

YYC Update

YYC presentation to the Calgary Airport Authority Community Consultative Committee (ACCC)

March 16 | 2023

YYC CALGARY
AIRPORT
AUTHORITY

Agenda

- **Welcome**
- **Introductions & land acknowledgment**
- **Safety Minute**
- **YYC Update**
- **West Runway**
- **Chestermere Noise Van Results**
- **Q&A**



In the spirit of respect, reciprocity and truth, we honour our ancestors and those who took care of this land long before we were here by acknowledging the Treaty 7 territory of the Blackfoot confederacy.

This includes the Siksika, Kainai, Piikani peoples — as well as the Îyâxe Nakoda, and Tsuut'ina nations. This territory is also home to the Métis Nation of Alberta, Region 3.

We embrace the role of helping to protect the space and foster the growth and development of the peoples – both the Indigenous and non-Indigenous - who live, work, and play on these lands.





2023 PASSENGER STATISTICS



West Runway Rehabilitation

Airport Community Consultative Committee

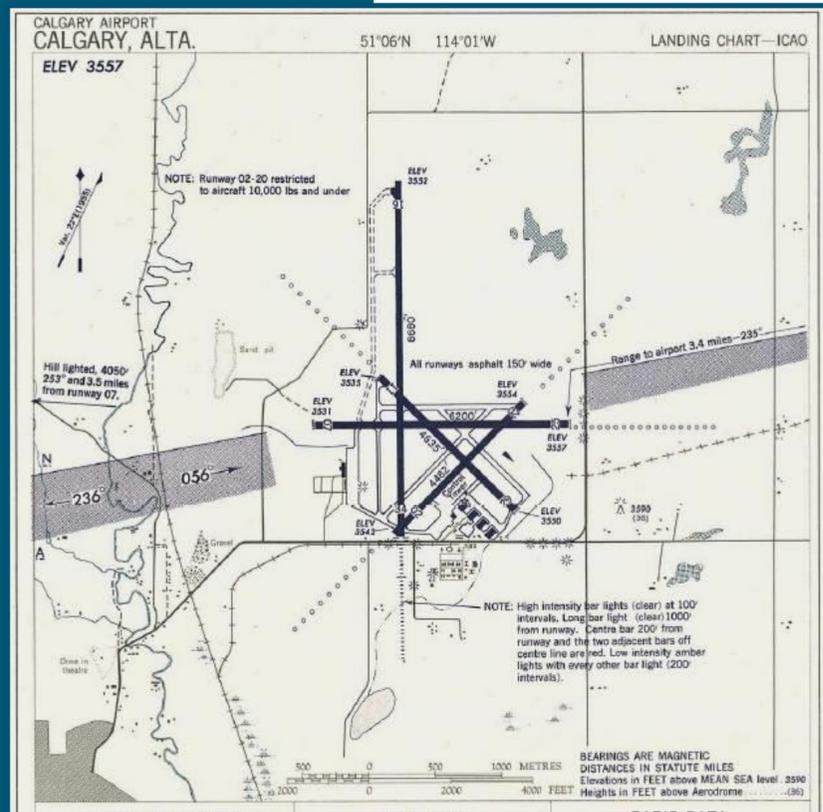


MARCH 2023



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WEST RUNWAY REHABILITATION PROJECT



1956



RECAP

- Runway 17R-35L was constructed in phases between 1939 and 1970's.
- Since it's original construction there have been a number of surface restorations to prolong the life of the asset.
- A full depth rehabilitation of the runway is required to ensure safe, secure and efficient airport operations. Additionally, Runway End Safety Areas (RESA) will be installed to ensure compliance with Transport Canada Regulations.



IMPORTANCE OF THIS WORK

OPERATE SAFELY

The rehabilitation is essential for ensuring a safe, secure and efficient airport environment – ensuring YYC can safely operate while meeting the demands of passenger and cargo traffic over the next 40 years.

GROW CALGARY'S ECONOMY

Ensure we have the capacity to continue to attract various commercial partners through YYC, as one of Canada's biggest travel and cargo hubs. This enables foreign direct investment, trade, tourism and critical goods movement. This work is also anticipated to create approximately 300 jobs.

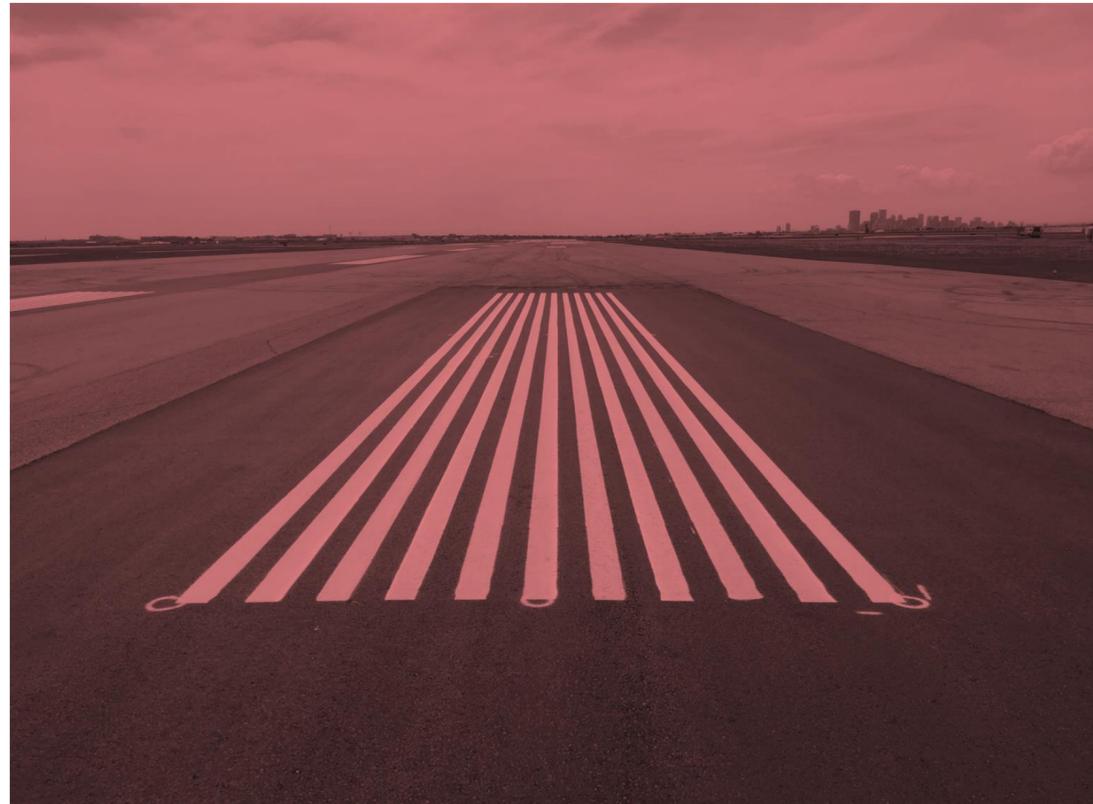
ENHANCE SUSTAINABLE PRACTICES

Demonstrate environmentally friendly and sustainable practices that ultimately minimize the impact on this land, any wildlife and the environment. The project will use crushed concrete from the old pavement removal and recycle milled asphalt to be reused for this and future projects.



