



# **BUILDING ON STRONG FOUNDATIONS**

Leading Ontario's Transportation Future

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**96<sup>th</sup> ANNUAL ONTARIO ROAD BUILDERS'  
ASSOCIATION CONVENTION & AGM**

**FEBRUARY 6 & 7, 2023 • Fairmont Royal York, Toronto**

# Operations Division



## Presenters:

- Eric Doidge, Assistant Deputy Minister, Operations Division
- Jasan Boparai, Director, Highway Operations Management Branch

# Outline



- Operations Division
- Highway Maintenance Contracts
- Maximum Workload Implementation
- Highways 11 & 17 New Bare Pavement Standard
- MTO/ORBA Working Groups and Innovative Trials
- Operator Challenges
- Tow Zone Pilot
- December 23-26, 2022, Severe Winter Storm

# Operations Division



- Operations Division focuses on operational policy, transportation user services, and regional delivery of programs for all transportation modes.
- Operations Division oversees the operation and maintenance of the provincial transportation network and related assets through two provincial branches and five regional branches:
  - Highway Operations Management Branch (Maintenance Management, Corridor Management, Traffic Policy, Emergency Management & Policy, Special Highway Operations Initiatives, and Provincial Sign Shop)
  - Transportation User Services Branch (Concession Agreements, Remote Airports, Marine Services, Intelligent Transportation Services, Municipal & Client Services, and Traveller Communication)
  - Regional Operations Branches (Issues management & local stakeholder relations, regional right-of-way management, emergency management, operational services, and maintenance)
    - Organized into five regions, Regional Operations Branches are the ministry integrators for all transportation services in their geographic location.
- Operations Division partners with other MTO Divisions and ministries to advocate for stakeholder needs and support delivery of work such as capital projects, transportation safety, transportation policy and planning etc.

# Highway Maintenance Contracts - Approach



- Ministry's Maintenance Services Delivery Approach
  - Best-value contract procurements that focus on public safety, sustainability and value for money.
  - Continue delivery of maintenance services using the Contractor Directed Maintenance Contract (CDMC) and Ministry Directed Maintenance Contract (MDMC) models.
  - Include Aboriginal participation opportunities to leverage and build capacity of local Aboriginal communities and businesses.
  - Enhance public awareness by providing real time maintenance services data through Ontario 511 such as the Track My Plow feature, and enable motorists to better plan their trips.
  - Continuous improvement through research into new technologies, materials, equipment and techniques.

# Highway Maintenance Contracts - Procurements



## Recently Awarded Contracts :

- North Bay CDMC, Cochrane CDMC & New Liskeard CDMC
  - Commenced June 2022
- Sault Ste. Marie CDMC and Kenora CDMC
  - Awarded for June & July 2023 start

## Ongoing and Approved CDMC Procurements:

- Owen Sound CDMC
  - Tender Closing Date (planned): February 15, 2023
- Thunder Bay West CDMC
  - Tender Closing Date (planned): March 8, 2023
- London CDMC
  - Tender Closing Date (planned): April 5, 2023
- Chatham CDMC
  - Tender Closing Date (planned): May 3, 2023

# Maximum Workload Limit



- Limits the maximum workload that can be held by a contractor.
  - Implemented following recommendations from internal audits and reviews, to enable the province to better manage risks if a contractor faces a major business disruption, such as insolvency.
  - Similar approach for maintenance contracts is in place in Alberta and British Columbia.
- The ministry is using a graduated approach to minimize potential impacts to maintenance contractors who currently hold larger market share.
  - Current Maximum Workload Limit: At the time of bidding a proponent shall not hold more than 40% of the ministry's highway maintenance program that is based on the aggregate total of Equivalent Two Lane Kilometers (E2 LN KM) held under agreement by a contractor, except in cases where the proponent is the incumbent contractor.
  - The ministry's long-term plan is to lower the maximum workload limit further. This is planned to be done in consultation with ORBA and in a manner that minimizes impacts to maintenance contractors.
- Contract language for maximum workload limit is being developed and is planned to be included in upcoming contracts as soon as it is finalized.

