

WEST RUNWAY REHABILITATION

CANADIAN BUSINESS AVIATION ASSOCIATION



JUNE 2023

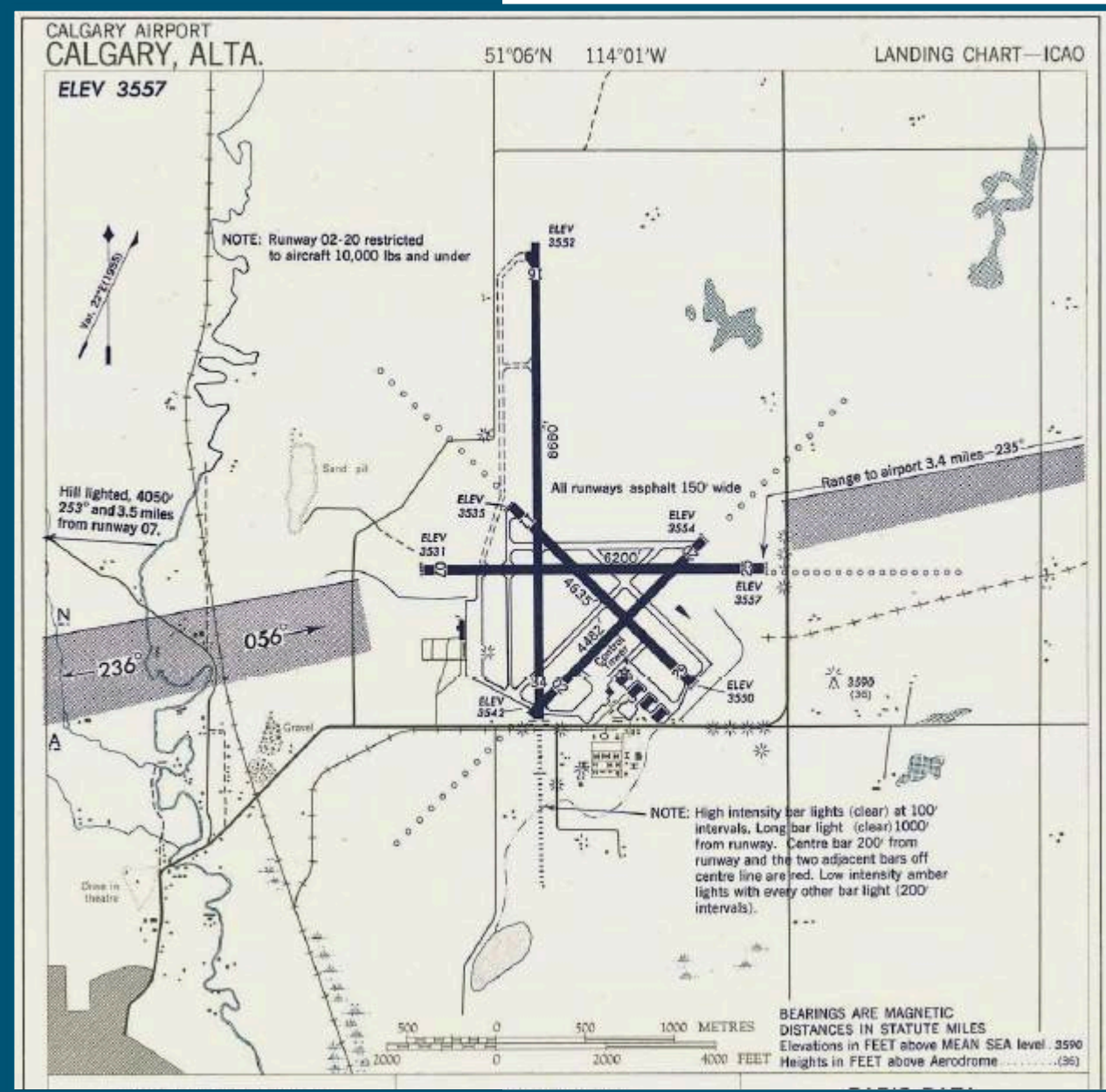


AGENDA

1. Introductions
2. West Runway Rehabilitation Project
3. YYC Capacity Planning
4. Online Coordination System
5. Q&A
6. Next Steps

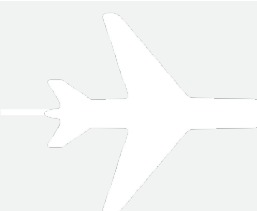


WEST RUNWAY REHABILITATION PROJECT



OVERVIEW

- 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.