Key risks if project is not completed:

- Structural or Electrical failure
- Costly Emergency Repairs
- Runway Capacity Constraints

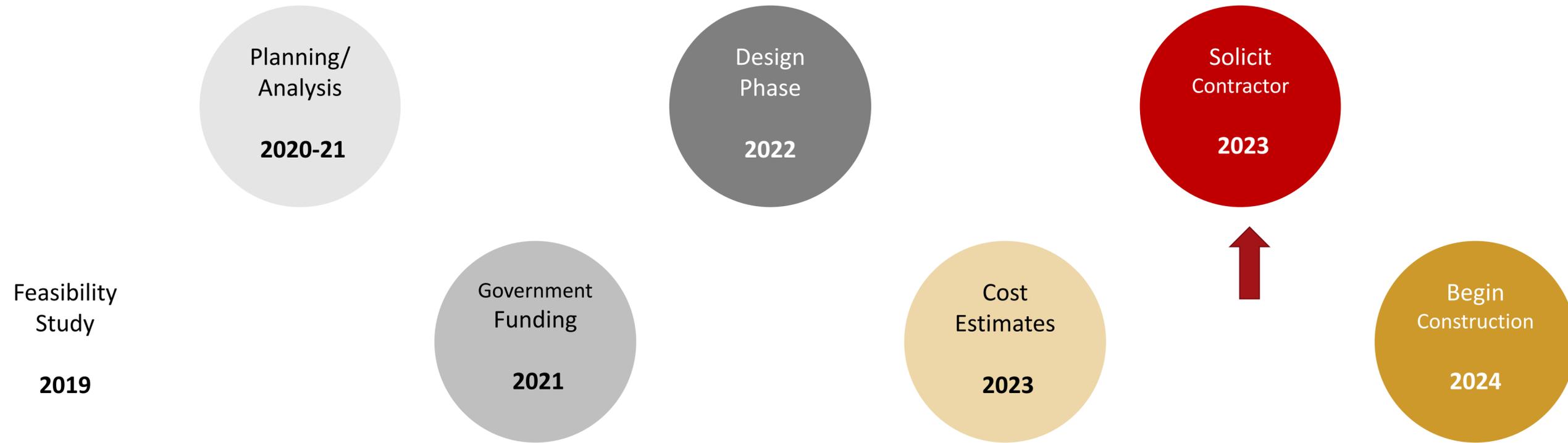


Key objective throughout this project is to ensure we are providing transparent and timely communication.

PROJECT UPDATE:

- Construction was scheduled to begin April 3, 2023
- Project costs have escalated due to increases in commodity pricing and inflation
- YYC is pausing the construction start date
- YYC is pursuing additional Federal and Provincial Funding
- The Project will maintain a 2-year Construction Schedule (2024 & 2025)
- Rehabilitation of the West Runway remains a top priority for the Calgary Airport Authority

WEST RUNWAY REHABILITATION PROJECT ROADMAP





NEXT STEPS

- Prepare revised Phasing Plan and updated construction timeline
- Complete some enabling work Spring 2023 in preparation for construction in 2024

An aerial photograph of a suburban residential neighborhood. The houses are arranged in neat rows along streets. In the center of the image, a large white commercial airplane is flying directly over the houses, appearing to be in a steep climb or descent. The text "Questions? Comments?" is overlaid in white on a dark teal background across the top of the image.

Questions? Comments?

© Keith Walker

YYC CALGARY AIRPORT AUTHORITY

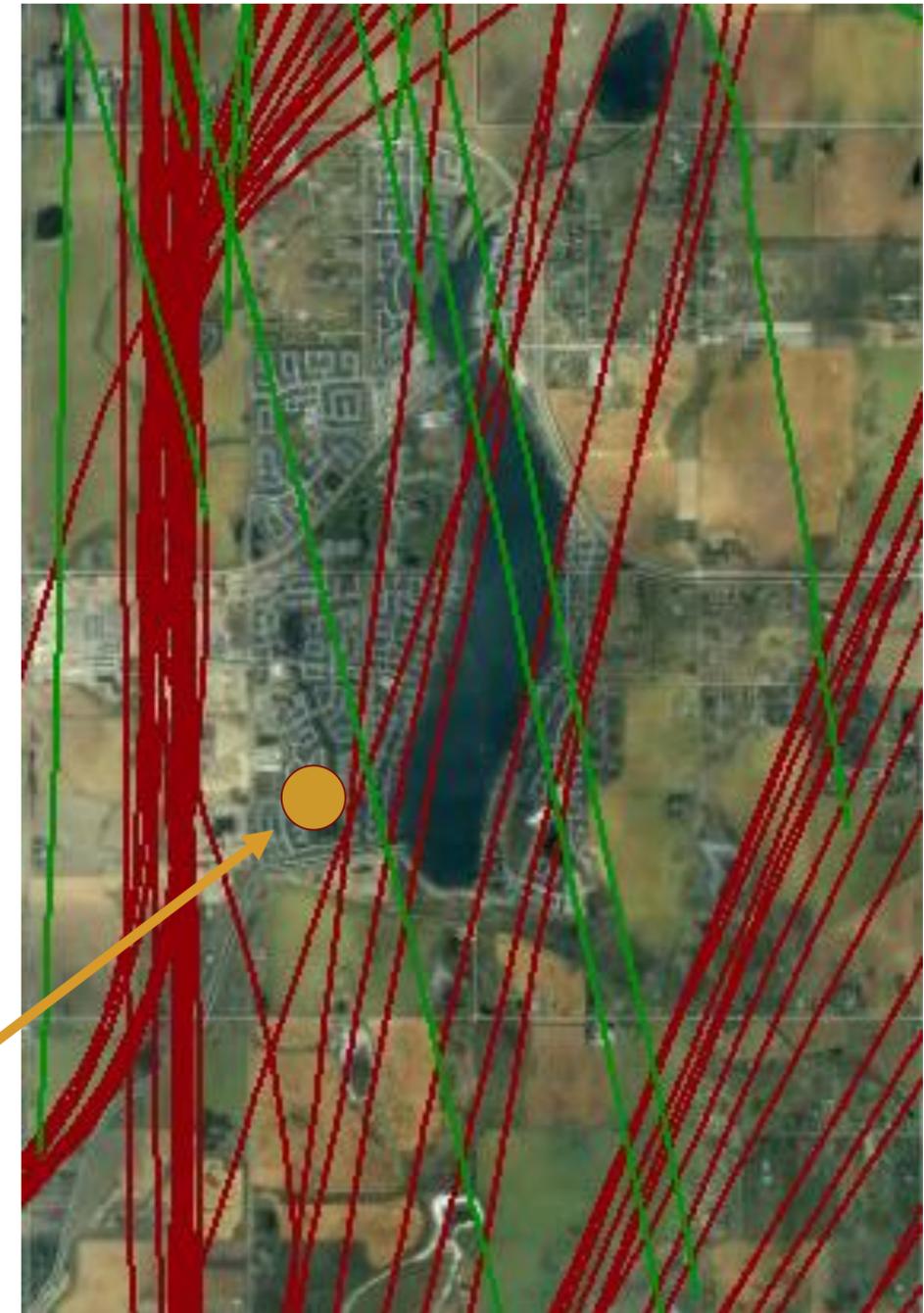
CHESTERMERE ACOUSTICS



PURPOSE OF THIS ANALYSIS

- Town of Chestermere identified an increase in noise impacts due to aircraft arrivals
- To understand what information and analysis will be helpful to community members

