

Toronto Pearson Noise Management Forums Pearson Public Meeting

December 3, 2020



Welcome + Introductions

Pearson Public Meetings

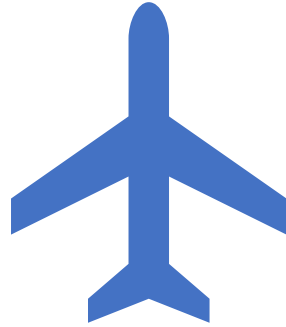
- The Pearson Public Meetings are part of the Noise Management Forums which were launched in 2019. The Noise Management Forums evolved from the old Community Environment and Noise Advisory Committee that served the airport for more than 20 years
- The meetings provide residents with:
 - A chance to learn more about airport operations and how your area is impacted
 - Hear updates from GTAA and NAV CANADA about noise management efforts
 - Ask questions or raise concerns related to airport operations
- Each meeting has a drop-in style session where residents can ask questions about operations in their area and a public meeting session which includes presentations and a public question period.
- Both the drop-in session and public meetings will be held virtually until further notice

Agenda

- Airport Situational update
 - Healthy Airport Initiatives
 - Airport Operations
- NAV CANADA Updates
- GTAA Updates
 - Maintenance Update
 - 2018 – 2022 Noise Management Action Plan
- Question Period

Airport Situational Update

Operations since COVID-19

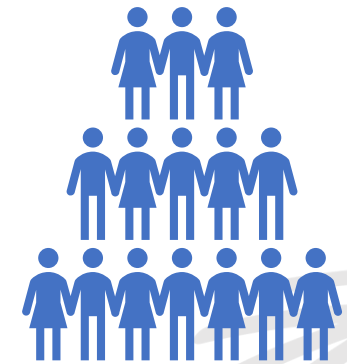


Operations

- Overall, traffic levels were down 76% in Q3 2020 compared to Q3 2019 – (121,958 in Q3 2019 vs 29,871 in Q3 2020)
- During the restricted hours (12:30 a.m. – 6:29 a.m.), traffic levels were down by 69% (4,185 in Q3 2019 vs 1,295 in Q3 2020)

Passengers

- Passenger traffic was down approximately 88% in Q3 2020 compared to Q3 2019 (14,182,267 in Q3 2019 vs ~ 1,700,000 in Q3 2020)



Healthy Airport Initiatives



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Healthy Airport Measures

Transport Canada regulations:

- Passenger health assessment at the final point of departure
- Mandatory temperature checks
- Arrivals health declaration to CBSA with PHAC support
- All incoming passengers must have a 14-day quarantine plan

Toronto Pearson has implemented our own Healthy Airport measures:

- Mandatory masks in all public areas, for passengers and employees
- Physical distancing: plexiglass barriers, separation at kiosks/seating areas signage, floor decals, and increased passenger comms
- Limiting terminal access to only passengers and workers
- Enhanced hygiene and cleaning in high traffic / high touch areas





HEALTHY AIRPORT MEASURES

Embracing innovation:

- BlueDot to predict/monitor COVID and other infectious disease risks
- Disinfection corridor that sprays a water-based non-toxic sanitizer
- Autonomous floor cleaners that use UV light for disinfection
- Use of probiotics in our washrooms to get rid of bad bacteria
- Active monitoring duct system offering real time air quality assessment available in terminal and online for passengers to see
- McMaster HealthLabs International Arrivals COVID-19 testing Study, co-sponsored by GTAA and Air Canada



MCMASTER HEALTHLABS TESTING INTERNATIONAL ARRIVALS FOR COVID-19



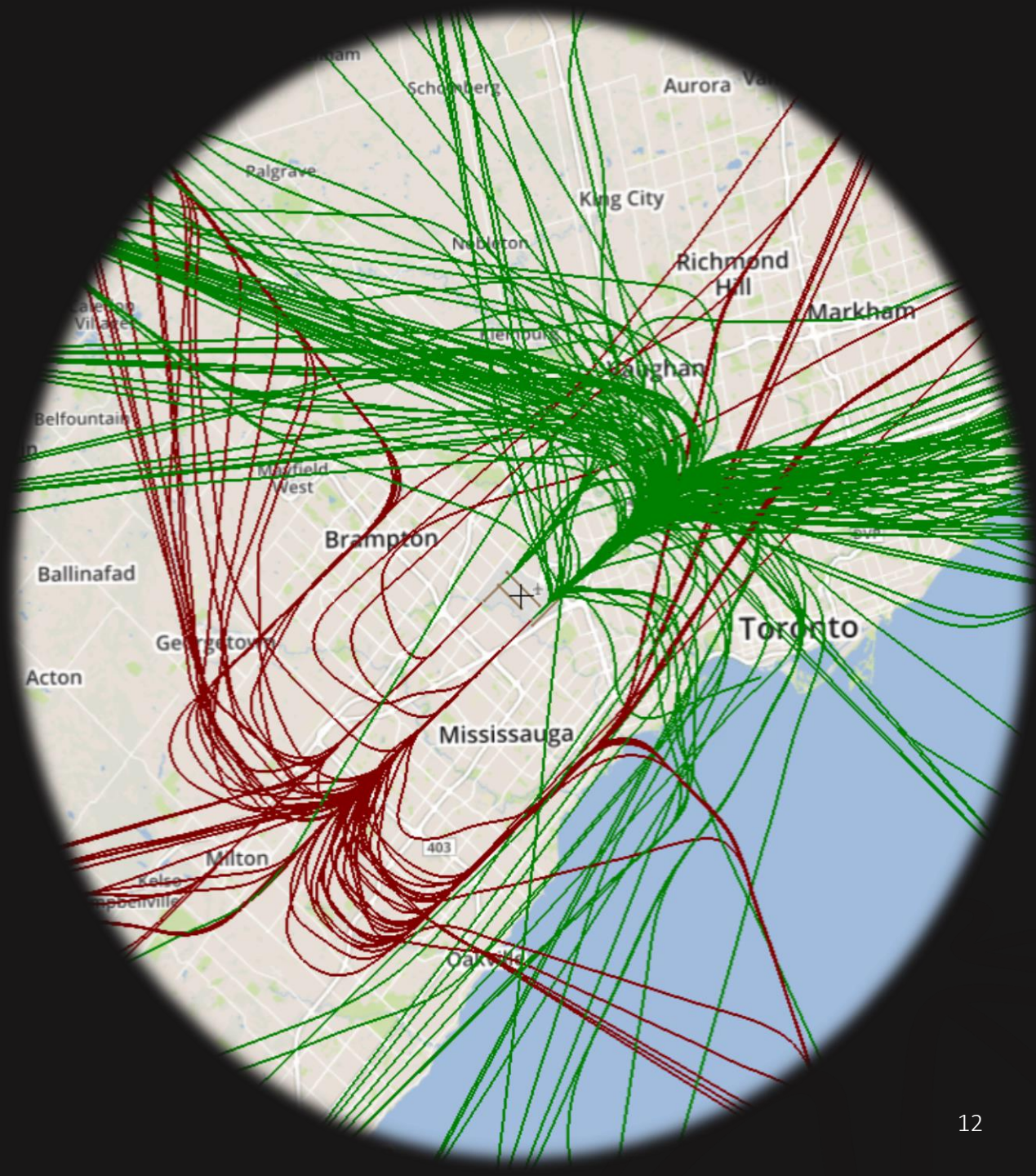
- From September 3 – November 14, 2020, McMaster HealthLabs (MHL) conducted a study of international arriving passengers, testing them on a voluntary basis for COVID-19
 - *16,000 participants completing more than 40,000 tests*
- Study was co-sponsored by Air Canada and Toronto Pearson, and partially funded by the Government of Canada
- Largest study of its kind to examine the number and percentage of arriving international travellers who tested positive for COVID-19 during the federal government’s quarantine period
- Findings could be useful to the Government of Canada and Government of Ontario in decision-making to control the spread of COVID-19 and in exploring policy options
- Interim Results were published on November 17:
 - *Based on September 3 – October 2 data; 8,600 participants completing more than 20,000 tests*
 - 99% of study participants tested negative for COVID-19 with 1% testing positive
 - Of the 1% testing positive for COVID 19:
 - 0.7% detected on arrival
 - 0.3% detected on day 7
 - <0.1% detected on day 14