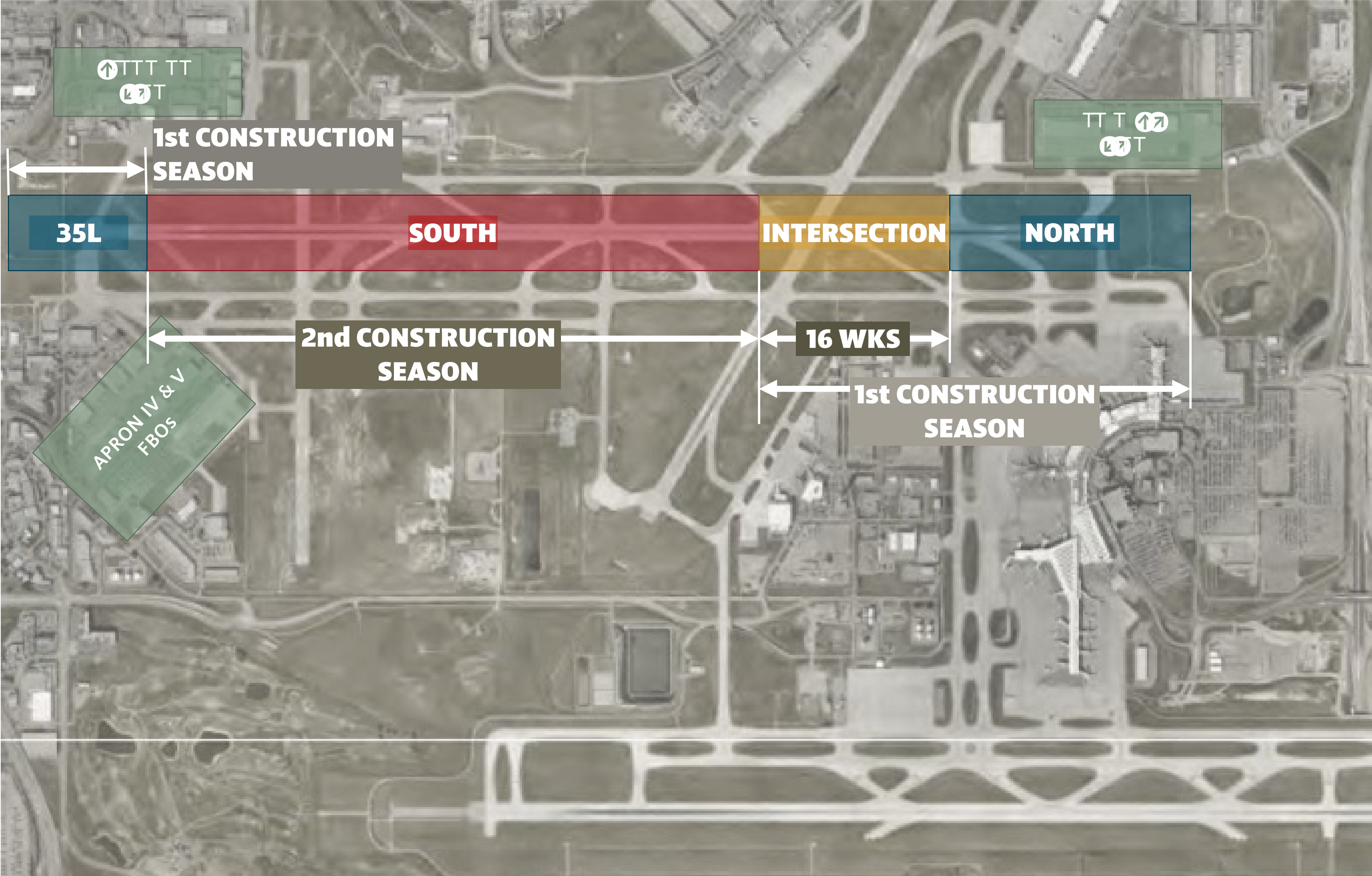
ENHANCE SUSTAINABLE PRACTICES

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.



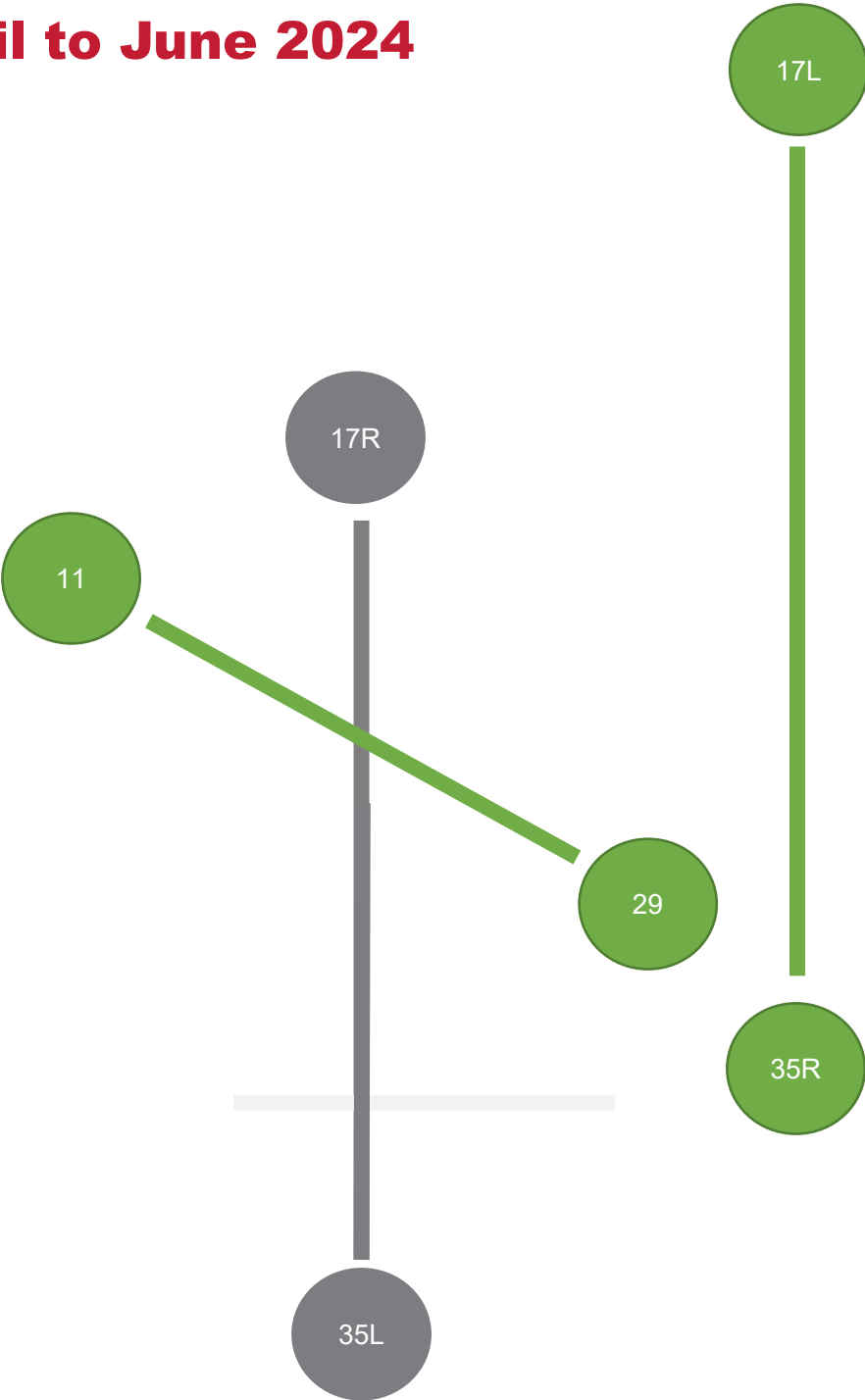
- Key risks if project is not completed:
- Structural or Electrical failure
 - Costly Emergency Repairs
 - Runway Capacity Constraints

