

Noise Management Forums Pearson Public Meeting

December 6, 2022



Welcome + Introductions

Pearson Public Meetings

- The Pearson Public Meetings are part of the Noise Management Forums.
- 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
 - 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 are virtual
- The Public Meetings are recorded and posted online at www.torontopearson.com/nmf

Agenda

- Operations + Community Impacts
- NAV CANADA Updates
- GTAA Updates
 - 2022 Runway Rehabilitation
- Question Period

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. Runs from Nov 1 to Oct 31. Annual budget increases with passenger growth

Noise Management Roles and Responsibilities

The **Greater Toronto Airports Authority** (GTAA) is a not-for-profit private business that has managed and operated the airport since 1996. The GTAA develops and manages a Noise Management Program and explores new opportunities for noise mitigation. It is also responsible to maintain the airport infrastructure including surfaces such as runways

NAV CANADA is the air navigation provider in Canada, responsible for safe and efficient movement of aircraft. NAV CANADA designs and publishes a network of air routes to design criteria set by Transport Canada and ICAO. It also assigns runways at Toronto Pearson considering winds, weather, capacity and the preferential runway system.

Transport Canada is the regulator for aviation in Canada. It ensures Canadian aircraft are compliant with the international noise standards through the aircraft certification process, establishes flight path design criteria and land-use guidelines based on noise exposure. It approves proposed changes to and enforces the Noise Abatement Procedures and Noise Operating Restrictions. Transport Canada also audits the airport's Night Flight Restriction Program annually.

Operations + Community Impacts



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



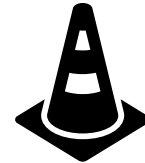


Runway Selection

Air Traffic Controllers consider many factors when selecting a runway configuration:



Wind - direction, windspeed, crosswinds



Runway and Taxiway Availability - can be affected by maintenance, snow clearing and other factors



Surface conditions - (wet, dry, ice, snow) combined with wind conditions



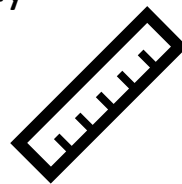
Distance to Runway – the primary departure runway is typically the shortest distance from the terminal – less fuel consumption, less GHG



Traffic Demand & Capacity – traffic levels vary seasonally and even throughout the day. Runway configurations are selected for optimal capacity



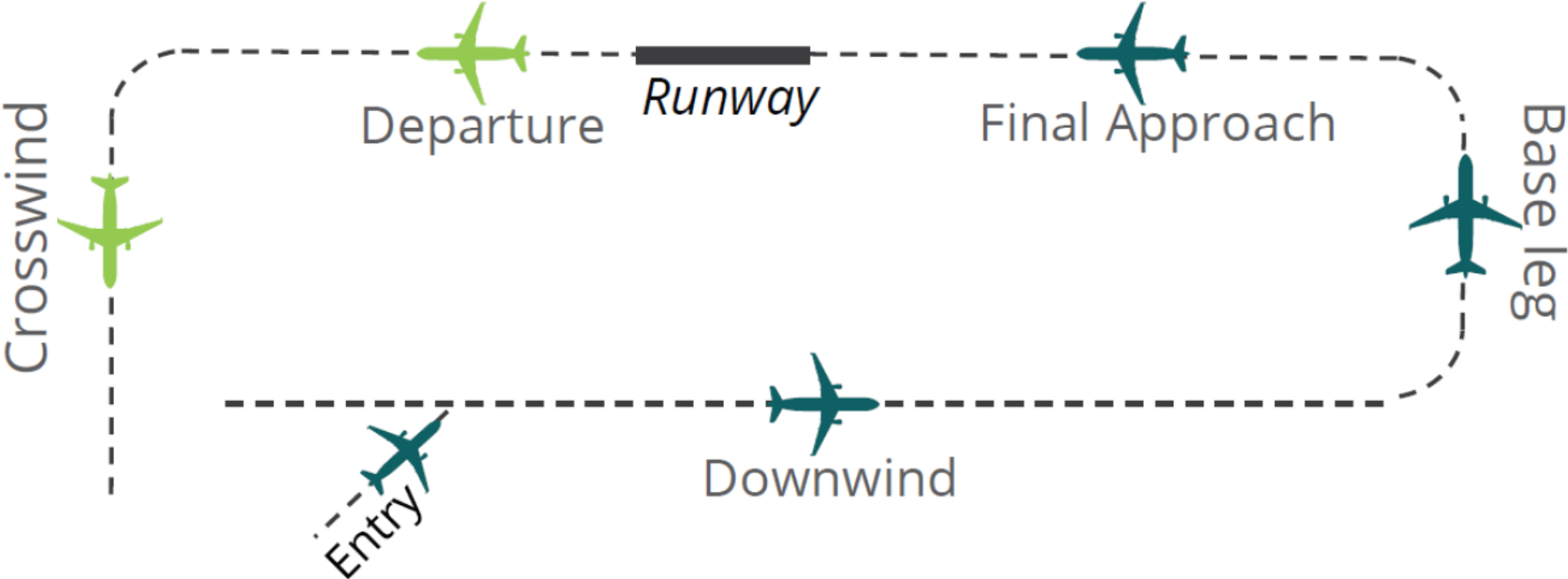
Time of Day – the Nighttime Preferential Runway System is used between midnight and 6:30 am. It is designed to affect the fewest people in the nighttime hours



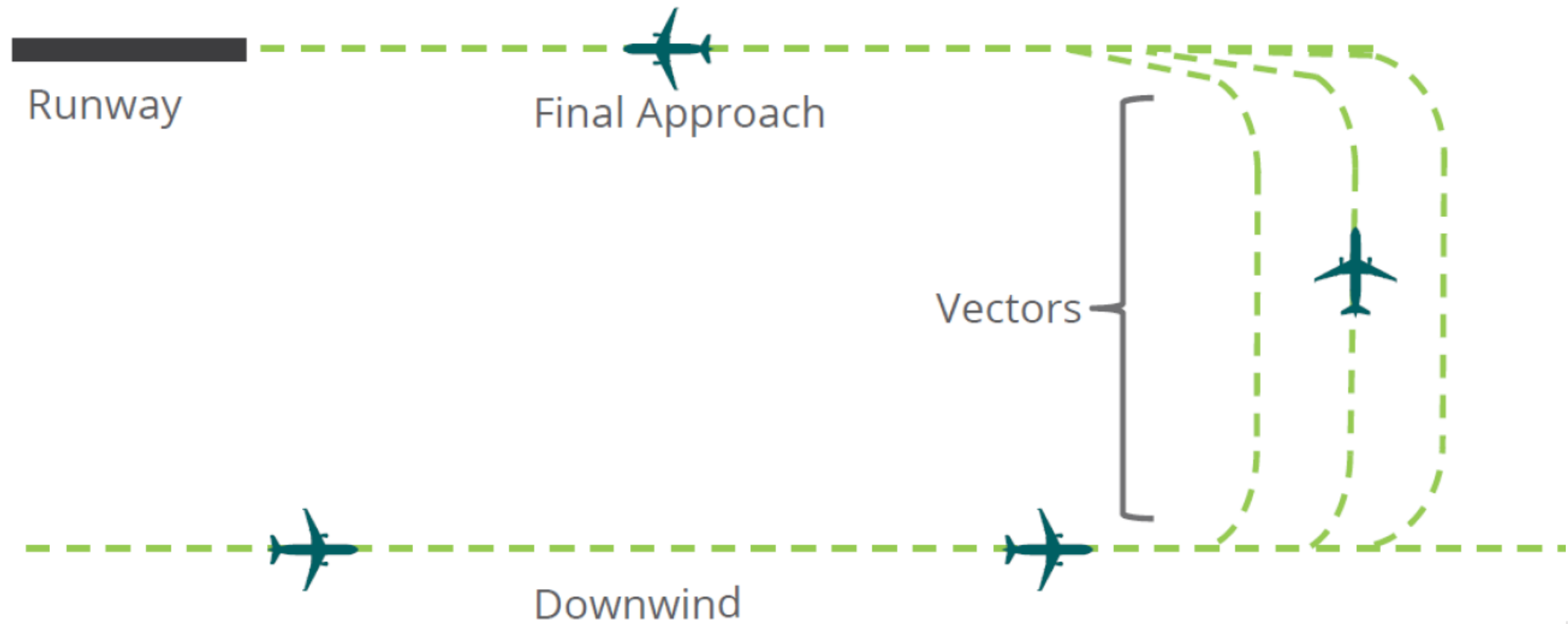
Runway Length –sometimes a longer runway is needed for long haul, large/heavy aircraft