Chestermere
Flight Tracks OCT 08, 2019

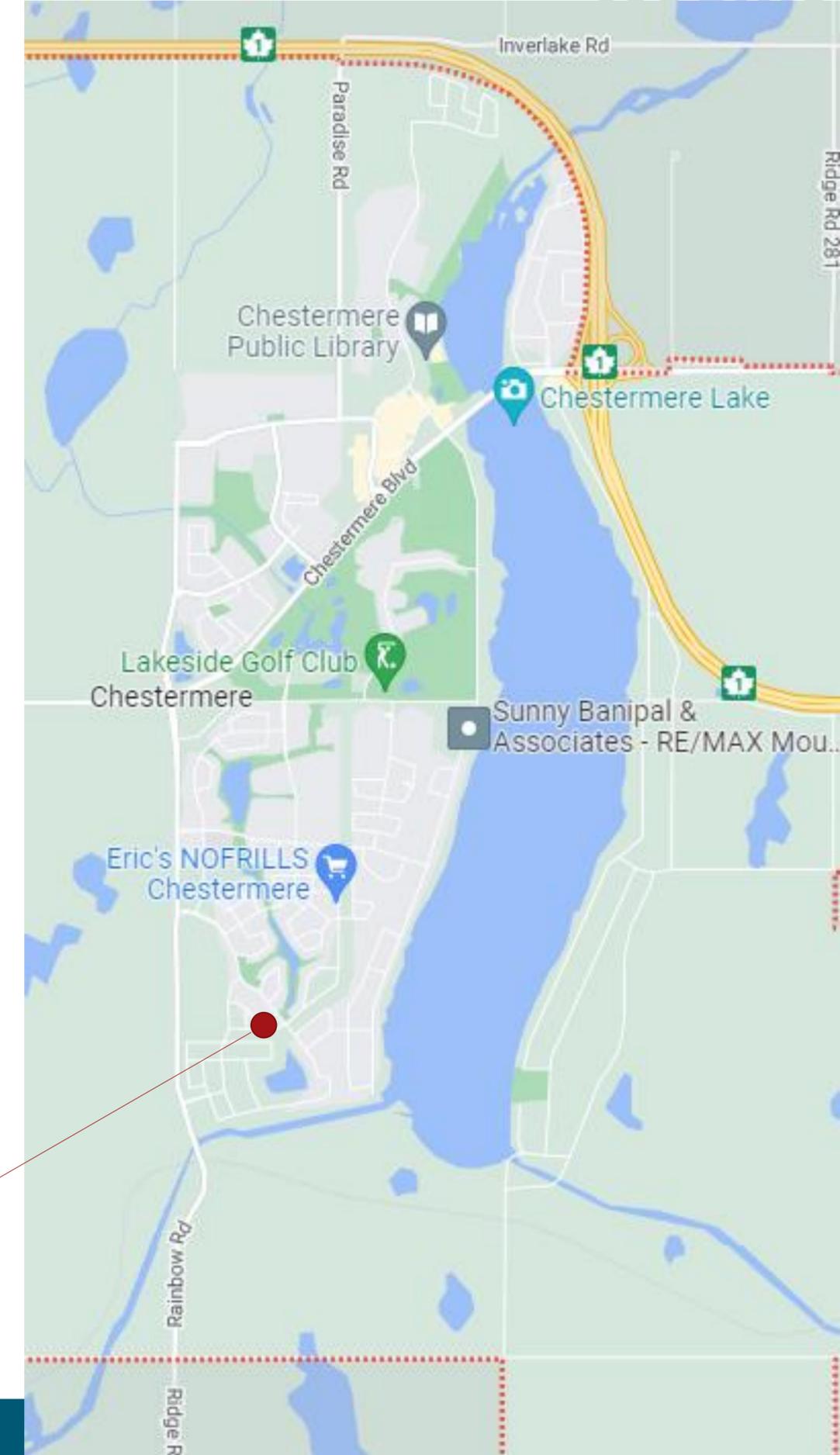


**Mobile
NMT
location**

ANALYSIS AREA AND APPROACH

- Mobile NMT in SW corner of residential area in Chestermere
- Mobile noise monitoring terminal deployed from September 23 to October 27, 2019
- Analysis is on the Mobile Noise Terminal, there is no permanent NMT
- There is a 60 dBA threshold on the NMT

