

Noise Management Forums Pearson Public Meeting

April 20, 2023



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
 - InsightFull Demo
- Question Period



Operations + Community Impacts



About Toronto Pearson



In 2022, Toronto Pearson facilitated 35.6 million passengers and 336,800 aircraft movements a year, directly employing 50,000 people from 400 employers, and enabling 6% 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.

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 preferential runway system.

Airlines are responsible for conducting operations in accordance with the Transport Canada regulations and the airport's Noise Abatement Procedures and Noise Operating Restrictions.

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.

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



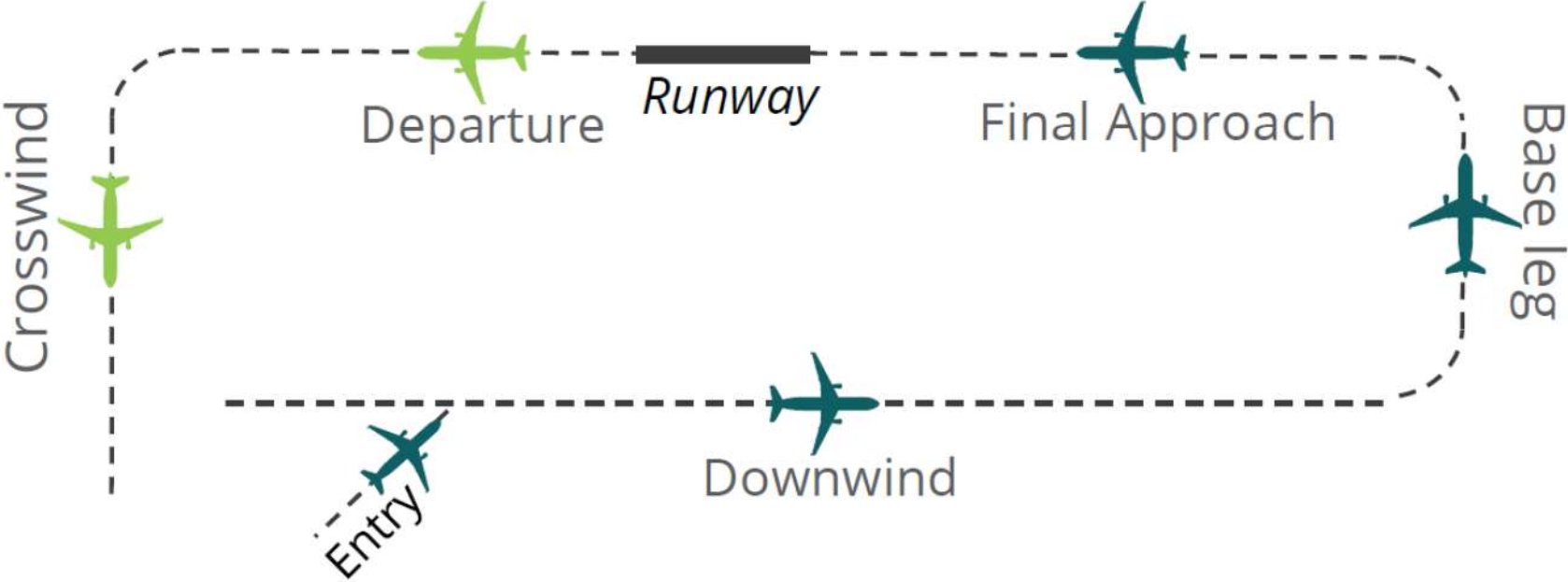
Time of Day – the Nighttime Preferential Runway System is used between midnight and 6:30 am. It is designed to affect the fewest people in the nighttime hours



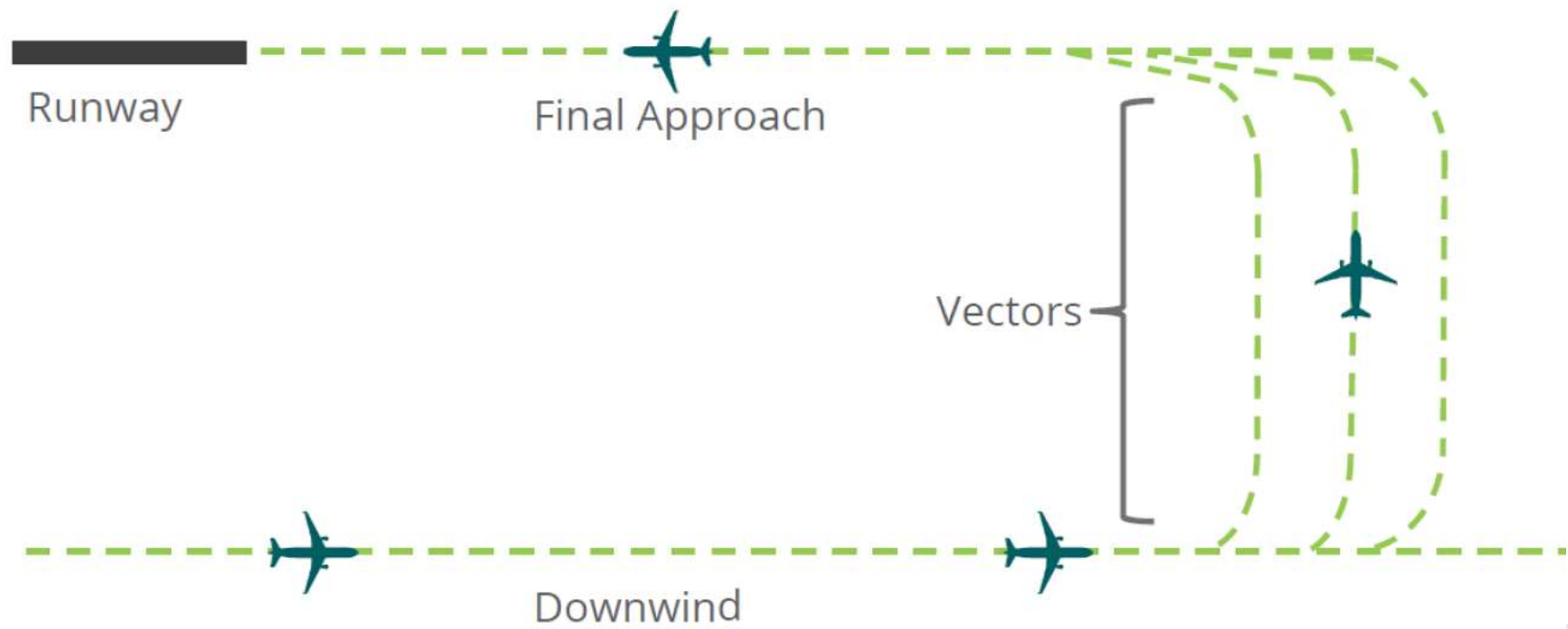
Runway Length –sometimes a longer runway is needed for long haul, large/heavy aircraft

