

Noise Statistics Update

Year End 2020



Overall Analysis

- In April 2020, Toronto Pearson began experiencing the impacts of COVID-19 with a significant drop in air traffic.
- The reduction in traffic has meant that fewer runways are needed at one time to handle the traffic.
 - For example, under high traffic levels, up to three parallel runways are used as a system to accommodate traffic. Under lower levels, only one or two runways are needed.
 - Learn more about how runways are used and what the different configurations mean [here](#).
- Similarly, lower traffic levels have reduced the regular need for the downwind arrival phase of flight used for sequencing. Instead, many arrivals are sent directly to the base leg. When using this approach, fewer residents are overflown than when using the downwind.
 - This is significant because the downwind phase has historically prompted many complaints from affected communities. Therefore, a reduction in its use has led to a further reduction in complaints from these areas.



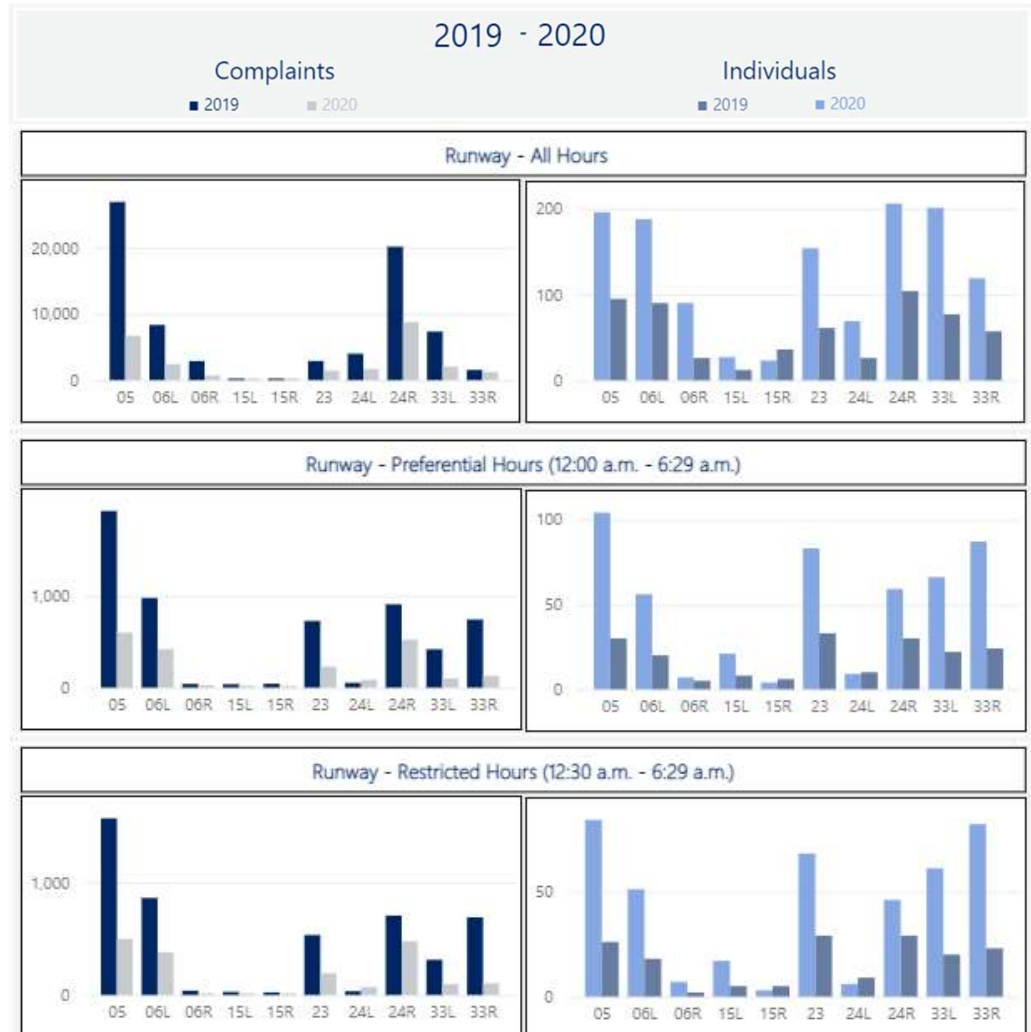
Complaints

Complaints Analysis

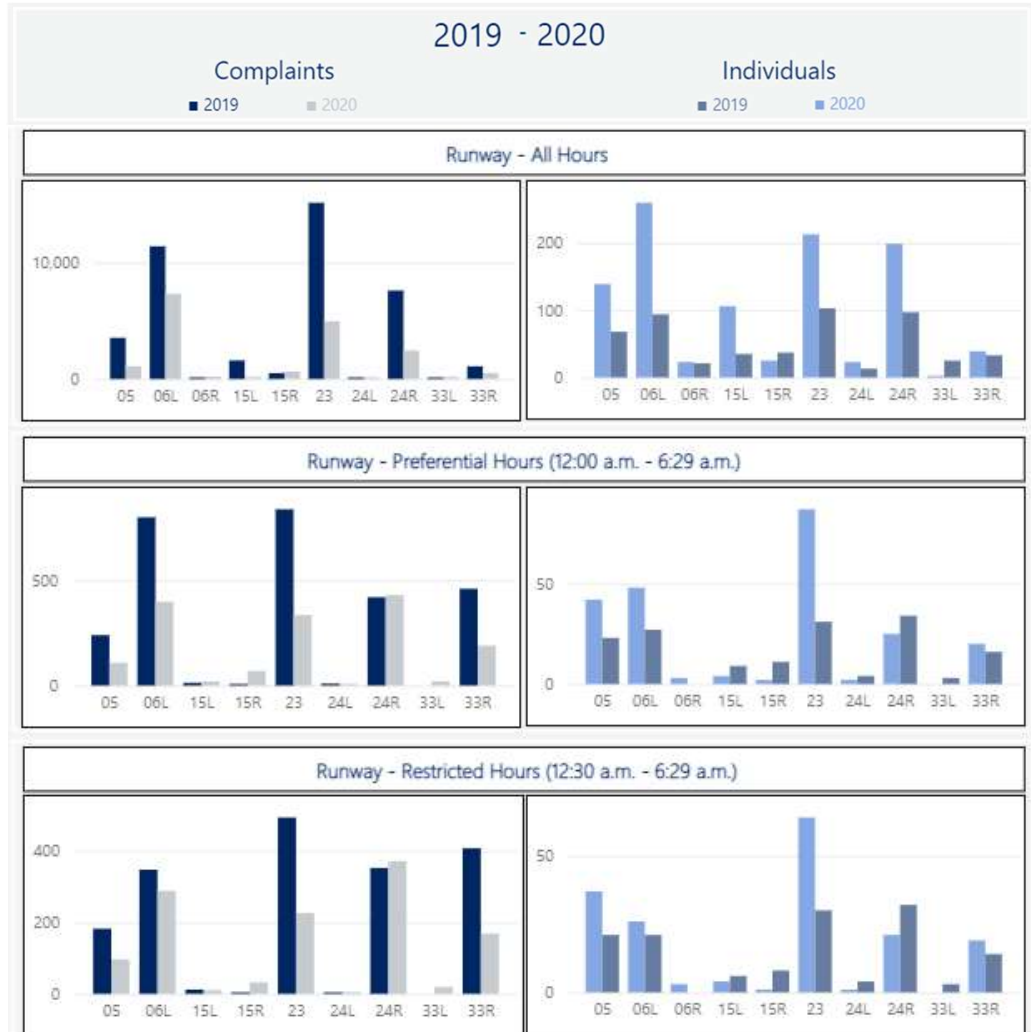
- Overall, for 2020, complaints were down 63% due to continued impacts of COVID-19 compared to the same period in 2019.
- Overall, for 2020, the number of individuals submitting complaints were down 60% compared to 2019.
 - Overall complaints against arrivals in 2020 were down 66% and the number of individuals submitting complaints were down 55% due to continued impacts of COVID-19 compared to the same period in 2019.
 - Overall complaints against departures in 2020 were down 58% and the number of individuals submitting complaints were down 61% due to continued impacts of COVID-19 compared to the same period in 2019.
- When comparing complaints and operations between 2019 and 2020, complaints have decreased almost consistently with operations.



