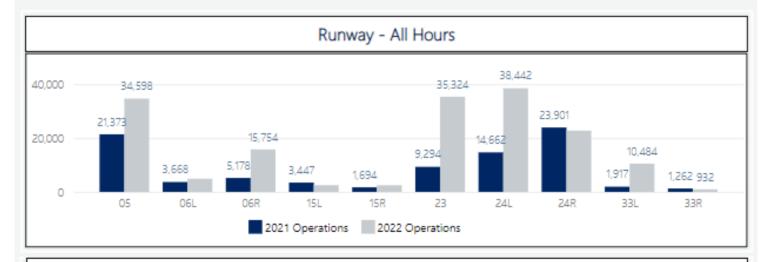
# Operations

## Operations Analysis

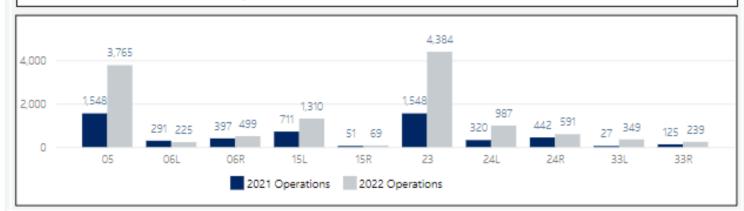
- In 2022, passenger activity began increasing due to the easing of pandemic-related traffic restrictions and pent-up travel demand. Traffic peaked during the summer. By year end, traffic reached approximately 75% of 2019 traffic.
- With higher traffic levels, there was once again a need for consistent use of the downwind phase to sequence
  arriving flights. Additionally, runways were used simultaneously more to manage the traffic. This means that
  communities impacted by the downwind, or those under runways used to offload arrivals or departures
  during peak periods saw a return in traffic. Learn more about how runways are used, including when offloads
  are used and what the different configurations mean <a href="here">here</a>.
- In November 2022, NAV CANADA introduced airspace enhancements known as Required Navigation Performance Authorization Required (RNP AR) for two runway ends at Toronto Pearson, Runways 05 and 23. RNP AR provides the opportunity to use shorter, more direct arrival routes, enabling aircraft to turn towards the airport sooner. These procedures support environmental sustainability efforts by significantly reducing greenhouse gases and the overflight of residential areas. Learn more <a href="here">here</a>.
- In April 2022, Toronto Pearson temporarily closed east/west runway 06L/24R, the airport's second-busiest runway, for a full rehabilitation. The work was completed, on time, and on budget in November 2022.