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

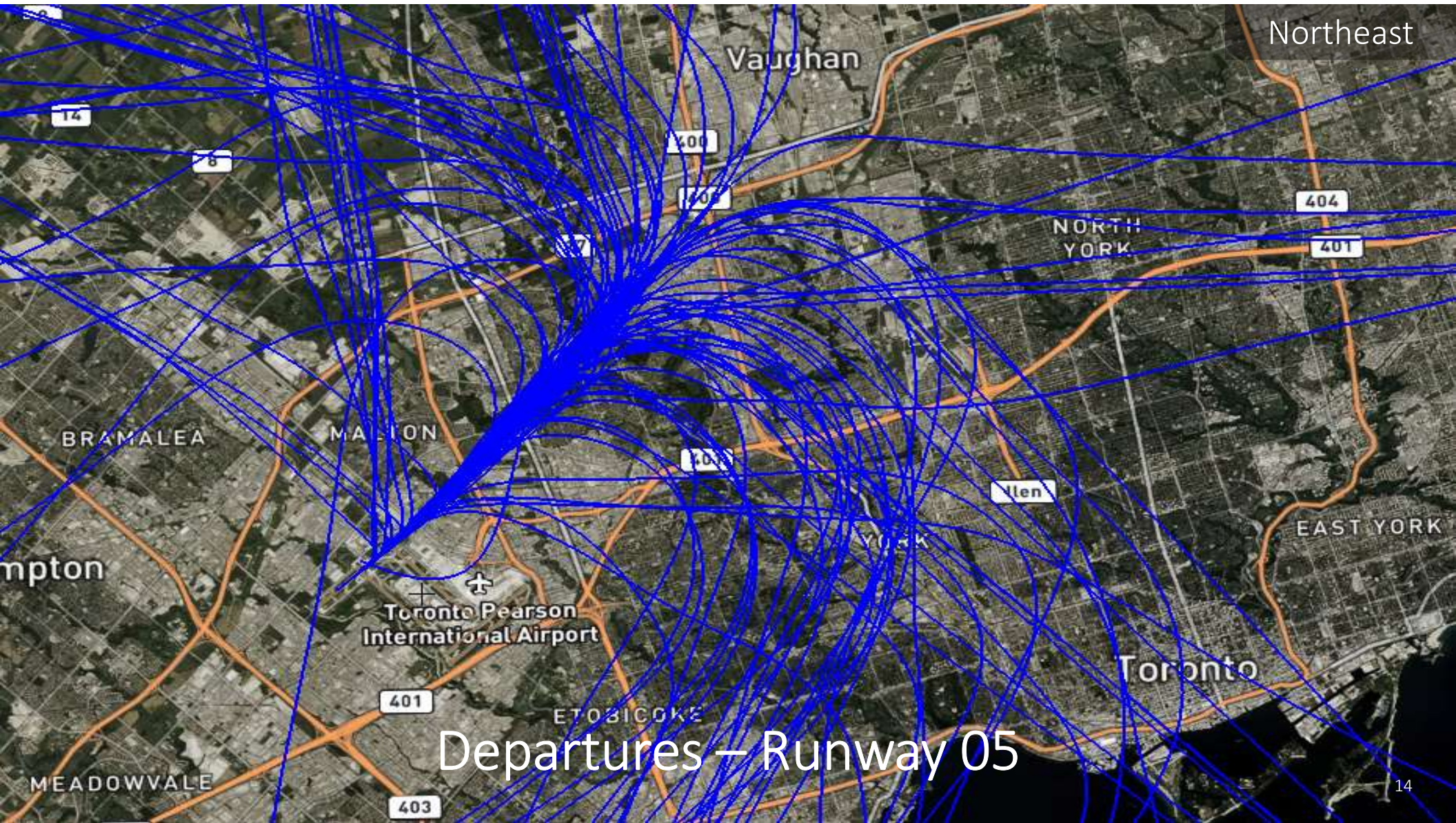
Communities impacted:

Maple/Vaughan, Richmond Hill, Thornhill, Rexdale





Arrivals - Runway 23



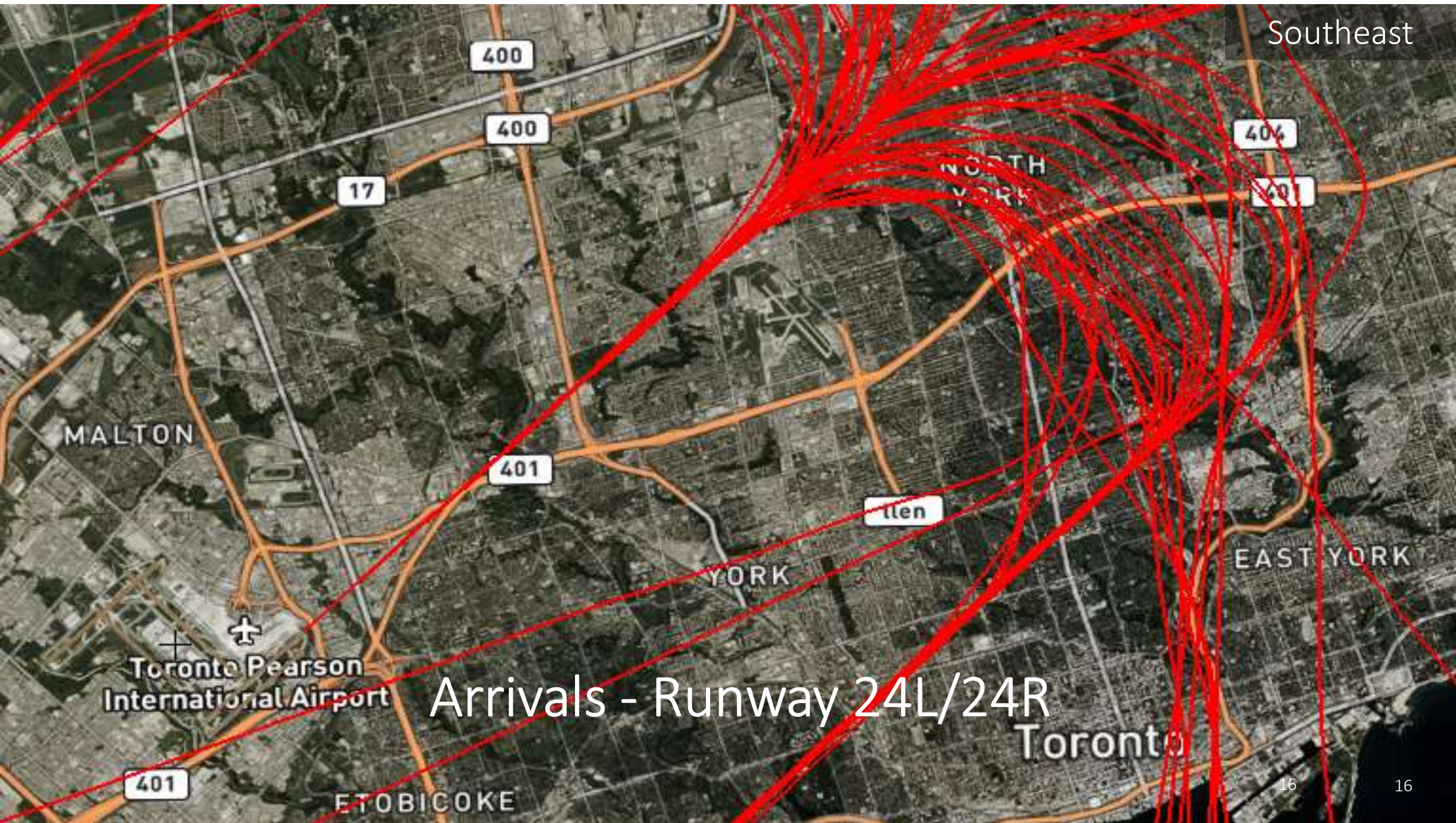
Northeast

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

Communities impacted:

