Civil & Mineral Engineering
UNIVERSITY OF TORONTO

UTTRI

# **COV**id-19 influenced **H**ouseholds' **I**nterrupted **T**ravel **S**chedules (**COVHITS**) Survey: Fall 2021 Cycle Report

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COVHITS Survey 2021

**Correspondence:**
khandker.nurulhabib@utoronto.ca

Kaili Wang, Yicong Liu, Brendan Reilly
**Professor Khandker Nurul Habib**

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## Executive Summary

The 2021 Fall COVHITS Survey is the third cycle of the COVHITS Survey that was conducted to collect passenger travel demand data during the time between the pausing of stage 3 reopening and the spread of the COVID-19 Omicron variant in Ontario. The survey study area includes the City of Toronto and the Regional Municipalities of Halton, Peel, and York. The survey was a household travel survey. The main objective was to collect observed/revealed data of the study area's daily (weekday) passenger travel. The survey sample was relatively small compared to the TTS (a once-per-5-years regional household travel survey) but carefully designed to get sufficient data for benchmarking travel demand changes resulting from COVID-19 restrictions in each of the four regions.

The survey was conducted by randomly recruiting people from online survey panels. The survey structure and implementation time were made compatible with those of the 2016 TTS and 2020 Fall COVHITS survey as much as possible so that the results could be evaluated considering the 2016 TTS context as the base case. The final dataset of the 2021 Fall COVHITS Survey includes single weekday travel diaries of all members (6 years or older) of a total of 4,687 households across the four regions. This includes a total of 9,962 reported weekday trips. Collected samples of each of the four regions are weight-adjusted separately to represent the corresponding regional population. This is a relatively small sample survey (compared to regional travel surveys, e.g., the TTS) and is prone to be skewed towards specific population segments (e.g., smaller household size and younger people). So, each region's datasets are pooled and further weight-adjusted to represent the population distributions across these four regions.

Overall, the 2021 Fall COVHITS revealed a recovery in mobility compared to the 2020 Fall cycle. Of course, the imposed restrictions over Fall 2020 and fall 2021 were not exactly the same and such differences should be taken into consideration. Overall, it seems that there is still a large drop in urban passenger mobility compared to the pre-pandemic level in 2016 Fall. The 2021 Fall COVHITS average weekday trip rates in the study area were 2.4 trips per household, compared with 2.0 and 5.2 trips per household, the value observed in the 2020 COHVITS and 2016 TTS. Immobility (no trip per day) was 58% in the 2021 Fall survey. It was slightly less than 62% in the 2020 Fall survey. However, it was still significantly higher than the pre-pandemic level, which was 22%.

The 2021 Fall COVHITS survey indicated COVID-19's persistent impact on commuting trip rates. The average weekday commuting trip per worker was 0.31, significantly lower than the pre-pandemic level. This resulted from a large increase in work-from-home practices due to the pandemic. Overall, in the study area, 36% of the employed respondents reported working exclusively from home in the Fall of 2021. The morning (AM) peak period of the trips generated by the respondents was even flattener compared to 2020 Fall. This indicates more distributed trip generation across the day than before. Toronto experienced the highest drop in morning peak-period share of daily trip generations.

Regarding modal shares of trips generated by the respondents in the study area, the modal share of driving in the AM peak period decreases from 64% (in 2020 Fall COVHITS) to 56% (in 2021 Fall COVHITS). It was around the same level as before the pandemic (55%). Similarly, the modal share of driving in daily trip generations decreases from 66% (in 2020 Fall COVHITS) to 58% (in 2021 Fall

COVHITS) across the study area. However, the average driving trip length in the 2021 Fall (15.8 km) increases significantly compared to the 2020 Fall (11.5 km) and 2016 Fall (11.1 km).

In Toronto, AM peak transit modal shares of trips generated by its residents recovered from 20% (in 2020 Fall COVHITS) to 26% (in 2021 Fall COVHITS). It was still lower than Toronto's pre-pandemic AM peak transit modal shares (30%). Transit modal shares of daily trips generation recovered from 3% (in 2020 Fall COVHITS) to 5% (in 2021 Fall COVHITS) in York and from 3% (in 2020 Fall COVHITS) to 7% (in 2021 Fall COVHITS) in Peel. Non-motorized modes (walk and cycle) maintained their modal shares in all regions, compared to the 2020 Fall. Overall, 14% of the trips generated by the residents in the study area were conducted through walk and cycle. It was higher than its pre-pandemic shares, which was 9%.

The COVHIS Survey collected respondent-stated information on e-shopping and transit usages. These respondent-stated data indicate that, in the study area, 38% of households experienced ordering meals online, 43% experienced ordering groceries online, and 35% experienced purchasing clothing online in Fall 2021. Market share of ordering meals & groceries online decreased slightly compared to the 2020 Fall. This cycle of COVHITS included questions on home delivery, and data reveal that 62% of households in the study area received at least one home delivery of goods per week. For in-store shopping, in 2021 Fall, 97% of the households purchased groceries in-person at least once a month. In 2020 Fall, only 63% of the households shopped groceries in-person at least once a month. This indicated recovery of out-of-home activities as the pandemic developed.

Respondents of the COVHITS survey who were transit users (made at least one transit trip in the survey week) were asked to state their purposes of transit trips. Data revealed that shopping (perhaps to pick up meals) was the most dominant (highest percentage of respondents') purpose of transit trips in all regions except in Toronto, where going to restaurants was the most dominant purpose, in general.

The 2021 Fall COVHITS Survey provides a snapshot of daily life for a sample of residents across the four regions. All COVHITS Surveys data indicated that COVID-19 altered people's daily activity-travel patterns, and further changes are still developing. A high rate of work from home and the necessity of social distancing still cost a significant rate of daily immobility in the study area. These are signs of changes in travel patterns in the study area, but how long the effects of these changes will stay and continue to evolve depends on how long COVID-19 continues to affect public life.

## Acknowledgements

The Fall 2021 **COV**id-19 influenced **H**ouseholds' **I**nterrupted **T**ravel **S**chedules (**COVHITS**) Survey was sponsored by and conducted on behalf of a consortium of regional municipalities, the provincial government and its agency, and a transit operator in the Greater Toronto area. These are:

City of Toronto
Metrolinx
Ministry of Transportation, Ontario
Regional Municipality of Halton
Regional Municipality of Peel
Regional Municipality of York
Toronto Transit Commission

Staff from these organizations and staff from the Data Management Group (DMG) at the Department of Civil & Mineral Engineering, University of Toronto, comprise the COVHITS Survey Technical Committee (TAC) members. This report is prepared for this consortium by the research group of Professor Khandker Nurul Habib with guidance from the DMG. The contributions of the TAC members to the production of this report and the DMG's ongoing work are gratefully acknowledged.

## Further Information

The COVHITS Surveys are parts of a specialized data collection program triggered by the extraordinary contexts of COVID-19's global pandemic-induced travel bans and the ceasing of urban residents' activities. It is sponsored by some member organizations of the Transportation Information Steering Committee (TISC), which also conducted the Transportation Tomorrow Surveys (TTS). The TTS survey datasets (2016, 2011, 2006, 2001, 1996, 1991, and 1986) are currently under the care of the DMG. The DMG is also responsible for maintaining the COVHITS survey databases and making available appropriate travel information for any urban transportation study in the area by the sponsoring organizations. Requests for information from the COVHITS survey should be directed to the address below.