# Highway 11 & 17 New Bare Pavement Standard



- In November 2022, the ministry introduced a new “ON Trans-Canada” standard which requires contractors to clear Highways 11 and 17 to bare pavement within 12 hours of the end of a winter storm, four hours faster than the previous standard.
  - The 12 hours bare pavement standard is intended to enhance winter maintenance services on Highways 11 and 17 while also optimizing the use of resources and protecting our environment.
- The new standard has been developed following extensive work done over three years involving:
  - Detailed technical review of winter maintenance services on Highways 11 and 17.
  - Data analysis and field work carried out during the Highways 11 and 17 winter maintenance pilot over 2020-21 and 2021-22 winter seasons.
  - Feedback from partners and stakeholders.
- Ontario Improving Road Safety in the North | Ontario Newsroom  
<https://www.ontario.ca/page/keeping-highways-11-and-17-safe-winter>





# Highway 11 & 17 New Bare Pavement Standard



- In addition to the new standard, the ministry has continued to enhance winter maintenance services to further enhance safety on these and other provincial highways:
  - New contract models that specify equipment, routes and requirements and balance risk allocation for the delivery of maintenance services.
    - The new contract models continue to demonstrate tangible improvements.
    - By Winter 2025-26, almost all contracts are planned to transition to the new contract models.
  - Increase in the use of underbody plows that remove packed snow better than conventional plows.
  - Increase in the use of anti-icing liquids (where appropriate) before storms to make it easier to clear snow.
  - Use of Potassium Acetate on trial-basis to further explore benefits of winter materials with lower freezing point.
  - Route improvements at specific areas to reduce deadheading. Deadheading is the distance travelled by a winter unit from its yard to the start of its designated route of operation.
  - Installing 24 new Road Weather Information System stations (including 8 stations along Highways 11 and 17), for better weather forecasting and response to evolving weather conditions.
  - Geometric improvements, such as rock removal in specific areas, to push back high rock cuts and improve sunlight exposure of roadway sections to help melt the snow which will help get to bare pavement faster.

# MTO/ORBA Working Groups and Innovative Trials



- Extended width winter equipment (Wide Wing Plow)
  - Innovative trials in the Kenora and Owen Sound CDMC's include a wide wing plow from Tenco and Viking-Cives respectively that enables one plow to clear snow on two lanes with one pass.
  - The wide wing plow services the same lanes as a snowplow that is pulling tow plow and is operated by an individual with a DZ license. This unit is more maneuverable in existing turn arounds at the end of a route.
  - Working Group will evaluate the trials to confirm future opportunities to use this equipment.



# MTO/ORBA Working Groups and Innovative Trials



- Medium Duty Combination Unit
  - Working Group recommended an innovative trial in the upcoming London CDMC that will include a medium duty combination unit that is less than 11,000kg GVWR and is operated by an individual with a “G” license requirement (no “Z” endorsement required)
  - The medium duty combination unit will service shorter routes with limited turn around locations in urban areas.
  - This trial supports the DZ driver shortage and offers contractor staff transitional training to DZ licensing.
- Anti-icing Liquids - Potassium Acetate Trial
  - A Highway Infrastructure and Innovation Funding Program (HIIFP) project has been initiated this winter in the Kakabeka MDMC (Northwestern Region) with the University of Waterloo and IMOS to assess the effectiveness of liquid Potassium Acetate (KAc) in both Direct Liquid Application and Pre-wet application. The findings from this trial will support efforts to expand the use of alternative winter materials.