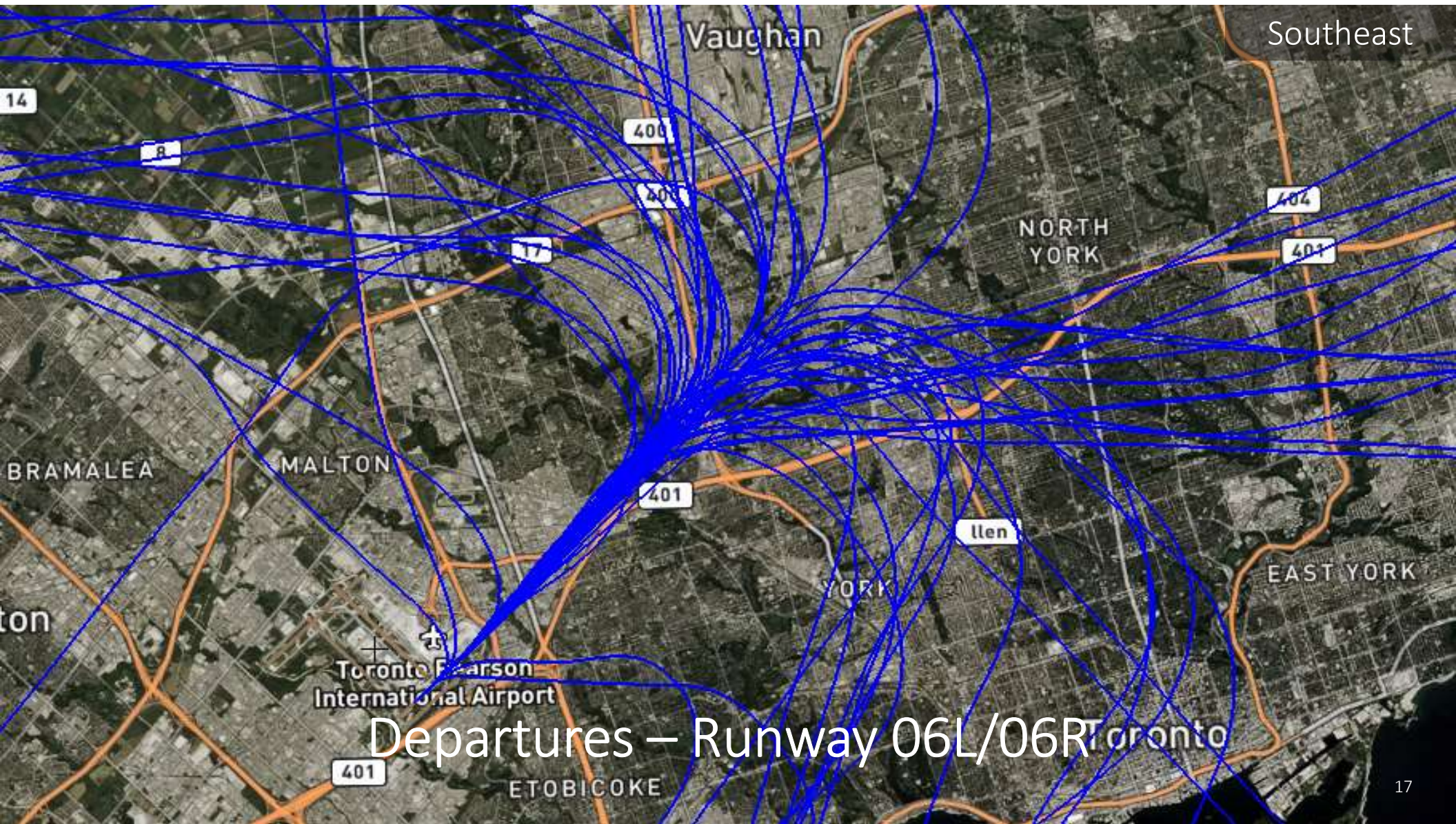
Midtown Toronto, North York, Weston, Markham





Southeast

Arrivals - Runway 24L/24R



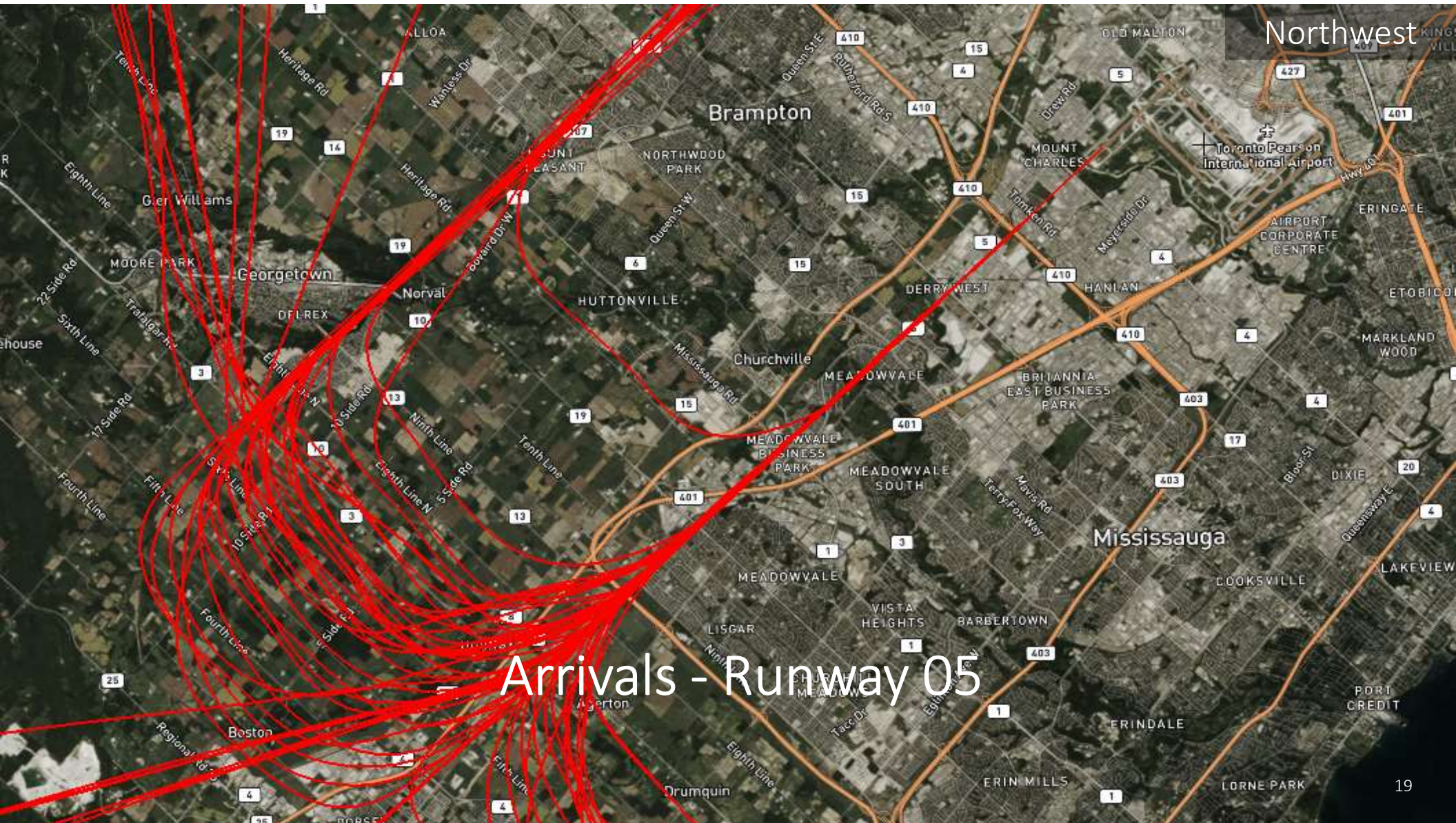
Arrivals Runway 05

Departures Runway 23

Communities impacted:

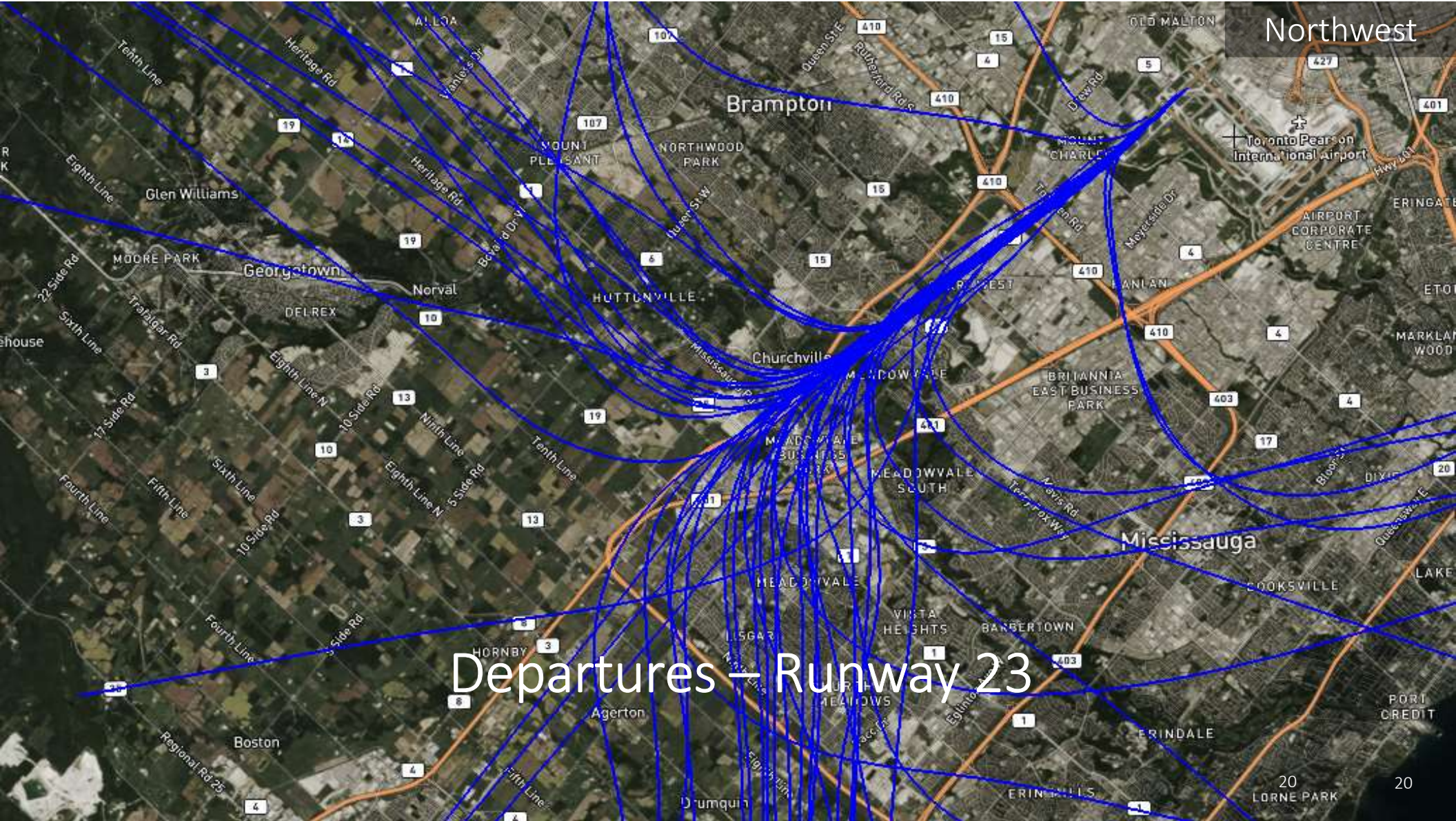
Brampton, Georgetown, Milton, Meadowvale, Streetsville





Northwest

Arrivals - Runway 05



Northwest

Departures – Runway 23

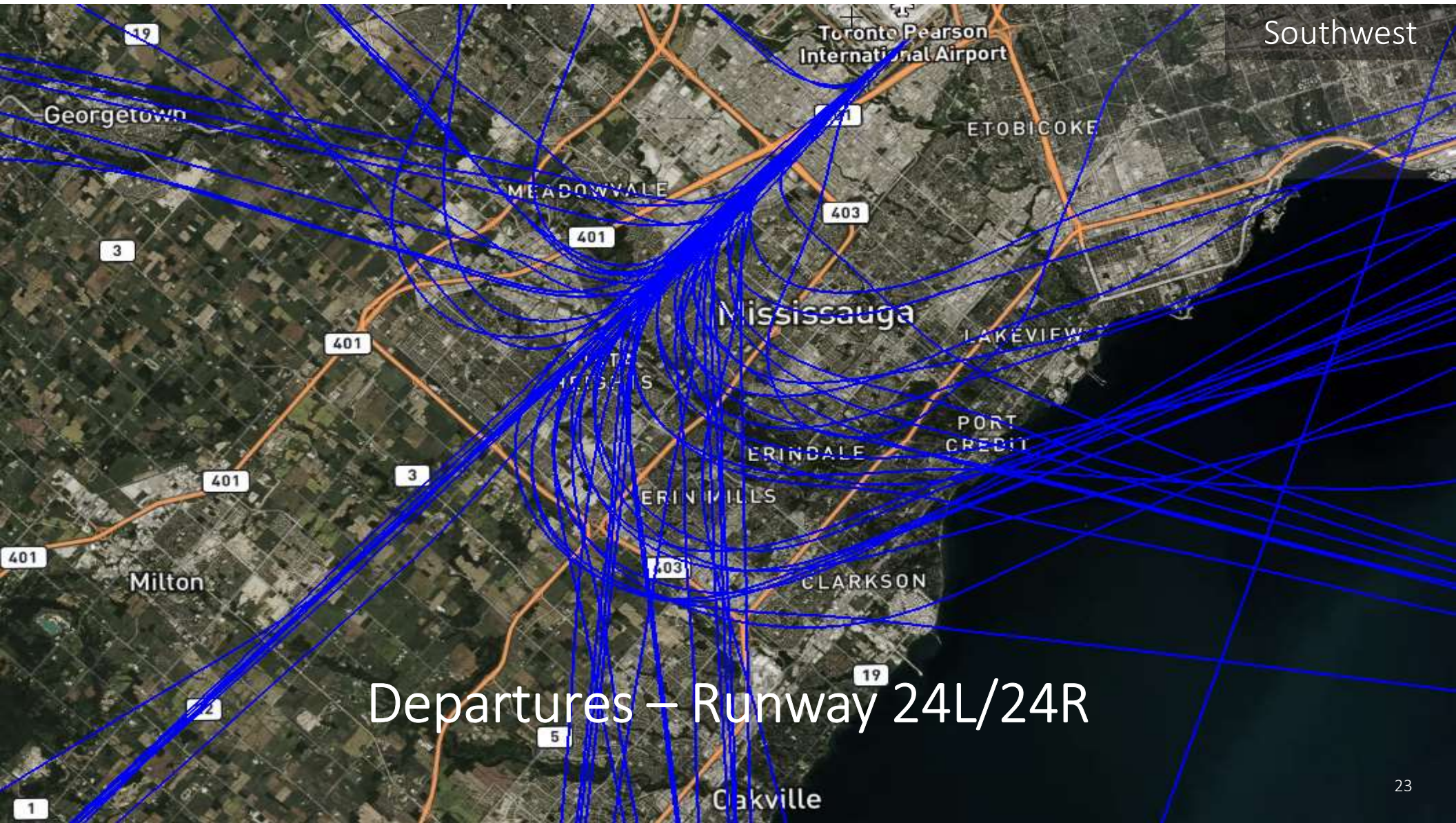
Arrivals Runway 06L/R Departures Runway 24L/R