Data Management Group
Department of Civil & Mineral Engineering
University of Toronto
35 St. George Street Toronto, Ontario
M5S 1A4
Tel: (416) 978-3913
Fax: (416) 978-3941
Email: info@dmg.utoronto.ca
Web: www.dmg.utoronto.ca

# Background

COVID-19 has changed people's travel patterns. Amid uncertainties in the pandemic's future recurrences in various scales and forms, it is unclear when the new normal situation (with respect to daily travel demand) will return and what the new normal will look like. The disruption in daily lives, especially social distancing, the mass-experience in telecommuting, e-shopping, and online social/religious activities, may change the travel behaviour of urban residents. Real/revealed ground-truth data/observations on travel demand at different stages of post-COVID-19 lockdown would provide data to assess the effects of lockdown and travel demand returning to 'normalcy'.

The Transportation Tomorrow Survey (TTS) has been the core travel demand dataset in the Greater Golden Horseshoe (GGH) since 1986. The latest TTS was in 2016, and the next one is planned to be in 2022. However, future datasets will benefit from reference data of the same kind as in Fall 2020. The COVHITS survey is designed to gather such reference data on passenger travel demand in the Greater Toronto Area. The core of the survey maintains a similar structure to the TTS. However, to capture behavioural changes (that may have already happened), it includes additional questions on topics such as telecommuting and flexible office hours.

Three cycles of COVHITS are planned and completed. the first and second cycles were completed in Fall 2020 and Summer 2021. This report presents a summary result of the third cycle in fall 2021 COVHITS survey.

## Area of coverage

The coverage area of the COVHITS survey was defined by the participant organizations in the consortium and thus composed of the City of Toronto and Regional Municipalities of Halton, Peel, and York.

| PARTICIPATING JURISDICTIONS | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Survey | City of Hamilton | City of Toronto | Regional Municipality of Durham | Regional Municipality of Halton | Regional Municipality of Peel | Regional Municipality of York | City of Kawartha Lakes | City of Barrie | City of Brantford | City of Guelph | City of Orillia | City of Peterborough | County of Brant | County of Dufferin | County of Peterborough | County of Simcoe | County of Wellington | Regional Municipality of Niagara | Regional Municipality of Waterloo | Town of Orangeville |
| 2021 Fall COVHITS Survey | | • | | • | • | • | | | | | | | | | | | | | | |
| 2021 Summer COVHITS Survey | | • | | • | • | • | | | | | | | | | | | | | | |
| 2020 Fall COVHITS Survey | | • | | • | • | • | | | | | | | | | | | | | | |
| 2016 TTS | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | | • | • |

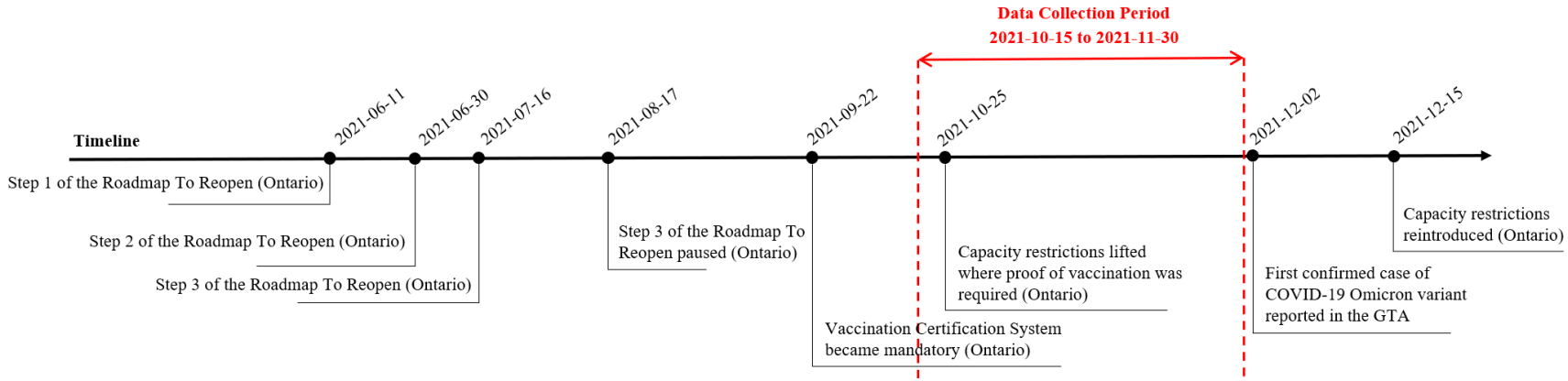
## Survey magnitude and timeframe

The Fall 2021 COVHITS survey was conducted using a random sample of residents drawn from online panels. Considering the constraints of timeline and budget, the use of online panels was determined to be the best option for participant recruitment for this study. The survey sample size requirement calculation took into consideration the maximum possible uncertainty in travel behaviour changes and a reasonable design factor. The survey was conducted from October 15 to November 30, 2021. A total of 6974 households were completed in the survey over the data collection period.

The final dataset contains responses from the total of 4,687 households. This includes 2,547 households from Toronto, 462 households from Halton, 854 households from Peel, and 824 households from York. The final dataset is composed of 9,984 individuals from 4,687 households in the study area, with a total of 9,962 recorded weekday trips.

| UNEXPANDED/UNADJUSTED RECORDS FOR THE STUDY AREA | | | |
|---|---|---|---|
| Survey | Households | Persons | Trips |
| Fall 2021 COVHITS Survey | 4,687 | 9,984 | 9,962 |
| Summer 2021 COVHITS Survey | 1,878 | 4,190 | 2,924 |
| Fall 2020 COVHITS Survey | 3,721 | 8,096 | 6,948 |
| 2016 TTS | 162,708 | 395,885 | 798,093 |

## Timeline



## Survey content

The COVHITS survey is a retrospective survey of travel taken by every member (age 6 or over) of the household during the weekday prior to the web contact. The survey is a web-based survey implemented in the TRAISI[1] platform.

| | INFORMATION COLLECTED | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Demographic Information | | | | | | | | | | | | | | Travel Information | | | | | | | | Other information | | | | | |
| | Household Characteristics | | | | | Person Characteristics | | | | | | | | | Nature of Trip | | | Means of Travel | | | | | Shopping | | | Transit | Workplace | Stated-preference experiments |
| | Dwelling unit type | Number of Persons | Vehicles Available | Adult Bikes Available | Household Income | Age | Gender | Possession of Driver's License | Usual Place of Work Location | Usual Place of School Location | Free Parking at Usual Place of Work | Possession of Transit Pass | Occupation Type | Work at Home | Travel modes to work – Pre COVID | Start time | Purpose of Trip | Origin and Destination Points | Travel Mode | Vehicle Occupancy | Used ETR407 | Detailed Transit Routes | GO Train & Subway Stations used | In-store shopping frequency | Online shopping frequency | Home delivery frequency | Transit usage by purpose | Workplace Arrangements | Stated preference experiments on household grocery shopping channel choices |
| 2021 Fall COVHITS | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | | | ○ | ○ | ○ | ○ | ○ | ○ | |
| 2021 Summer COVHITS | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | | | ○ | ○ | | | ○ | | ○ | ○ |
| 2020 Fall COVHITS | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | | | ○ | ○ | ○ | ○ | | ○ | ○ | |
| 2016 TTS | ○ | ○ | ○ | | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | | | | | | |

[1] TRAISI stands for 'Travel Activity Internet Survey Interface'. It is a software system developed to design passenger travel surveys with optimum interactions with the survey respondents through graphical, map and transit scheduling app interfaces. The software system is developed as a part of the TTS2.0 project, led by Professor Khandker Nurul Habib and sponsored by the TISC.

## Report content

The purpose of this report is to summarize the Fall 2021 COVHITS survey results according to regional boundaries. The summary provides demographic and travel characteristics presented in tabular format at the two levels of detail: The overall study area and each of the four Regional Municipalities (Toronto, Peel, York, and Halton).