**Mobile
Noise
Monitoring
Terminal**



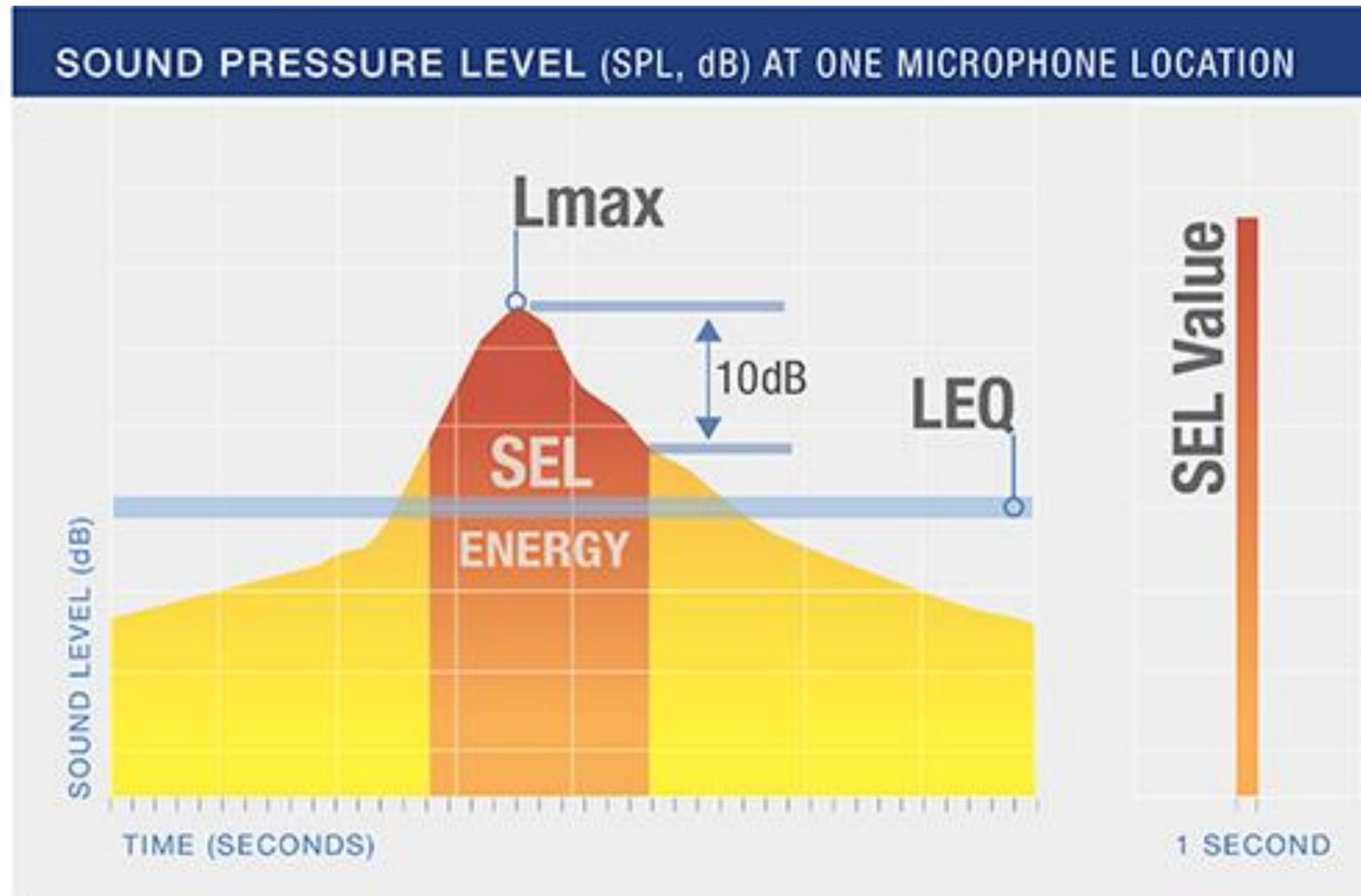
AIRCRAFT ACOUSTICS 101

Lmax

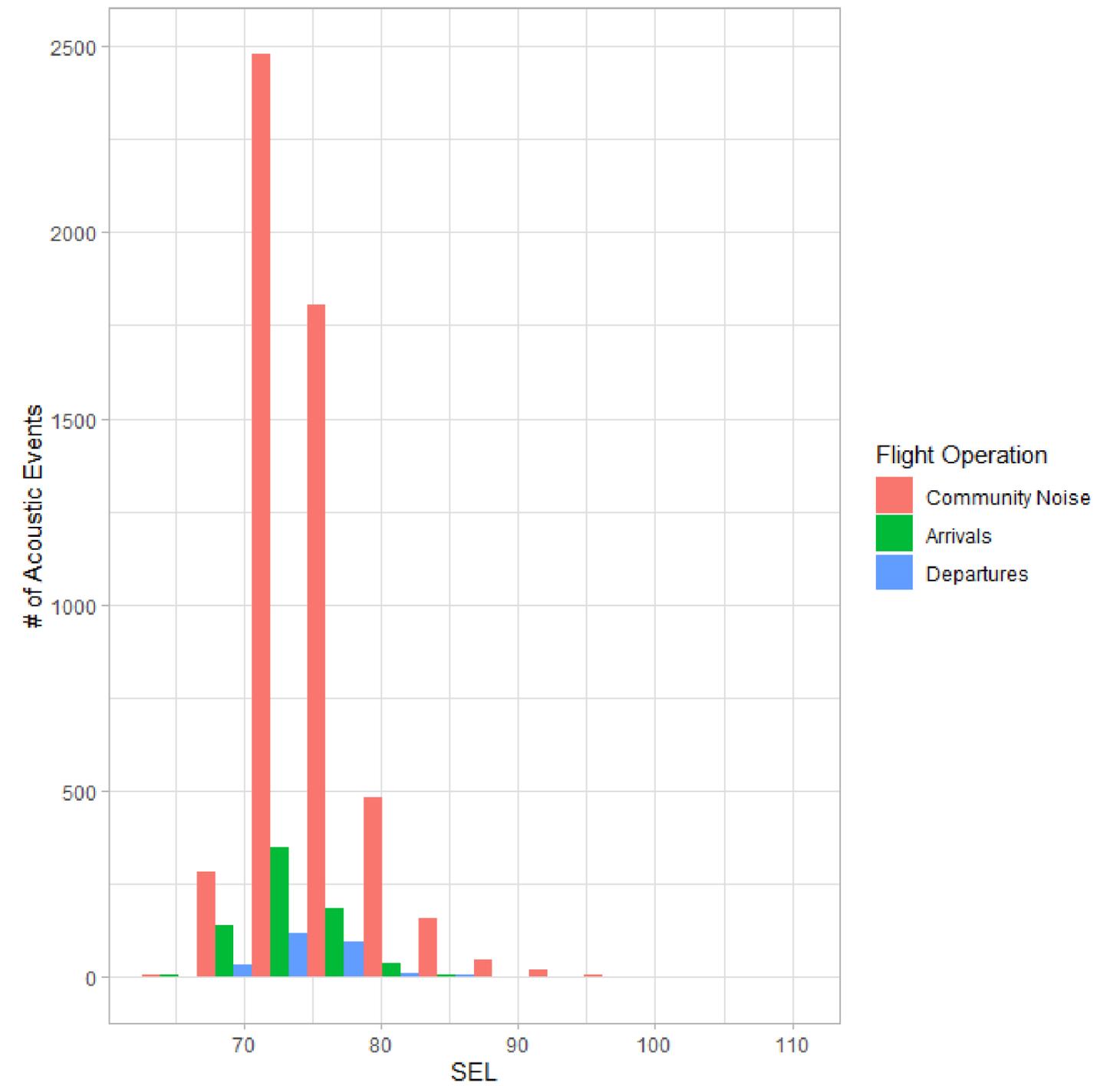
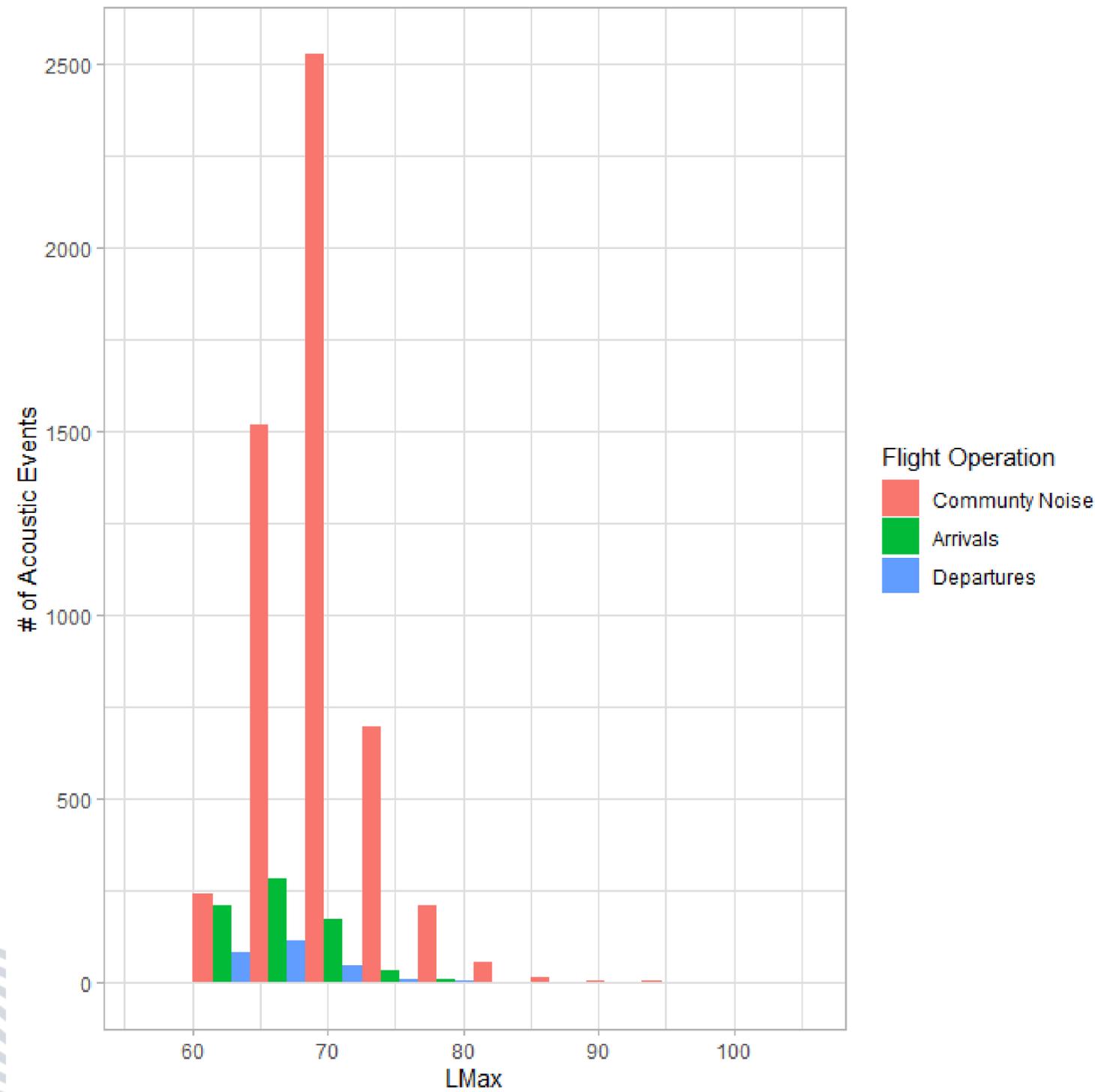
- Maximum instantaneous sound pressure

Sound Exposure Level (SEL)