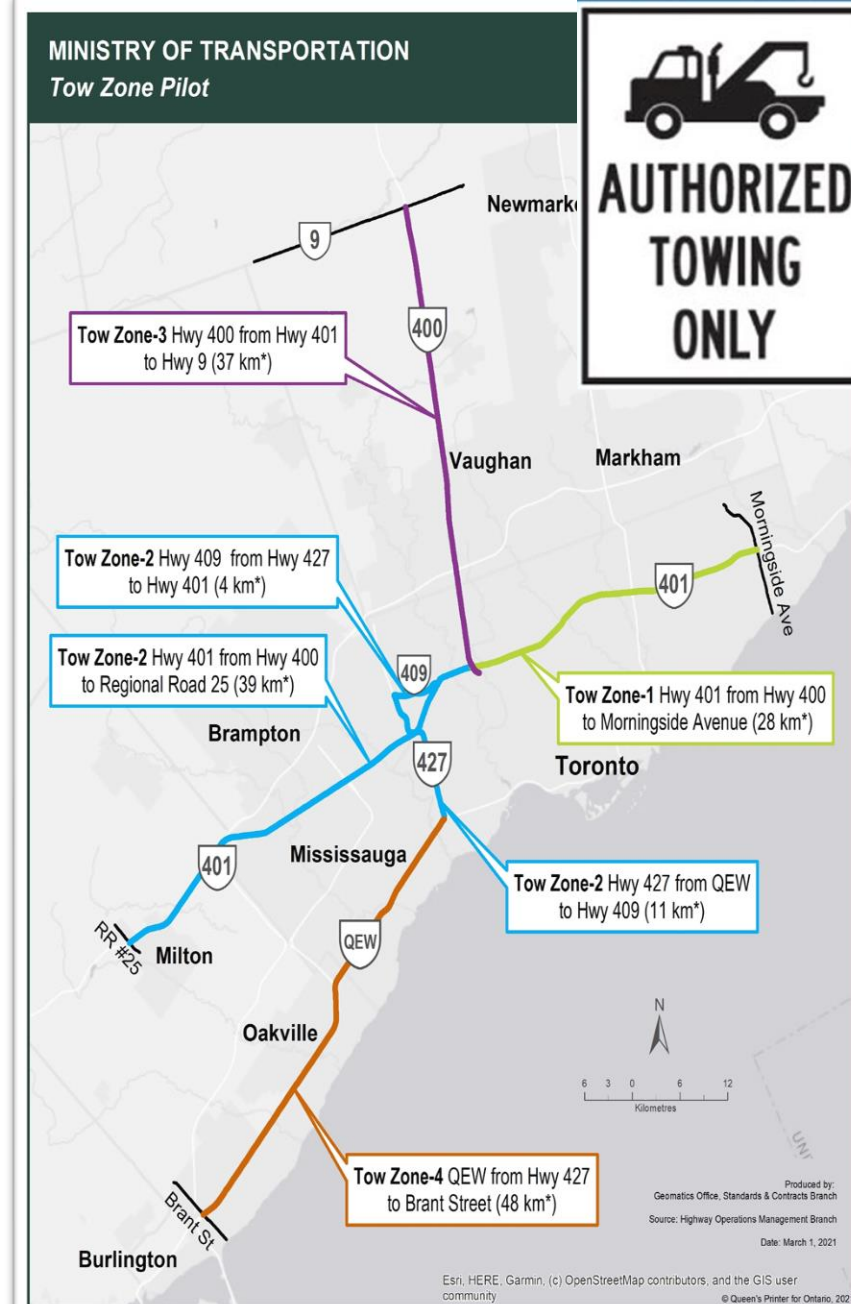
# Operator Challenges



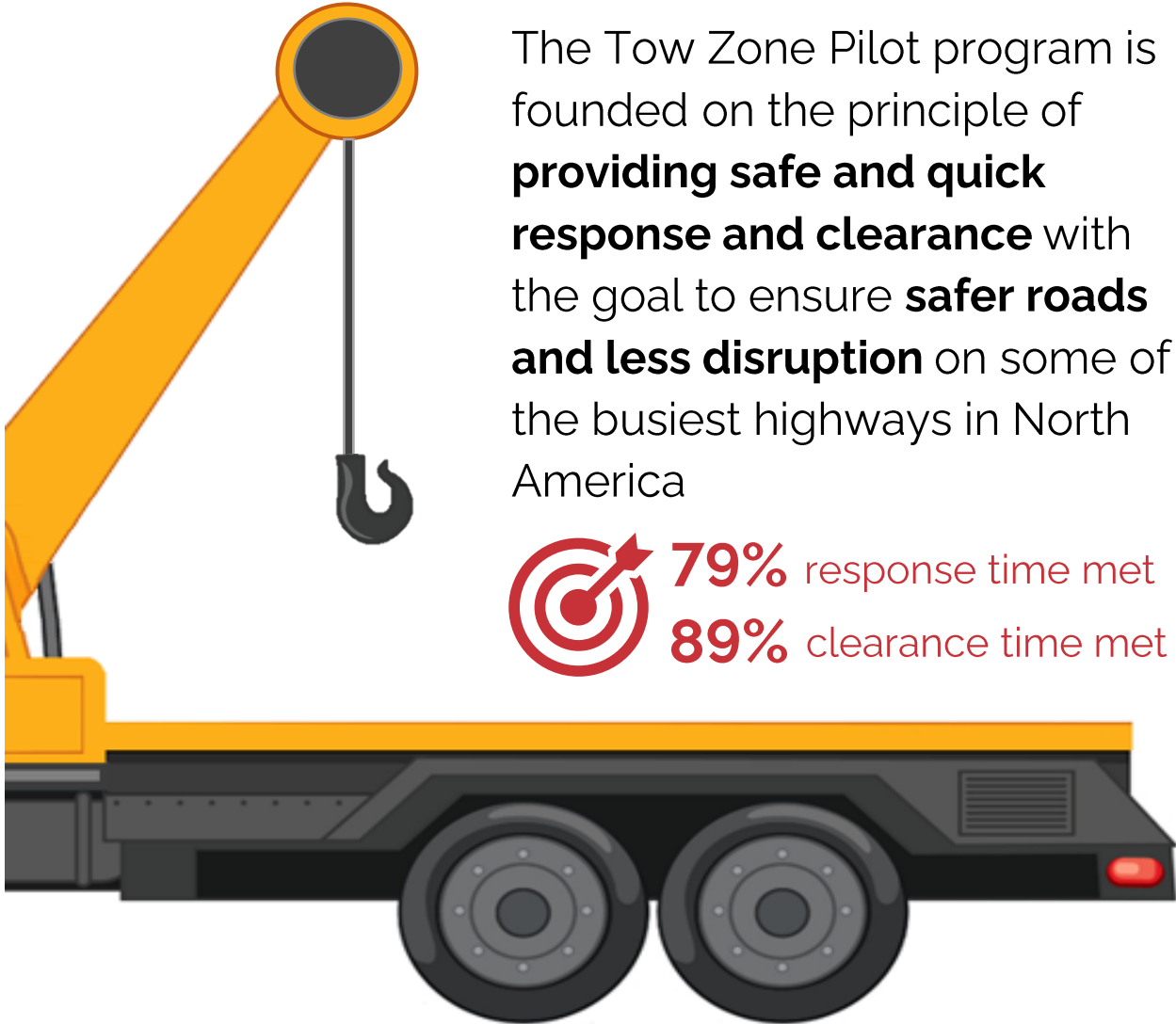
- Lack of operators is an industry-wide issue that has a bearing on all sectors that require AZ/DZ licence, and has started to impact the delivery of winter maintenance services, especially in Northern Ontario. Most winter vehicles require operators with an AZ or DZ licence.
- In a joint effort, ORBA has partnered with the Canadian Construction Association to submit a proposal to the federal government for inclusion of winter operators in the seasonal migrant worker program that currently targets the agriculture sector.
- Some maintenance contractors are also enrolling in the ministry's Drivers Certification Program (DCP) that gives ministry-approved organizations permission to train and test (upgrade or renewal) for commercial class licences (A-F), motorcycle licences and air brake endorsement.
- For this winter season, the ministry has developed a guidance document to assist field staff in supporting contractors manage impacts of operator shortages, if ministry assistance is requested.
- MTO/ORBA joint working group has been exploring various options to mitigate operator shortages:
  - Opportunities to include fair wage provisions in new procurements.
  - Equipment innovations – wide wing plow and medium duty combination unit.
  - Opportunities to increase year-around work.
  - Enhanced guaranteed hours and retention incentives.