Corresponding data from the 2016 TTS are presented in this report as reference points. The overall TTS and the COVHITS surveys differ in survey area as shown by the participating jurisdictions and as explained in the section of 'Area of Coverage'. Note that the reported 2016 TTS statistics are of the study area of the COVHITS survey only.

The information presented includes socio-demographic and travel characteristics. In addition to presenting the magnitude of the trips coming into and leaving an area, the summary tables also describe travel characteristics such as travel purpose, trip start time, travel distance, and travel mode choices.  Definitions of terms are listed on the next page.

The samples of each municipality of the COVHITS survey are weight-adjusted to the corresponding municipality's key population statistics (household size and age distribution). This is to ensure that the samples are true representation of corresponding populations. Statistics for the whole study area presented in this report are based on the pooled samples that are further weight-adjusted to the relative proportions of the corresponding total population of the municipalities. Numeric figures presented in this report are rounded.

# Data Key

| HOUSEHOLD CHARACTERISTICS | |
|---|---|
| Households | Total number of households in the area |
| Dwelling Type | Distribution of households by dwelling type: house, townhouse, or apartment. |
| Household Size | Distribution of households by the number of persons in residence at the time of the survey interview. |
| Number of Available Vehicles | Distribution of households by number of vehicles available to the household for personal use. |
| Number of Available Adult Bikes | Distribution of households by number of adult bikes available to the household for personal use. |
| Household Income | Distribution of households' annual income before tax. |
| Household Averages: | |
| Persons/household | Total population divided by total number of households. |
| Workers/household | Total number of employed persons (full-time, part-time, work-from-home) divided by total number of households. |
| Drivers/household | Total number of persons in possession of a driver's licence divided by the total number of households. The calculation excludes a small % of households for which the total number of drivers was unknown. |
| Vehicles/household | Total number of vehicles available for personal use divided by the total number of households. |
| Trips/day/household | Total number of daily trips made by persons aged 6 and over divided by the total number of households. |

| POPULATION CHARACTERISTICS | |
|---|---|
| Records | Total population residing in private dwellings in the area at the time of the survey. Excludes residents living in collective dwellings (who were not surveyed). For COVHITS survey, records will be the total number of records collected in each region. |
| Age | Distribution of population by age group. |
| Median Age | 50% of the population are above and 50% are below the median age. |
| Daily Trips per Person | For TTS, number of trips made by persons aged 11 and over divided by the number of persons aged 11 and over. For COVHITS, number of trips made by persons aged 6 and over divided by the number of persons aged 6 and over. |
| Daily Work Trips per Worker | Number of work trips made by employed persons divided by the number of employed persons. |
| Employment Type | Full time outside the home, part-time outside the home, work at home (full-time or part-time). |
| Student | % of population who are students. |
| Licensed | % of population with a valid driver's licence. Persons with unknown licence status were excluded from the calculation. |
| Transit pass | % of population in possession of a valid transit pass. Persons with unknown data were excluded from the calculation. |
| Workplace Arrangement | Usual place of work. WFH only: work from home only; Hybrid: mix of work outside of home and work from home; WOHO only: work outside of home only; No usual place: no usual place of work, no fixed work location. |
| Usual Mode of Travel to Work | Typical/Usual mode of travel to work. |
| Study Arrangement | Usual place of school arrangement. SFH only: study from home only; Hybrid: mix of study from home and go to school; Go to School: travel to school to study. |

| TRAVEL CHARACTERISTICS | |
|---|---|
| Trip Rates | For TTS, number of trips made by persons (residents of a designated region) aged 11 and over divided by the number of persons (residents of a designated region) aged 11 and over. For COVHITS, number of trips made by persons (residents of a designated region) aged 11 and over as well as aged 6 and over are divided by the corresponding number of persons (residents of a designated region). |
| Trips Made by Residents of the Area | Survey statistics for all trips made by population residing within the given geography reported on. |
| Trips Made to the Area | Survey statistics for all trips with a destination within the given geography reported on, whether made by residents of the given geography or by residents of all other geographies included in the Study Area. |
| Time Period | Two time periods are reported: the morning peak travel period of 6:00 to 8:59 a.m. and the full 24-hour day. |
| Trips | Total estimated average trips for the reported time period on weekdays (estimates based on the survey data expanded to represent the total population). |

| | |
|---|---|
| Trip Purpose (for trips made by residents of the area): | Distribution of all trips made by residents across the following categories: |
| HB-W | Home-based work: Home to work and work to home. |
| HB-S | Home-based school: Home to school and school to home. |
| HB-D | Home-based discretionary: All other home-based trips. |
| N-HB | Non-home-based: All trips where neither end is home. |
| Trip Purpose (for trips to the area): | Distribution of all trips made to the area across the following categories: |
| Work | Destination purpose is work. |
| School | Destination purpose is school. |
| Home | Destination purpose is to return home. |
| Other | Other destination purpose, such as shopping, entertainment, pick someone up/drop someone off, etc. |
| Modes of travel: | |
| Driver | Automobile driver. |
| Pass. | Automobile passenger. |
| Transit | Public transit (local transit). If a trip uses more than one mode category which includes public transit, then public transit is given preference as the primary mode. In cases where both GO Train and local transit were used, GO Train is the dominant classification. |
| GO Train | GO Train. In cases where both GO Train and local transit were used, GO Train is the dominant classification. |
| Walk | Walk |
| Cycle | Bicycle |
| Other | Other modes of travel. Includes motorcycle, taxi, school bus, and all other modes. |
| Average Trip Length (km): | Average trip length measured as the straight-line distance between the origin and destination coordinates of the trip within the GTHA. |
| - | -Reported for trips with the following motorized modes: driver, passenger, transit, and GO Train. |
| - | -Reported for trips with the following non-motorized mode: walk. |
| - | -Reported for trips with the following non-motorized mode: bicycle |
| **OTHER INFORMATION** | |
| In-store shopping frequency | The frequency of household's visiting stores in-person to purchase merchandise in each category. |
| Online shopping frequency | The frequency of household's using online stores purchase merchandise in each category. |
| Transit usage frequency | The frequency of individuals using transit for various activity purposes. |
| Weekly Home Delivery Frequency | The weekly frequency of household's using online stores purchase merchandise and delivered to home. |

## Comparability of COVHITS Surveys and the 2016 TTS

Caution should be undertaken when comparing data between the COVHITS surveys and the 2016 TTS. The comparability between datasets may be affected by several factors, including the coverage of the survey, sample size, how well the target population (residents of private households) is represented by the sample source used in the given dataset, and changes in survey methods.

The 2016 TTS has the following key characteristics.

- **Survey mode**: The 2016 TTS used a mix of computer-aided telephone interview (CATI) and computer-aided web interview (CAWI) survey method.
- **Coverage**: The 2016 TTS covered 5% of households in the survey area and could be easily expanded to the whole population.
- **Sample frame**: In 2016, an address-based sample frame was adopted to obtain coverage of all households, not just those with directory-listed telephone landlines. A portion of the random address sample was matched to listed phone numbers and received a high response in both telephone and online surveying. However, the 'address-only' portion of the sample, which received only a survey invitation letter, had a lower response. While it was necessary to use an address-only sample to achieve coverage of cell-phone-only households, there is likely higher non-response bias in this portion of the sample. However, this is compensated for in part by data weighting.
- **Survey timeframe**: The 2016 TTS was conducted over the 3 months in Fall: from September to December 2016.
- **Travel diary**: The 2016 TTS collected travel diaries of household members only aged 11 years or more.
- **Sample expansion**: The 2016 TTS is expanded to the population in the survey area. An iterative proportional fitting procedure was undertaken to adjust the household weights according to the following controls: dwelling type, household size, and household members' age by gender. As the method employed made household-level adjustments based on the age/gender demographics of all household members, 2016 expanded household counts in the survey data match the Census household counts.