Communities impacted:

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





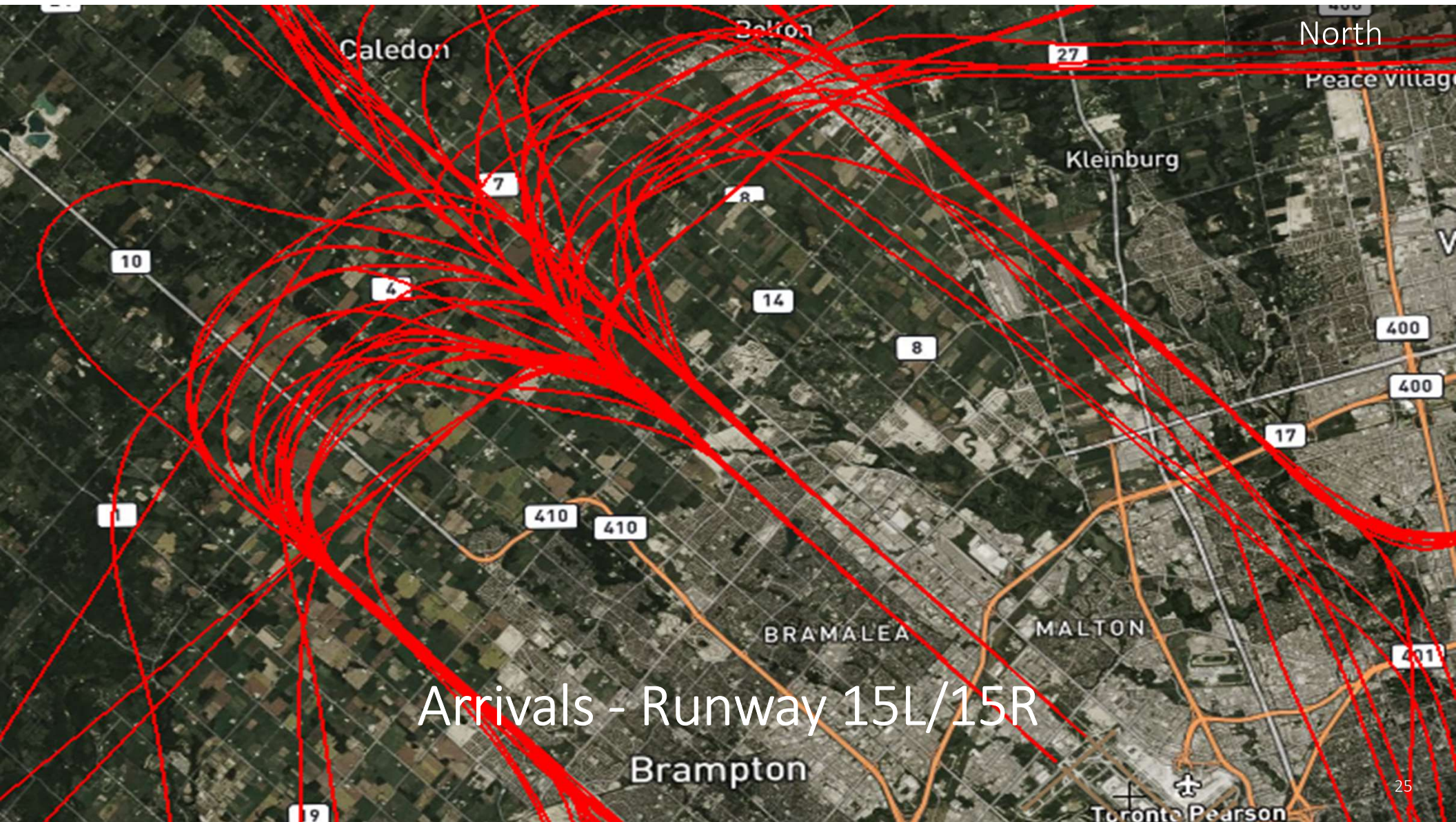


Departures – Runway 24L/24R

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

Communities impacted:
Brampton, Malton





Arrivals - Runway 15L/15R

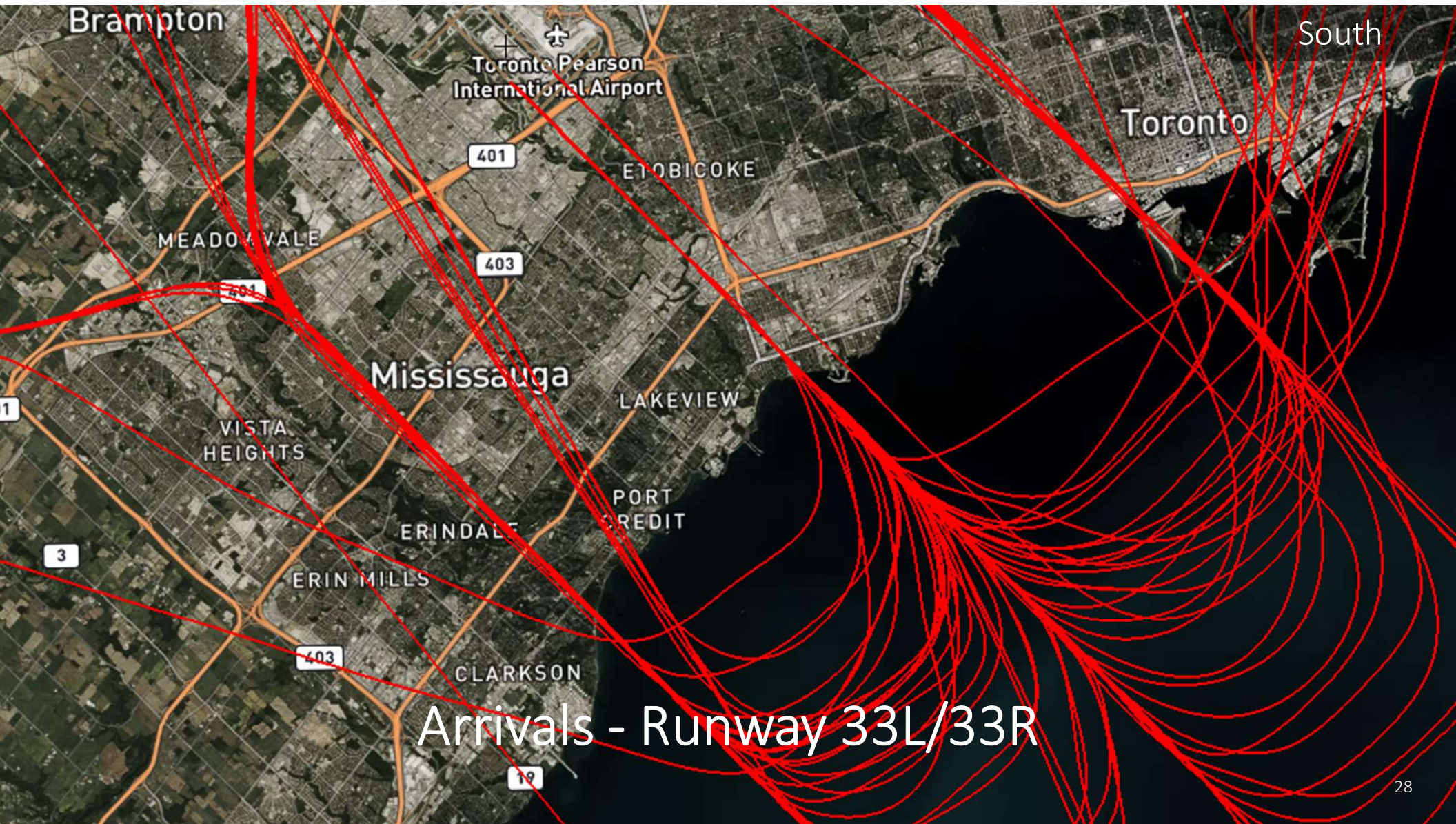
Arrivals Runway 33L/R

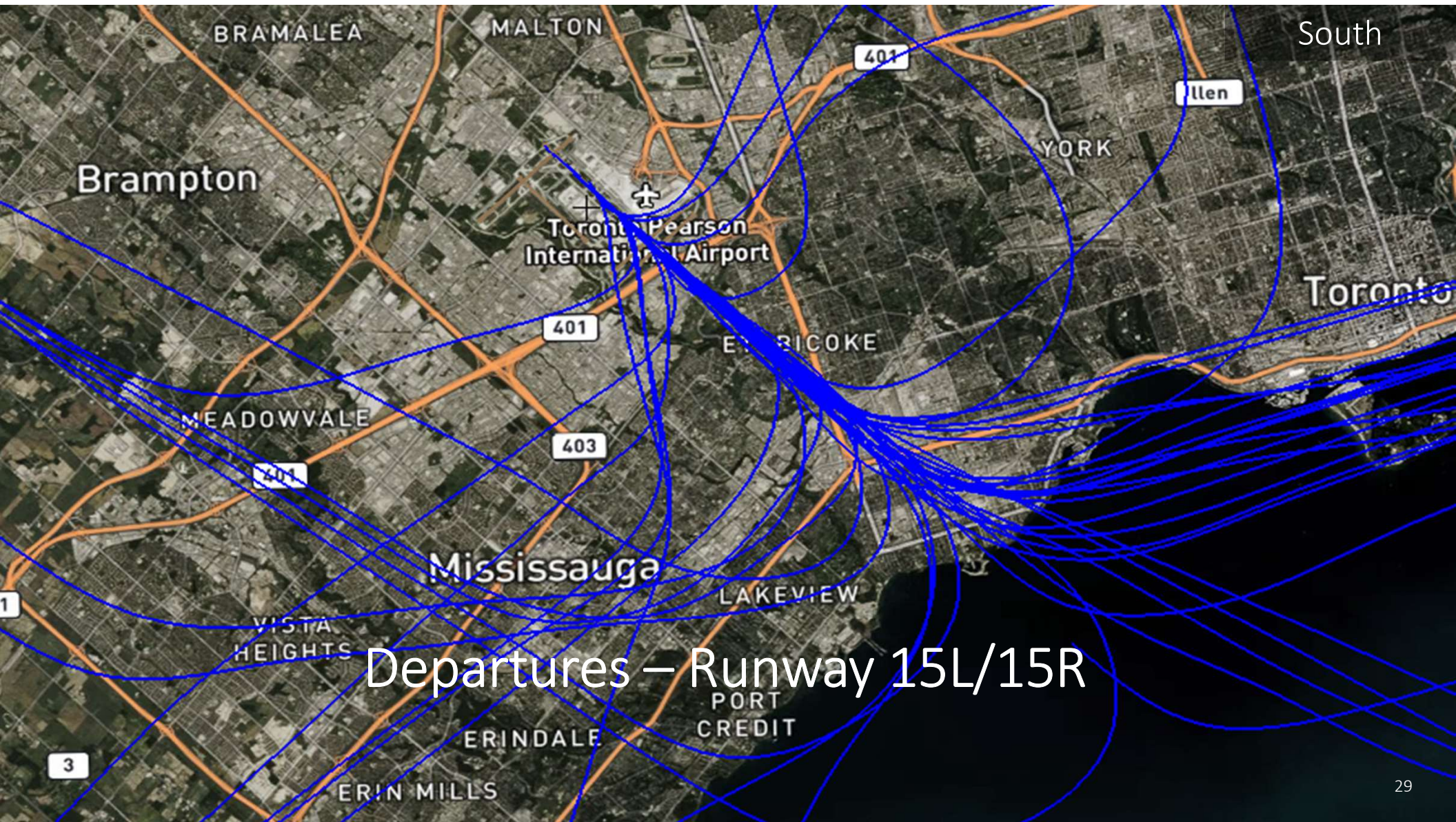
Departures Runway 15L/R

Communities impacted:

Etobicoke-Lakeshore, Alderwood, Long Branch, Markland Wood



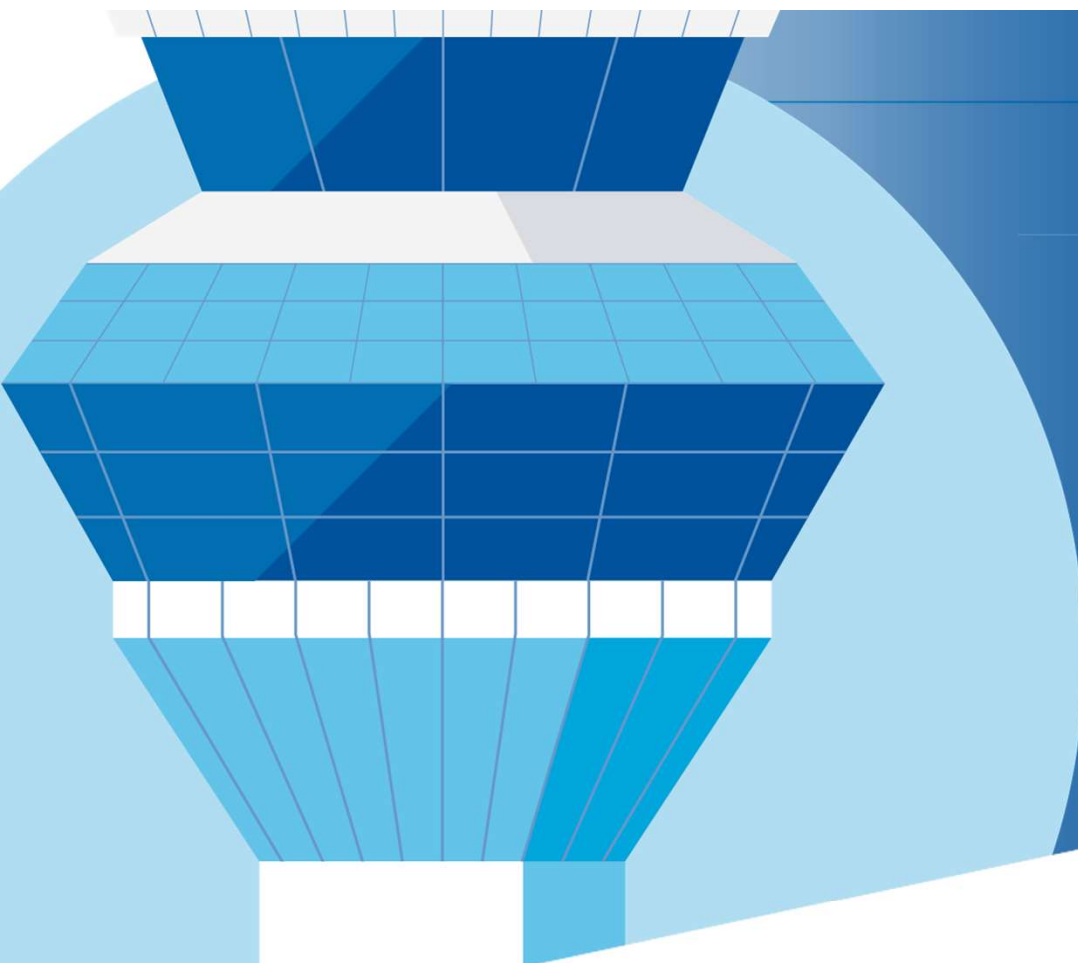




Departures – Runway 15L/15R

NAV CANADA Updates





NAV CANADA UPDATE

Serving a world in motion
navcanada.ca