# Tow Zone Pilot

- Due to the increasing incidents of unsafe practice, inflated pricing, lack of customer protection, and crime in the towing sector, the Province launched a pilot that introduced four (4) restricted towing zones on sections of provincial highways, effective Monday, December 13, 2021, 12:01 A.M.
- Within restricted towing zones, only authorized companies can remove vehicles that require a tow. This means no other towing company can solicit towing of vehicles within a restricted towing zone, unless authorized by the Police or MTO.
- Tow Zone Pilot objectives:
  - Enhance safety and reduce clearance times by ensuring that authorized towing companies have the required training, experience and are properly equipped and integrated with other responders.
  - Ensure that towing, recovery and storage services within the pilot use standardized pricing.
  - Eliminate the unsafe practice of racing to the scene of incidents.
  - Provide data and information to support the development of standards, processes and practices for the towing and storage sector.



# Tow Zone Pilot



The Tow Zone Pilot program is founded on the principle of **providing safe and quick response and clearance** with the goal to ensure **safer roads and less disruption** on some of the busiest highways in North America

 **79%** response time met  
**89%** clearance time met

> 400K

average annual daily traffic flowing through tow zones

32,790

incidents responded to

92%



LIGHT VEHICLES

8%



HEAVY VEHICLES

82%



DISABLED VEHICLES

18%



SINGLE/MULTI COLLISIONS



On average, for light-vehicle incidents

**Response** is within **20 min** and **Clearance** within **28 min**

< 1%

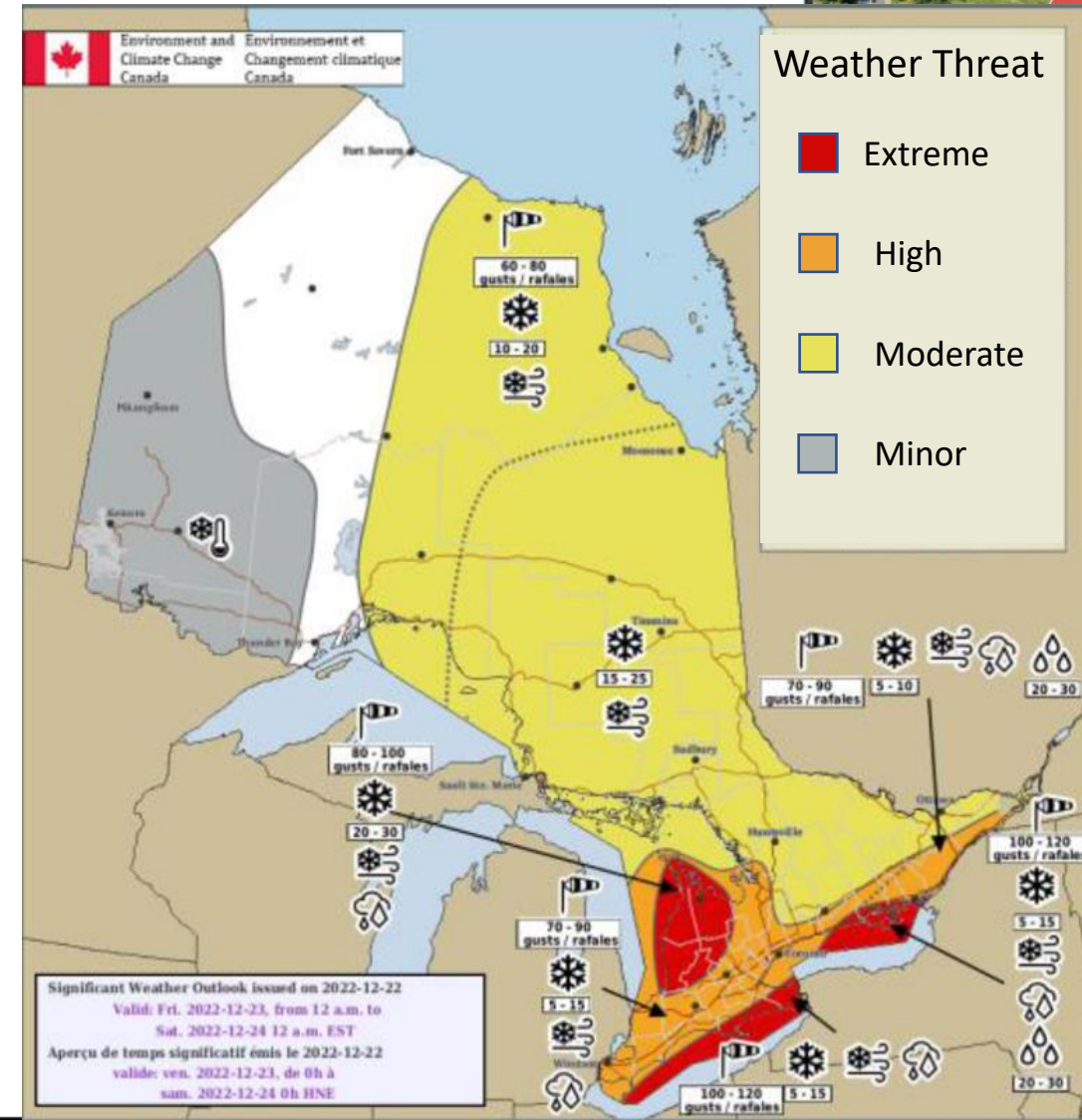
customer complaints received