The 2020 Fall COVHITS has the following key characteristics:

- **Survey mode**: The 2020 Fall COVHITS survey was conducted using a computer-aided web interview (CAWI) survey method only.
- **Coverage**: The 2020 Fall COVHITS survey sample size was calculated as the minimum size required to draw regional statistical inferences and is very small compared to that of the TTS.
- **Sample frame**: The 2020 Fall COVHITS survey was conducted using an online commercial survey panel as a sample frame only.
- **Survey timeframe**: The 2020 Fall COVHITS survey was conducted over 1 month in Fall: from October to November 2020.
- **Travel diary**: The 2020 Fall COVHITS Survey collected travel diaries of household members aged 6 years or more.
- **Sample weighting**: The 2020 Fall COVHITS survey sample presented in this report was too small to be reliably expanded to the total population of the survey areas. However, to make the regional (as municipalities) sample representative to the corresponding population, a simple two factor (household size and age) based weights are estimated to make each regional sample as a random representative sample of their population. An iterative proportional fitting procedure is used to calculate sample weigh-adjustment values.

The 2021 Summer COVHITS has the following key characteristics:

- **Survey mode**: The 2021 COVHITS survey was conducted using a computer-aided web interview (CAWI) survey method only.
- **Coverage**: The 2021 COVHITS survey sample size was calculated as the minimum size required to draw regional statistical inferences and is very small compared to that of the TTS.
- **Sample frame**: The 2021 COVHITS survey was conducted using an online commercial survey panel as a sample frame only.
- **Survey timeframe**: The 2021 COVHITS survey was conducted over 1 month in Summer: from July to August 2021.
- **Travel diary**: The 2021 COVHITS Survey collected travel diaries of household members aged 6 years or more.
- **Sample weighting**: The 2021 COVHITS survey sample presented in this report was too small to be reliably expanded to the total population of the survey areas. However, to make the regional (as municipalities) sample representative to the corresponding population, a simple two factor (household size and age) based weights are estimated to make each regional sample as a random representative sample of their population. An iterative proportional fitting procedure is used to calculate sample weigh-adjustment values.

The 2021 Fall COVHITS has the following key characteristics:

- **Survey mode**: The 2021 Fall COVHITS survey was conducted using a computer-aided web interview (CAWI) survey method only.
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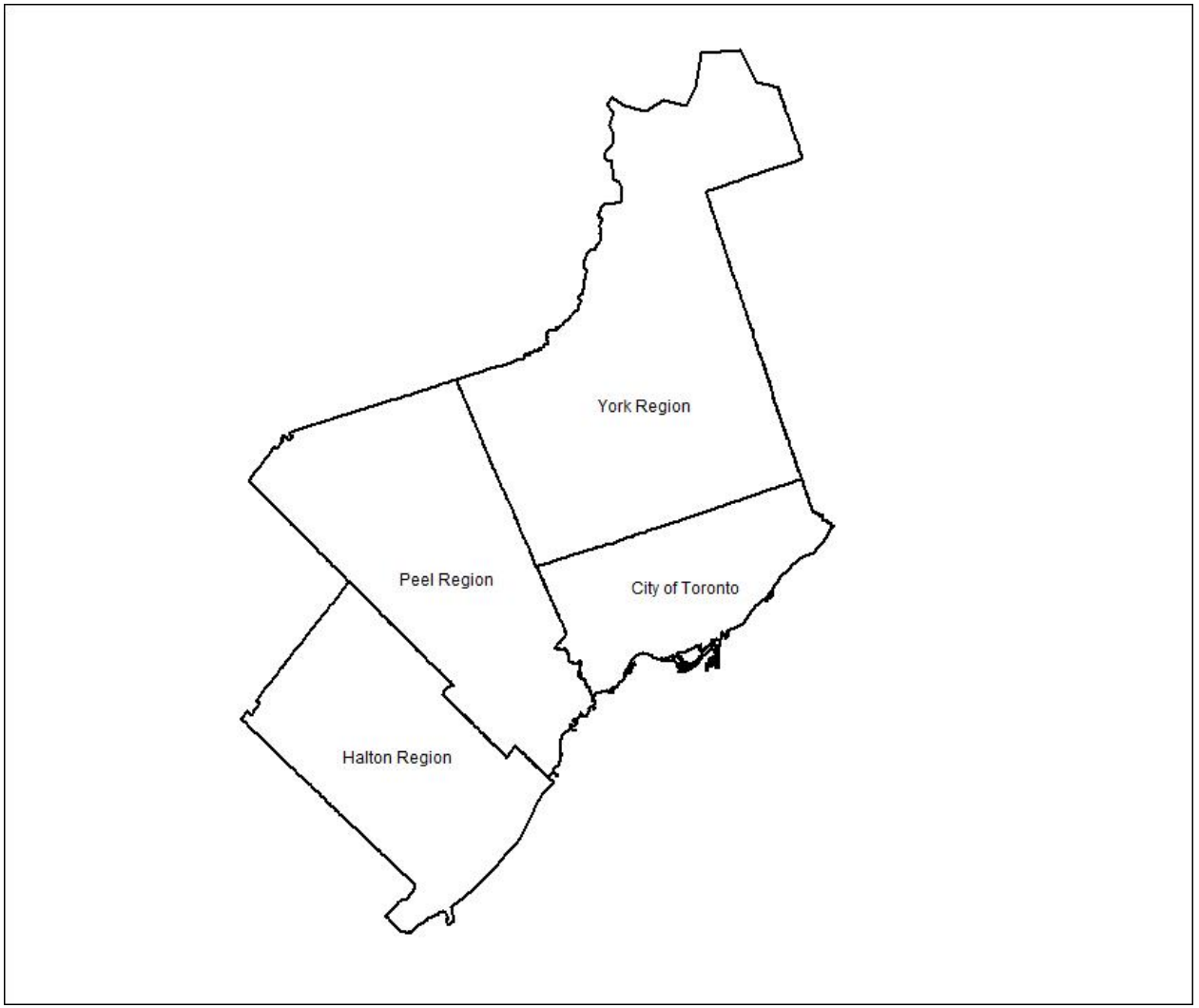
- **Sample frame**: The 2021 Fall COVHITS survey was conducted using an online commercial survey panel as a sample frame only.
- **Survey timeframe**: The 2021Fall COVHITS survey was conducted over 1 month in Fall: from October to November 2021.
- **Travel diary**: The 2021 Fall COVHITS Survey collected travel diaries of household members aged 6 years or more.
- **Sample weighting**: The 2021 Fall COVHITS survey sample presented in this report was too small to be reliably expanded to the total population of the survey areas. However, to make the regional (as municipalities) sample representative to the corresponding population, a simple two factor (household size and age) based weights are estimated to make each regional sample as a random representative sample of their population. An iterative proportional fitting procedure is used to calculate sample weigh-adjustment values.

Readers should exercise caution while comparing statistics between the COVHITS surveys and 2016 TTS due to the key survey characteristics differences mentioned above. However, this report presents key statistics of both surveys side-by-side, considering the 2016 TTS data as the reference dataset of regular Fall months of the year. To ensure compatibility:

- All TTS statistics that are presented in the report are of four regions (Toronto, Halton, Peel, and York) only, not of the whole TTS area.
- All TTS statistics are of expanded (to the full population) sample. The COVHITS survey statistics are of the weight-adjusted sample.

