Region of Waterloo

**Transportation Services Department**
**Date: January 31, 2025**

# Memorandum – 2022 Transportation Tomorrow Survey

This memo provides an overview of the Transportation Tomorrow Survey (TTS) and its significance in understanding travel behavior for the Region of Waterloo. It summarizes key findings from the 2022 TTS, highlighting trends in transportation modes within the Region and examines the factors that may have shaped these trends or shifts.

## Understanding the TTS

The TTS is a large-scale travel survey conducted every five years to analyze travel behavior across the Greater Golden Horseshoe. It collects detailed information on travel patterns, including how and why trips were made and household demographics. The TTS was first conducted in 1986, and the data for the most recent survey was released in December 2024. Approximately 5% of households in each region are sampled, including 10,017 households in the Region of Waterloo for the 2022 survey.

While the TTS provides valuable insights, its household-based methodology has limitations. It tends to underrepresent certain groups, such as post-secondary students who may live in dormitories or shared accommodations outside the survey sample.

According to the 2023 Population and Household Estimates Report for Waterloo Region, 58,090 students migrated to the Region in 2023. This approach may also overlook individual travel patterns, such as student commutes, causing walking, cycling, and transit use to appear less significant than they are. While the TTS remains a valuable tool for tracking long-term trends and informing planning, it should not be used as the sole source of data for interpreting trends or making decisions. To fill these gaps, additional data sources like transit ridership statistics, traffic data, and targeted surveys are necessary for a more comprehensive understanding of regional travel behaviors.

The 2022 survey introduced new data elements, including walking trips for non-commute purposes and trips by younger children (ages 5–10). For meaningful comparisons with past surveys, this memorandum adjusts the data to align with historical methodologies.

Another important factor is the timing of the 2022 survey, which was conducted while COVID-19 regulations and restrictions were still influencing travel behavior. This context must also be considered when interpreting the data to ensure meaningful and accurate insights.

## Key Findings

Table 3 - Primary Modes of Travel in the Region of Waterloo - 1996 to 2022

| Year | Transit % | School bus % | Cycle % | Walk % | Paid ridership % | Car % |
|---|---|---|---|---|---|---|
| 1996 | 3.5% | 1.8% | 0.8% | 6.3% | 0.0% | 87.5% |
| 2006 | 3.6% | 2.0% | 0.7% | 6.2% | 0.0% | 87.5% |
| 2011 | 5.1% | 2.4% | 0.8% | 4.6% | 0.0% | 87.2% |
| 2016 | 4.6% | 2.9% | 1.6% | 6.2% | 0.1% | 84.6% |
| 2022 | 4.5% | 2.7% | 2.1% | 7.5% | 0.2% | 82.9% |

Some key findings of the TTS are summarized below;

- ***Car Usage Trends***: Car usage remains dominant, although its share has declined from 87.5% in 1996 to 82.9% of all weekday trips in 2022. In contrast, other modes of transportation such as transit, cycling and walking have shown steady growth over the years.

- ***Walking Trends***: Walking in the Region increased from 6.3% of all weekday trips in 1996 to 7.5% in 2022, with the City of Waterloo recording the highest share at 10.9%. The higher share can be attributed to higher density in the downtown and university area. To ensure comparability with previous TTS surveys, the 2022 TTS data was filtered to include only trips made by individuals aged 11 and older and to exclude non-commute walking trips, which were not captured in earlier TTS surveys. Without these adjustments, the 2022 data would show a higher percentage of walking trips, potentially overstating the increase in walking compared to historical trends.