HIGH LEVEL PROJECT PHASING



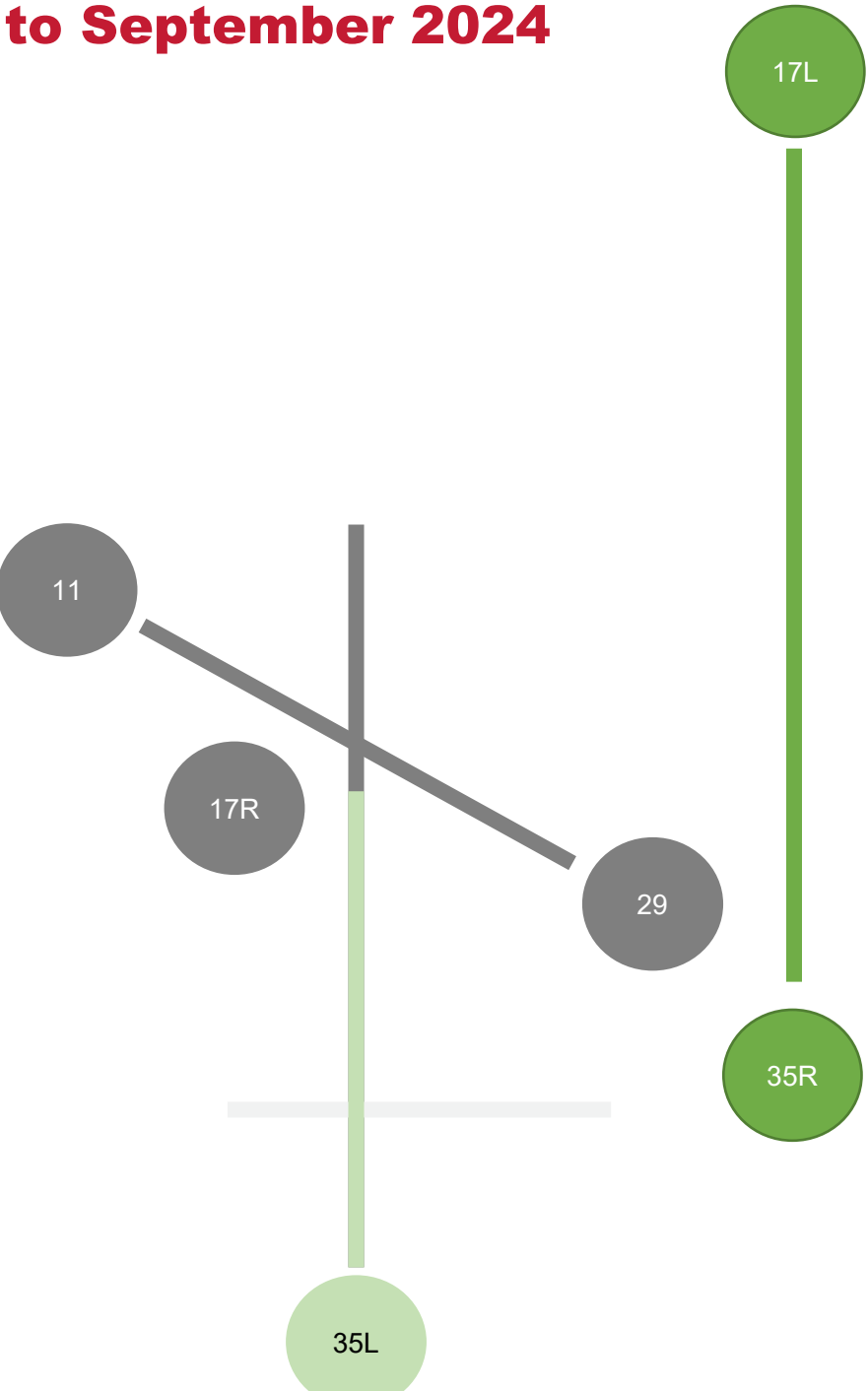
WHICH RUNWAY CLOSURES WILL BE NECESSARY?