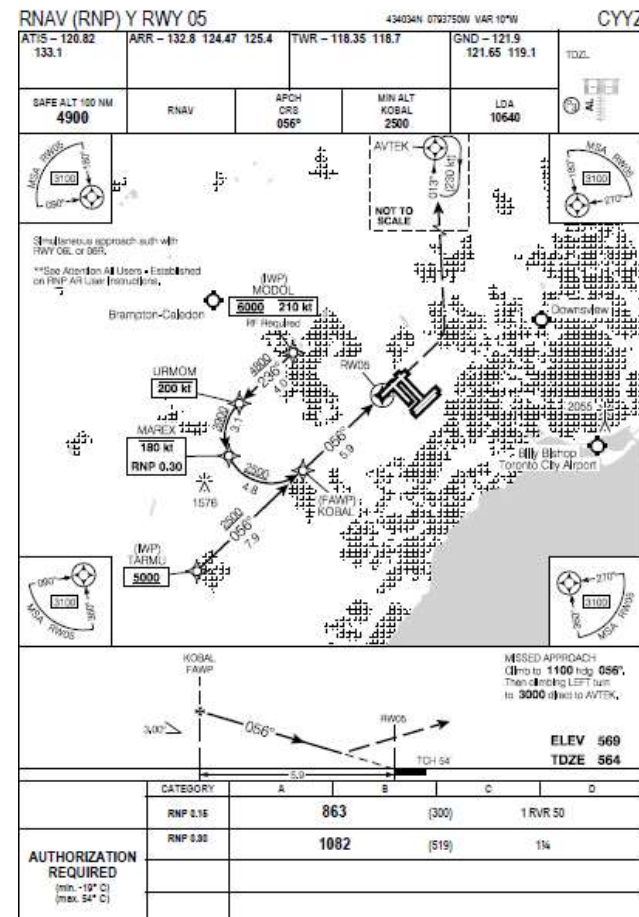


IMPLEMENTATION OF RNP AR

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



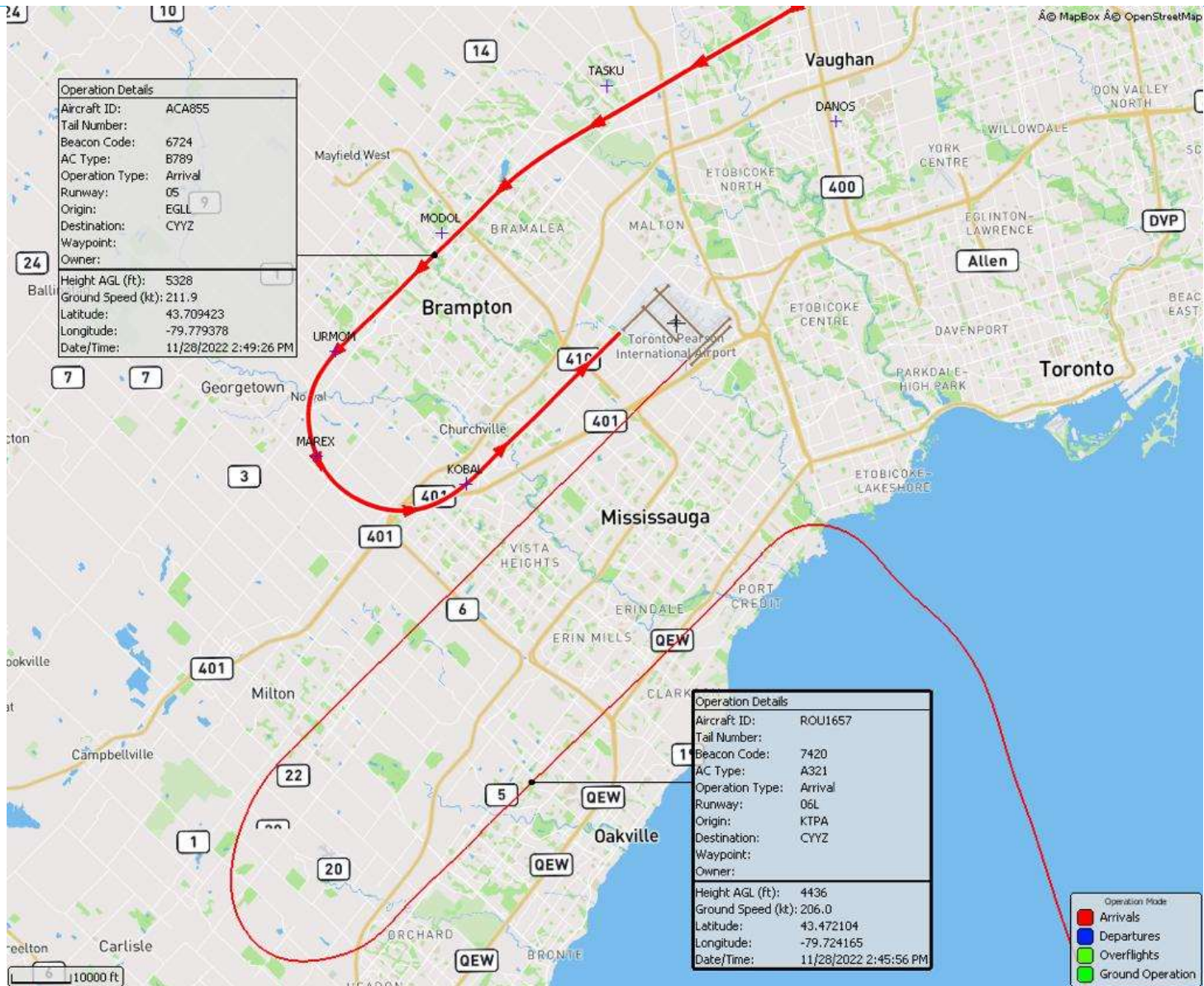
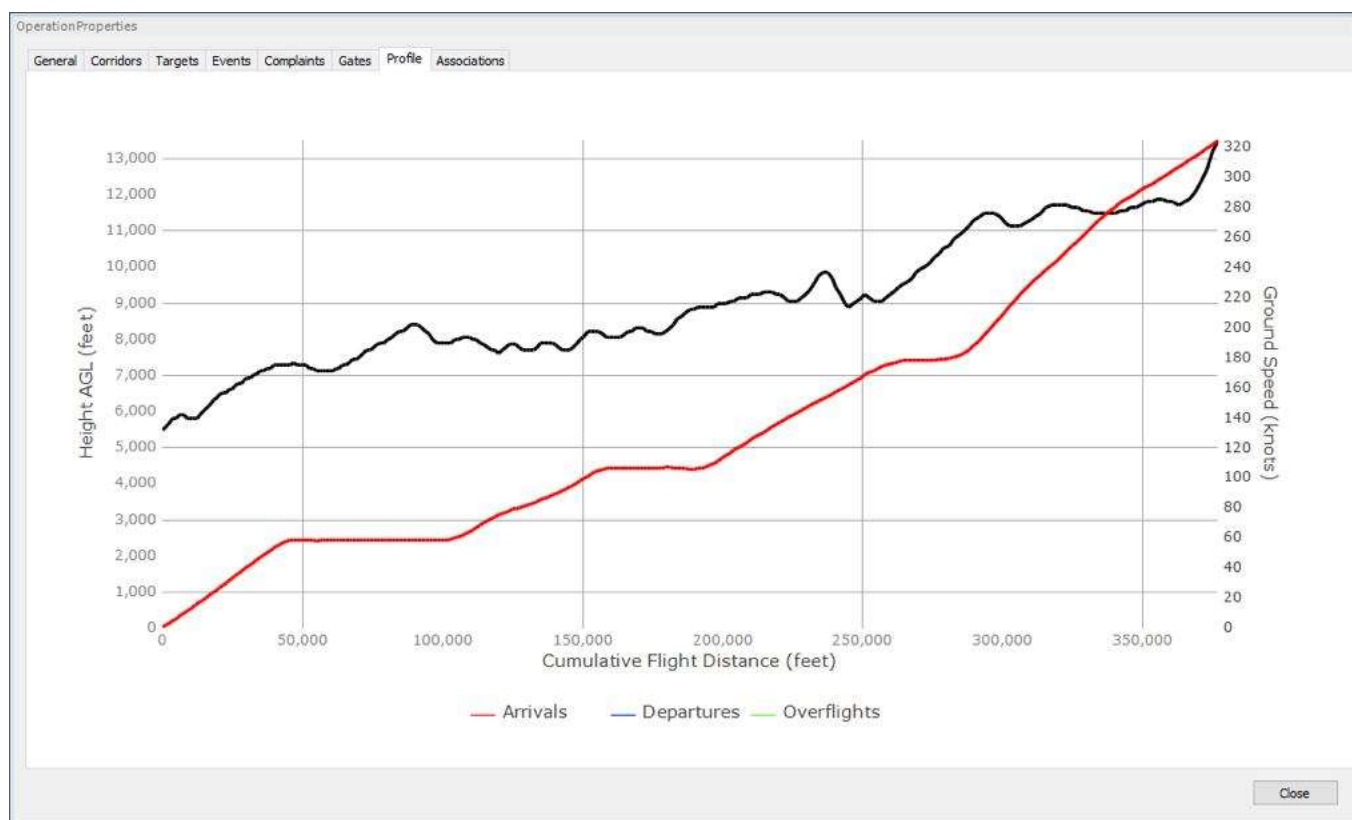