## Area summaries




## THE STUDY AREA

## THE STUDY AREA

### HOUSEHOLD CHARACTERISTICS

| Households (unweighted) | | Dwelling Type | | | | Household Size | | | | | Number of Available Vehicles | | | | | Household Averages | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | House | Townhouse | Apartment | other | 1 | 2 | 3 | 4 | 5+ | 0 | 1 | 2 | 3 | 4+ | Persons | Workers | Drivers | Vehicles | Trips/Day |
| 2016 TTS | 2,093,200 | 46% | 10% | 44% | N/A | 25% | 28% | 17% | 17% | 12% | 17% | 41% | 32% | 8% | 3% | 2.7 | 1.4 | 1.8 | 1.4 | 5.2 |
| 2020 Fall COVHITS | 327,185 (3,721) | 58% | 12% | 28% | 2% | 25% | 28% | 17% | 17% | 12% | 14% | 44% | 34% | 7% | 1% | 2.7 | 1.6 | 1.9 | 1.6 | 2.1 (of age 6+) 2.0 (of age 11+) |
| 2021 Summer COVHITS | 164,684 (1,878) | 58% | 12% | 30% | 1% | 25% | 28% | 17% | 17% | 12% | 11% | 46% | 35% | 5% | 3% | 2.7 | 1.7 | 2.0 | 1.6 | 1.7 (of age 6+) 1.7 (of age 11+) |
| 2021 Fall COVHITS | 18,663 (4,687) | 57% | 12% | 30% | 1.0% | 25% | 28% | 17% | 17% | 12% | 12% | 47% | 31% | 7% | 3% | 2.7 | 1.7 | 1.9 | 1.6 | 2.6 [2] (of age 6+) 2.4 [3] (of age 11+) |

### HOUSEHOLD CHARACTERISTICS

| | Number of Adult Bikes | | | | | Household Income | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4+ | $0 - $14,999 | $15,000 - $39,999 | $40,000 - $59,999 | $60,000 - $99,999 | $100,000 - $124,999 | $125,000 and above | Decline / don't know |
| 2016 TTS | N/A | N/A | N/A | N/A | N/A | 5% | 14% | 14% | 21% | 10% | 18% | 18% |
| 2020 Fall COVHITS | 44% | 24% | 22% | 7% | 2% | 3% | 12% | 14% | 28% | 16% | 20% | 8% |
| 2021 Summer COVHITS | 40% | 27% | 22% | 7% | 4% | 3% | 13% | 13% | 31% | 14% | 21% | 6% |
| 2021 Fall COVHITS | 52% | 19% | 17% | 7% | 5% | 3% | 10% | 12% | 25% | 17% | 25% | 8% |

### POPULATION CHARACTERISTICS

| Population/records (unweighted) | | Age | | | | | | | Daily Trips per Person age 11+ (6+) | Daily Work Trips per Worker | Population (unweighted) | | Employment Type | | | Student | Licensed | Transit Pass |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0-10 | 11-15 | 16-25 | 26-45 | 46-64 | 65+ | Median | | | | | Full Time | Part Time | At Home | | | |
| | | | | | | | | | | | | 2,744,000 | 46% | 7% | 4% | 23% | 69% | 20% |
| | | | | | | | | | | | Male | 415,586 (3,789) | 45% | 7% | N/A | 27% | 68% | 15% |
| | | | | | | | | | | | | 216,026 (2,015) | 47% | 9% | N/A | 24% | 72% | 20% |
| | | | | | | | | | | | | 23,579 (4,753) | 48% | 7% | N/A | 25% | 70% | 13% |
| 2016 TTS | 5,653,900 | 12% | 6% | 13% | 29% | 26% | 14% | 38.3 | 2.2 | 0.83 | Female | 2,909900 | 34% | 10% | 4% | 22% | 61% | 22% |
| 2020 Fall COVHITS | 873,671 (8,096) | 12% | 6% | 13% | 29% | 26% | 13% | 39.0 | 0.84 (0.85) | 0.35 | | 445,505 (4,190) | 35% | 10% | N/A | 26% | 64% | 14% |
| 2021 Summer COVHITS | 443,792 (4,190) | 12% | 6% | 13% | 29% | 26% | 14% | 38.8 | 0.71 (0.69) | 0.23 | | 218,749 (2,118) | 37% | 13% | N/A | 26% | 65% | 19% |
| 2021 Fall COVHITS | 49,990 (9,984)[4] | 12% | 6% | 13% | 29% | 26% | 14% | 38.8 | 1.0 [5] (1.0) | 0.31[6] | | 25,775 (5,101) | 37% | 11% | N/A | 27% | 65% | 12% |

[2] 95% confidence interval (2.56, 2.66)

[3] 95% confidence interval (2.38, 2.47)

[4] The difference between total unweighted records and summation of unweighted male and female records is records reported non-binary and declined to report their gender.

[5] 95% confidence interval (1.02, 1.04)

[6] 95% confidence interval (0.29, 0.33)

## POPULATION CHARACTERISTIC

| | Current Workplace Arrangement | | | | Pre-COVID Workplace Arrangement | | | | Pre-COVID Usual Mode of Travel to Work | | | Current Study Arrangement | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | WFH only | Hybrid | WOHO only | No usual place | WFH only | Hybrid | WOHO only | No usual place | Auto Driver | Transit | Other | SFH only | Hybrid | Go to School |
| 2016 Census | N/A | N/A | N/A | N/A | 7% | N/A | 81% | 12% | 62% | 25% | 13% | N/A | N/A | N/A |
| 2020 Fall COVHITS | 46% | 11% | 38% | 6% | 14% | 18% | 60% | 7% | 65% | 24% | 10% | 54% | 25% | 21% |
| 2021 Summer COVHITS | 39% | 14% | 42% | 5% | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 2021 Fall COVHITS | 36% | 14% | 46% | 5% | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 29% | 53% | 18% |

## TRIP RATES BY STUDY AREA RESIDENTS

| | 0 | 1 | 2 | 3 | 4 | 5+ |
|---|---|---|---|---|---|---|
| 2016 TTS (11+) | 22% | 1% | 49% | 8% | 11% | 8% |
| 2020 Fall COVHITS (6+) | 61% | 2% | 31% | 4% | 2% | 1% |
| 2020 Fall COVHITS (11+) | 62% | 2% | 30% | 4% | 2% | 1% |
| 2021 Summer COVHITS (6+) | 71% | 3% | 19% | 3% | 2% | 2% |
| 2021 Summer COVHITS (11+) | 70% | 3% | 20% | 3% | 2% | 2% |
| 2021 Fall COVHITS (6+) | 57% | 3% | 29% | 4% | 4% | 2% |
| 2021 Fall COVHITS (11+) | 58% | 3% | 28% | 4% | 4% | 3% |

