



City of  
**Kelowna**

# Snow and Ice Control Program Overview

# Winter Maintenance Services

- ▶ Winter Maintenance Services
  - ▶ Mobility Infrastructure Network
  - ▶ Walkways in parks
  - ▶ Civic properties
- ▶ Current Budget : \$ 2.8 M
- ▶ YTD : \$1.7 M





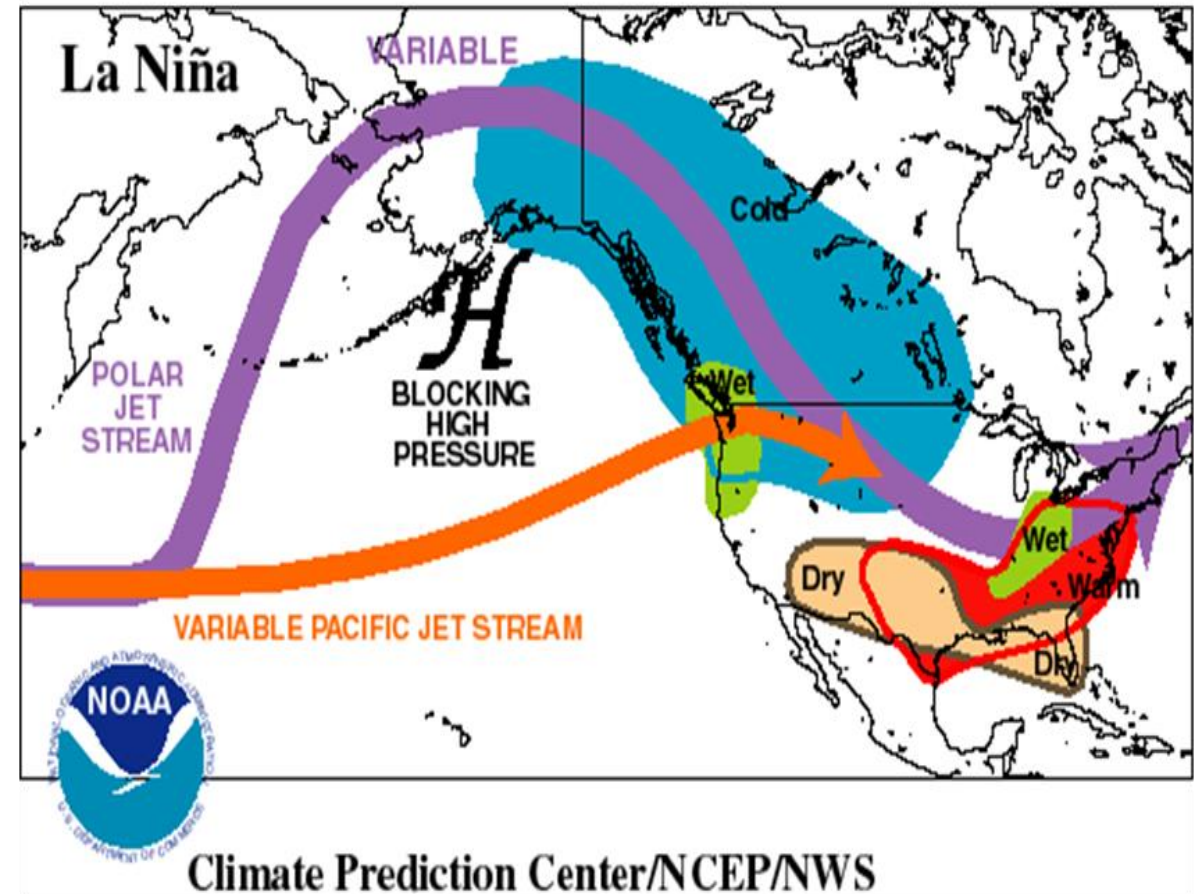
# Service Areas



- ▶ Roadways and Corridors
- ▶ Parks and Civic Properties
- ▶ Sidewalks and Bus Stops
- ▶ Public Laneways
  - ▶ Service provided for Emergency Services and solid waste removal vehicle access
- ▶ Private Roads and Lanes
  - ▶ Not maintained by the City
- ▶ Highways 97 and 33
  - ▶ AIM
- ▶ Bennet Bridge
  - ▶ Atkins Realis

# 2024 Outlook

- ▶ Short forecasts are more accurate
- ▶ Seasonal Impact : ENSO
- ▶ Current status : La Nina Watch
- ▶ Not a strong indicator for unusual weather



# Initial Preparations



- ▶ Preparations start post Labor Day weekend
- ▶ Performance Reviews
  - ▶ Team reviews past performance and issues
- ▶ Equipment Readiness
  - ▶ Plans for equipment readiness and conversions
- ▶ Shift Changes & Schedules
- ▶ Supplier Contracts
  - ▶ Renewals of supplier contracts (materials and services)



# Equipment Complement



- ▶ Various Types of Trucks
  - ▶ Tandem axle and single axle trucks with belly blades and slip in sanders
  - ▶ One-ton trucks with front-mounted blade plow and rear sander
- ▶ Sidewalk Service Equipment
  - ▶ Trackless tractors with brush and/or front plow
- ▶ Supporting Equipment
  - ▶ Graders
  - ▶ Anti/De-icing units
  - ▶ Snow raiders

# Snow Event Planning



- ▶ Weather Response guided by Weathernet
  - ▶ Private third-party forecasting company
- ▶ Augmenting Forecasting Services
  - ▶ Using an additional local forecasting company
  - ▶ Increased accuracy based on local knowledge
- ▶ Better Preparation for Appropriate Response
  - ▶ Enhanced forecasting allows for improved planning