The east/west runways are used for ~95% of traffic, due to predominant easterly/westerly winds, and capacity

Runway Circuit Pattern



Runway Circuit Pattern



Arrivals Runway 23

Departures Runway 05

Communities impacted:

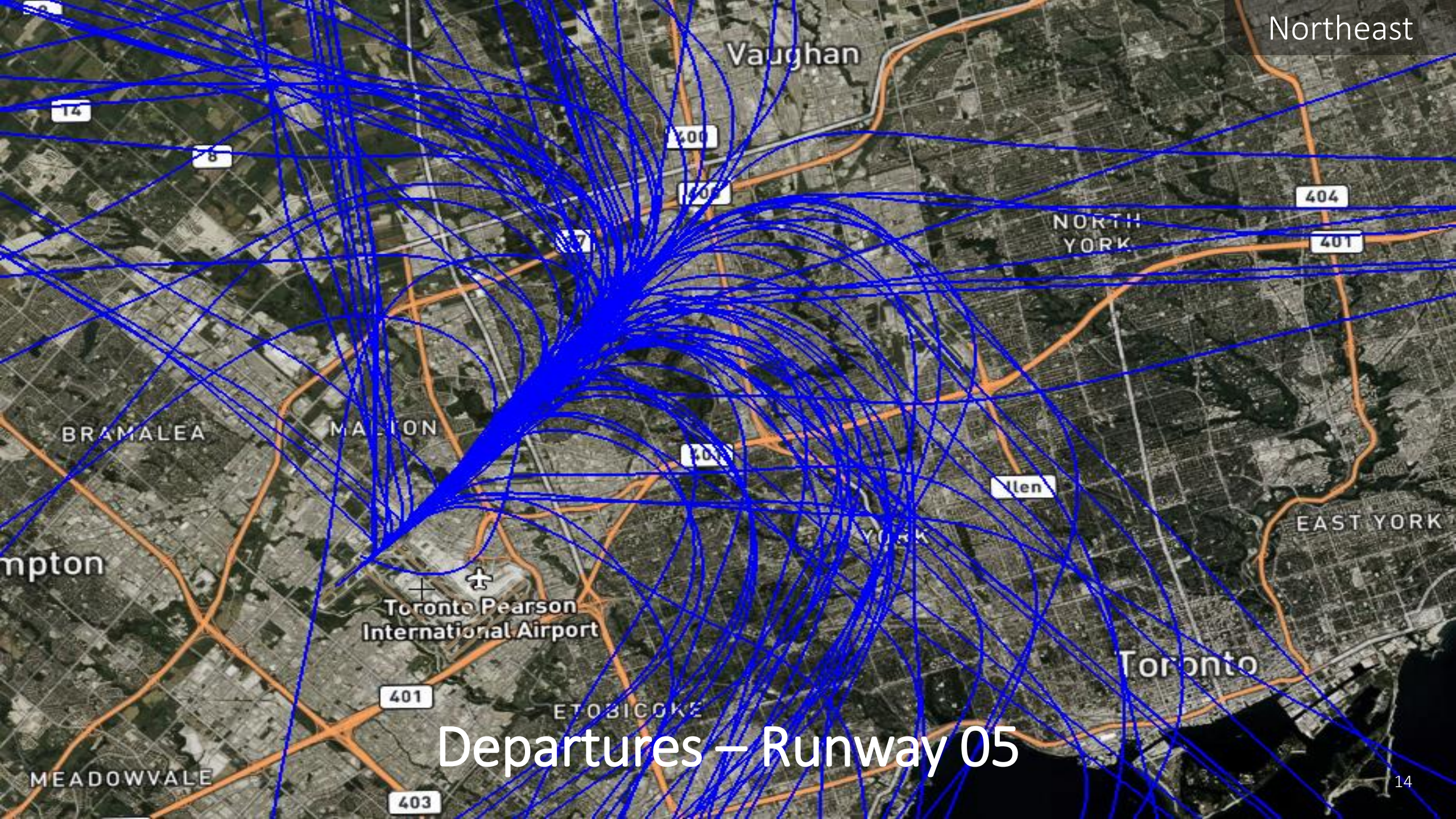
Maple/Vaughan, Richmond Hill, Thornhill, Rexdale