# Arrivals

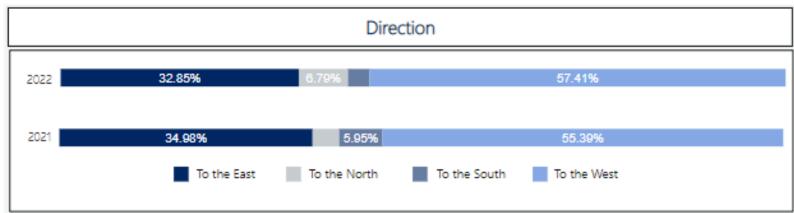
#### 2021 - 2022



#### Runway - Preferential Hours (12:00 a.m. - 6:29 a.m.)

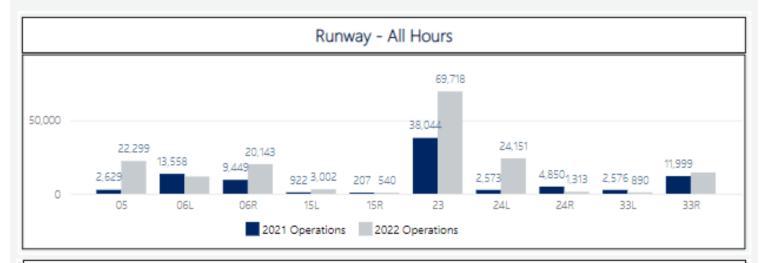






# Departures

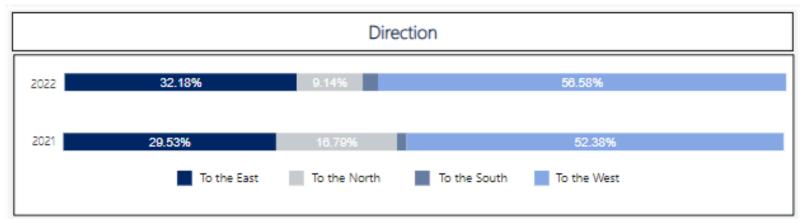
#### 2021 - 2022



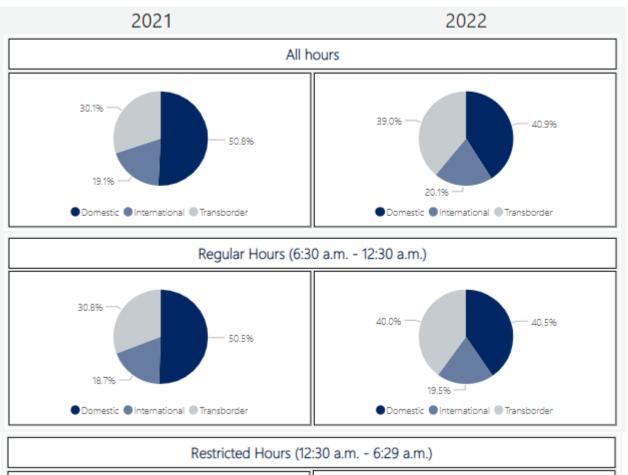
#### Runway - Preferential Hours (12:00 a.m. - 6:29 a.m.)

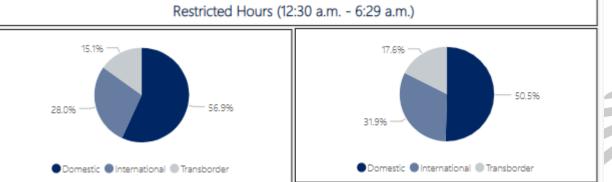


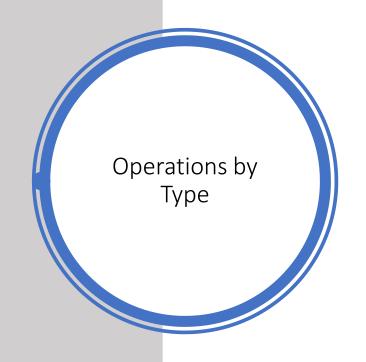


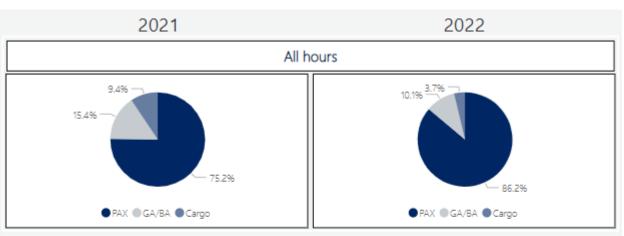


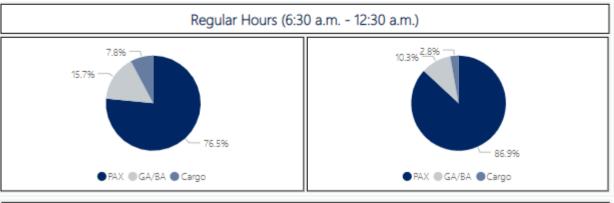


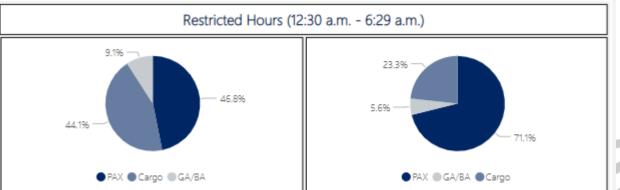








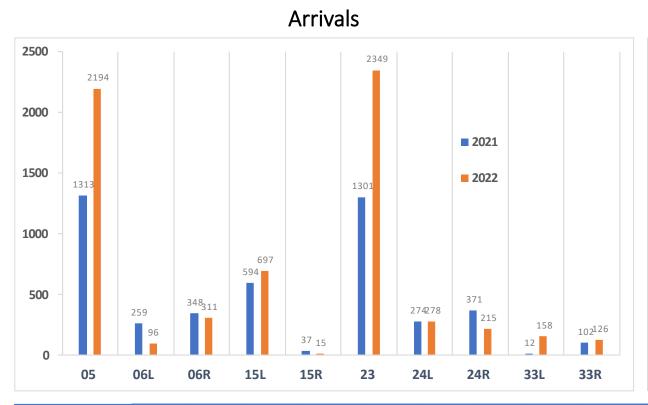


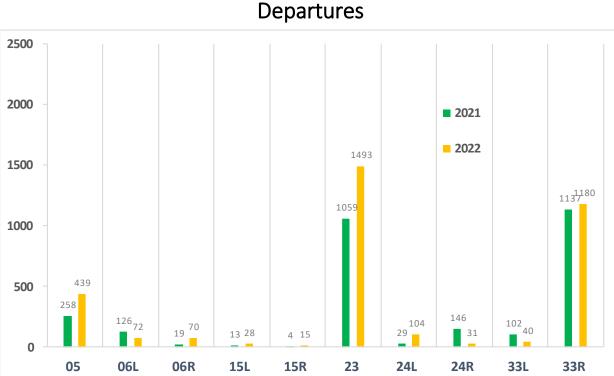


# Night Flight Restriction Program

### Night Flight Restriction Program 2021-2022 (Jan-Dec)

Restricted Hours (12:30 a.m. - 6:29 a.m.)