\* Statistics are averages based on MTO data; December 13, 2021 – December 31, 2022

# December 23-26, 2022, Severe Winter Storm



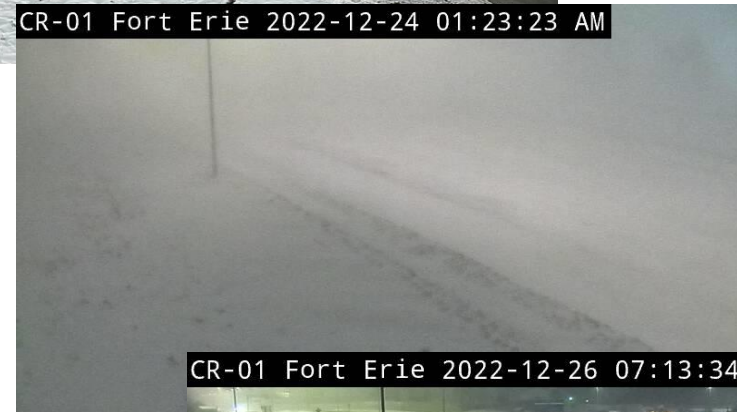
- Provincial highways in Ontario provide a key transportation network that supports the economic wellbeing of the province and the delivery of goods and emergency services to local communities across the province.
- The December 23-26, 2022, severe winter storm had a significant impact on large parts of the province in Southern and Northern Ontario.
  - Forecast: Significant snowfall, damaging winds, blowing snow, rain as well as icing and cold temperatures
  - Resulted in the extended closure of several major provincial highways and many secondary highways.
  - Several municipalities declared a state of emergency and suspended winter maintenance services until after the winter storm.



# December 23-26, 2022, Severe Winter Storm



- Based on experience gained, MTO has been implementing a paradigm shift involving early and more effective planning and coordination between MTO's program areas and with partners such as the OPP and Emergency Management Ontario.
- The winter storm required MTO and maintenance contractors to implement several non-standard solutions in response to the evolving weather conditions.
- At several locations ministry staff and maintenance contractors had to pull over due to poor visibility and then became stranded due to drifting snow. At several patrol yards, maintenance contractors' staff were unable to get to the patrol yards for their shift as municipal roads were closed or not suitable for travel.
- The ministry appreciates the significant efforts made by highway maintenance contractors to respond effectively to this severe winter storm.

