Urban Mobility Measurement
At Transport Canada
HERE — **LINK-LEVEL SPEED DATA**

- Transport Canada receives segment-level traffic speed data for Canada’s entire road network (by TMC) from HERE Technologies.
- The Provinces and Territories have access to this data.
- Historical data available as far back as September 2017.
- Congestion analytics based on Texas A&M methodologies and TAC guidelines.
**Travel Time Index**

- TTI = travel time index
- Indicator that tells us how much longer a given trip takes during peak hours, compared to the same trip during off-peak hours

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TTI = \frac{\text{observed travel time}}{\text{free – flow travel time}} = \frac{\text{average free – flow travel speed}}{\text{average observed travel speed}}
\]

- Example: if a trip that usually takes 10 minutes during off-peak hours takes 20 minutes, TTI = 2.0
TIME OF DAY

• 5 time windows (bins) are defined:

- AM Peak: 7am – 9am
- Mid-day: 10am – 3pm
- PM Peak: 4pm – 7pm
- Evening: 8pm – 11pm
- Weekend: 7am – 7pm
TORONTO BEFORE AND AFTER THE PANDEMIC

Toronto, ON
October 6 – October 12, 2019
PM peak period (3 PM – 6:59 PM)

Travel Time Index

≤ 1.00   1.25   1.50   1.75   ≥ 2.00

9 km

Toronto, ON
October 3 – October 9, 2021
PM peak period (3 PM – 6:59 PM)
SERVICE AREA ANALYTICS

**Network Accessibility**
- Accessibility of any given point of interest based on Travel Time to/from the facility

**Monitoring Congestion Behavior**
- Change in accessibility throughout the day due to traffic behavior
Thank you/Merci