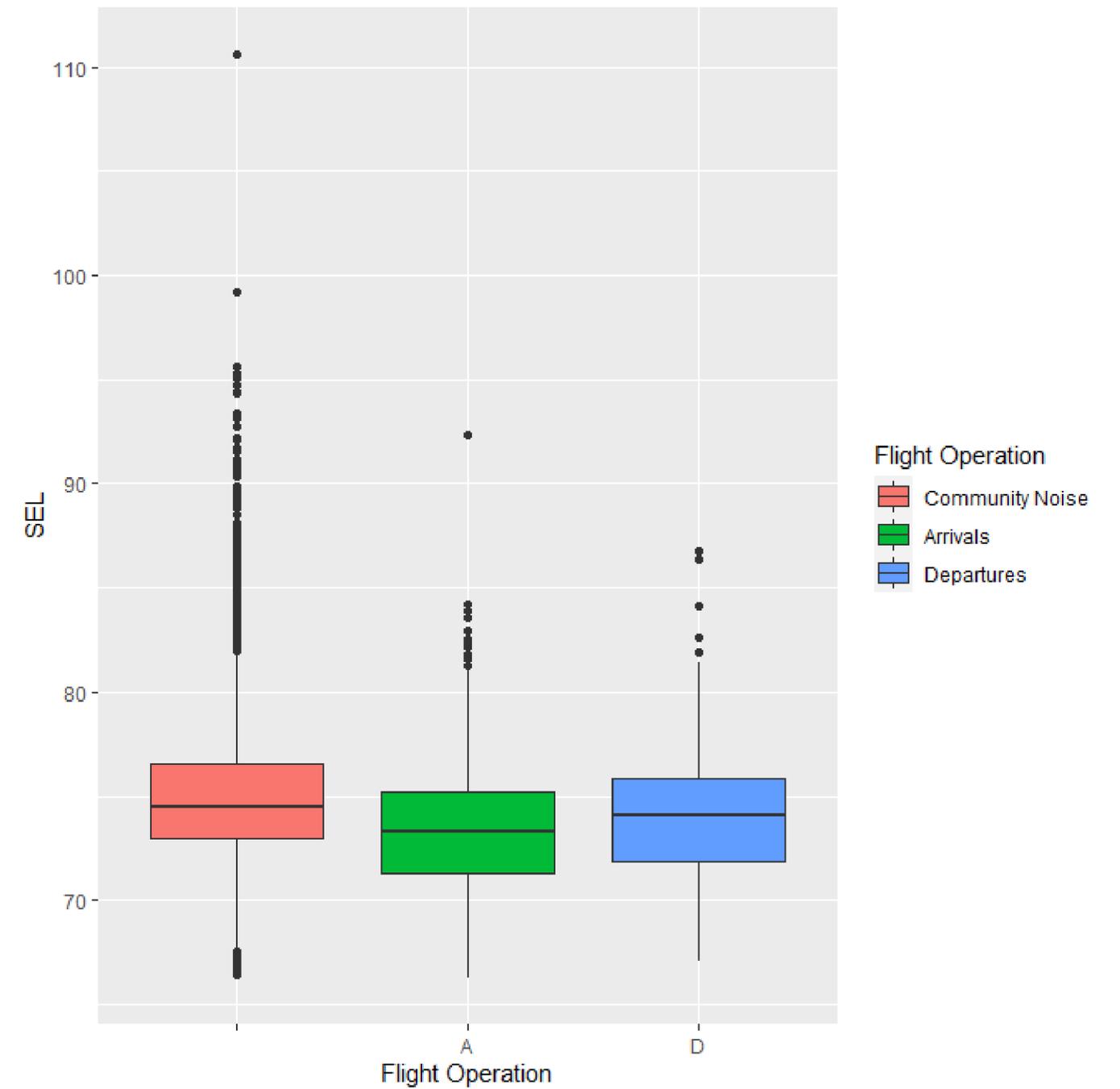
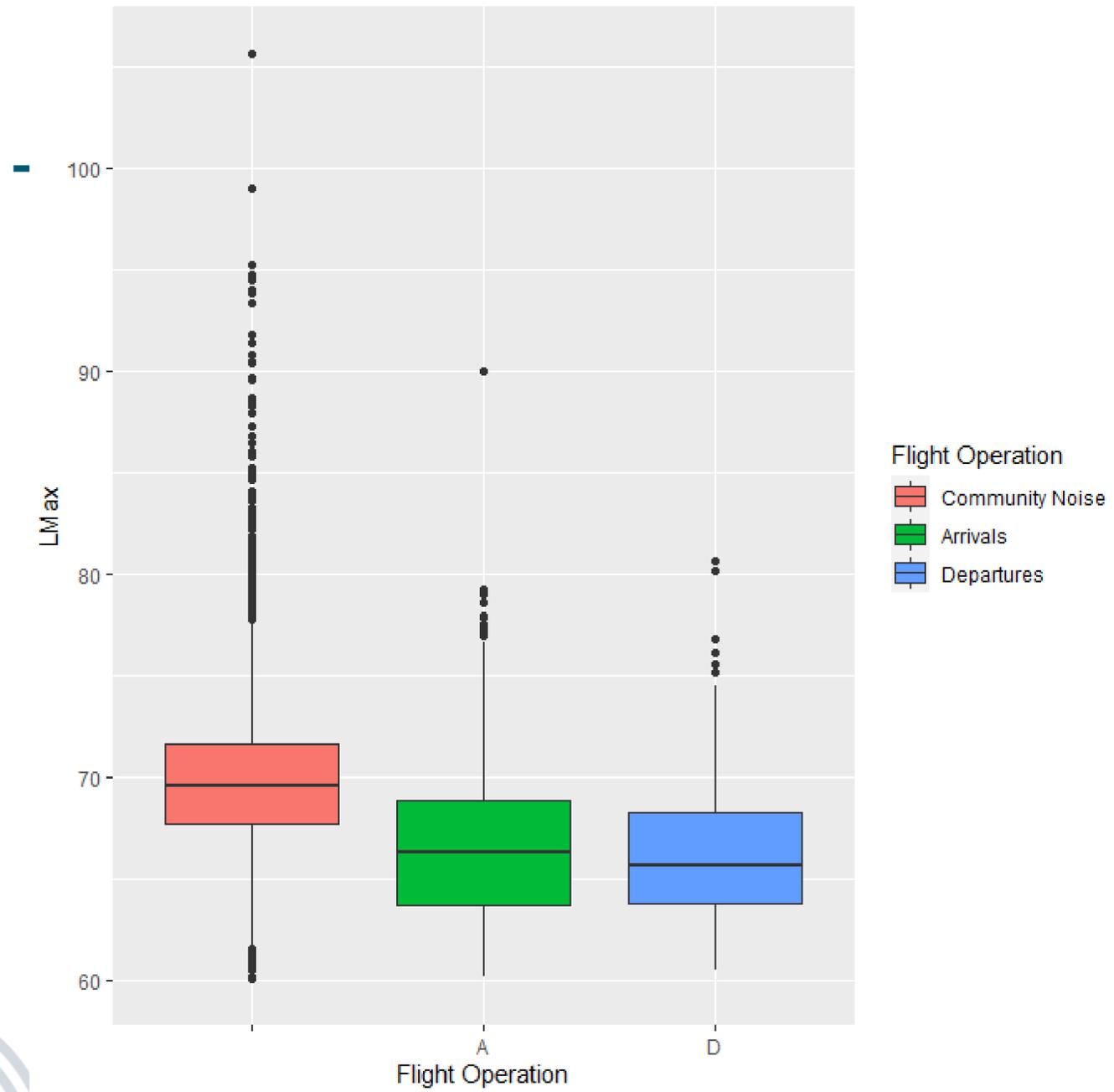
- Metric for comparing acoustic events of different durations



NUMBER OF ACOUSTIC EVENTS



CHESTERMERE ACOUSTICS (SEL & Lmax)



LMAX SUMMARY

Sound pressure levels
(dBA)