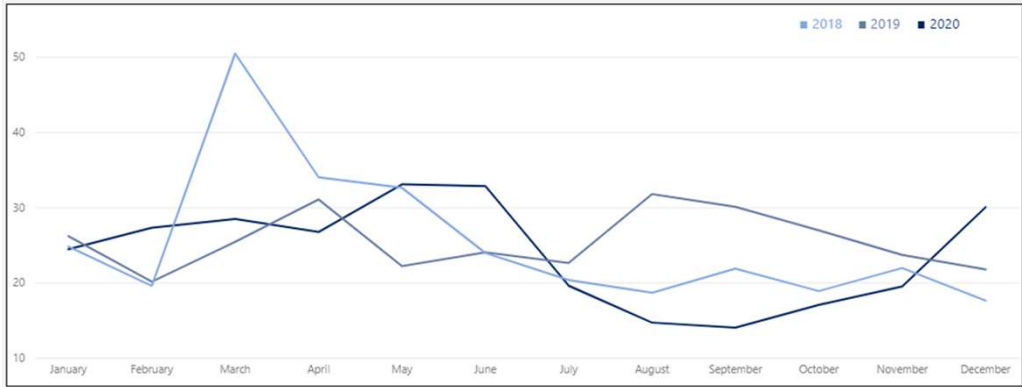
Arrivals



Departures

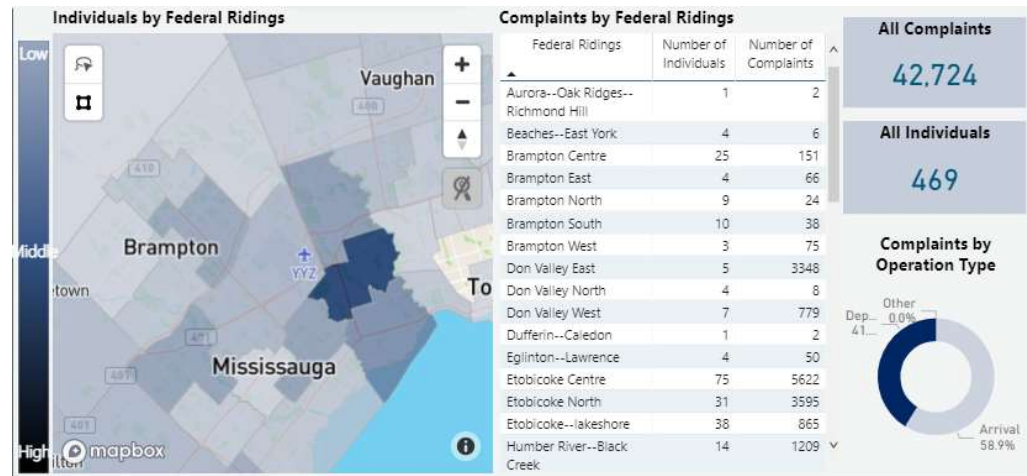


Complaints Per 100 Operations



All Complaints

(includes helicopter operations & engine run-ups)