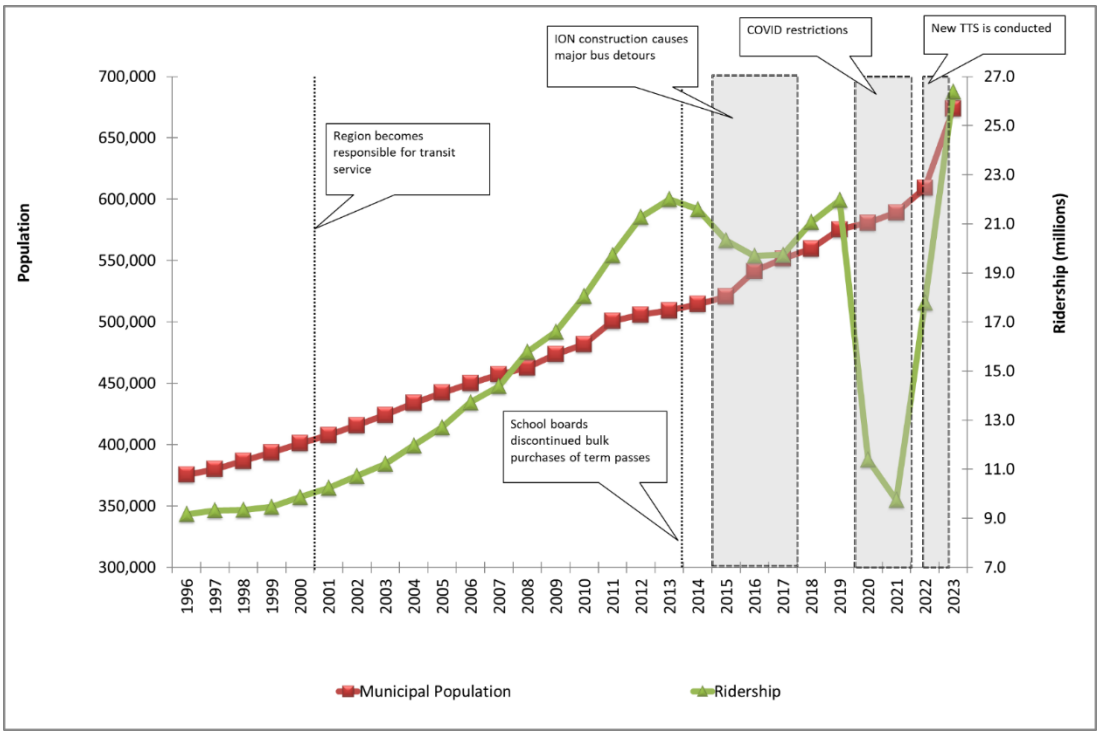
- ***Cycling Trends***: TTS data shows that the cycling mode share in the Region has steadily increased from 0.8% in 1996 to 2.1% in 2022, reflecting the positive impact of policies and initiatives aimed at promoting sustainable and active transportation.

- ***Transit Usage Trends***: The TTS data indicates that transit use has generally increased over time, rising from 3.5% of all weekday trips in 1996 to a peak of 5.1% in 2011, followed by a slight decline to about 4.5% in both 2016 and 2022. However, due to the limitations of TTS data, it should not be relied upon in isolation to assess the performance of transit in the Region.

  Below, several factors that may have influenced these trends are discussed, along with data from Grand River Transit (GRT), to provide a broader and more complete perspective;
  - *The Pandemic* - The 2022 TTS data was collected in Fall of 2022/Spring of 2023 and may reflect the lingering effects of COVID-19 pandemic. Analysis from other municipalities within the GTHA indicates a similar stabilization/reduction in transit mode share for 2022 TTS data.
  - *Underreporting Post-Secondary Ridership* - Approximately 40-50% of transit users in the Region are post-secondary students, a group that is traditionally underrepresented in the TTS due to its household-based data collection methodology, as explained earlier.

- *Other Factors* – the data reveals a dip in ridership between 2013 and 2017. Several factors contributed to this decline;
  - In 2013, school boards discontinued bulk purchases of term passes, reducing high school student ridership significantly.
  - In 2014 Budget constraints led to targeted service reductions that impacted ridership.
  - From 2014 to 2017 construction of the ION light rail system caused significant detours in the bus network, further reducing ridership during this period.

The chart below illustrates data from Grand River Transit (GRT) from 1996 to 2023. The red line represents steady population growth (375,410 in 1996 to 673,910 in 2023). The green line depicts transit ridership trends. Post-pandemic, ridership rebounded dramatically and reached its highest level at 26.4 million boardings in 2023. This trend highlights encouraging transit growth in the Region of Waterloo, with transit ridership growing at an average annual rate of 4.0%/year, significantly outpacing population growth at 2.2%/year. This suggests an increasing reliance on public transportation over time.




**Next Steps**

As Transportation Services prepares to launch the Integrated Mobility Plan, the TTS data will help provide guidance on how investments can help add options for resident travel, while still keeping a strong network that support the economy.

Additionally, the Ministry of Transportation has indicated it plans to initiate data collection for the next iteration of the TTS in Fall 2026.