Northeast

Arrivals - Runway 23

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Northeast

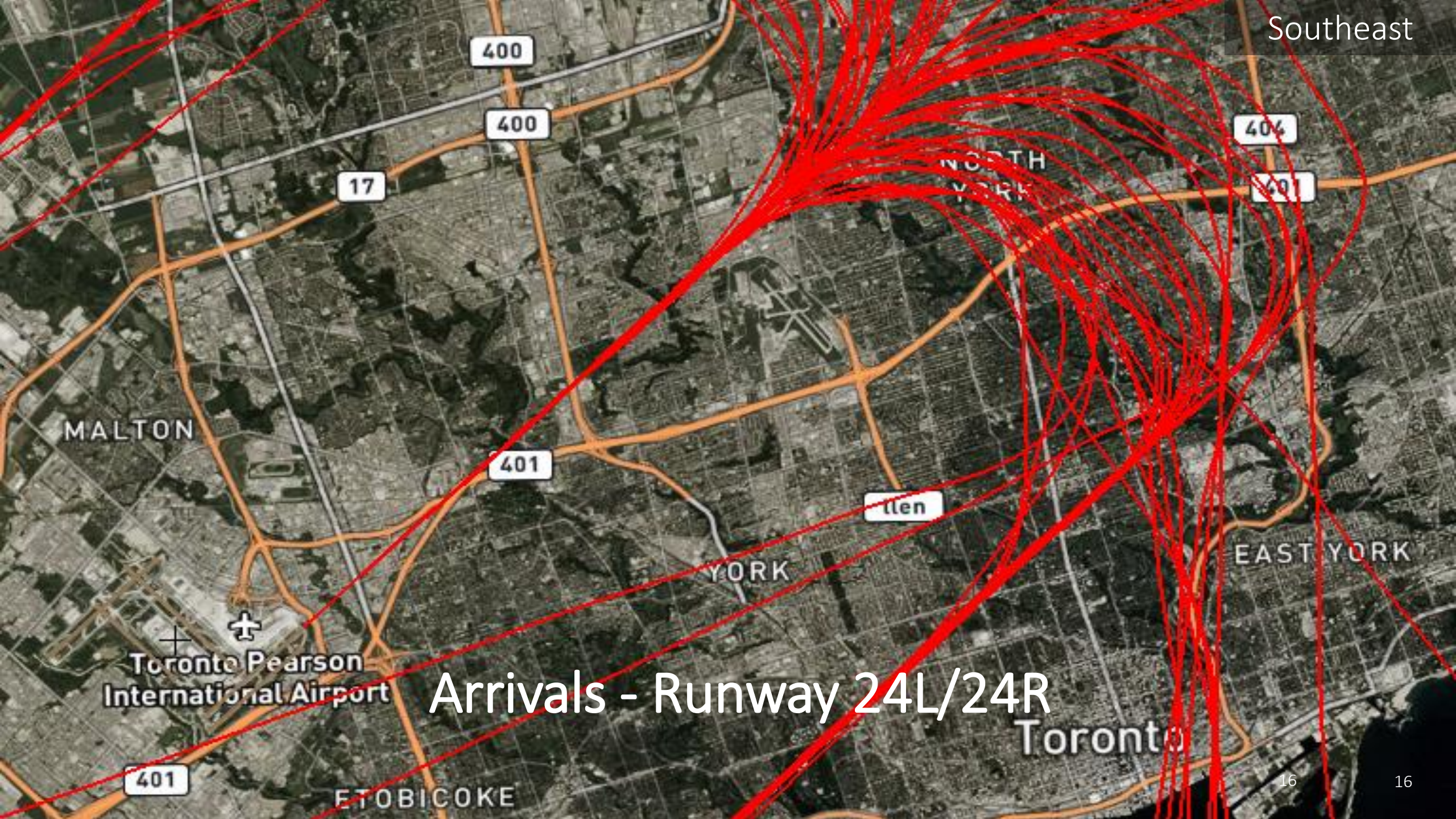
Departures – Runway 05

Arrivals Runway 24L/R

Departures Runway 06L/R

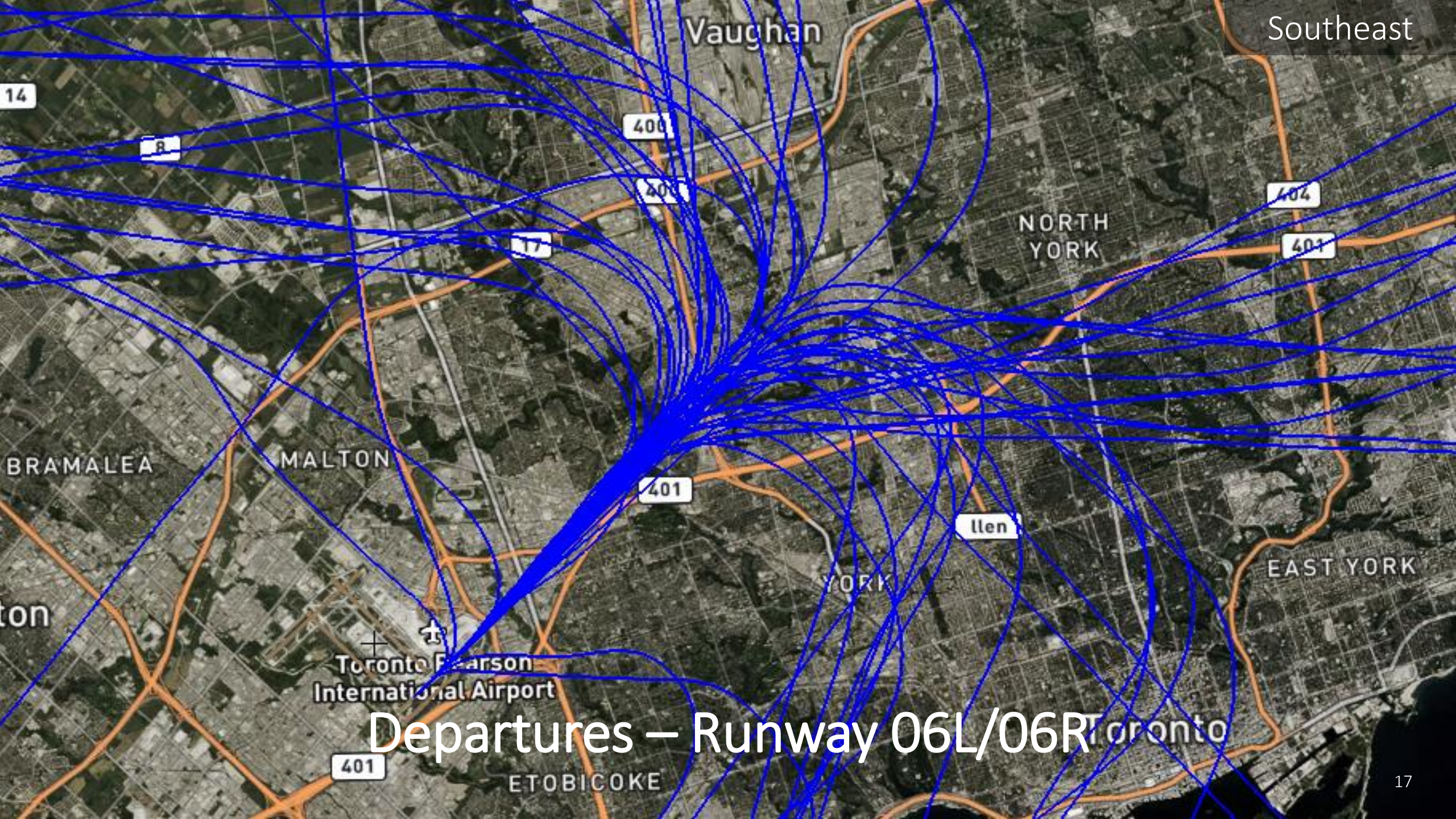
Communities impacted:

Midtown Toronto, North York, Weston, Markham



Toronto Pearson International Airport

Arrivals - Runway 24L/24R



Southeast

Vaughan

NORTH YORK

MALTON

YORK

EAST YORK

Toronto Pearson International Airport

Departures – Runway 06L/06R

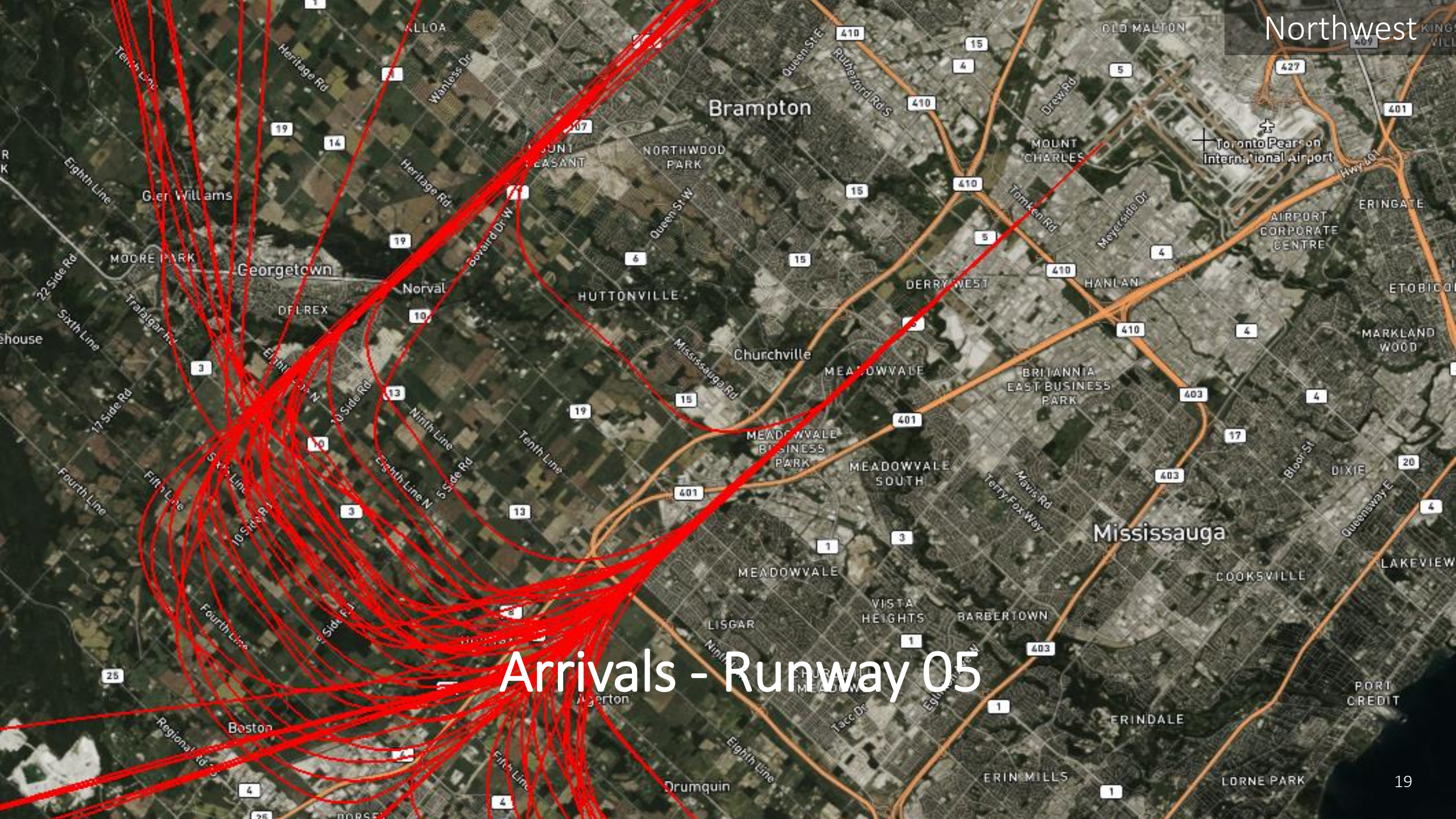
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Arrivals Runway 05