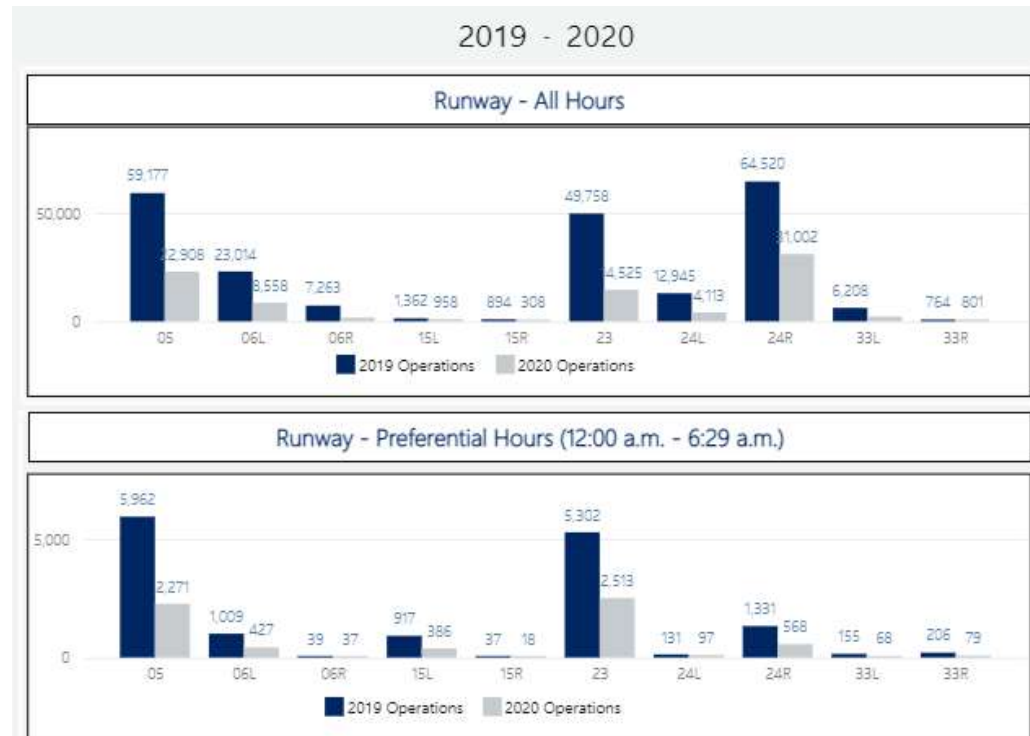
Operations

Operations Analysis

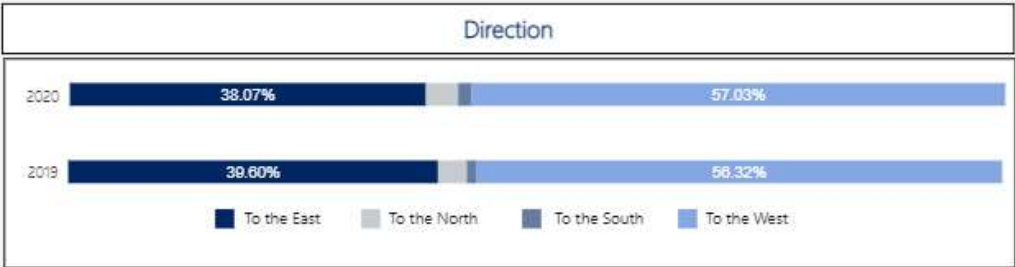
- Overall operations for the full year of 2020 were down 61% compared to 2019. During the preferential hours, there were 11,914 fewer operations.
- In 2020, 95% of operations used the east-west runways compared to 96% in 2019.
 - Winds in the region are predominantly east/west and there will always be some variation in the percentage of time spent in a westerly vs easterly flow.