April to June 2024



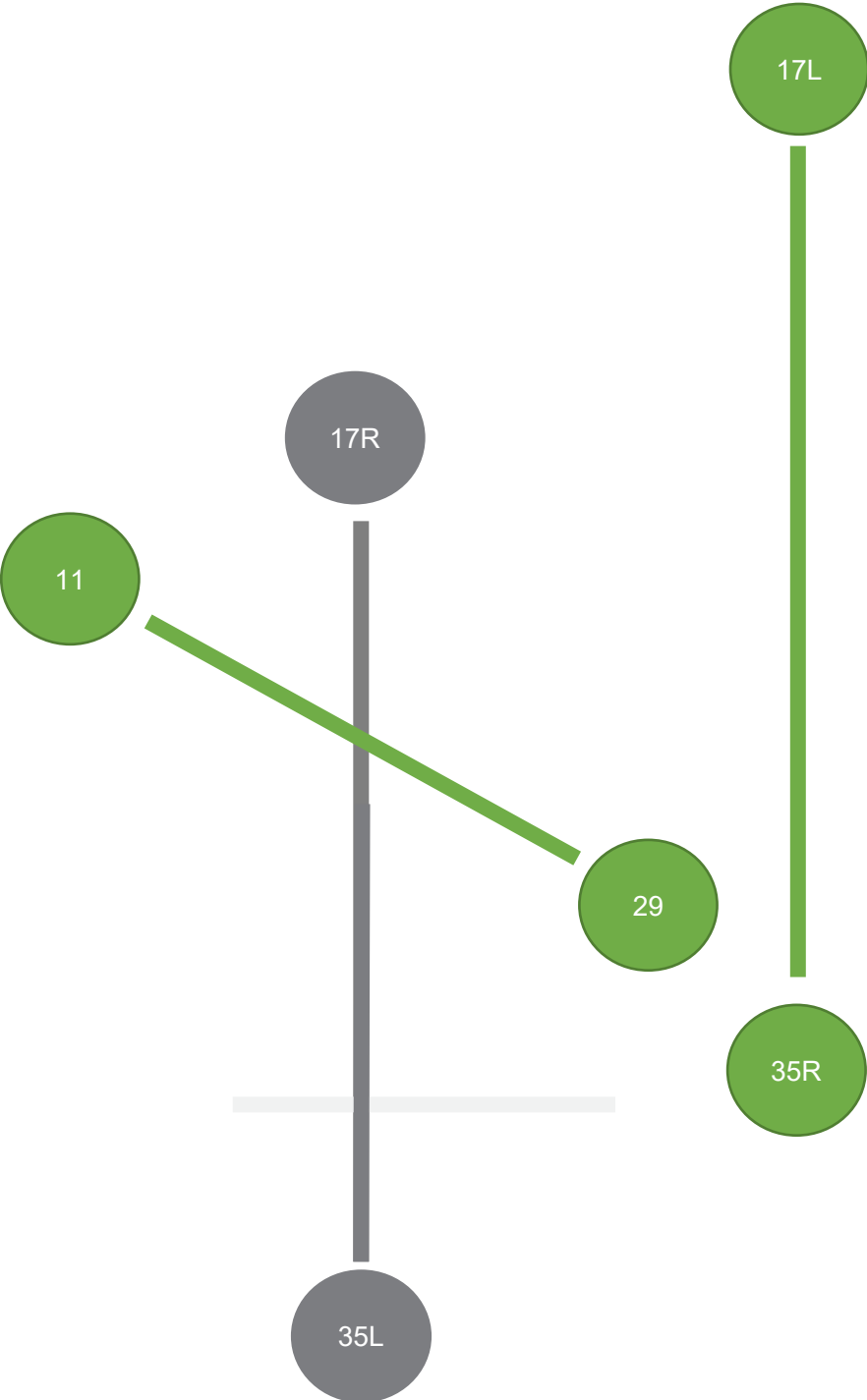
**PHASE 1A -
FULL 17R/35L CLOSURE**

July to September 2024



PHASE 1B - 11-29 CLOSURE

April to November 2025