Noise Year 2021- 2022	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Total	Annual Budget	% Used	Noise Year 2020-2021
Movements	855	1,161	963	850	1,049	1,159	1,227	1,509	1,647	1,509	1,224	1,186	14,339	20,889	68.6 %	30.7%

	Q3 2021	Q3 2022
Movements	2,243	3,156

## Enforcement

### **Enforcement Investigations**

#### 2021 vs. 2022

#### **Noise Abatement Procedures**

- All arrival and departure operations are monitored for compliance with the Noise Abatement procedures using rules set in the Airport Noise and Operations System
- Reviews the data that Transport Canada collects through the Civil Aviation Daily Occurrence Reporting System (CADORS). These reports are reviewed by enforcement on a daily basis

#### Night Flight Restriction Program

• All flights that operate during the Restricted Hours (12:30 a.m. - 6:29 a.m.) are verified against night flight schedule and day of operations approvals

#### Formal Investigation

- When there is evidence that a non-compliance to the Night Flight Restriction Program or Noise Abatement Procedures occurred, the GTAA investigates the event and forwards the complete details of the investigation along with all supporting evidence to Transport Canada Enforcement Office.
- Transport Canada publishes infractions for which a corporate entity is responsible <u>here</u>.

	20	21	2022		
Туре	GTAA Investigations	Sent to Transport Canada	GTAA Investigations	Sent to Transport Canada	
Night Flight Restriction Program	78	26	104	9	
Noise Abatement Procedures	7	7	29	29	
Total	85	32	29	33	

# Early Turn Trial

## Background of the Trial

On March 3, 2008, two early turn trials were introduced at Toronto Pearson.

#### North-South Early Jet Turns

- Specific small jet aircraft permitted to turn to course shortly after take-off on the east-west runways between 7:00 a.m. and 11:00 p.m. This is standard procedure since 2005
- As part of the Trial, early turns are permitted on the north-south runways

#### **Propeller Turns Extended Hours**

- Propeller aircraft are permitted to turn to course shortly after take-off from any runway between the hours of 7:00 a.m. and 11:00 p.m. This is standard procedure since the 1970s
- As part of the trial, prop turns are also permitted from 6:30 a.m. to 6:59 a.m. and from 11:01 p.m. to 11:30 p.m.

## Early Turns: North-South Jets (Q4 2022)

Statistics – Jets (North-South)								
Month	Eligible Aircraft	Actual Early Turns	Generated Complaints					
January	30	1	0					
February	84	7	0					
March	119	16	0					
April	79	5	0					
May	23	0	0					
June	261	7	1					
July	94	3	0					
August	128	13	0					
September	132	5	1					
October	124	2	0					
November	215	11	4					
December	45	5	3					

#### Q4 2022

#### From October to December 2022:

- 18 eligible jet aircraft (5%) made early turns on the north/south runways
- 7 were associated with complaints

#### From March 3, 2008 to December 31, 2022:

- 3,420 eligible jet aircraft (16%) made early turns on the north/south runways
- 224 were associated with complaints

## Early Turns: Propeller Extended Hours (Q4 2022)

	Statistics – Propellers (Extended Hours)								
	(	6:30 to 6:59	11:01 to 11:30 p.m.						
Month	Eligible Aircraft	Early Turns	Generated Complaints	Eligible Aircraft	Early Turns	Generated Complaints			
January	9	8	4	29	19	1			
February	4	2	0	13	9	0			
March	3	2	1	25	15	9			
April	1	1	1	29	19	8			
May	5	3	1	21	15	4			
June	0	0	0	22	18	7			
July	3	2	0	13	10	0			
August	2	1	1	19	12	3			
September	1	1	0	4	3	2			
October	0	0	0	9	9	2			
November	1	1	0	5	3	0			
December	2	1	0	19	12	1			

#### Q4 2022

#### From October to December 2022:

- 2 props (67%) turned between 6:30 and 6:59 a.m.
- 24 prop (69%) turned between 11:01 and 11:30 p.m.
- 3 were associated with complaints

#### From March 3, 2008 to December 31, 2022:

- 4,971 props (86%) turned between 6:30 and 6:59 a.m.
- 13,043 props (81%) turned between 11:01 and 11:30 p.m.
- 1,322 were associated with complaints