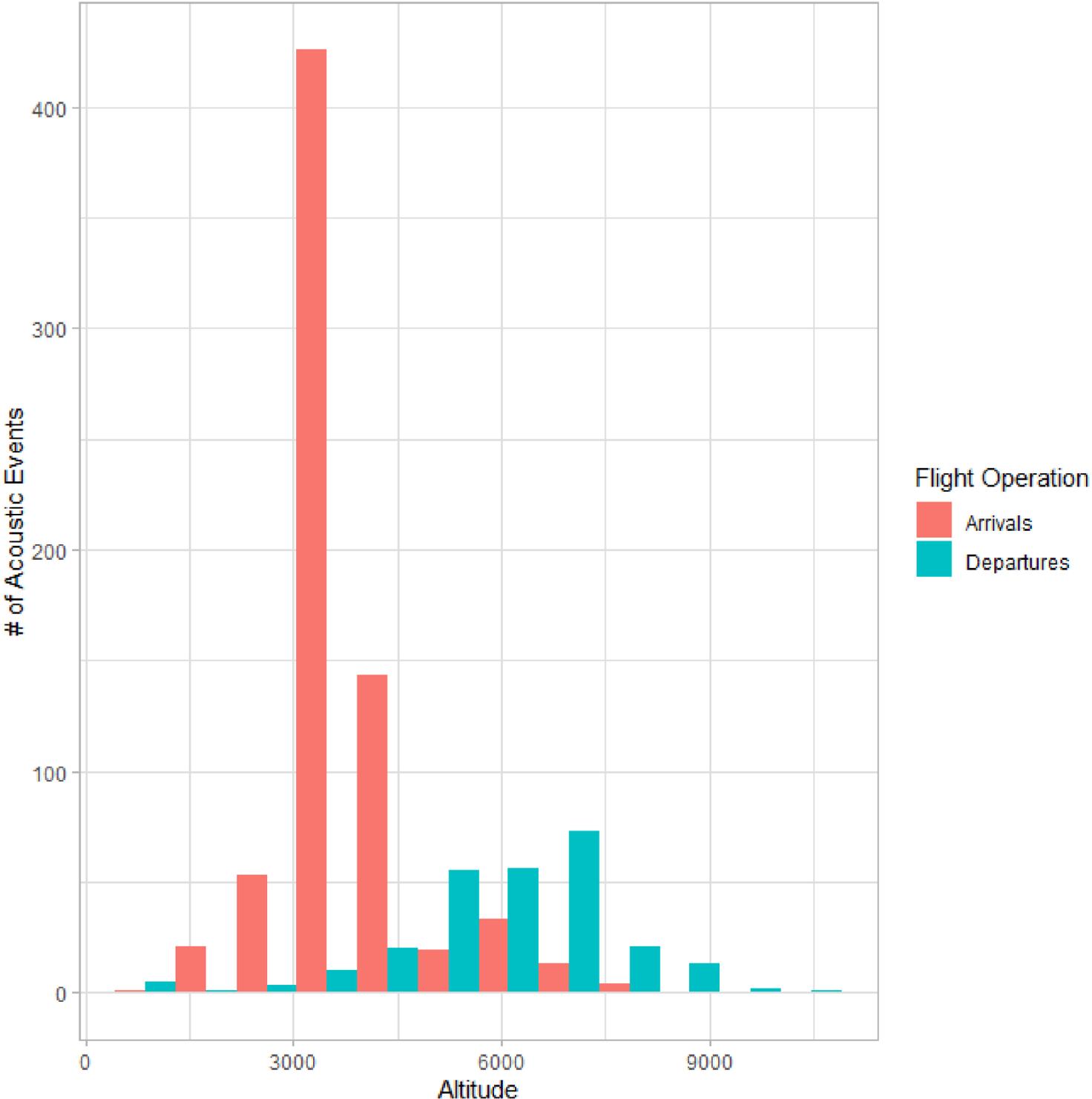
Common indoor and
outdoor noises



**Range measured in
Chestermere outdoor**

FLIGHTS BY ALTITUDE

- 96.5% of noise events from aircraft were over 2,000ft AGL
- Average altitude of all aircraft was 4,432ft AGL



PRELIMINARY FINDINGS

Sept 23 – Oct 27, 2019

- Average altitude of overflights is 4,432 ft AGL
- Range of Sound Exposure Level (SEL) for aircraft noise events is 70-76 dB
- Range of Lmax for aircraft noise events is 60-70 dB
- Average of 31 flights per day that registered a noise event
- What the operation is: Arrival flights are on the RNP approach to west of Chestermere



AIR TRAFFIC DASHBOARD

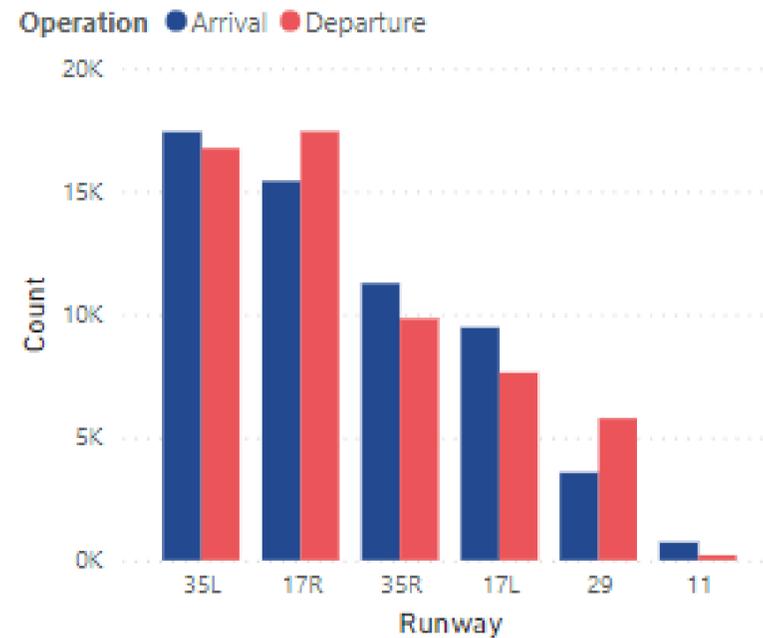
- Year
- 2018
 - 2019
 - 2020
 - 2021
 - 2022

- Month
- 01 Jan
 - 02 Feb
 - 03 Mar
 - 04 Apr
 - 05 May
 - 06 Jun
 - 07 Jul
 - 08 Aug
 - 09 Sep
 - 10 Oct
 - 11 Nov
 - 12 Dec