Departures Runway 23

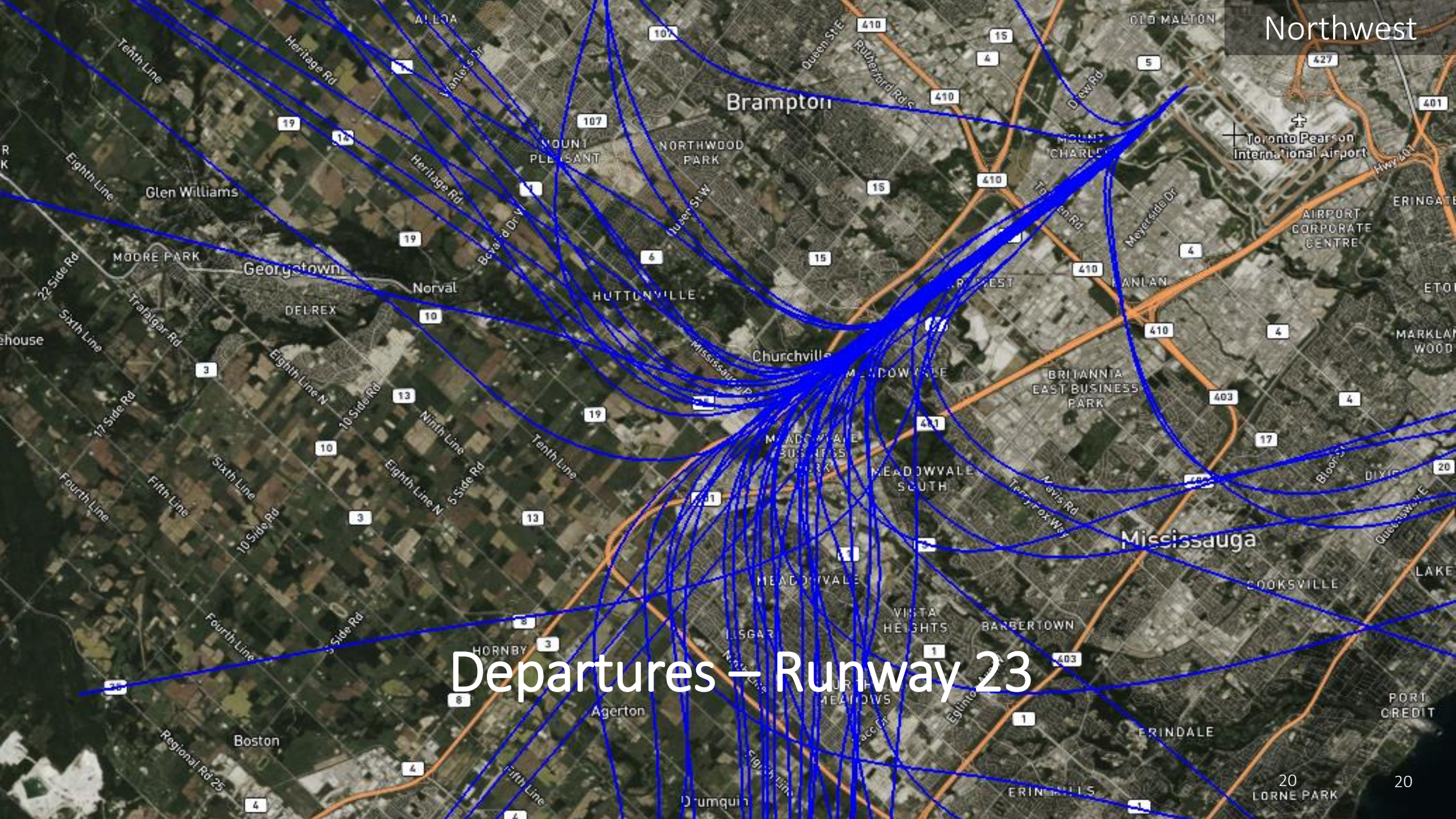
Communities impacted:

Brampton, Georgetown, Milton, Meadowvale, Streetsville



Arrivals - Runway 05

Northwest



Departures - Runway 23

Toronto Pearson International Airport

Brampton

Georgetown

Mississauga

Boston

Agerton

ERINDALE

ERIN HILLS

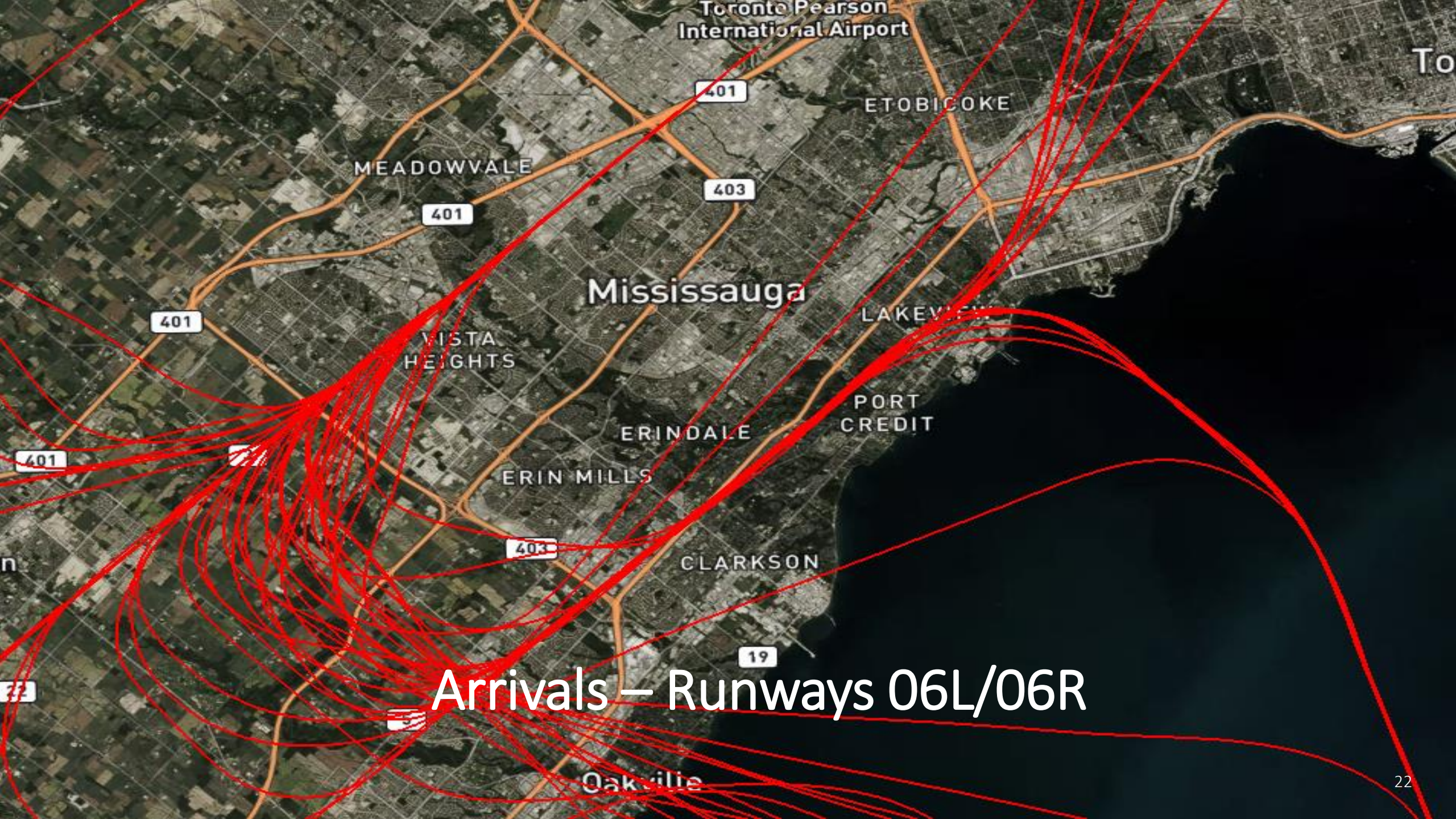
20 LORNE PARK

20

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

Communities impacted:

Meadowvale, Alderwood, Erin Mills, Streetsville, Clarkson, Port Credit, Oakville



Toronto Pearson International Airport

ETOBICOKE

MEADOWVALE

Mississauga

LAKEVIEW

VISTA HEIGHTS

PORT CREDIT

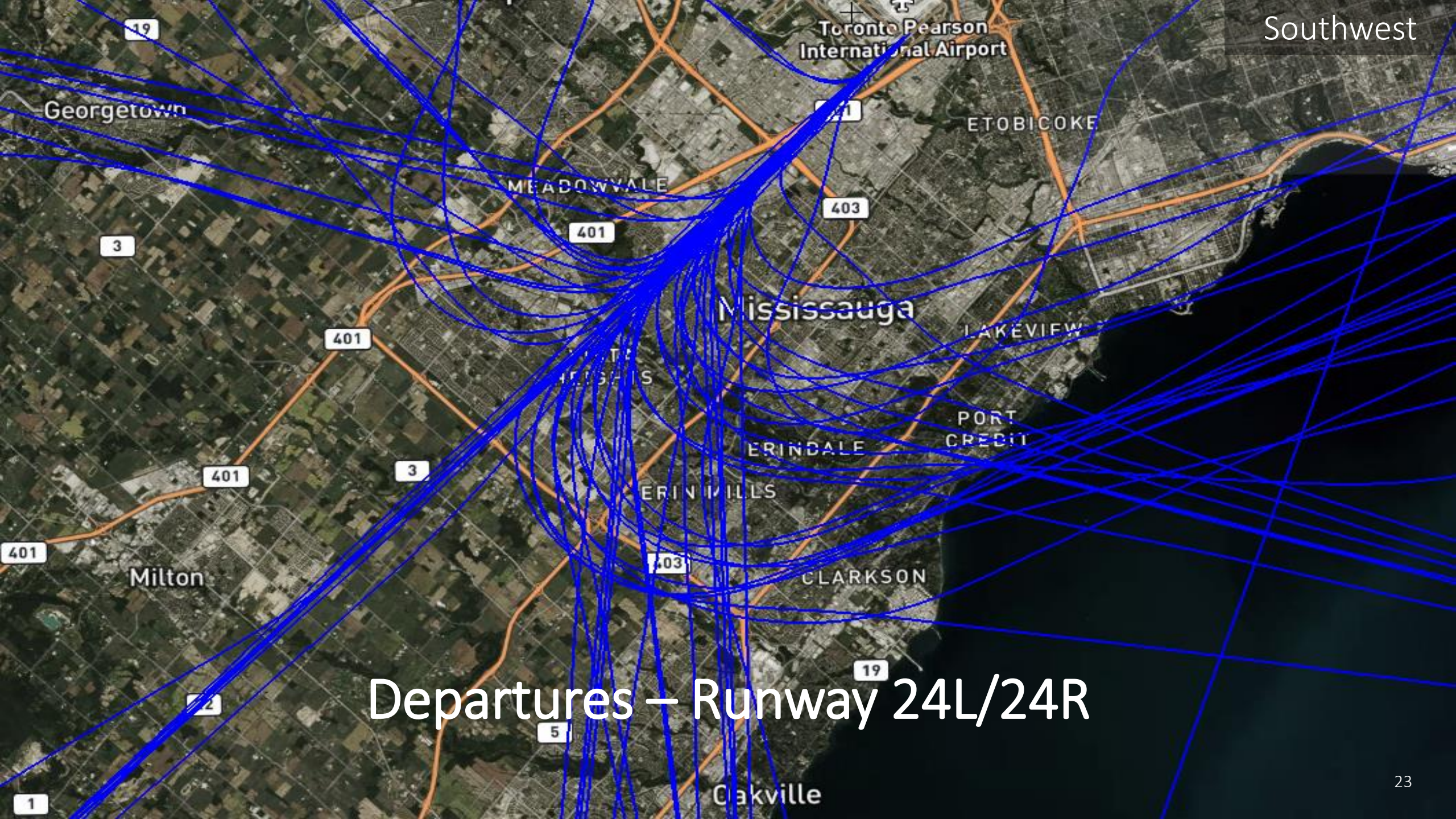
ERINDALE

ERIN MILLS

CLARKSON

Oakville

Arrivals – Runways 06L/06R



Departures – Runway 24L/24R