## TRIPS MADE BY RESIDENTS OF THE STUDY AREA

| Time Period | Trips (unweighted) | % 24hr | Trip Purpose | | | | Mode of Travel | | | | | | Average Trip Length (km) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | HB-W | HB-S | HB-D | N-HB | Driver | Pass. | Transit | GO Train | Walk & Cy | Other | Driver | Pass. | Transit | Walk & Cy | |
| 6-9 AM | 2,717,700 | 25.0% | 50% | 19% | 22% | 9% | 55% | 11% | 17% | 3% | 11% | 3% | 12.5 | 8.2 | 10.2 | 1.3 | 2016 TTS |
| | 142,433 (1,362) | 22.0% | 60% | 24% | 13% | 3% | 64% | 8% | 11% | N/A | 15% | 3% | 13.6 | 4.7 | 11.1 | 1.1 | 2020 Fall COVHITS (11+) |
| | 163,601 (1,463) | 23.5% | 52% | 34% | 11% | 2% | 55% | 14% | 10% | N/A | 16% | 5% | 13.6 | 3.8 | 10.2 | 1.0 | 2020 Fall COVHITS (6+) |
| | 46,209 (495) | 16.8% | 68% | 2% | 23% | 7% | 77% | 11% | 6% | N/A | 5% | 1% | 18.1 | 15.3 | 13.0 | 1.9 | 2021 Summer COVHITS (11+) |
| | 48,603 (509) | 17.0% | 65% | 5% | 23% | 7% | 73% | 14% | 6% | N/A | 6% | 1% | 18.1 | 13.1 | 13.0 | 1.6 | 2021 Summer COVHITS (6+) |
| | 9,361 (1,711) | 20.7% | 55% | 27% | 13% | 5% | 56% | 12% | 14% | N/A | 13% | 4% | 18.0 | 10.1 | 11.0 | 1.6 | 2021 Fall COVHITS (11+) |
| | 10,559 (1,819) | 21.7% | 48% | 36% | 12% | 4% | 50% | 15% | 13% | N/A | 15% | 6% | 18.0 | 8.7 | 10.9 | 1.9 | 2021 Fall COVHITS (6+) |
| 24 Hrs | 10,874,300 | | 36% | 12% | 38% | 14% | 58% | 13% | 16% | 1% | 9% | 3% | 11.1 | 9.1 | 9.3 | 1.4 | 2016 TTS |
| | 647,071 (6,715) | | 37% | 11% | 35% | 18% | 66% | 8% | 8% | N/A | 16% | 2% | 11.5 | 6.1 | 12.2 | 1.1 | 2020 Fall COVHITS (11+) |
| | 696,803 (6,948) | | 34% | 16% | 33% | 17% | 62% | 11% | 8% | N/A | 16% | 3% | 11.5 | 5.2 | 11.7 | 1.0 | 2020 Fall COVHITS (6+) |
| | 275,267 (2,865) | | 33% | 2% | 40% | 25% | 68% | 12% | 9% | N/A | 9% | 0.5% | 17.2 | 16.2 | 8.9 | 2.0 | 2021 Summer COVHITS (11+) |
| | 286,017 (2,924) | | 32% | 3% | 40% | 25% | 66% | 14% | 10% | N/A | 10% | 0.5% | 17.2 | 15.1 | 8.6 | 1.8 | 2021 Summer COVHITS (6+) |
| | 45,257 (9,655) | | 31% | 14% | 34% | 21% | 58% | 12% | 13% | N/A | 14% | 3% | 15.8 | 13.9 | 11.3 | 1.6 | 2021 Fall COVHITS (11+) |
| | 48,714 (9,962) | | 29% | 18% | 33% | 20% | 54% | 15% | 12% | N/A | 15% | 3% | 15.8 | 12.5 | 11.2 | 1.7 | 2021 Fall COVHITS (6+) |

| TRIPS MADE TO THE STUDY AREA | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Period | Trips (unweighted) | % 24hr | Trip Purpose | | | | Mode of Travel | | | | | | Average Trip Length (km) | | | | |
| | | | Work | School | Home | Other | Driver | Pass. | Transit | GO Train | Walk & Cy | Other | Driver | Pass. | Transit | Walk & Cy | |
| 6-9 AM | 2,650,618 | 24.8% | 55% | 20% | 6% | 19% | 55% | 11% | 18% | 3% | 11% | 3% | 11.1 | 6.7 | 9.7 | 1.2 | 2016 TTS |
| | 139,569 (1,320) | 21.9% | 58% | 23% | 6% | 13% | 63% | 8% | 11% | N/A | 15% | 3% | 11.3 | 4.4 | 10.0 | 1.1 | 2020 Fall COVHITS (11+) |
| | 160,549 (1,420) | 23.4% | 51% | 33% | 5% | 11% | 55% | 14% | 10% | N/A | 16% | 5% | 11.3 | 3.7 | 9.3 | 1.0 | 2020 Fall COVHITS (6+) |
| | 43,869 (478) | 16.3% | 62% | 2% | 12% | 24% | 76% | 11% | 7% | N/A | 6% | 1% | 16.1 | 15.3 | 13.0 | 1.9 | 2021 Summer COVHITS (11+) |
| | 46,263 (492) | 16.6% | 59% | 5% | 11% | 25% | 72% | 15% | 6% | N/A | 7% | 1% | 16.1 | 13.1 | 13.0 | 1.6 | 2021 Summer COVHITS (6+) |
| | 9,250 (1,692) | 20.6% | 51% | 25% | 10% | 14% | 56% | 12% | 15% | N/A | 13% | 5% | 17.1 | 10.1 | 11.1 | 1.6 | 2021 Fall COVHITS (11+) |
| | 10,447 (1,800) | 21.6% | 45% | 33% | 9% | 12% | 49% | 16% | 13% | N/A | 16% | 6% | 17.1 | 8.7 | 11.0 | 1.9 | 2021 Fall COVHITS (6+) |
| 24 Hrs | 10,700,208 | | 22% | 6% | 44% | 28% | 58% | 13% | 16% | 1% | 9% | 3% | 10.4 | 8.1 | 9.1 | 1.3 | 2016 TTS |
| | 636,772 (6,568) | | 22% | 7% | 45% | 26% | 66% | 8% | 8% | N/A | 16% | 2% | 9.9 | 5.8 | 10.5 | 1.1 | 2020 Fall COVHITS (11+) |
| | 686,316 (6,800) | | 21% | 10% | 45% | 25% | 61% | 11% | 8% | N/A | 17% | 3% | 9.9 | 5.1 | 10.1 | 1.0 | 2020 Fall COVHITS (6+) |
| | 268,527 (2,775) | | 19% | 1% | 47% | 32% | 68% | 12% | 10% | N/A | 10% | 0.5% | 16.2 | 15.6 | 8.9 | 2.0 | 2021 Summer COVHITS (11+) |
| | 279,276 (2,850) | | 19% | 2% | 47% | 33% | 65% | 14% | 10% | N/A | 10% | 0.4% | 16.2 | 14.6 | 8.6 | 1.8 | 2021 Summer COVHITS (6+) |
| | 44,843 (9,548) | | 18% | 7% | 47% | 28% | 58% | 12% | 13% | N/A | 14% | 3% | 15.1 | 13.0 | 11.3 | 1.6 | 2021 Fall COVHITS (11+) |
| | 48,277 (9,853) | | 16% | 10% | 47% | 26% | 54% | 14% | 12% | N/A | 16% | 4% | 15.1 | 11.5 | 11.3 | 1.7 | 2021 Fall COVHITS (6+) |

| Weekly Home Delivery Frequency by Households | | | | | | |
|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5+ |
| 2021 Summer COVHITS | 32% | 24% | 18% | 12% | 5% | 9% |
| 2021 Fall COVHITS | 38% | 22% | 17% | 11% | 5% | 8% |

| OTHER INFORMATION – Household level responses | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | In-Store Shopping Frequency | | | | Online Shopping Frequency | | | |
| | | Meals | Groceries | Clothing | Other | Meals | Groceries | Clothing | Other |
| 2020 Fall COVHITS | None | 33% | 13% | 72% | 68% | 50% | 54% | 74% | 66% |
| | Once in a month | 20% | 8% | 18% | 19% | 15% | 12% | 15% | 20% |
| | Once every two weeks | 13% | 16% | 5% | 6% | 12% | 9% | 6% | 7% |
| | Once a week | 21% | 40% | 3% | 4% | 13% | 17% | 2% | 4% |
| | Twice a week | 8% | 16% | 2% | 2% | 6% | 5% | 2% | 2% |
| | 3 times or more a week | 5% | 7% | 0% | 1% | 4% | 3% | 1% | 1% |
| 2021 Fall COVHITS | None | 53% | 2% | 55% | 46% | 62% | 57% | 65% | 50% |
| | Once in a month | 27% | 5% | 32% | 30% | 24% | 14% | 25% | 30% |
| | Once every two weeks | 9% | 13% | 6% | 11% | 7% | 9% | 4% | 9% |
| | Once a week | 6% | 46% | 4% | 8% | 4% | 13% | 3% | 6% |
| | Twice a week | 2% | 23% | 1% | 3% | 2% | 5% | 2% | 3% |
| | 3 times or more a week | 1% | 11% | 1% | 3% | 1% | 2% | 1% | 2% |