RAPID COVID-19 TESTING PILOT – ALBERTA

- In November 2020, Alberta launched a government approved, science-based rapid COVID-19 testing pilot for Canadians arriving from international locations.
- Applies to Canadians arriving by land and by air. Calgary International Airport is participating in the trial as the only airport in Alberta currently approved to accept international flights.
- Travellers are offered a COVID-19 test upon arrival. If the test comes back negative, they are not required to remain in quarantine as long as they commit to certain restrictions and to undergoing a second test on Day 6 or 7 after arrival.
- **“We hope [this] will lead to reducing and one day eliminating the current 14-day self-isolation requirements. This innovative testing is the lifeline our airport and airline partners need to instill confidence in air travel,” Bob Sartor, President & CEO, The Calgary Airport Authority**



Airport Operations



About Toronto Pearson



Prior to COVID-19, Toronto Pearson was the sixth most connected airport in the world, facilitating almost 50 million passengers and 478,000 aircraft movements a year, directly employing 49,000 people and enabling \$42 billion of Ontario's GDP



Toronto Pearson is open 24 hours a day. A typical day is divided into normal operating hours (6:30 a.m. to midnight), preferential runway system hours and restricted hours



Preferential hours (midnight to 6:29 a.m.): prioritize runways that overfly the fewest people



Restricted Hours (12:30 to 6:29 a.m.): governed by a Night Flight Restriction Program which limits number of movements. Program runs from Nov 1 to Oct 31 and accounts for about 4 per cent of annual movements. Annual budget increases with passenger growth

Operations at a Glance

Q3 2019

121,958 flights
1326 flights per day

4,185 night flights
45 flights per night

VS

Q3 2020

29,871 flights
325 flights per day

1,295 night flights
14 flights per night

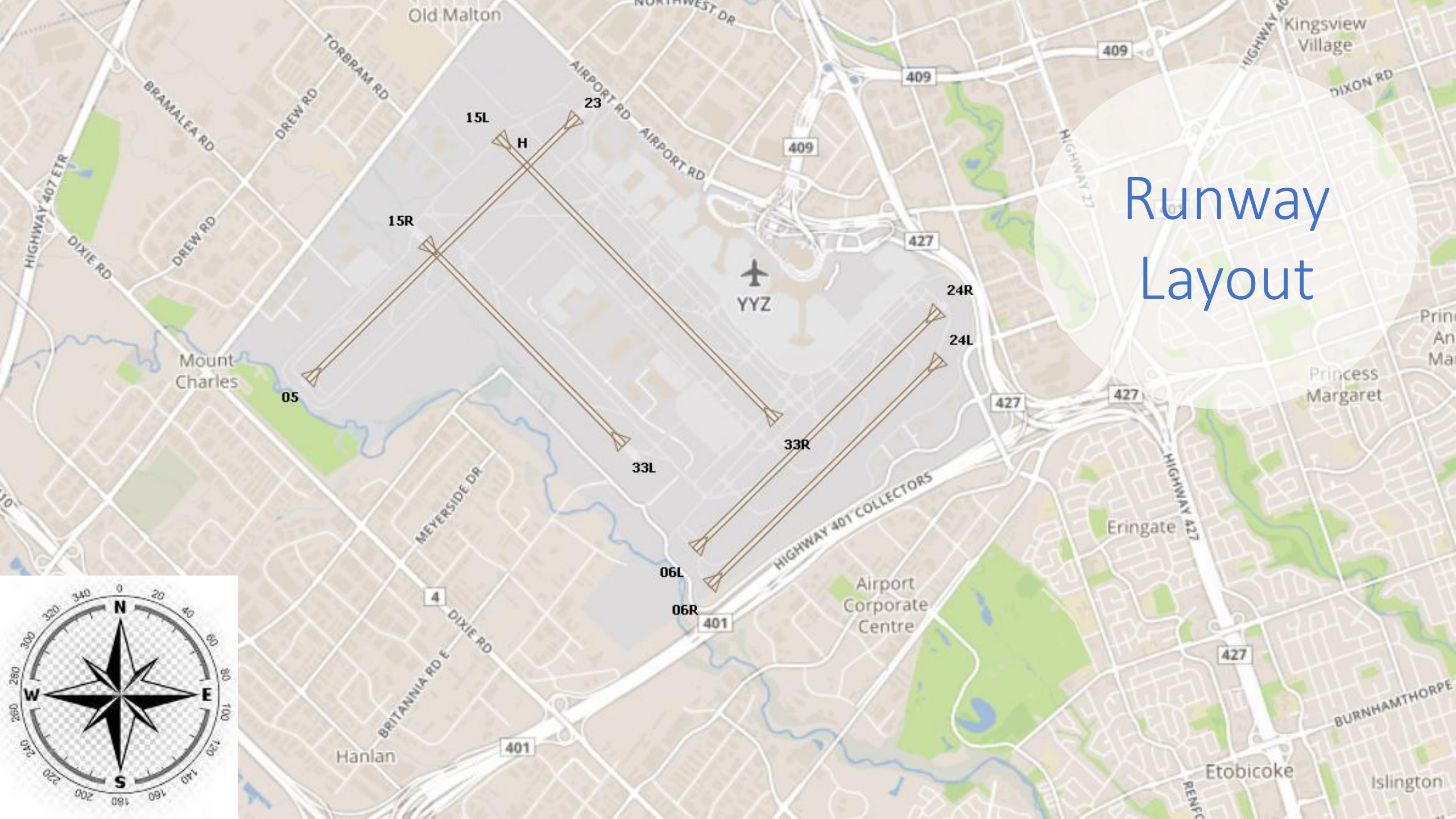
The lower traffic levels in Q3 2020 vs Q3 2019,
reflect the impact of COVID-19 on air travel

