



Innovation in Winter Road Maintenance

June, 2018

ITS Canada



Who We Are



**CAMPBELL[®]
SCIENTIFIC**
WHEN MEASUREMENTS MATTER



The Problem



*MTO monitors approx.
16,500 centre line km of
roadway across an
approx. area of 1.076
million km²*



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The Problem

- Multiple Sensors/parameters
- Huge Solar Panel Requirements



The Solution

Reduced Sensor Count
Reduced reporting requirement
Low Power Use



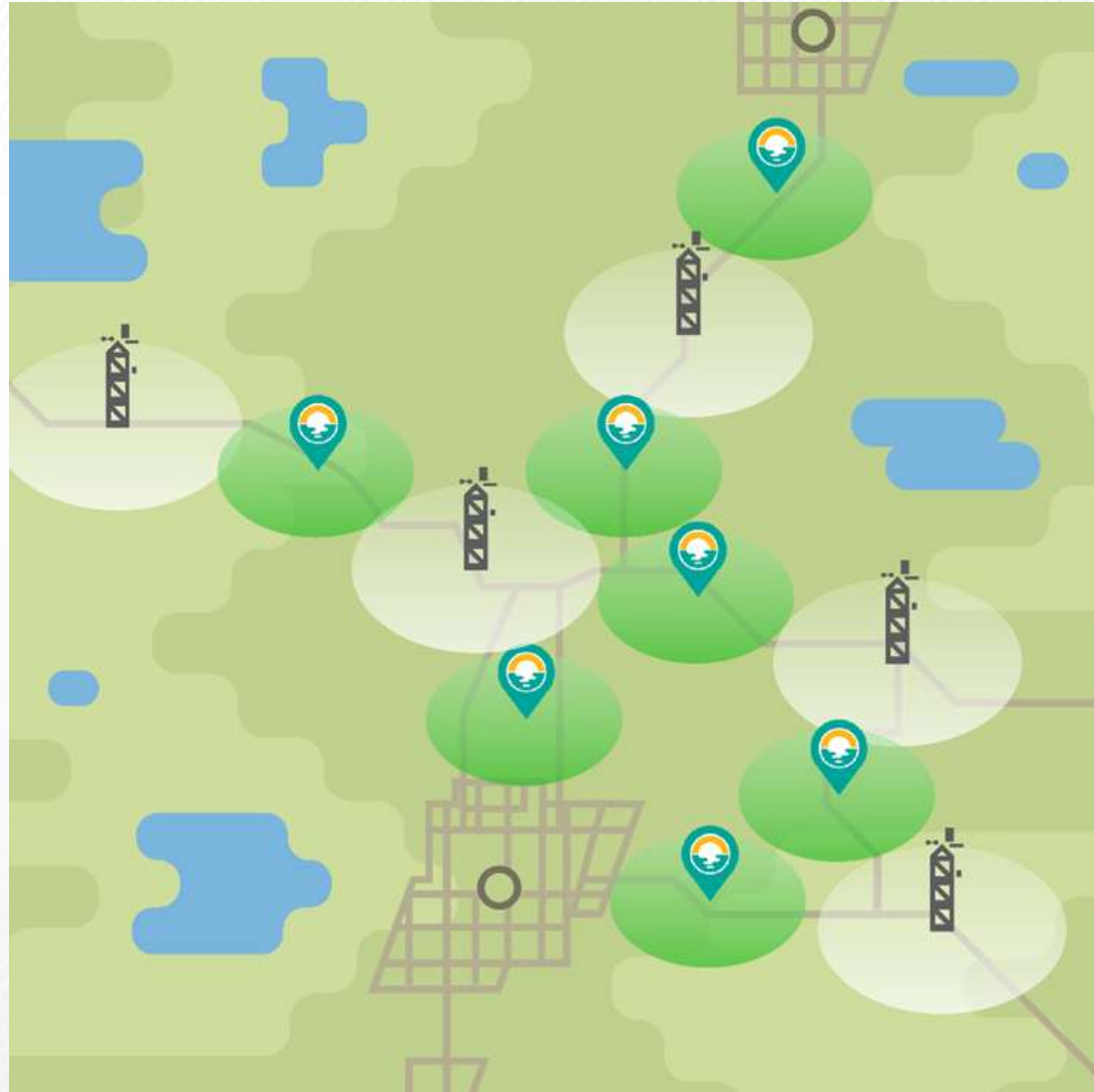
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Outcomes to date



- 11 Stations Installed in Northern Ontario
- Operated successfully January through end of Winter
 - Test continues in winter 2018/19
 - 6 additional stations
- Additional sensors- Frost Probes for Season Load Adjustment



A Municipal Solution



A Municipal Solution



Applications