| OTHER INFORMATION – Individual-level responses | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | Transit Usage Frequency of Transit User (who used transit at least during the survey a week) Only | | | | | |
| | | Work /School | Shopping | Restaurant | Recreation | Visiting | Other |
| 2020 Fall COVHITS | None | 74% | 51% | 31% | 69% | 58% | 72% |
| | Once a week | 10% | 13% | 33% | 13% | 23% | 12% |
| | Twice a week | 4% | 8% | 19% | 5% | 7% | 4% |
| | 3 times a week | 5% | 12% | 7% | 6% | 5% | 3% |
| | 4 times a week | 3% | 7% | 7% | 3% | 3% | 7% |
| | 5 times a week | 3% | 6% | 2% | 1% | 4% | 2% |
| | 6 or more times a week | 1% | 4% | 1% | 2% | 2% | 1% |
| 2021 Fall COVHITS | None | 77% | 41% | 44% | 63% | 58% | 70% |
| | Once a week | 14% | 12% | 28% | 19% | 23% | 16% |
| | Twice a week | 4% | 9% | 17% | 9% | 12% | 7% |
| | 3 times a week | 2% | 6% | 6% | 4% | 3% | 3% |
| | 4 times a week | 1% | 7% | 3% | 2% | 2% | 2% |
| | 5 times a week | 1% | 16% | 2% | 1% | 1% | 1% |
| | 6 or more times a week | 1% | 9% | 2% | 1% | 1% | 1% |

# CITY OF TORONTO - FORMER METROPOLITAN TORONTO

## CITY OF TORONTO

### HOUSEHOLD CHARACTERISTICS

| Households (unweighted) | | Dwelling Type | | | | Household Size | | | | | Number of Available Vehicles | | | | | Household Averages | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | House | Townhouse | Apartment | Other | 1 | 2 | 3 | 4 | 5+ | 0 | 1 | 2 | 3 | 4+ | Persons | Workers | Drivers | Vehicles | Trips/Day |
| 2016 TTS | 1,113,000 | 31% | 6% | 63% | N/A | 32% | 30% | 16% | 13% | 9% | 28% | 48% | 20% | 4% | 1% | 2.4 | 1.4 | 1.5 | 1.0 | 4.6 |
| 2020 Fall COVHITS | 22,171 (1,089) | 46% | 9% | 43% | 2% | 32% | 30% | 16% | 13% | 9% | 22% | 50% | 23% | 4% | 1% | 2.4 | 1.5 | 1.7 | 1.4 | 1.6 (of age 6+) 1.5 (of age 11+) |
| 2021 Fall COVHITS | 9,940 (2,547) | 47% | 9% | 43% | 1% | 32% | 30% | 16% | 13% | 9% | 19% | 53% | 22% | 5% | 2% | 2.4 | 1.6 | 1.8 | 1.5 | 2.4 [7] (of age 6+) 2.3 [8] (of age 11+) |

### HOUSEHOLD CHARACTERISTICS

| | Number of Available Adult Bikes | | | | | Household Income | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4+ | $0 - $14,999 | $15,000 - $39,999 | $40,000 - $59,999 | $60,000 - $99,999 | $100,000 - $124,999 | $125,000 and above | Decline / don't know |
| 2016 TTS | N/A | N/A | N/A | N/A | N/A | 7% | 17% | 15% | 21% | 9% | 16% | 16% |
| 2020 Fall COVHITS | 46% | 25% | 21% | 7% | 1% | 4% | 14% | 16% | 27% | 15% | 17% | 6% |
| 2021 Fall COVHITS | 53% | 20% | 17% | 7% | 4% | 3% | 12% | 13% | 26% | 15% | 24% | 7% |

### POPULATION CHARACTERISTICS

| Population/records (unweighted) | | Age | | | | | | | Daily Trips per Person age 11+ (6+) | Daily Work Trips per Worker | Population (unweighted) | | Employment Type | | | Student | Licensed | Transit Pass |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0-10 | 11-15 | 16-25 | 26-45 | 46-64 | 65+ | Median | | | | | Full Time | Part Time | At Home | | | |
| | | | | | | | | | | | | 1,286,500 | 45% | 7% | 4% | 22% | 68% | 24% |
| | | | | | | | | | | | Male | 25,474 (944) | 45% | 7% | N/A | 24% | 67% | 23% |
| | | | | | | | | | | | | 11337 (2,437) | 48% | 8% | N/A | 23% | 71% | 17% |
| 2016 TTS | 2,671,500 | 11% | 5% | 13% | 31% | 26% | 14% | 38.9 | 2.2 | 0.76 | | 1,385,000 | 35% | 10% | 4% | 21% | 57% | 26% |
| 2020 Fall COVHITS | 52,452 (1,996) | 11% | 5% | 13% | 31% | 26% | 14% | 40.0 | 0.71 (0.71) | 0.33 | Female | 25,805 (1,001) | 35% | 9% | N/A | 23% | 59% | 23% |
| 2021 Fall COVHITS | 23,659 (5,004) | 11% | 5% | 13% | 31% | 26% | 14% | 39.6 | 1.1 [9] (1.1) | 0.31 [10] | | 11,913 (2,478) | 39% | 12% | N/A | 25% | 64% | 16% |

[7] 95% confidence interval (2.34, 2.46)
[8] 95% confidence interval (2.20, 2.32)
[9] 95% confidence interval (1.05, 1.09)
[10] 95% confidence interval (0.28, 0.33)

## POPULATION CHARACTERISTIC

| | Current Workplace Arrangement | | | | Pre-COVID Workplace Arrangement | | | | Pre-COVID Usual Mode of Travel to Work | | | Current Study Arrangement | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | WFH only | Hybrid | WOHO only | No usual place | WFH only | Hybrid | WOHO only | No usual place | Auto Driver | Transit | Other | SFH only | Hybrid | Go to School |
| 2016 Census | N/A | N/A | N/A | N/A | 7% | N/A | 81% | 12% | 46% | 37% | 17% | N/A | N/A | N/A |
| 2020 Fall COVHITS | 48% | 13% | 33% | 6% | 15% | 20% | 58% | 7% | 54% | 32% | 14% | 60% | 20% | 20% |
| 2021 Fall COVHITS | 37% | 16% | 43% | 4% | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 33% | 47% | 20% |

## TRIP RATES BY CITY OF TORONTO RESIDENTS

| | 0 | 1 | 2 | 3 | 4 | 5+ |
|---|---|---|---|---|---|---|
| 2016 TTS (11+) | 22% | 1% | 49% | 9% | 11% | 8% |
| 2020 Fall COVHITS (6+) | 67% | 2% | 26% | 3% | 1% | 0% |
| 2020 Fall COVHITS (11+) | 67% | 2% | 26% | 3% | 1% | 0% |
| 2021 Fall COVHITS (6+) | 56% | 4% | 29% | 4% | 4% | 3% |
| 2021 Fall COVHITS (11+) | 57% | 4% | 28% | 4% | 4% | 3% |