Overall traffic down by 76%
Night flight traffic down by 69%

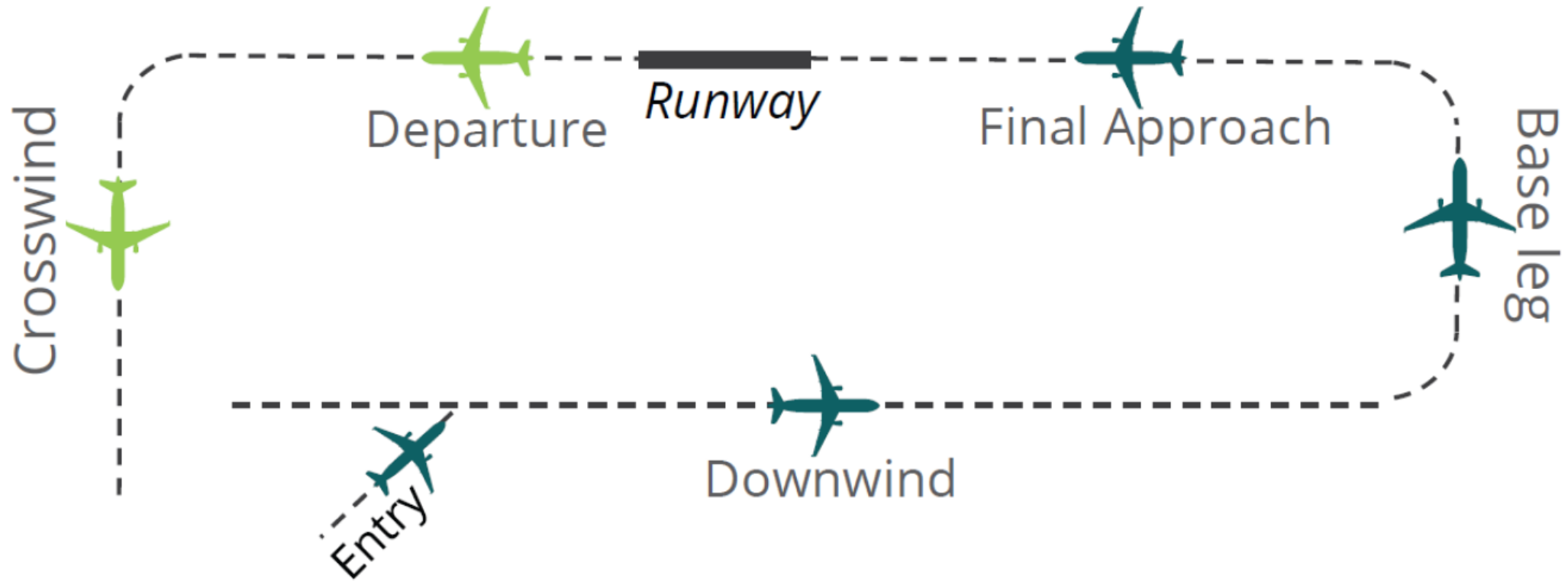
Our Runways

- Toronto Pearson has five runways
- Two runways go in the north-south direction:
 - Runway 15L/33R
 - Runway 15R/33L
- Three runways go in the east-west direction:
 - Runway 05/23
 - Runway 06L/24R
 - Runway 06R/24L
- Runways can be used from both ends, so while there are five runways, there are 10 operational ends for arrivals and departures

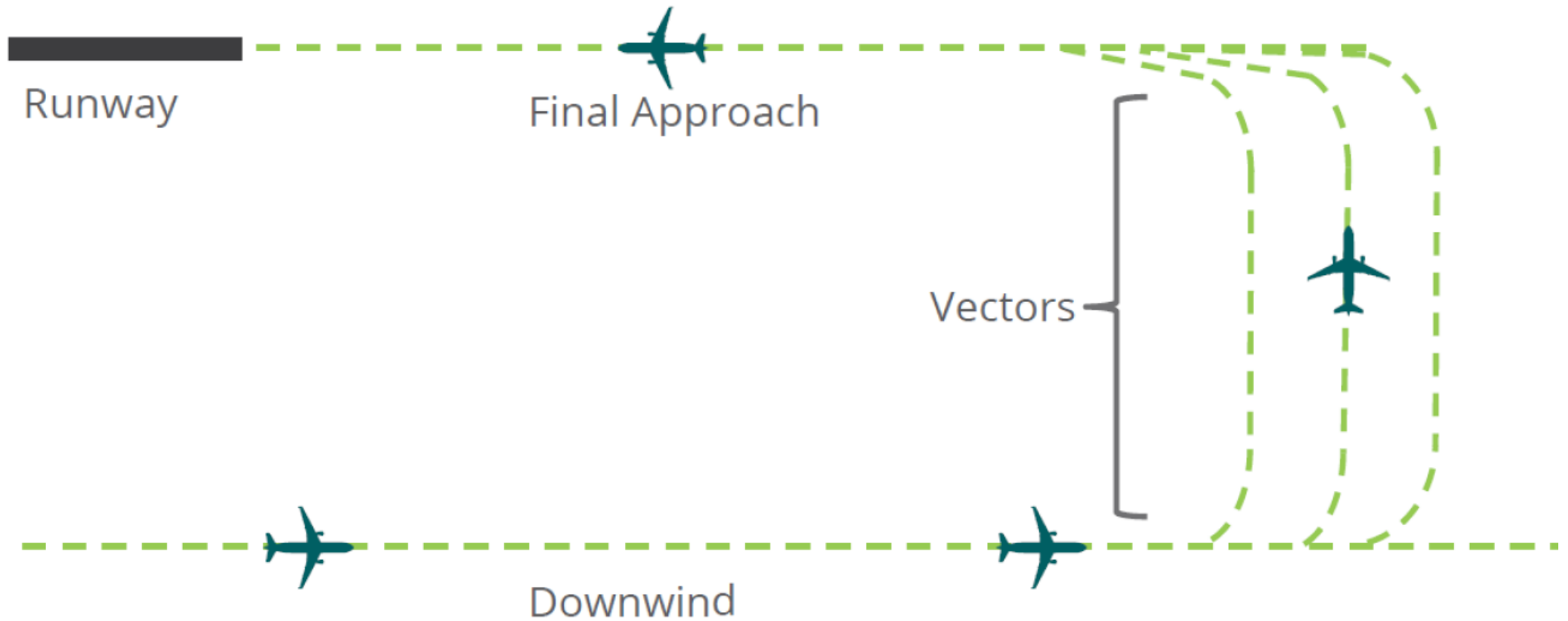
Runway Layout



Runway Circuit Pattern



Runway Circuit Pattern



Northeast of the Airport

Mainly impacted by:

Arrivals Runway 23, Departures Runway 05



Northeast

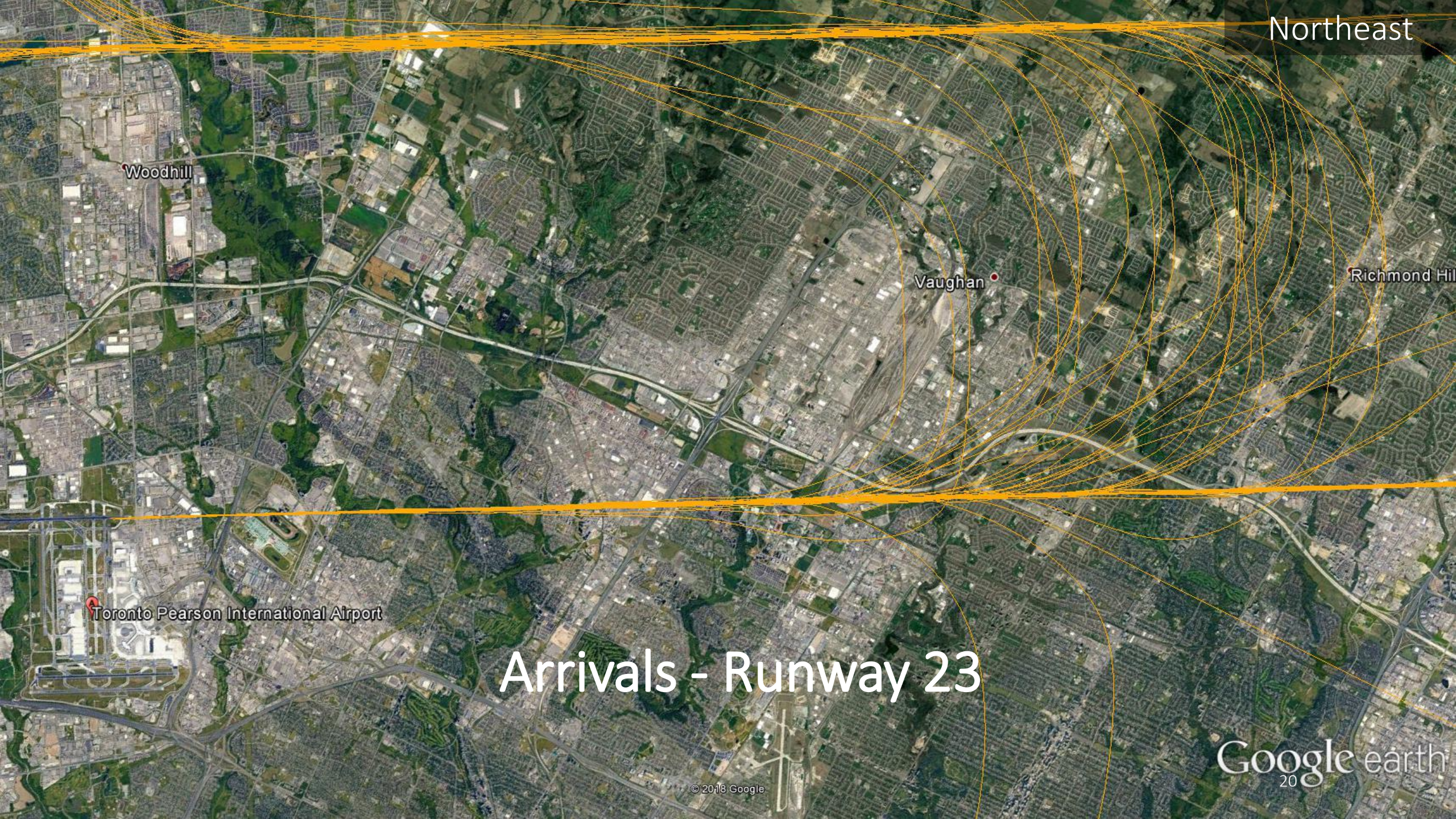
Woodhill

Vaughan

Richmond Hill

Toronto Pearson International Airport

Arrivals - Runway 23



Northeast

Woodhill

Vaughan

Richmond Hill

Toronto Pearson International Airport

Departures – Runway 05

Google earth
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Southeast of the Airport

Mainly impacted by:

Arrivals Runway 24L/24R, Departures Runway 06L/06R



Southeast

Toronto Pearson International Airport

Markham

North York

York

Arrivals - Runway 24L/24R

Toronto

Toronto Pearson International Airport

Departures – Runway 06L/06R

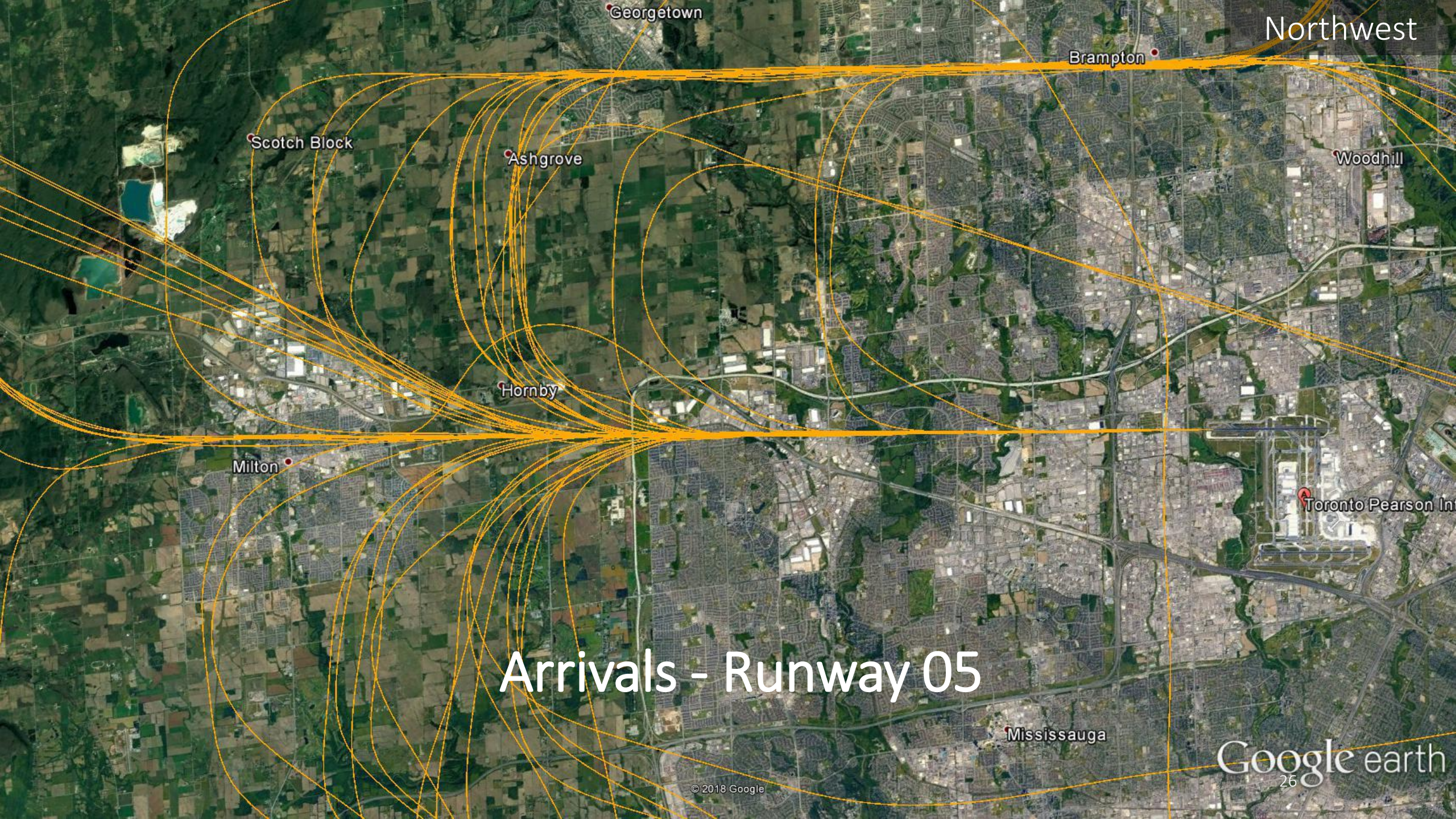
North York

Northwest of the Airport

Mainly impacted by:

Arrivals Runway 05, Departures Runway 23





Northwest

Brampton

Woodhill

Georgetown

Scotch Block

Ashgrove

Hornby

Milton

Toronto Pearson Int

Arrivals - Runway 05

Mississauga

Google earth



Northwest

Brampton

Woodhill

Scotch Block

Ashgrove

Hornby

Milton

Toronto Pearson Int

Departures - Runway 23

Mississauga

Google earth

Southwest of the Airport

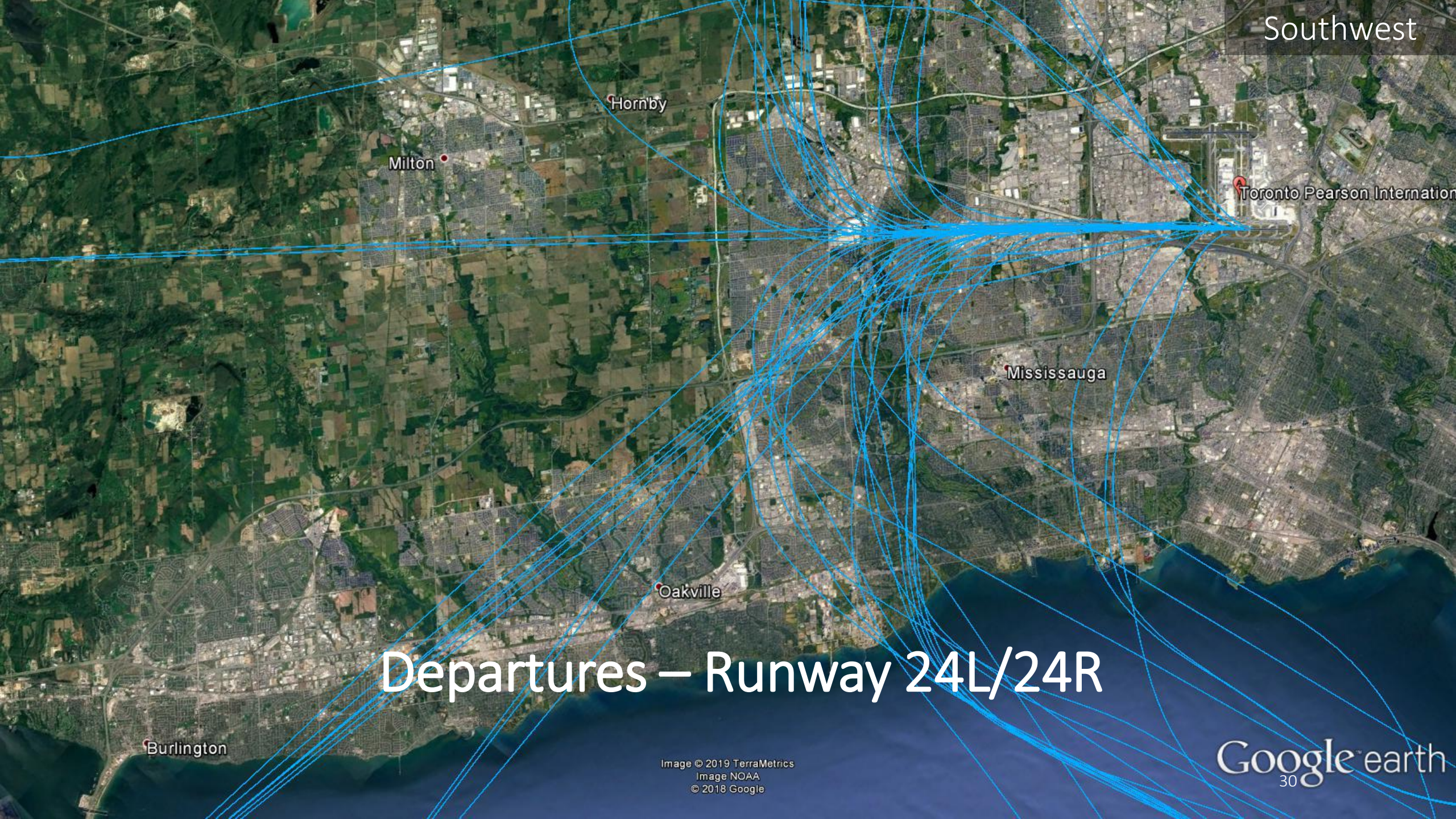
Mainly impacted by:

Arrivals Runway 06L/06R, Departures Runway 24L/24R





Arrivals - Runway 06L/06R



Departures – Runway 24L/24R

Toronto Pearson International

Milton

Hornby

Mississauga

Oakville

Burlington

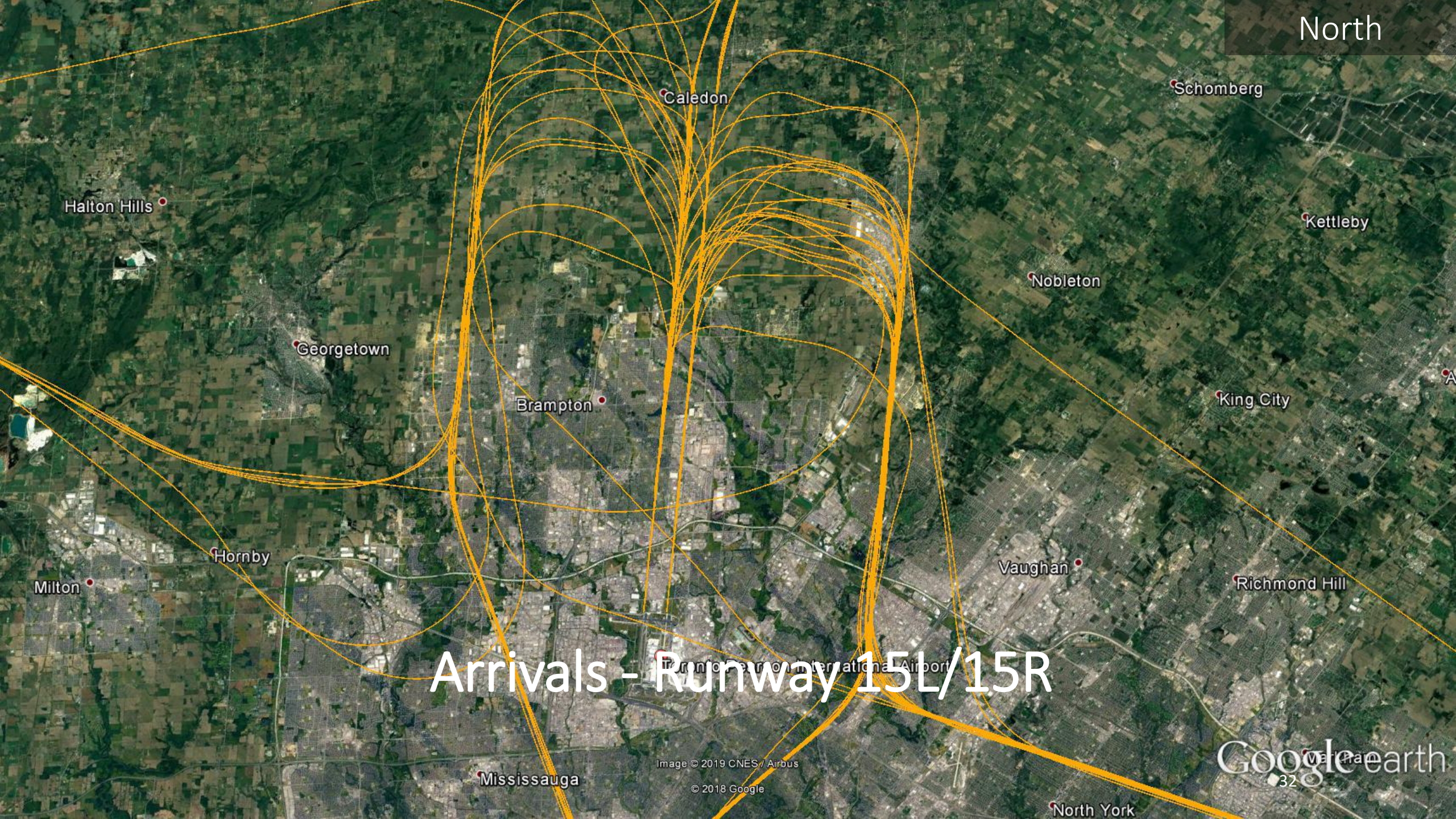
North of the Airport

Mainly impacted by:

Arrivals Runway 15L/15R, Departures Runway 33L/33R



North



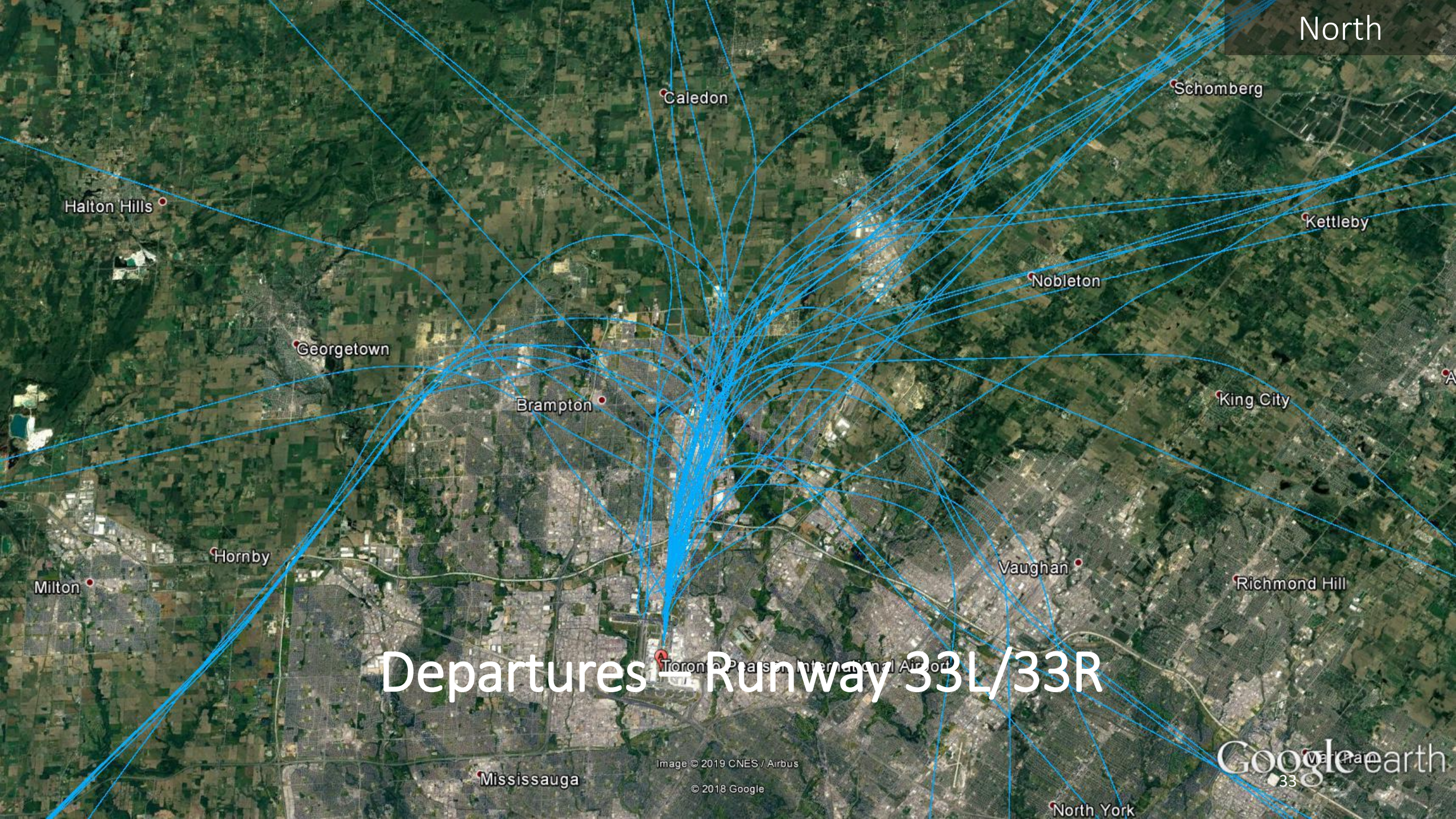
Arrivals - Runway 15L/15R

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North



Departures - Runway 33L/33R

Image © 2019 CNES / Airbus

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South of the Airport

Mainly impacted by:

Arrivals Runway 33L/33R, Departures Runway 15L/15R



South



Milton

Hornby

Vaughan

Richmond Hill

Toronto Pearson International Airport

Mississauga

Markham

North York

Oakville

Toronto

Arrivals - Runway 33L/33R

Image © 2019 TerraMetrics
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South