**PHASE 2 -
FULL 17R/35L CLOSURE**

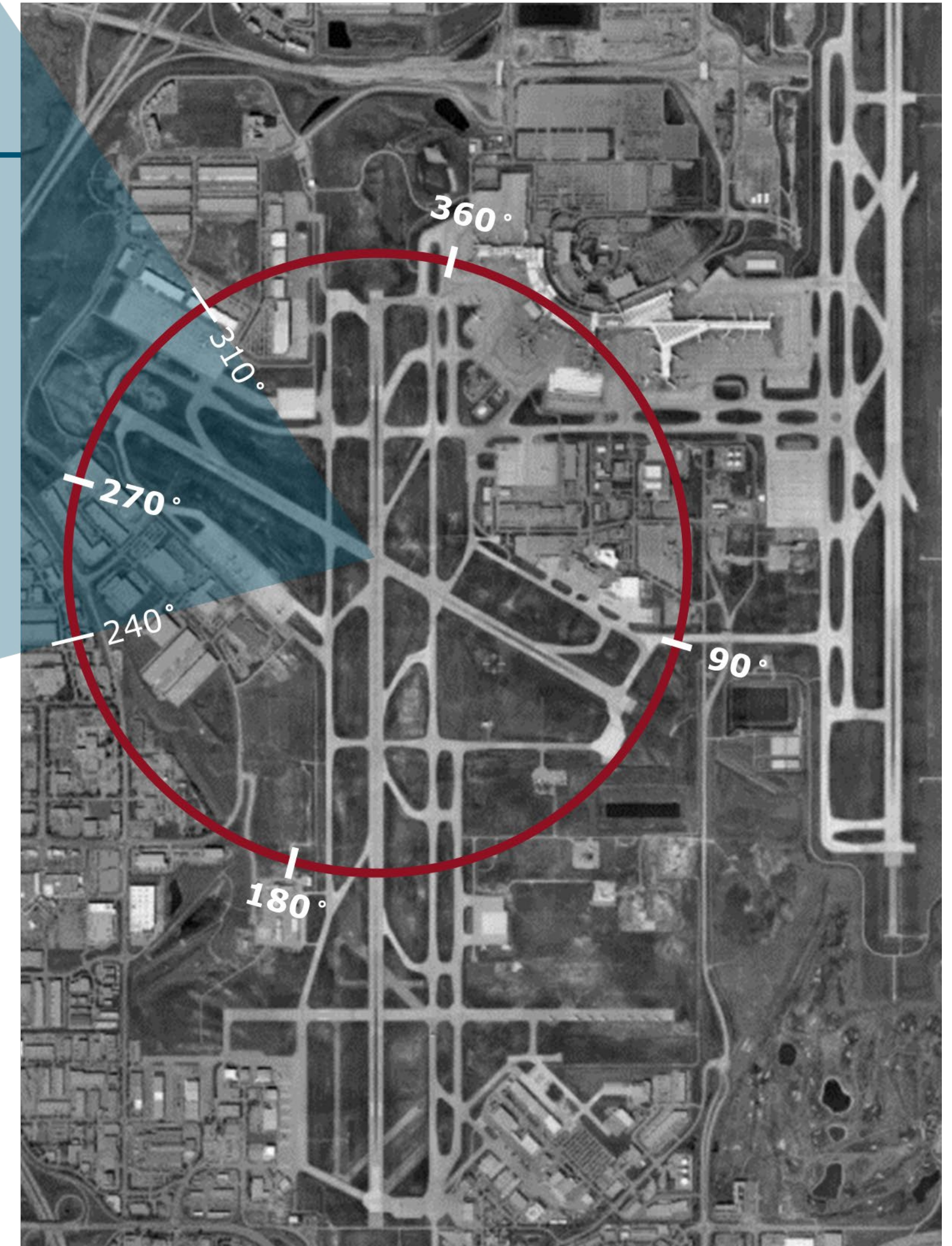
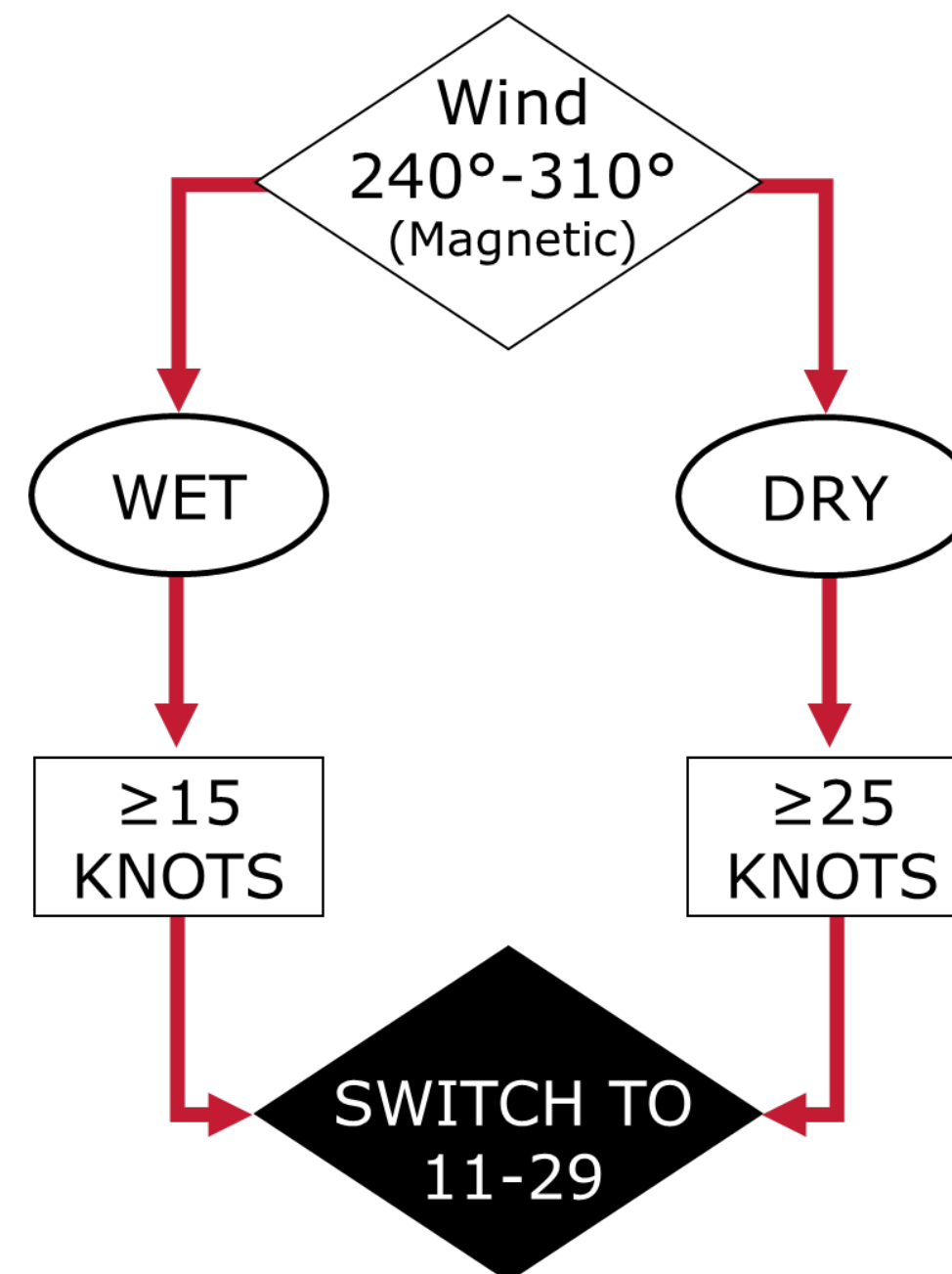
*Note: The West Runway will be returned to service
December 2024 to March 2025.*