Image courtesy of GTAA Operational Performance team

IMPLEMENTATION OF RNP AR

Continuous Descent Operations



Images courtesy of
GTAA Operational
Performance team

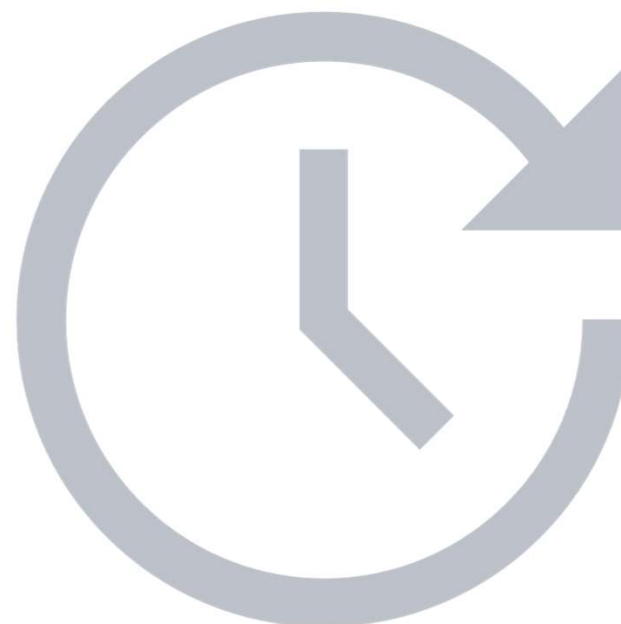
NEXT STEPS

- › Utilization to increase gradually over time.
- › 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.

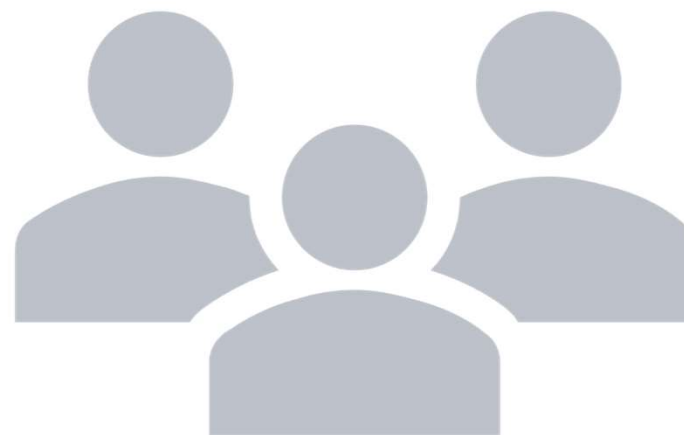
IMPLEMENTATION OF RNP AR

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



INDUSTRY NOISE MANAGEMENT BOARD

INMB MEETING #18

- › Anticipated late spring/early summer, agenda to include:
 - Determine methodology to evaluate a new CPRP proposal
 - › Proposed aircraft fly longer before turning and/or having them fly along a precise track along the ground versus a heading that provides variability.
 - Technical discussions on descent guidance on standard arrival routes.
 - › Working to ensure greater consistency between pilots and air traffic controllers

THANK YOU



GTAA Updates














Noise Management Update

Summer Maintenance	<ul style="list-style-type: none">▪ No major projects affecting the use of runways▪ Routine maintenance – introducing a new maintenance calendar
Open Houses	<ul style="list-style-type: none">▪ Held an in person open house in Vaughan on March 23rd▪ Tuesday, April 25th in the Riding of Humber River-Black Creek Time: 6:00 pm to 8:00 pm; drop in for a one-on-one conversation anytime during these hours; there are no formal presentations. Place: St. Simon Catholic School, (gymnasium) 24 Strathburn Blvd., North York, ON M9M 2K3 Community Open Houses Pearson Airport (torontopearson.com)
Summer Events	<ul style="list-style-type: none">▪ Our Summer Street Program will be re-launched this summer on May 26th▪ Look for the Team at events across the region including Carassauga, Toronto Outdoor Picture Show, Streetsville Bread and Honey Festival, Oakville Rib Fest, Chutneyfest and more.▪ We'll also be sponsoring a number of Farmers' market this year in Vaughan, Weston, Etobicoke▪ A detailed calendar will be posted on torontopearson.com/community

InsightFull

- [InsightFull](#) was launched in March 2020
- Created to provide members of the community with interactive information about the operations at Toronto Pearson and how they may impact their neighbourhood.
- Structured around questions the airport often receives and provides location-specific information to help answer these questions.
- Includes reports for various time periods:
 - Operations
 - Complaints
 - Noise metrics

Toronto Pearson 

 How does Toronto Pearson operate?	 What operations are over my area?	 Has something changed?	 How is noise managed?	 Does the airport close at night?	 Interactive Reports and Statistics
 How much has the airport grown over time? While the impacts of COVID-19 on the aviation industry are still evolving, the airport and its surrounding communities have grown over time. Read more					
 Have traffic levels changed over my area? View an interactive report on how air traffic levels vary over your area. Read more					
 Have the flight paths changed? The flow of air traffic can change for many reasons, which may make it seem like aircraft are flying different routes. Read more					
 Have there been any recent changes with traffic returning post-pandemic? How the airport operates will continue to evolve as traffic returns. Read more					
 How does maintenance work impact operations? Our taxiways and runways need regular maintenance to keep them in good shape. Read more					

Stay in Touch



[Noise Advisories](#) on airport maintenance and activities with possible impacts.



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](#) – next meeting, September 14, 2023

[Community Open Houses](#) – next open house, April 25, 2023:

St. Simon Catholic School, (gymnasium) 24 Strathburn Blvd., North York, ON M9M 2K3

Question Period



Thank You

Next Meeting – September 14, 2023