Milton

Hornby

Vaughan

Richmond Hill

Toronto Pearson International Airport

Mississauga

Markham

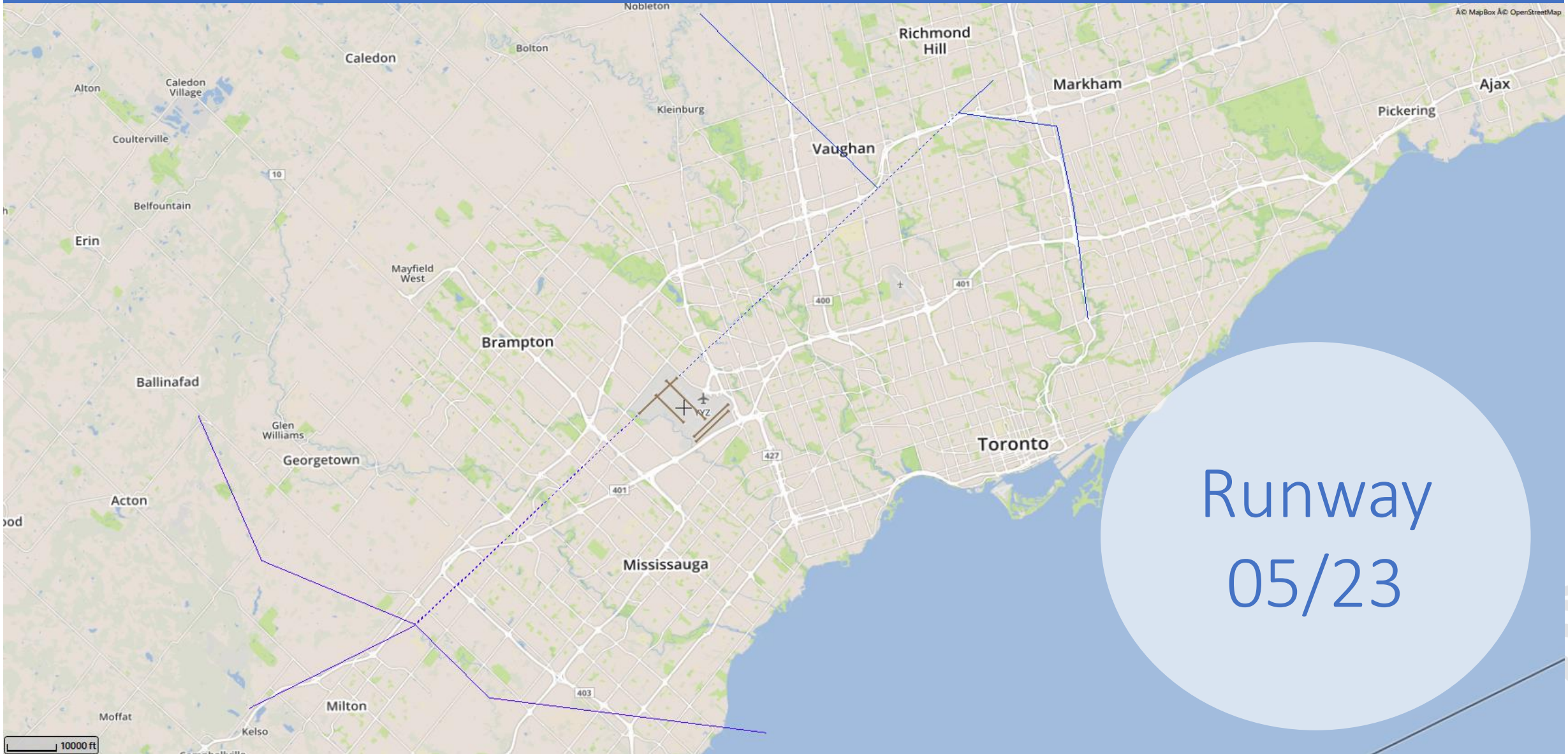
North York

Oakville

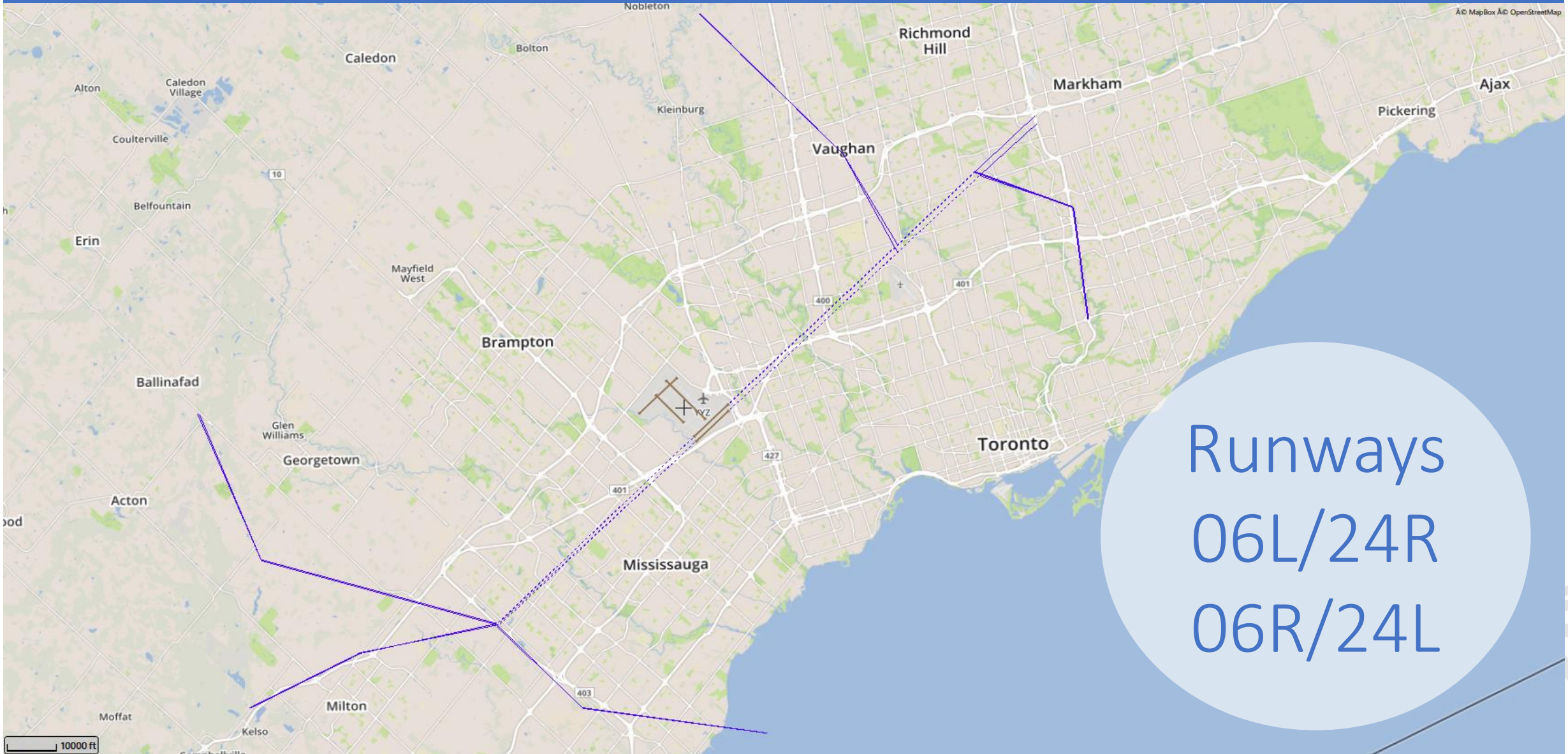
Toronto

Departures – Runway 15L/15R

New Nighttime Arrival Procedures – RNAV X



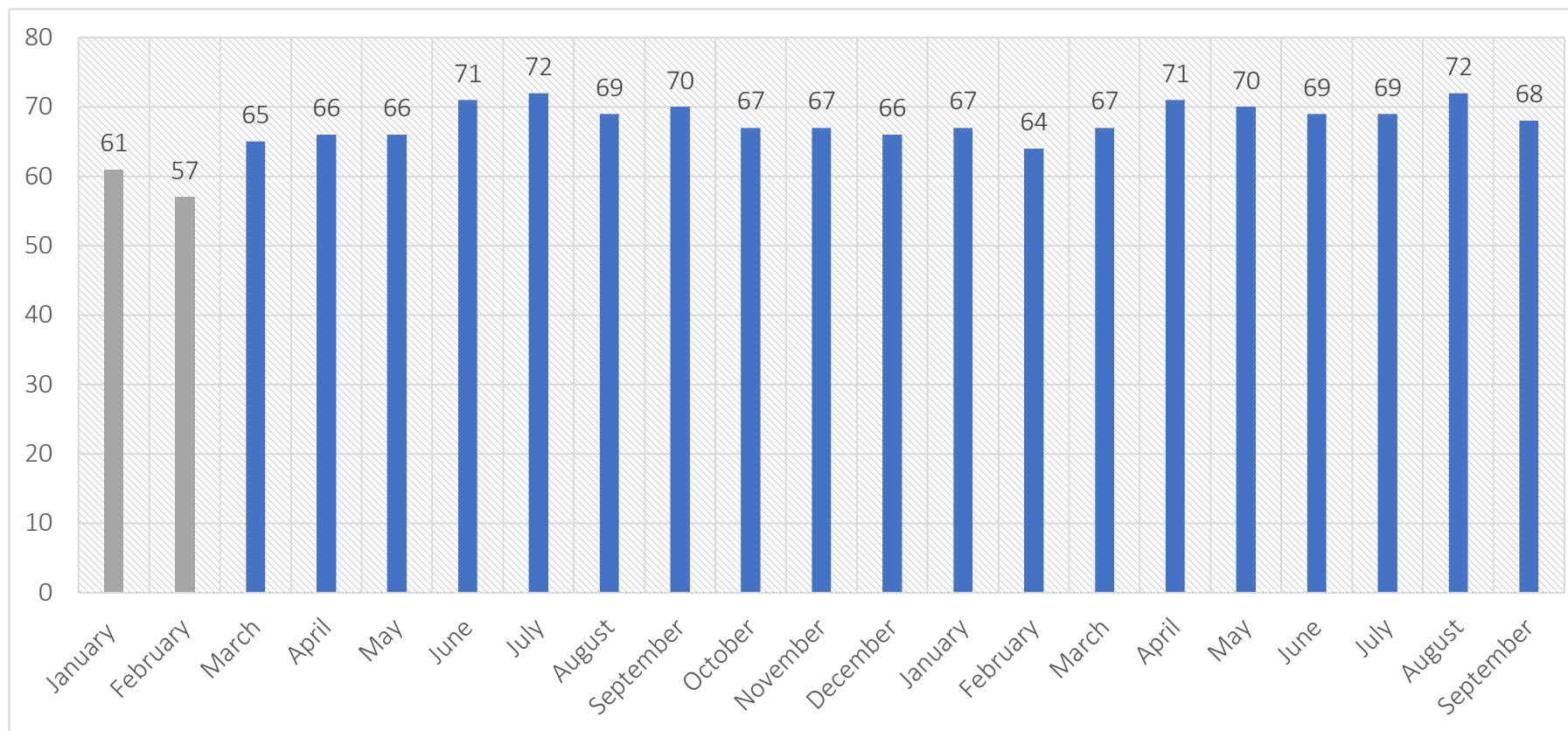
New Nighttime Arrival Procedures – RNAV X