USE OF 11-29: DATA ANALYSIS

Findings:

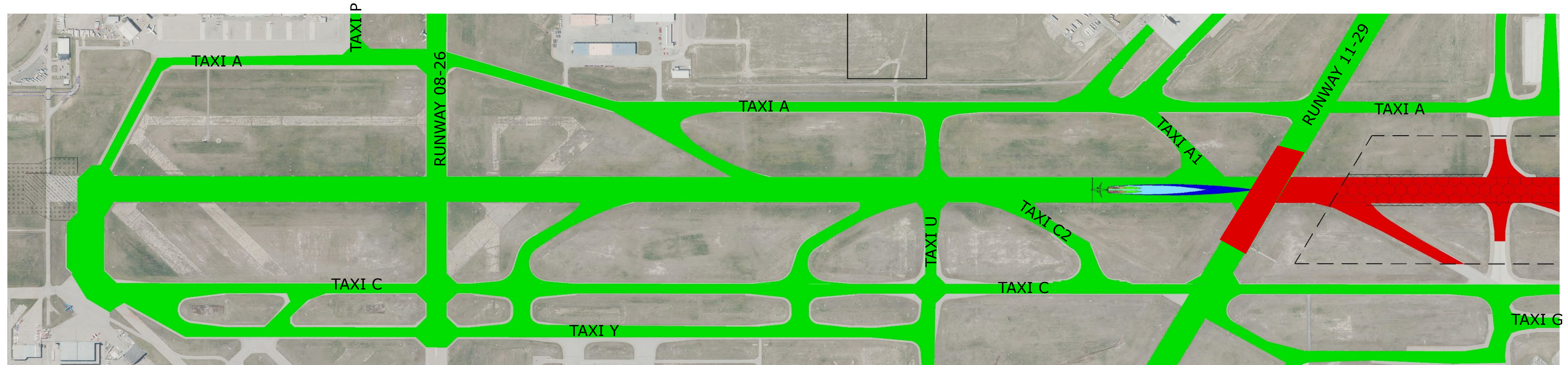
- Crosswinds exceeding 15 knots are experienced about 2% per year over the 5-year period
- Average of 120 hours per year recorded crosswinds exceeding 15 knots with an average event duration of 2.5 hours
- Majority of crosswinds in excess of 15 knots are experienced from October - June

Crosswinds in excess of 15 knots are the lowest **between July – September**
July average: 9.6 hrs.
August average: 6 hrs.
September average: 6.6 hrs