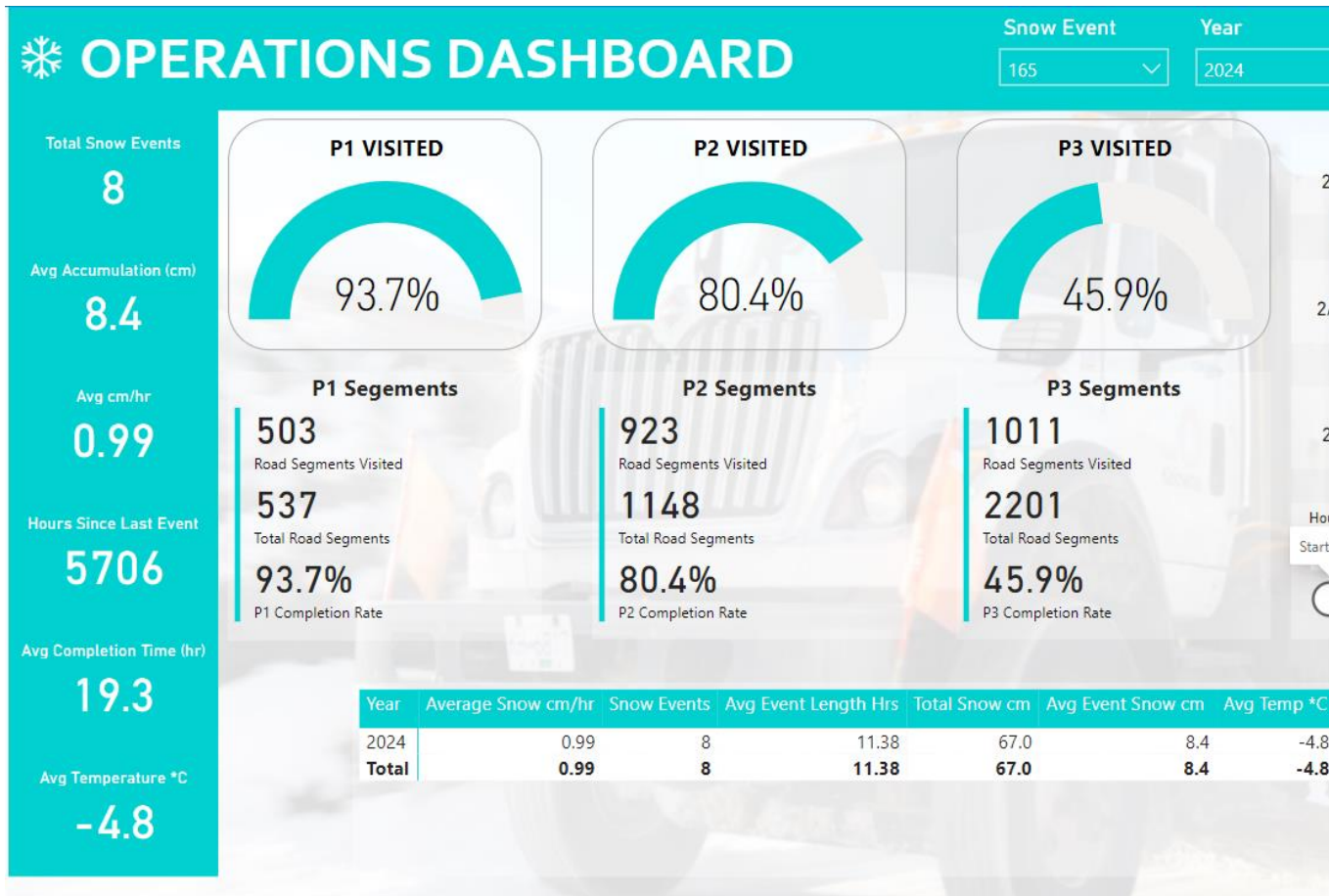
# Extreme Weather Protocols



- ▶ Forecasted event 15 cm or multiple days.
- ▶ Media event before snow starts
- ▶ Twice daily conference calls
- ▶ Parking Bans
  - ▶ Issued in 7 snow areas
- ▶ Snow Removal Program
- ▶ 6 snow dumping areas



# Digital Transformation



- ▶ Introduction of Cityworks in 2021
  - ▶ Transition to a digital approach for snow and ice response measurement
- ▶ Snow and Ice Dashboard
  - ▶ Demonstrates adherence to council policy
  - ▶ Digitally tracks routes
  - ▶ Displays completion rates in near real time
- ▶ Digital interfaces in snow clearing equipment
  - ▶ Displays open service requests for action
  - ▶ Allows marking off requests as complete in real time
- ▶ Future Improvements
  - ▶ Enhancements to near real time map and dashboard overviews
  - ▶ Creation of public-facing versions for citizens

# Changes from 2023/2024 Season



- ▶ Implementation of Recommendations
  - ▶ 7 recommendations from root cause analyses of Feb 27, 2024, event
  - ▶ Incorporated into current response plan
- ▶ Sidewalk Program Transition
  - ▶ Moved to Parks Services for better management and improved efficiencies
- ▶ Combination with Snow Program
  - ▶ Integrated with parks and civic properties snow program
- ▶ Enhanced Service Delivery
  - ▶ AIM to deliver services more effectively
  - ▶ Higher service level across systems
- ▶ Improved Access
  - ▶ Ensures better access to civic properties
  - ▶ Facilitates public transit access





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Questions /Discussion