NAV CANADA Updates

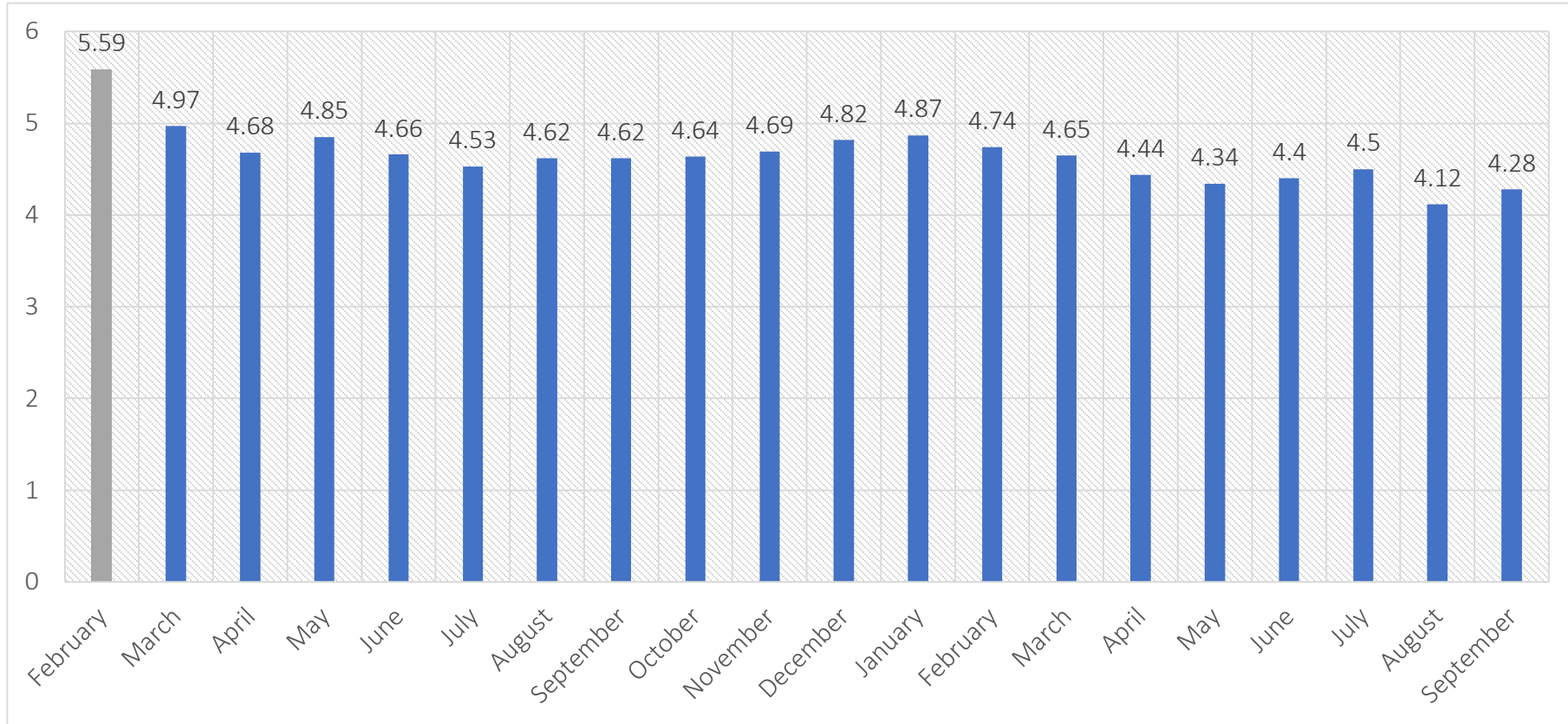
Percentage of Aircraft Using CDO Procedures

New CDO arrival procedures for the downwind segments were implemented February 28, 2019. Current traffic levels and seasonality may influence usage of CDO.



- Percentage of aircraft using CDO procedures **pre-implementation**
- Percentage of aircraft using CDO procedures **post-implementation**

Average Level Segment Distance (for aircraft not achieving CDO)



- Percentage of aircraft using CDO procedures **pre-implementation**
- Percentage of aircraft using CDO procedures **post-implementation**



Looking ahead

HELIOS Recommendation: Design RNP-AR procedures that can reduce the need for a high / low operation

- New 'Established on RNP-AR' separation standard approved by ICAO and NAV CANADA has worked with Transport Canada to gain approval for use in Canada.
- NAV CANADA, the GTAA and INMB are undertaking preliminary analysis work on how the concept could be deployed at Toronto Pearson

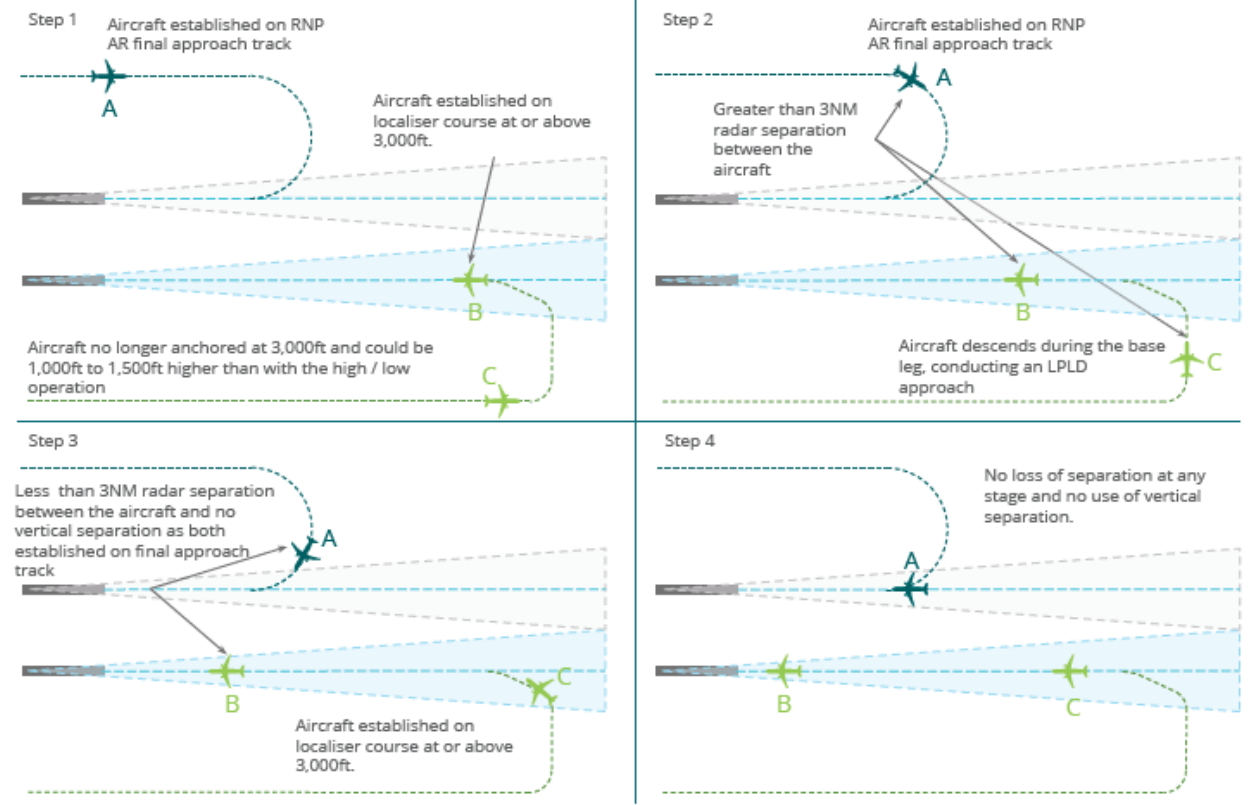


Figure 26. Established on RNP AR

Establish on RNP-AR

(video found at [World First: NAV CANADA Implements New ICAO Separation Standard at YYC - YouTube](#))

NAV CANADA



GTAA Updates

Maintenance and Winter Operations Update

2020 Capital Maintenance projects

- All projects are complete as of November 12
- All preferential runways are available
- Regular maintenance continues and Noise Advisories are posted at torontopearson.com

Temporary Closure of Runway 06R/24L

- Runway 06R/24L and associated taxiways are temporarily closed for the winter of 2020/2021. The exact re-opening dates will be confirmed in 2021.

Winter operations

- During the colder months the airport undertakes the following activities to maintain safe operation:
 - de-icing of aircraft
 - surface treatment and snow removal on runways, taxiways, aprons.
 - Runway availability is affected during surface treatment and snow clearing activities



Noise Management Action Plan



Deliverables to Date

- ✓ Launched Noise Management Forums
- ✓ Published updated Complaint Process
- ✓ Completed A320 Family Audit and began tracking usage against 2019 audit
- ✓ Six Ideas:
 - ✓ Ideas 1-4 implemented
 - ✓ Idea 5 tested and trialed (will not be pursued based on results and community feedback)
 - ✓ Idea 6 (revised Preferential Runway program) trial began February 2020
- ✓ Launched InsightFull, a new noise management website
- ✓ Began publishing new noise reports
- ✓ Pilot School Air Conditioning Program

Q4 Workplan

- Idea 6 Trial continues
- Continue to monitor A320 series retrofit program. Quarterly A320 series retrofit reports can be found near the bottom of [this page](#)
- Develop metrics and engage with industry and community stakeholders for the Fly Quieter and Greener Reporting Program
- Continue to update on the Night Flight Restriction Program
- Pilot School Air Conditioning Program continues
- Develop remaining components of the Noise Management Forums

Question Period

Thank You