AVAILABILITY:
July to September 2024

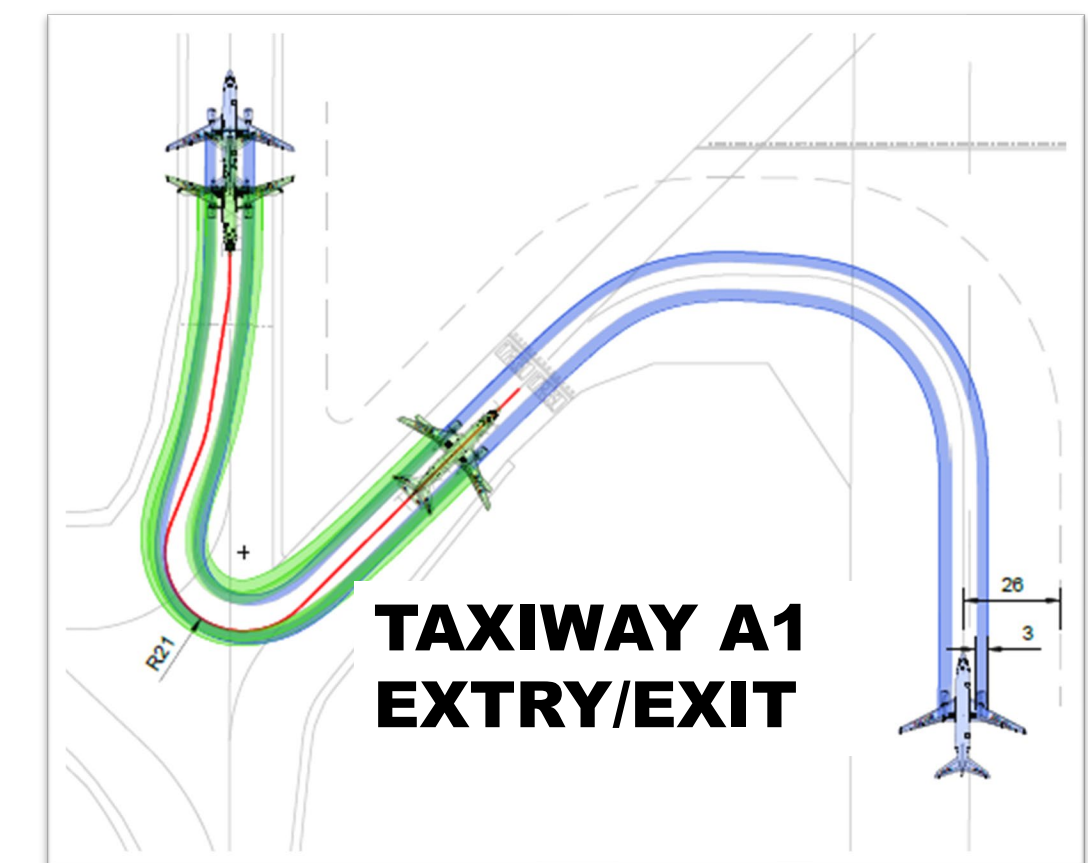
DECLARED DISTANCES | Shortened Runway



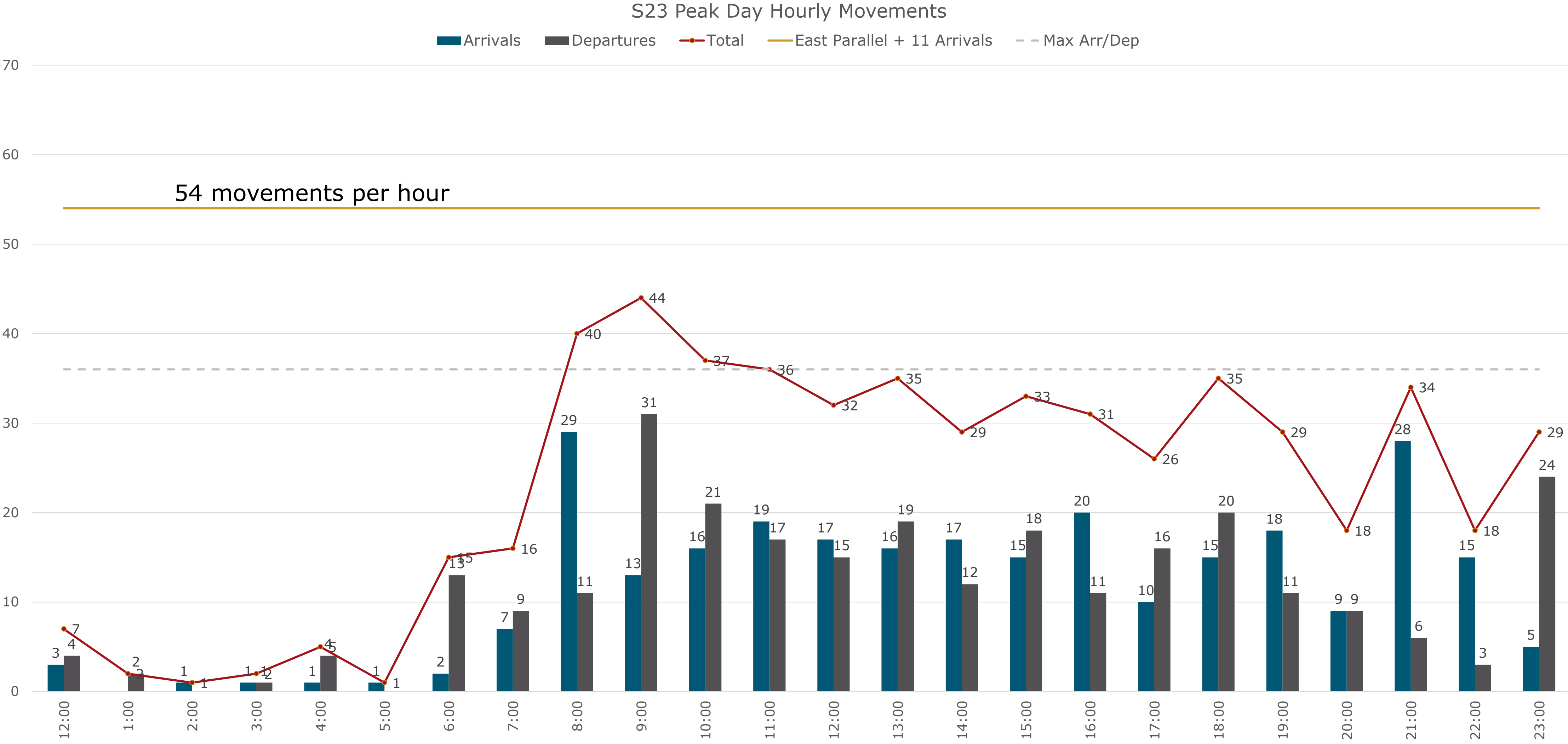
Runway Declared Distances Proposed Shortened Runway 17R-35L		
DECLARED DISTANCE	RUNWAY 17R	RUNWAY 35L
TORA	7,651' / 2,332m	N/A
TODA	8,635' / 2,632m	N/A
ASDA	7,651' / 2,332m	N/A
LDA	N/A	7,877' / 2,401m

Runway Landing Distance Available Proposed Shortened Runway 35L	
LANDING DISTANCE AVAILABLE (LDA)	RUNWAY 35L
TO TAXIWAY U	6,486' / 1,977m
TO TAXIWAY C2	7,169' / 2,185m
TO THRESHOLD (TAXI A1)	7,877' / 2,401m

AGN Restriction	
RUNWAY 17R DEPARTURE FROM THRESHOLD 17R	AGN III RESTRICTED
RUNWAY 17R DEPARTURE FROM TAXIWAY U	AGN IV RESTRICTED
RUNWAY 35L ARRIVALS	AGN IV RESTRICTED



RUNWAY CAPACITY vs DEMAND – SUMMER 2023



Current WRR Activities:

- Engage our Engineering Consultant
- Release a Construction Management RFP
- Prepare revised Phasing Plan and update construction timeline
- Complete some enabling work in preparation for construction start in 2024



YYC Calgary International Airport is an IATA Level 2 airport

- Commercial and Cargo airlines submit flight schedules on a seasonal basis
- YYC will analyze capacity for gates, off gate parking, check in counters, baggage belts
- Assessing the Summer 2024 runway movements to support the West Runway Rehabilitation Project



Anticipated Impacts to Operations:

- Reduced movements of 54/hour for Commercial, Cargo, General & Business Aviation
- Peak Hours of concern:
 - Arrivals: 0800, 1400, 2100, 2200
 - Departures: 0900, 1500, 1800, 2300

CAPACITY PLANNING

ONLINE COORDINATION SYSTEM (OCS)

To ensure the most efficient use of our runway capacity, the Calgary Airport Authority is implementing an online airport slot reservation tool, the Online Coordination System (OCS)

Our key objective is to ensure minimal impact to operations during both capital projects and regular airside maintenance where aircraft movements per hour are limited.