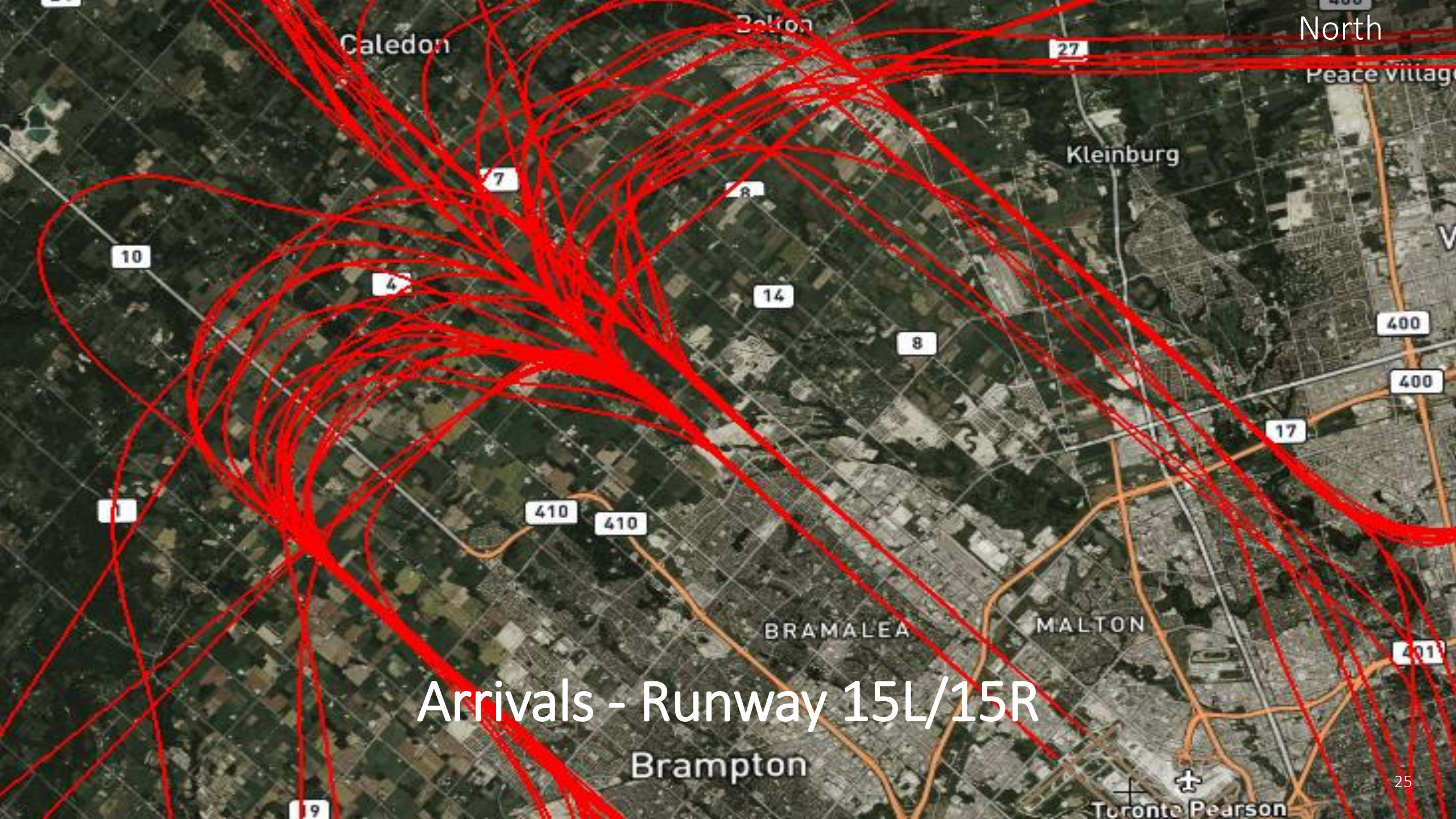
Arrivals Runway 15L/R

Departures Runway 33L/R

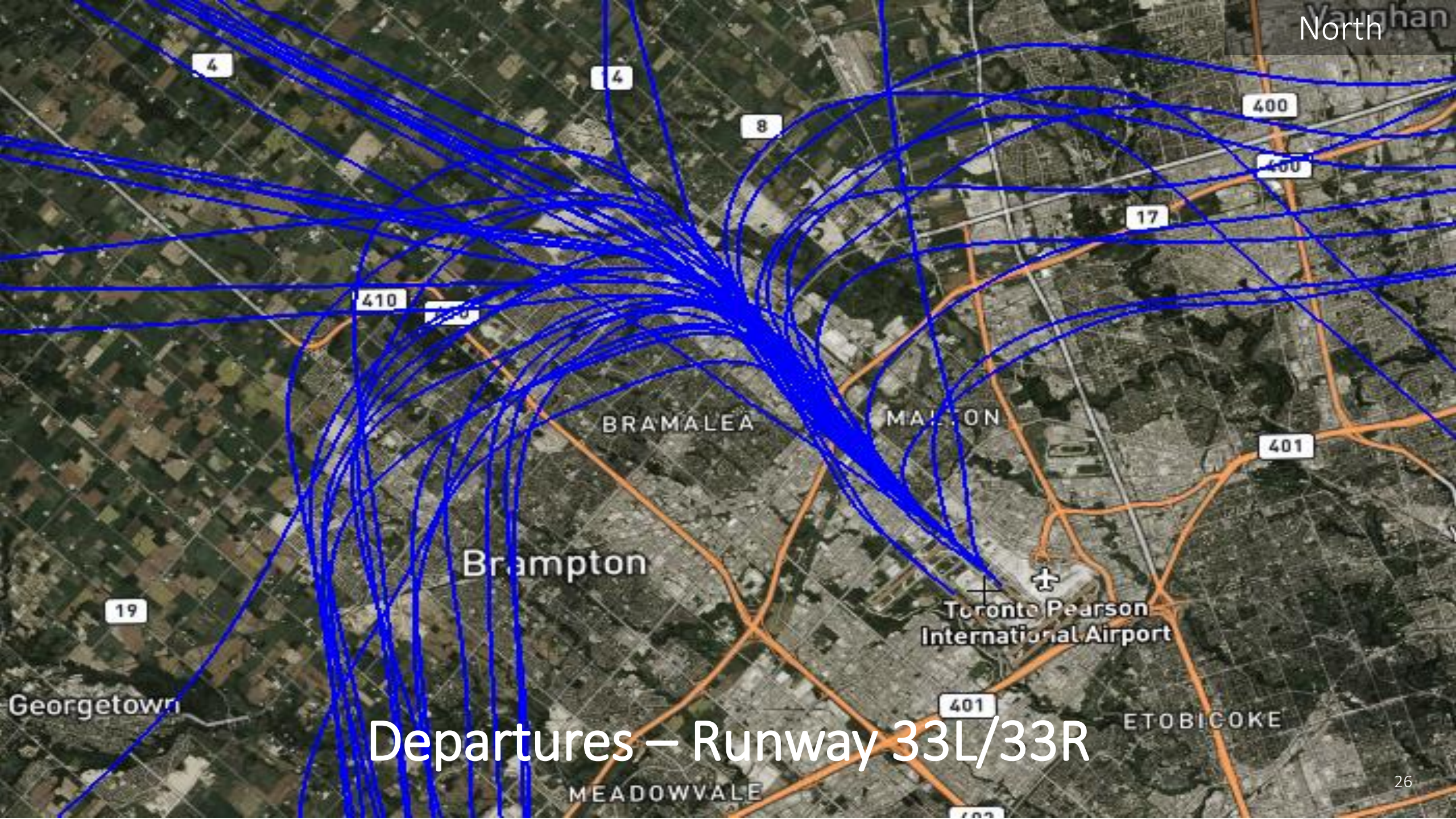
Communities impacted:

Brampton, Malton





Arrivals - Runway 15L/15R



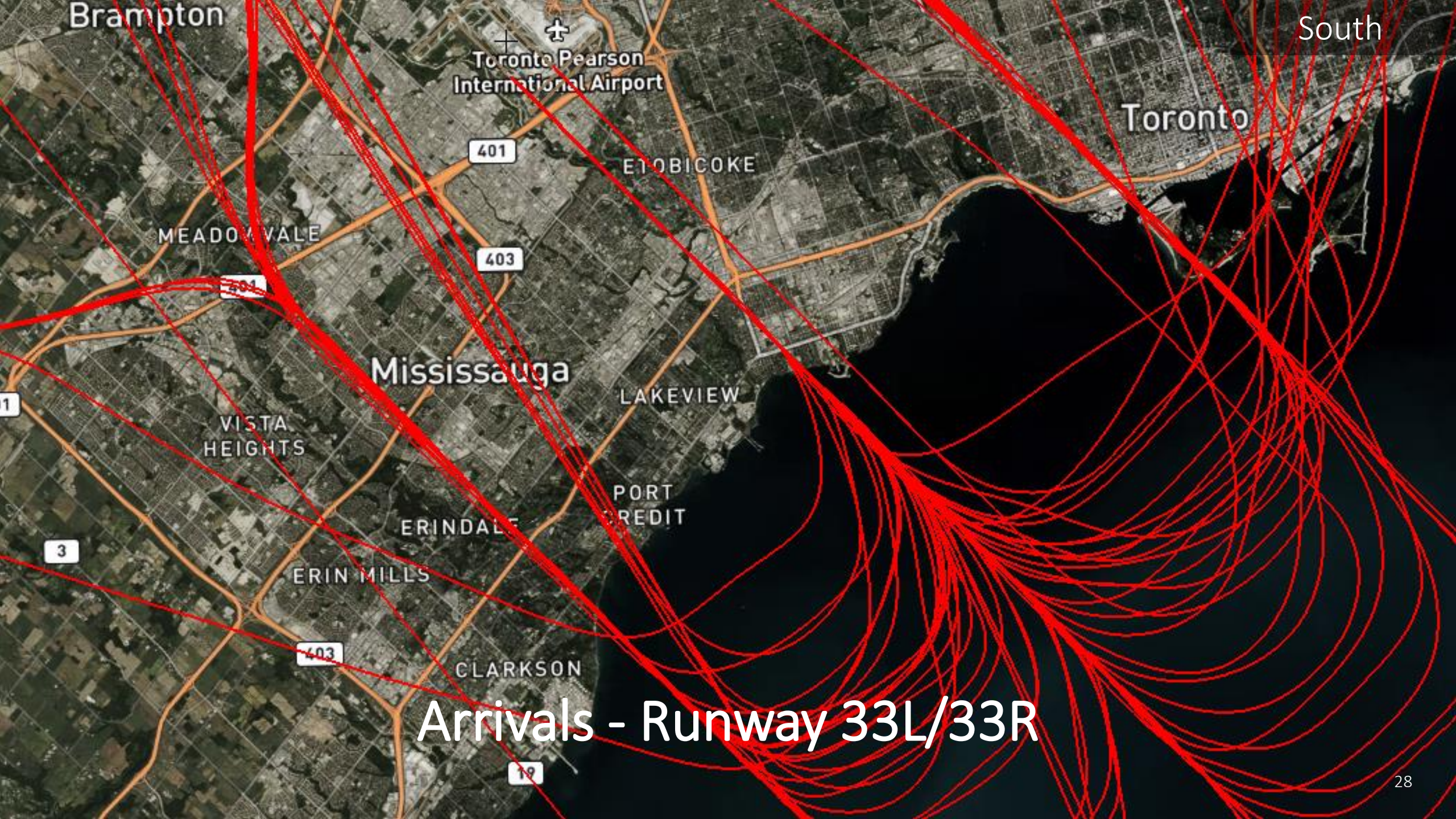
Departures – Runway 33L/33R

Arrivals Runway 33L/R

Departures Runway 15L/R

Communities impacted:

Etobicoke-Lakeshore, Alderwood, Long Branch, Markland Wood



Brampton

South

Toronto Pearson
International Airport

Toronto

401

ETOBICOKE

MEADOWVALE

403

Mississauga

LAKEVIEW

VISTA
HEIGHTS

1

PORT
CREDIT

ERINDALE

3

ERIN MILLS

403

CLARKSON

Arrivals - Runway 33L/33R

19



BRAMALEA

MALTON

South

401

Allen

YORK

Brampton

Toronto Pearson International Airport

Toronto

401

ERINBORO

MEADOWVALE

403

Mississauga

LAKEVIEW

Departures - Runway 15L/15R

VISTA HEIGHTS

PORT CREDIT

ERINDALE

ERIN MILLS

3

NAV CANADA Updates





NAV CANADA UPDATE

Serving a world in motion
navcanada.ca



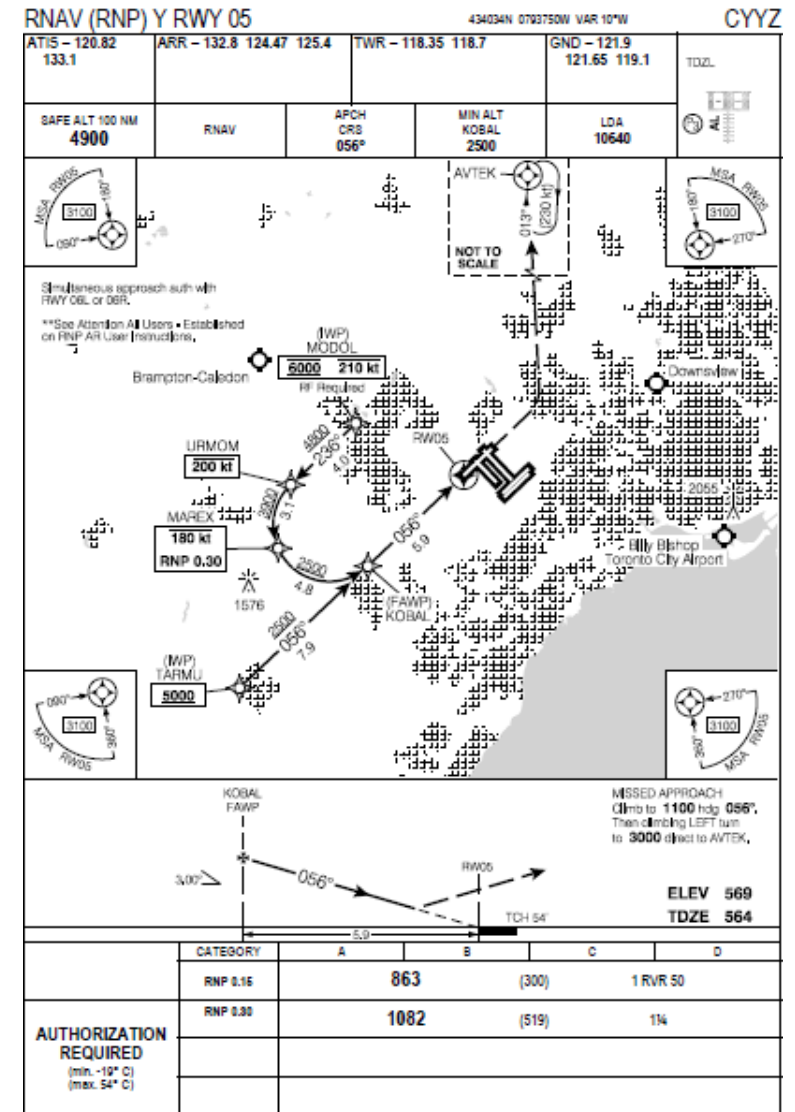


IMPLEMENTATION OF RNP AR

IMPLEMENTATION OF RNP AR

Update

- › Approaches published on November 3, 2022
- › Implementation update published on NAV CANADA website last week
- › Info also available on GTAA website
- › First usage of the approach was Nov 28
 - One of the first was Air Canada 855 from London Heathrow
 - Saved an estimated 200+ litres of fuel