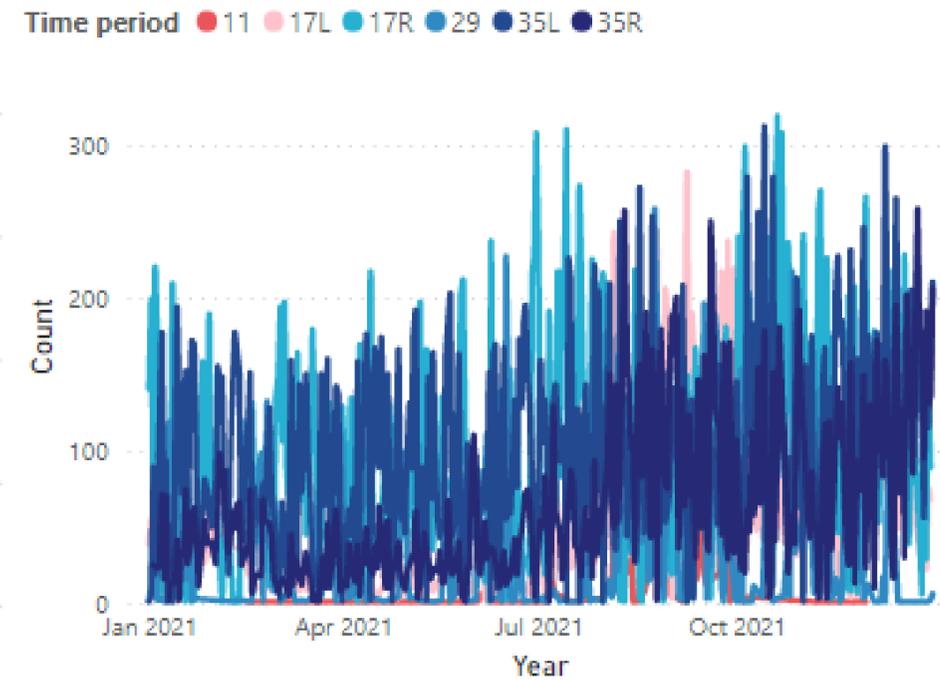
View Tabular Data

VRF Traffic and Aircraft Type

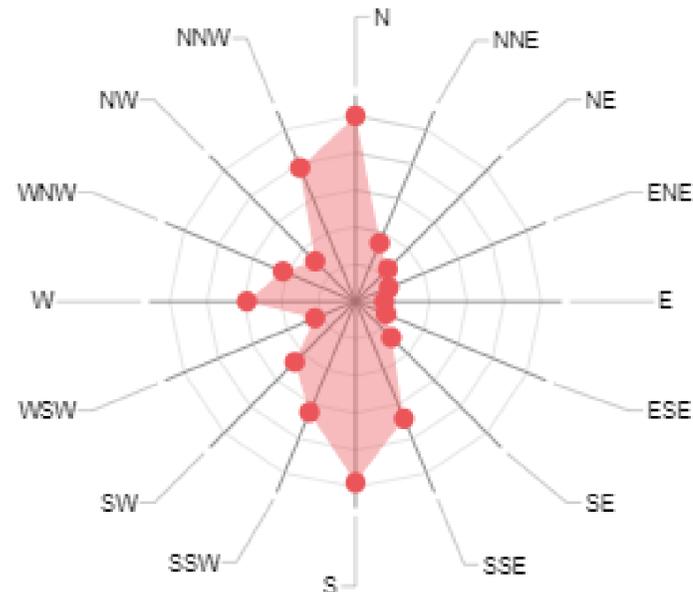
Breakdown by Runway for Selected Timeframes



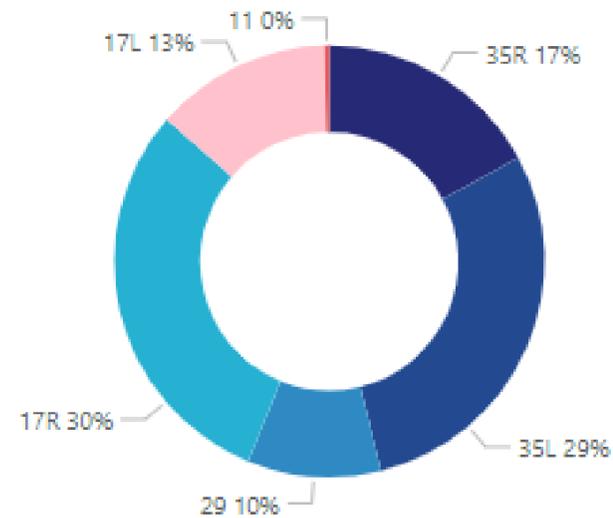
Breakdown Over Time for Selected Timeframes



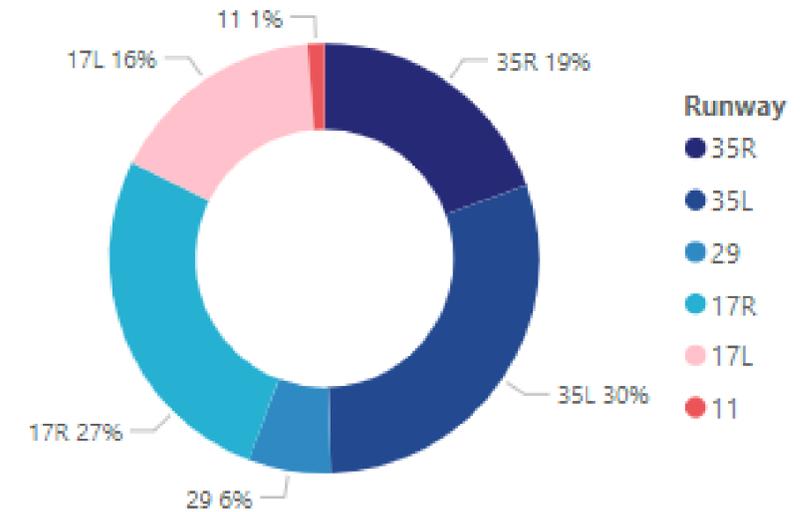
Wind Rose (3-Hourly Observations @ 10m)



