2024

### Weather The Good, The Bad and The Ugly











### SETTING THE STAGE Weather and Airports

Weather is responsible for 70% of all aviation-related delays

Airports are the start and end points for every flight – how weather impacts this, and how we plan and respond to events echoes across the system as a whole

Setting the stage for success: collaborative industry-wide approach to planning and execution

813

.058 CSN

106-

Delayed Delayed Delayed

Cancelle

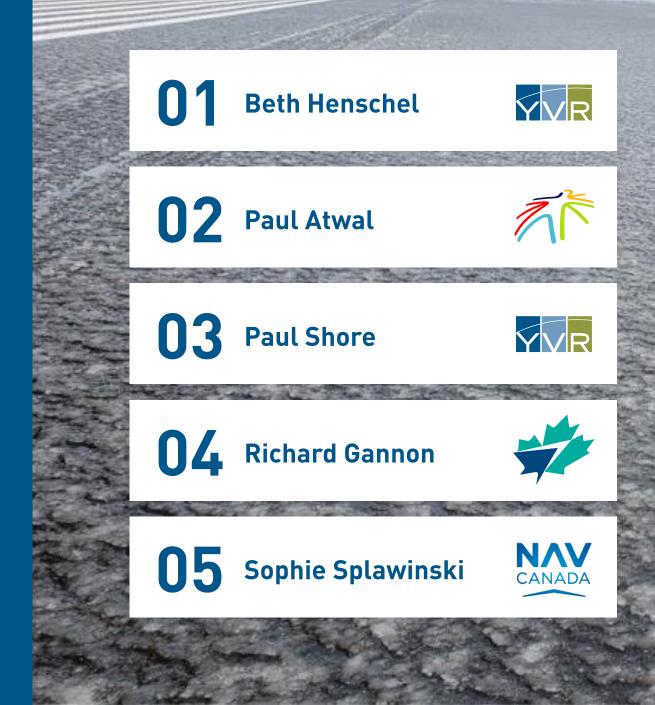
Cancelle Cancelle Delayee



# Common Understanding

- Climate conditions are changing
- Perspective is key
- Expanded thinking means anticipating problems better
- Our success is shared

### Introductions



### **AVMET** is Born...

# Aviation Meteorological Reference NAV CANADA Aviation Meteorology Reference



### **Picture This Scene**

#### THINK ABOUT

- Strategies
- Weather sources/data
- Questions
- Concerns
- Options

#### **BEFORE – DURING – AFTER**

Each team, customer, stakeholder... has their own plan(s) for their specific operation. Key is how to make them all fit.

### **Elements of the Storm**

Individual

**Elements** 

#### Assessing Overall Impact

- Start time
- End time
- Intensity
- Variability

" When will it start, when will it end, how bad will it be, and how sure are we of all this?"

TEMPERATURE	
Air, surface	Precipitation behavior, runway treatment, deicing
VISIBILITY	
Daytime, nighttime	Impacts on HOT (non-SureWX), snow removal crews, possible LVOP/RVOP
WIND	
Magnitude & direction	RWY orientation, deicing, accumulation on surfaces
ACCUMULATION	
<ul> <li>Rate</li> <li>Type</li> <li>LWE</li> <li>intensity</li> </ul>	Airport capacity (ROT, spacing, snow clearing ops, etc.), HOT, treatment, ramp crews, PAX
OTHER CONSIDERATIONS	
<ul> <li>Convection</li> <li>SIGMETs</li> <li>PIREPs</li> <li>Ice Shedding Requirements</li> </ul>	Enroute/TCU impacts, airline SOPs, ROT

#### Why They Matter

### How Have Things Evolved

#### Communication strategies – ATFM

# System-wide balance (RWY vs APRON vs HOT

• LWE

• Staffing

#### DEC 2022

JAN 2024

Communications strategies - Airport community Equipment changes/purchases

• D-TMI

## Looking to the Future

- Predictable ROT and renewals
- DTMI programs
- Proactive communications in snow removal
- Importance of historical events and data
  - Understanding the why
- Understanding flow capacity/demand for arrivals & departures
- System-wide balance: RWYs vs. APRON clearance vs. HOT
- System-wide impacts & education: collaborative growth



Weather: The Good, the Bad and The Ugly

# **5 MIN STRETCH BREAK**



# So, What Does It Mean to You?

PANEL DISCUSSION



# So, What's Next?

MEDIA