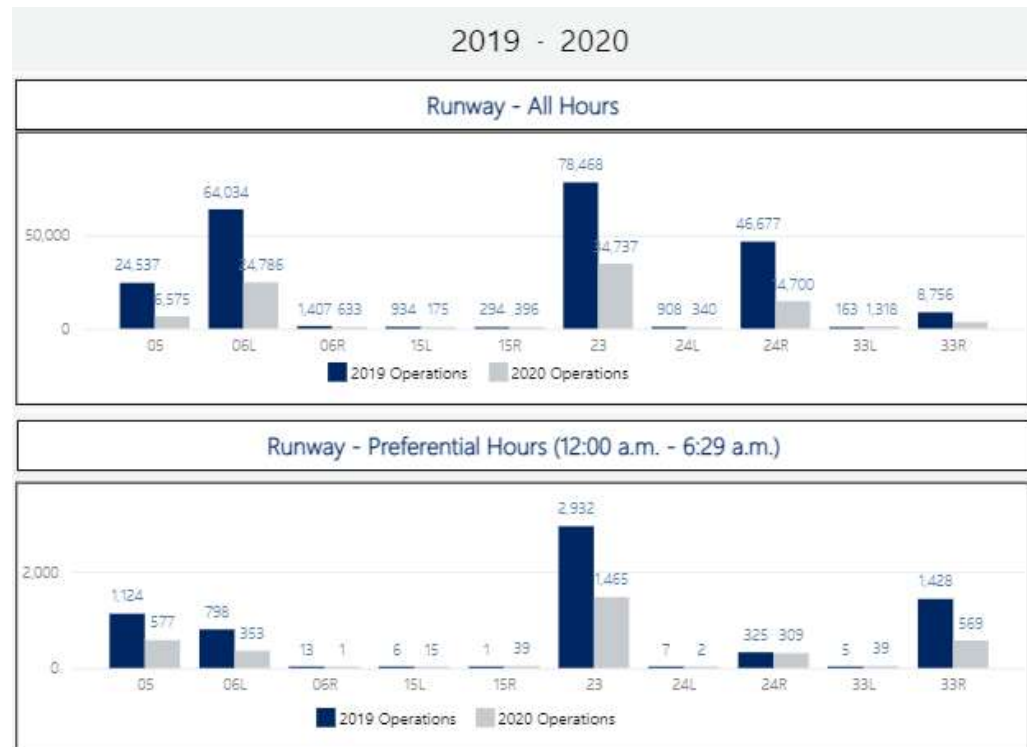
Arrivals



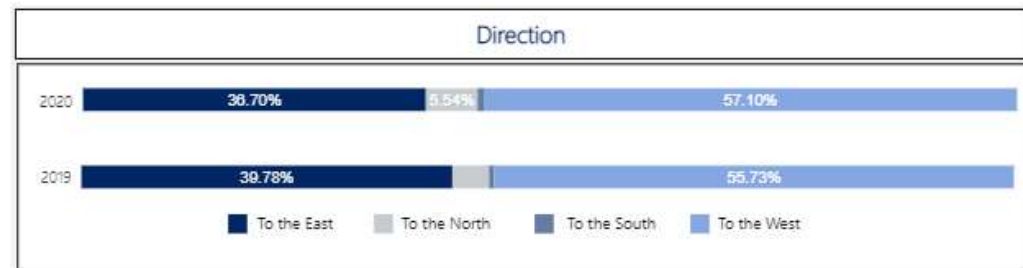
Arrivals by Direction



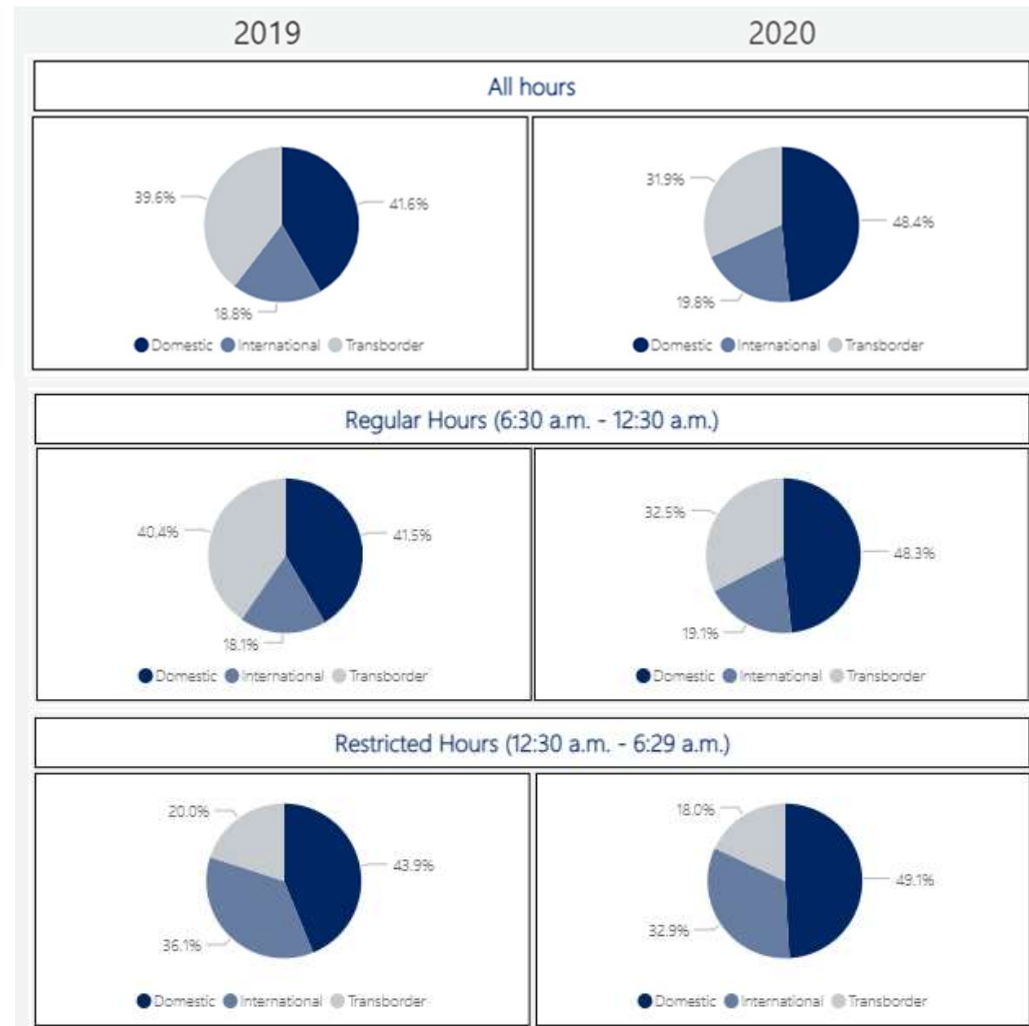
Departures



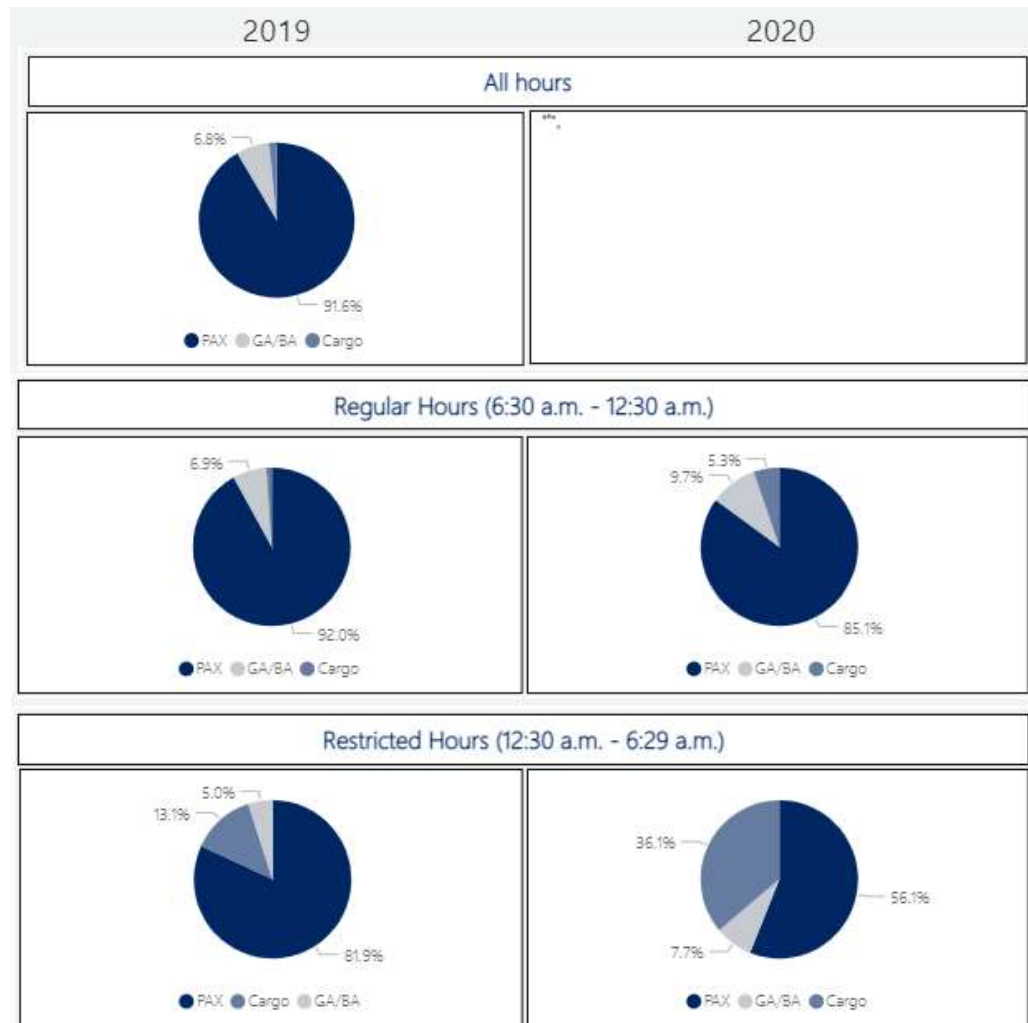
Departures by Direction



Operations by Sector



Operations by Type

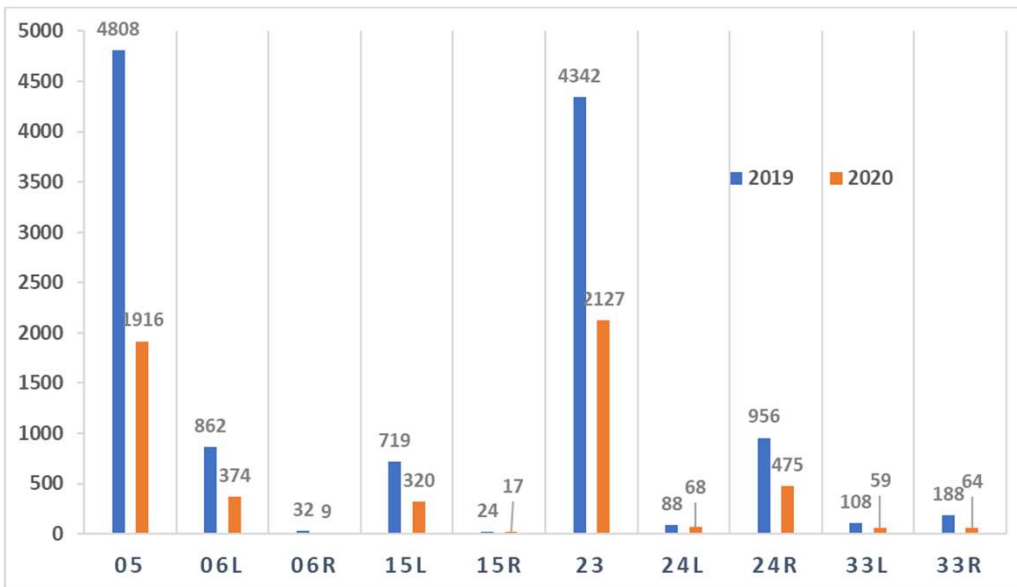


Night Flight Restriction Program

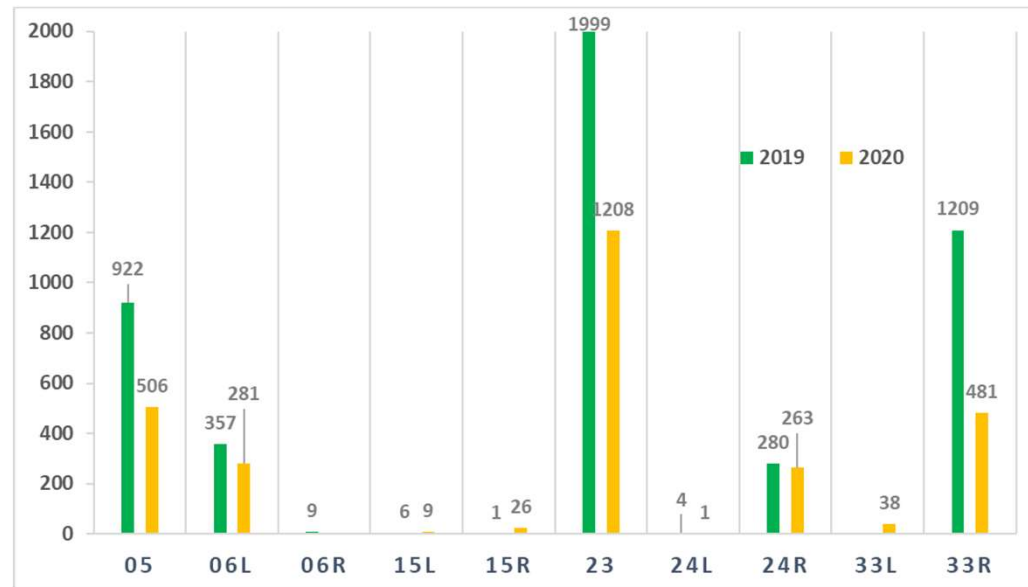
Night Flight Restriction Program 2019-2020 (Jan-Dec)

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

Arrivals



Departures



Noise Year 2019-2020	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Total	Annual Budget	% Used	Noise Year 2018-2019