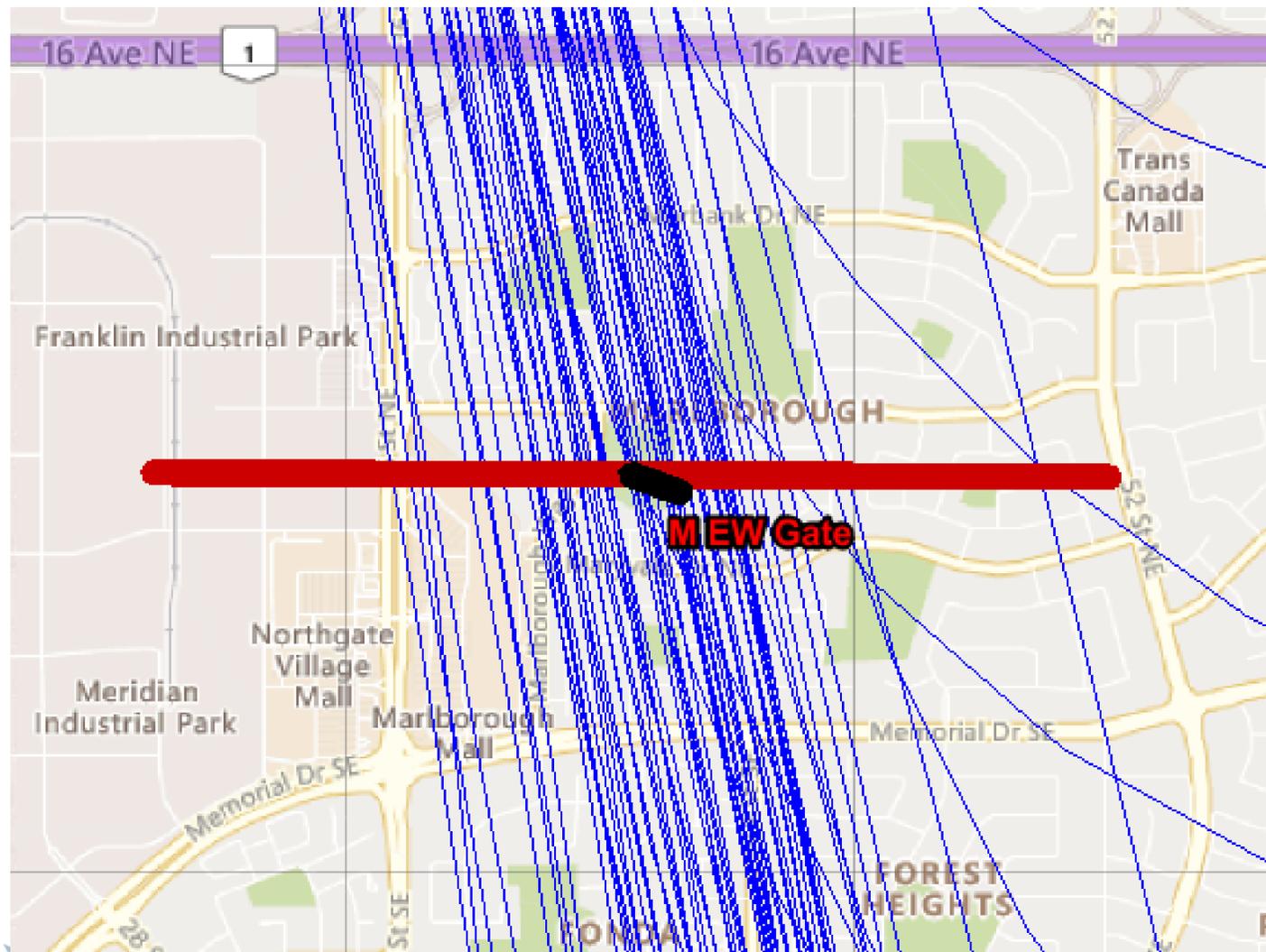
Departures



Arrivals



Marlborough Overflight Analysis

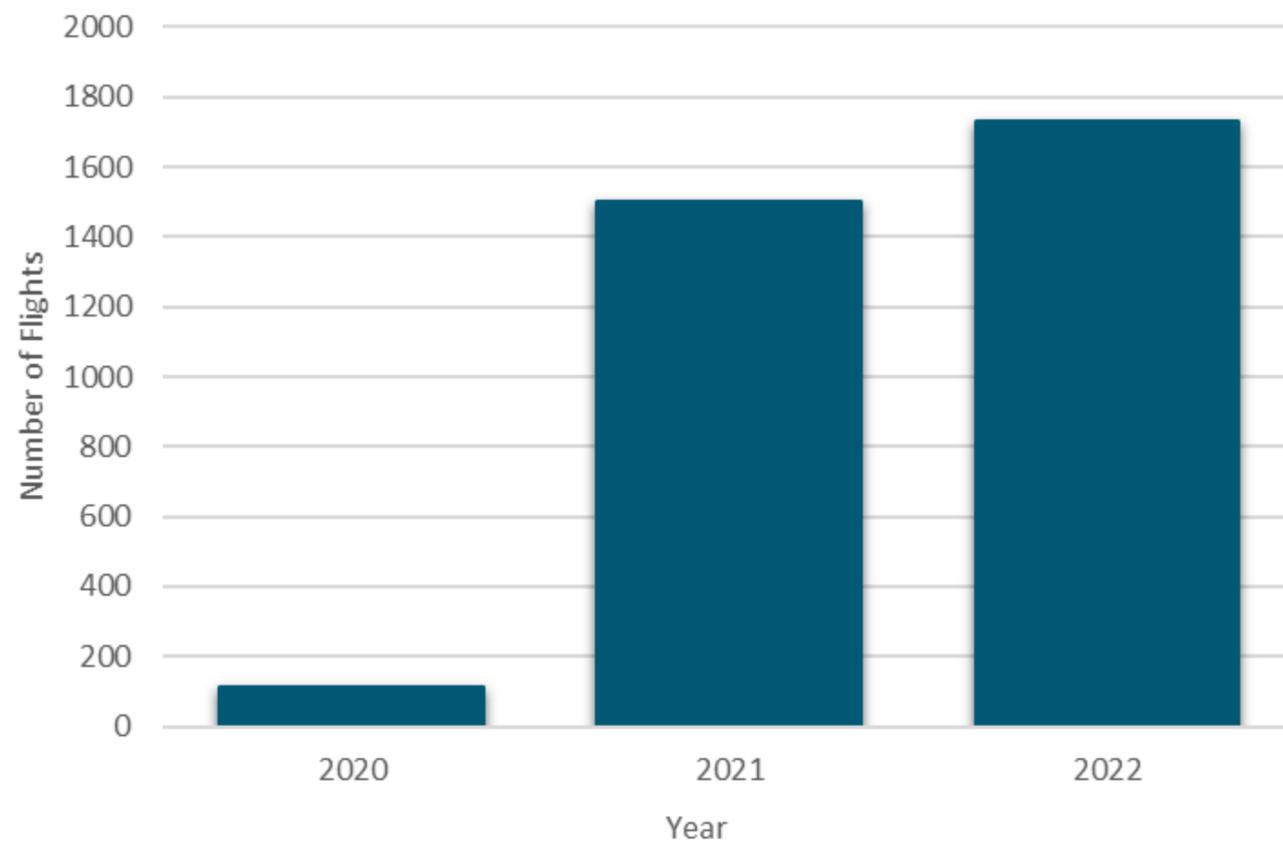


17L flight paths - November 10, 2022

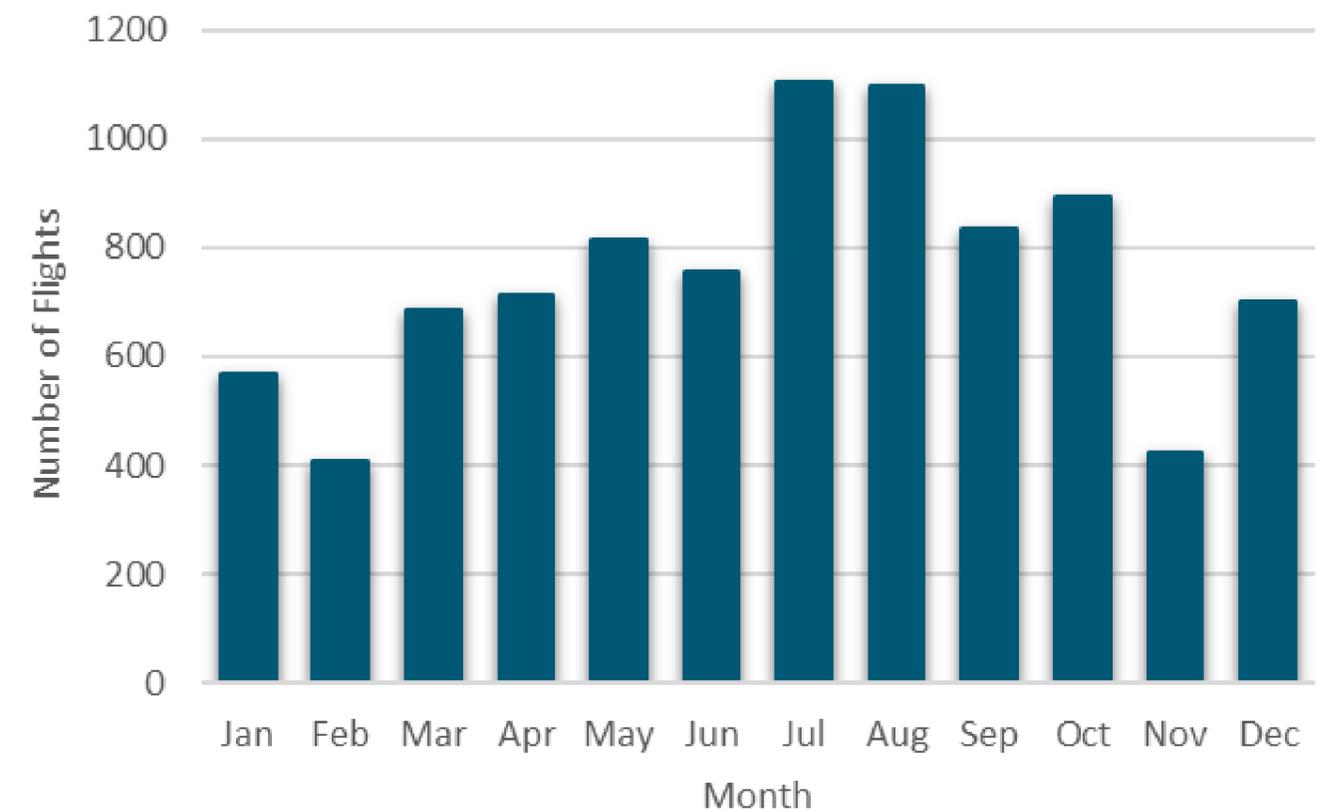
- Concerns at last meeting regarding an increase in flight activity over Marlborough in late 2022
- Compared flights over Marlborough in Sept/Oct of 2020, 2021, 2022
- Monthly trend of flights over Marlborough in 2022

Marlborough Overflight Analysis

Flights from 17L over Marlborough
Sept & Oct (2020, 2021, 2022)



Flights from 17L over Marlborough
Jan - Dec, 2022





MEMBER ROUND TABLE