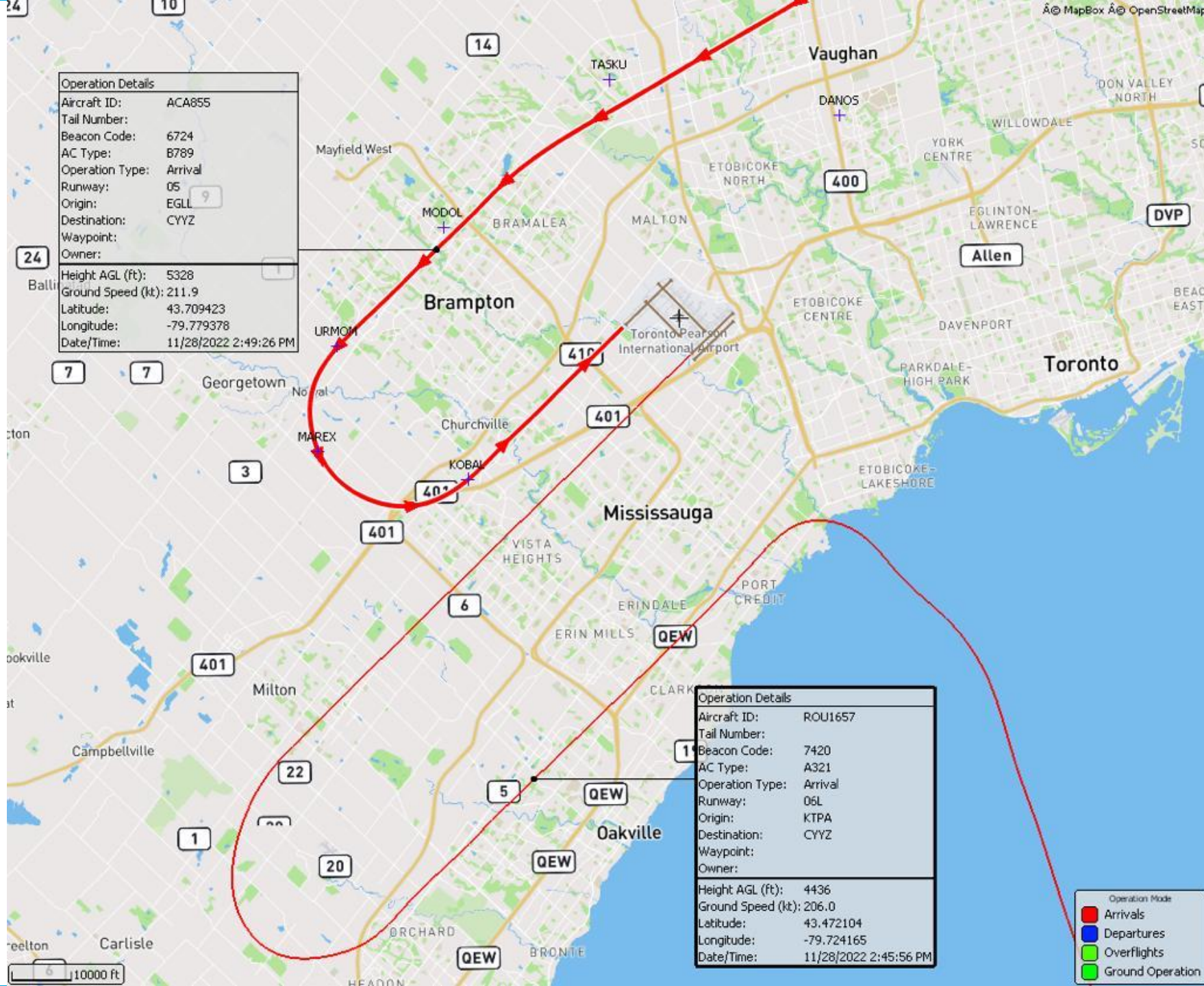
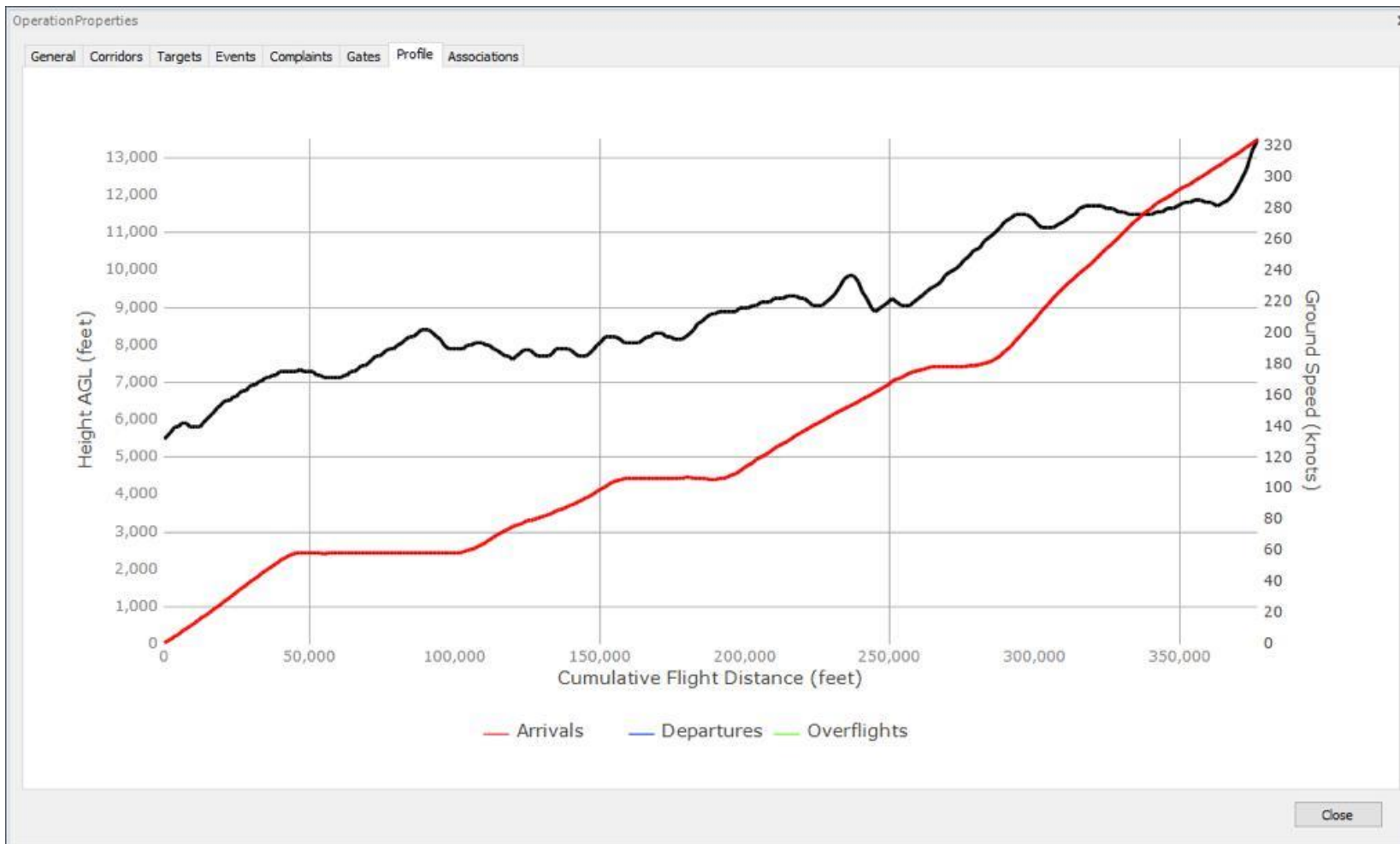


Image courtesy of GTAA Operational Performance team

IMPLEMENTATION OF RNP AR

Continuous Descent Operations

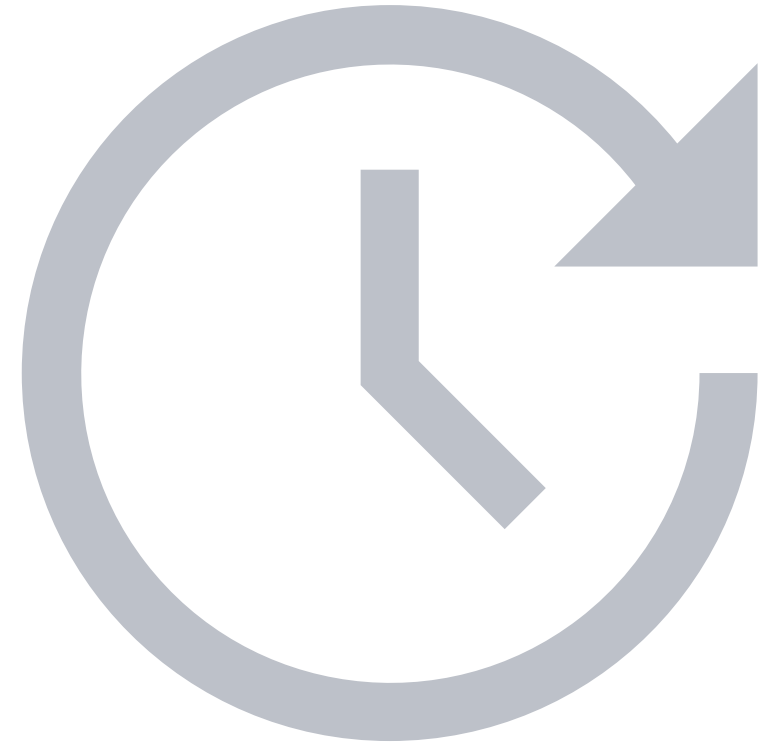


Images courtesy of
GTAA Operational
Performance team

IMPLEMENTATION OF RNP AR

Update

- › Over the early weeks and months following implementation as the air traffic controllers familiarise themselves with the new approaches, there may be some different runway usages occurring.
 - This will be a temporary occurrence and limited to a few hours in the middle of the day to support capability development and enable near-term benefits.
- › It is important remember that aircraft in the past have always departed from both the north runway (05/23) and the south runway (06L/24R)
 - During lower traffic periods the majority of aircraft may depart from only one runway to better manage air traffic and available resources.



NEXT STEPS

NEXT STEPS

- › An assessment of the change will be made by NAV CANADA and the GTAA following 180 days from implementation of RNP AR arrival routes.
 - This 180-day period will end approximately at the end of May 2023.
 - A report reviewing this period will be shared with the Noise Management Forums and published on NAV CANADA's website.
 - We expect to complete this report in late summer or early fall of 2023.

THANK YOU



GTAA Updates

Runway
Rehabilitation
Update



Runway 06L/24R has reopened!

- In April 2022, Toronto Pearson temporarily closed east/west runway 06L/24R, the airport's second-busiest runway, for a full rehabilitation.
- The rehabilitation is now complete, on time, and on budget.
- This project is one of the largest runway repair projects in the airport's history.
- This project, funded in part by the federal government's Airport Critical Infrastructure Program, has extended the life of the runway by about 30 years.



Stay in Touch



Sign up for our monthly community e-newsletter, Checking In at torontop Pearson.com/checkingin



Learn more about airport operations and community impacts at airportnoise.torontop Pearson.com



Email us at community.engagement@gtaa.com



To log a complaint, call us at 416-247-7682 or [submit online](#)



Pearson Public Meetings – 2023 dates will be released early next year

Question Period

Thank You

Dates for 2023 Noise Forums will be shared soon