Movements	1,248	1,446	1,574	1,519	1,150	438	478	420	456	408	431	455	9,568	20,889	47.9%	80.9%

Full Year (Jan - Dec)	2019	2020
Movements	16,914	8,242

Enforcement

Enforcement Investigations

2019 vs. 2020

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 [here](#).

Type	Q1-Q4 2019		Q1-Q4 2020	
	GTAA Investigations	Sent to Transport Canada	GTAA Investigations	Sent to Transport Canada
Night Flight Restriction Program	107	72	45	25
Noise Abatement Procedures	50	47	24	21
Total	157	119	69	46

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

Statistics – Jets (North-South)			
Month	Eligible Aircraft	Actual Early Turns	Complaints
January	68	6	2
February	32	2	0
March	53	11	7
April	12	1	0
May	20	2	0
June	10	1	1
July	21	0	0
August	5	0	0
September	0	0	0
October	7	0	0
November	15	3	0
December	16	0	0

From January to December 2020:

- 26 eligible jet aircraft (10%) made early turns on the north/south runways
- 10 complaints are attributed to this trial

From March 3, 2008 to December 31, 2020:

- 3,273 eligible jet aircraft (16%) made early turns on the north/south runways
- 208 complaints are attributed to this trial



Early Turns: Propeller Extended Hours

Statistics – Propellers (Extended Hours)						
Month	6:30 to 6:59 a.m.			11:01 to 11:30 p.m.		
	Eligible Aircraft	Early Turns	Complaints	Eligible Aircraft	Early Turns	Complaints
January	35	29	4	26	21	0
February	24	20	3	22	17	0
March	22	15	3	19	12	2
April	2	2	1	0	0	0
May	3	2	0	0	0	0
June	7	5	1	2	1	0
July	6	5	0	0	0	0
August	3	2	0	3	1	0
September	2	2	0	1	1	0
October	1	0	0	3	1	0
November	1	0	0	15	9	1
December	3	2	0	13	9	2

From January to December 2020:

- 84 props (77%) turned between 6:30 and 6:59 a.m.
- 72 prop (69%) turned between 11:01 and 11:30 p.m.
- 18 complaints are attributed to this trial

From March 3, 2008 to December 31, 2020:

- 4,846 props (83%) turned between 6:30 and 6:59 a.m.
- 12,831 props (81%) turned between 11:01 and 11:30 p.m.
- 1,224 complaints are attributed to this trial