What is OCS?

OCS is a web-based system developed to allow registered users to view and download schedules for selected airports, as well as be able to schedule a runway slot reservation for General and Business Aviation.

Why the shift to this tool

Implementing this Software as a Service tool allows YYC to manage the movements required for GA/BA operations to keep movements out of the peak times. This ensures we are minimizing impacts to regular service and decreasing the risk of flight delays during times when we are at capacity.

WHAT IS CHANGING

Beginning Fall 2023:

- Runway Arrival and Departure slots will need to be reserved using the Online Coordination System
 - YYC based operators, can reserve a slot 30 days in advance
 - Non-YYC based operators, can reserve a slot 72 hours in advance
- Drive consistency between the 4 major Canadian airports





*"Coming together is a beginning,
staying together is progress, and
working together is success."*

Henry Ford

ROLE & RESPONSIBILITIES

- Submit a user Online Coordination System Application Form
 - FBO
 - Operator
- Request reservations through the OCS tool
- Support the new process and tool
 - YYC will monitor compliance
- Ask questions, raise concerns

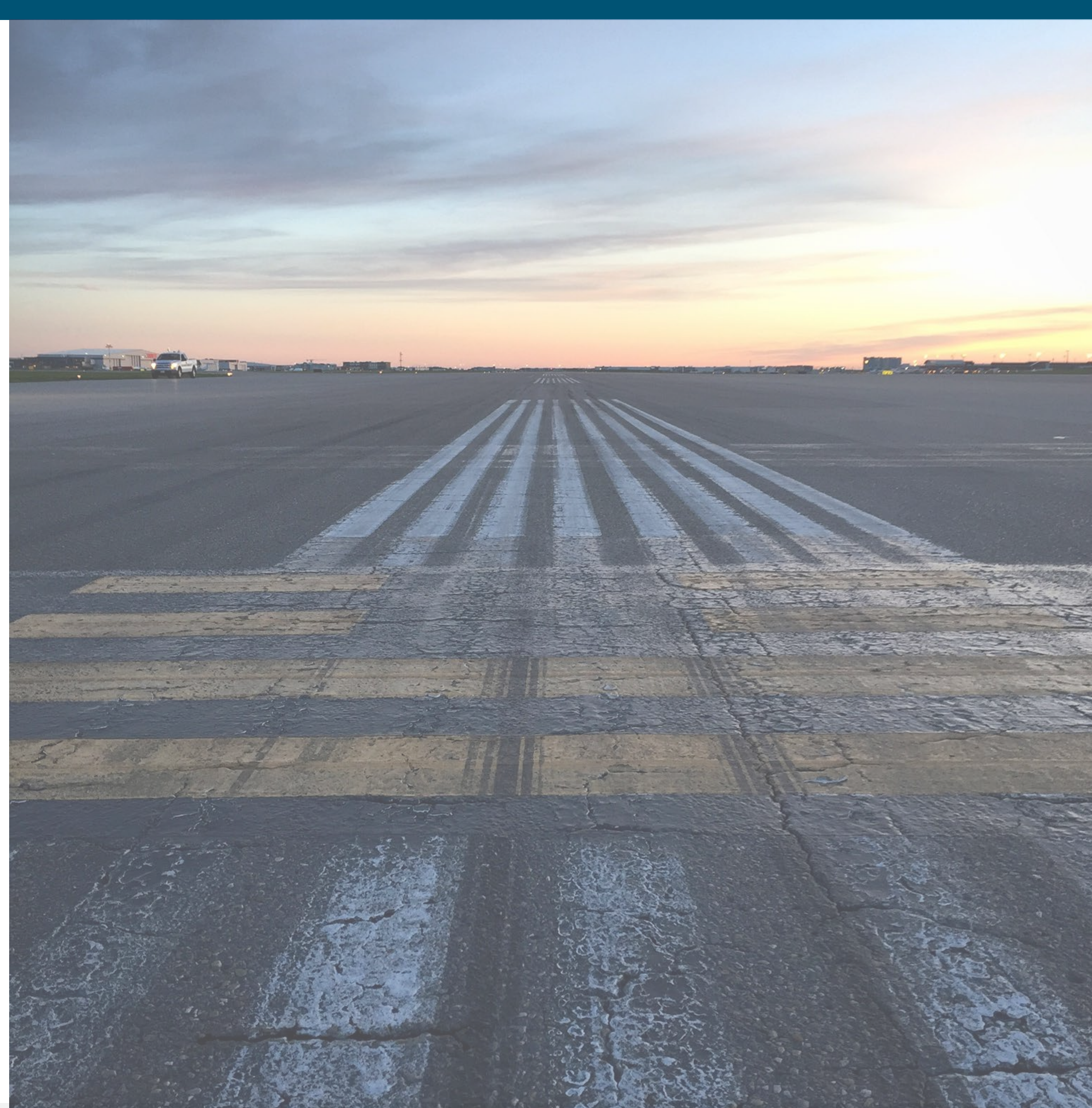
OCS IMPLEMENTATION ROADMAP


Overview of key activities over the next few months



Next Steps:

- Continue discussions with the Canadian Business Aviation community
 - Set up regular touch points?
- Provide an update at the CBAA Annual Conference on July 13th
- Potential OCS Tool Demo – late summer and early fall





Questions? Comments?

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