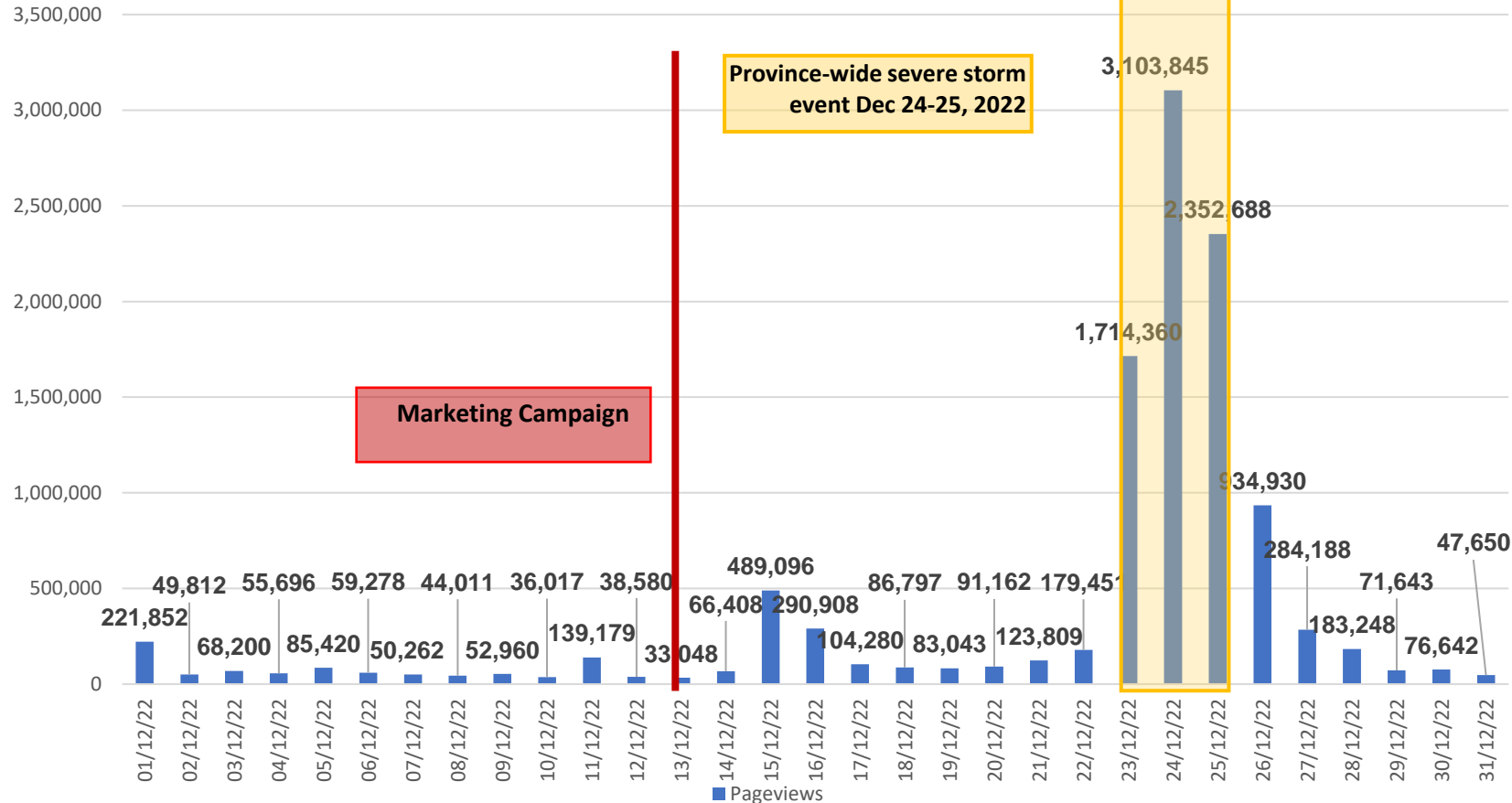




# December 23-26, 2022, Severe Winter Storm Ontario 511 Website and Mobile App Metrics



Ontario 511 Website - Pageviews  
December 2022

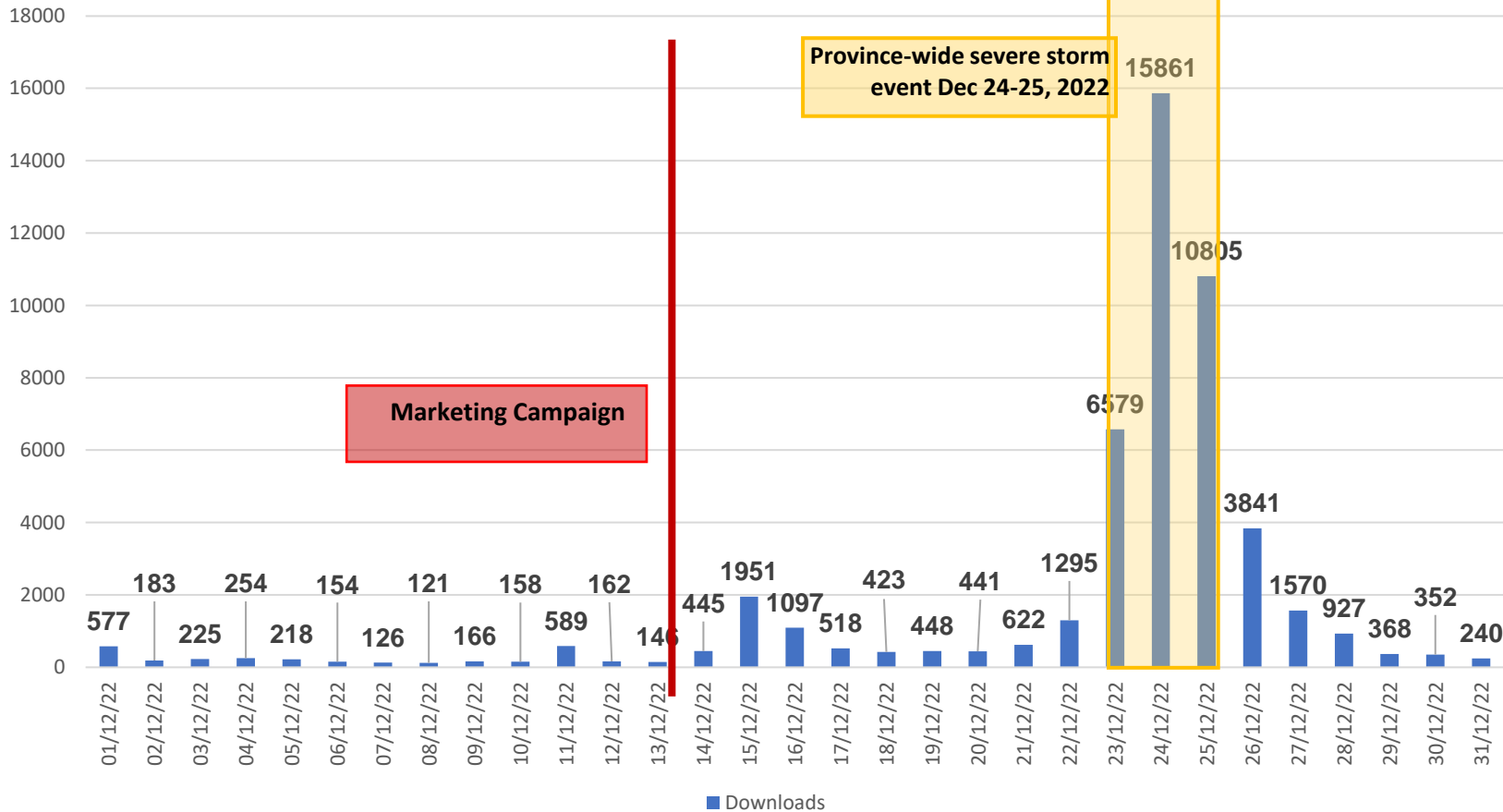


- Ontario 511 experienced extraordinarily high usage across its four (4) channels during the Dec 23-25th winter storm event.
- During the 3-day storm event, the Ontario 511 website experienced over 7.1 million pageviews, which accounted for approximately 21% of the 2022 annual total pageviews (33.5 million).
- For comparison, the same 3-day period in 2021 saw 394,000 pageviews, and 2022 was an increase of over 1,160%.
- Paid advertising campaign started December 14, and contributed to the overall website usage, including initial usage increases on December 15 and 16.

# December 23-26, 2022, Severe Winter Storm Ontario 511 Website and Mobile App Metrics



Ontario 511 Mobile App - New Devices (iOS + Android)  
December 2022



- Similarly, the Ontario 511 mobile app experienced over 33,000 downloads during the storm event, which accounted for approximately 30% of the 2022 annual downloads (107,000). There have been over 196,800 downloads to date.
- Mobile app download trends coincided well with website usage during this period, with peaks in usage following the start of the paid advertising campaign, and storm usage.



Thank You