## TRIPS MADE BY RESIDENTS OF CITY OF TORONTO

| Time Period | Trips (unweighted) | % 24hr | Trip Purpose | | | | Mode of Travel | | | | | | Average Trip Length (km) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | HB-W | HB-S | HB-D | N-HB | Driver | Pass. | Transit | GO Train | Wlk & Cy | Other | Driver | Pass. | Transit | Walk & Cy | |
| 6-9 AM | 1,240,300 | 24.1% | 54% | 18% | 20% | 8% | 44% | 9% | 30% | 1% | 14% | 2% | 10.6 | 7.4 | 8.8 | 1.4 | 2016 TTS |
| | 6,518 (243) | 19.6% | 64% | 24% | 11% | 2% | 52% | 8% | 20% | N/A | 17% | 3% | 16.7 | 3.5 | 7.7 | 1.2 | 2020 Fall COVHITS (11+) |
| | 7,171 (257) | 20.4% | 58% | 31% | 10% | 1% | 47% | 13% | 20% | N/A | 17% | 3% | 16.7 | 3.4 | 7.3 | 1.2 | 2020 Fall COVHITS (6+) |
| | 4,021 (791) | 17.9% | 60% | 20% | 14% | 6% | 48% | 9% | 26% | N/A | 14% | 2% | 18.2 | 15.5 | 10.9 | 1.6 | 2021 Fall COVHITS (11+) |
| | 4,454 (830) | 18.7% | 54% | 28% | 13% | 5% | 43% | 12% | 24% | N/A | 18% | 3% | 18.2 | 13.9 | 10.9 | 2.5 | 2021 Fall COVHITS (6+) |
| 24 Hrs | 5,141,800 | | 36% | 11% | 38% | 15% | 46% | 11% | 27% | 1% | 13% | 2% | 9.6 | 8.8 | 8.2 | 1.4 | 2016 TTS |
| | 33,224 (1,335) | | 38% | 11% | 33% | 18% | 53% | 6% | 15% | N/A | 24% | 2% | 11.4 | 4.3 | 11.4 | 1.1 | 2020 Fall COVHITS (11+) |
| | 35,116 (1,371) | | 36% | 15% | 32% | 18% | 50% | 9% | 15% | N/A | 24% | 2% | 11.4 | 4.3 | 11.0 | 1.1 | 2020 Fall COVHITS (6+) |
| | 22,468 (5,055) | | 30% | 11% | 36% | 23% | 48% | 10% | 20% | N/A | 20% | 2% | 14.9 | 15.3 | 11.0 | 1.6 | 2021 Fall COVHITS (11+) |
| | 23,849 (5,174) | | 28% | 15% | 35% | 22% | 45% | 12% | 19% | N/A | 21% | 3% | 14.9 | 13.8 | 11.1 | 1.8 | 2021 Fall COVHITS (6+) |

| TRIPS MADE TO CITY OF TORONTO | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Period | Trips (unweighted) | % 24hr | Trip Purpose | | | | Mode of Travel | | | | | | Average Trip Length (km) | | | | |
| | | | Work | School | Home | Other | Driver | Pass. | Transit | GO Train | Wlk & Cy | Other | Driver | Pass. | Transit | Walk & Cy | |
| 6-9 AM | 1,375,560 | 25.8% | 60% | 19% | 5% | 17% | 42% | 9% | 30% | 5% | 13% | 2% | 10.9 | 7.5 | 9.8 | 1.4 | 2016 TTS |
| | 11,432 (397) | 26.5% | 78% | 13% | 2% | 8% | 57% | 6% | 25% | N/A | 10% | 2% | 16.8 | 5.8 | 17.2 | 2.5 | 2020 Fall COVHITS (11+) |
| | 12,306 (413) | 27.1% | 72% | 19% | 1% | 7% | 53% | 11% | 24% | N/A | 10% | 2% | 16.8 | 8.4 | 16.6 | 2.3 | 2020 Fall COVHITS (6+) |
| | 4,068 (813) | 18.0% | 56% | 19% | 10% | 15% | 47% | 8% | 27% | N/A | 14% | 3% | 15.7 | 10.7 | 10.5 | 1.9 | 2021 Fall COVHITS (11+) |
| | 4,476 (851) | 18.7% | 50% | 26% | 9% | 14% | 42% | 11% | 25% | N/A | 17% | 4% | 15.7 | 10.2 | 10.5 | 1.6 | 2021 Fall COVHITS (6+) |
| 24 Hrs | 5,327,702 | | 24% | 7% | 41% | 27% | 46% | 11% | 27% | 2% | 13% | 2% | 9.5 | 7.9 | 8.6 | 1.4 | 2016 TTS |
| | 43,136 (1,656) | | 37% | 6% | 34% | 22% | 58% | 6% | 15% | N/A | 20% | 1% | 12.9 | 8.9 | 13.5 | 1.2 | 2020 Fall COVHITS (11+) |
| | 45,359 (1,695) | | 35% | 8% | 34% | 22% | 55% | 9% | 15% | N/A | 20% | 1% | 12.9 | 8.3 | 13.2 | 1.2 | 2020 Fall COVHITS (6+) |
| | 22,571 (5,089) | | 18% | 6% | 46% | 30% | 48% | 10% | 21% | N/A | 20% | 2% | 13.5 | 13.5 | 11.1 | 1.6 | 2021 Fall COVHITS (11+) |
| | 23,919 (5,207) | | 17% | 8% | 47% | 28% | 45% | 12% | 20% | N/A | 21% | 3% | 13.5 | 12.1 | 11.1 | 1.7 | 2021 Fall COVHITS (6+) |

| Weekly Home Delivery Frequency by Households | | | | | | |
|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5+ |
| 2021 Fall COVHITS | 38% | 21% | 17% | 10% | 5% | 9% |

| OTHER INFORMATION – Household level responses | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | In-Store Shopping Frequency | | | | Online Shopping Frequency | | | |
| | | Meals | Groceries | Clothing | Other | Meals | Groceries | Clothing | Other |
| 2020 Fall COVHITS | None | 32% | 6% | 71% | 68% | 49% | 56% | 71% | 66% |
| | Once in a month | 19% | 10% | 17% | 17% | 15% | 14% | 15% | 18% |
| | Once every two weeks | 14% | 19% | 5% | 6% | 13% | 11% | 6% | 7% |
| | Once a week | 20% | 40% | 3% | 5% | 12% | 13% | 3% | 5% |
| | Twice a week | 10% | 17% | 4% | 3% | 7% | 3% | 4% | 3% |
| | 3 times or more a week | 5% | 8% | 1% | 1% | 4% | 3% | 1% | 2% |
| 2021 Fall COVHITS | None | 55% | 2% | 56% | 46% | 62% | 55% | 66% | 50% |
| | Once in a month | 26% | 4% | 31% | 30% | 23% | 12% | 24% | 30% |
| | Once every two weeks | 9% | 15% | 6% | 11% | 7% | 10% | 4% | 9% |
| | Once a week | 7% | 45% | 4% | 8% | 4% | 15% | 4% | 7% |
| | Twice a week | 2% | 22% | 2% | 3% | 3% | 6% | 2% | 3% |
| | 3 times or more a week | 1% | 11% | 1% | 3% | 1% | 2% | 1% | 2% |

| OTHER INFORMATION – Individual-level responses | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | Transit Usage Frequency of Transit User (who used transit at least during the survey a week) Only | | | | | |
| | | Work /School | Shopping | Restaurant | Recreation | Visiting | Other |
| 2020 Fall COVHITS | None | 69% | 54% | 27% | 67% | 54% | 66% |
| | Once a week | 11% | 12% | 33% | 13% | 24% | 14% |
| | Twice a week | 5% | 6% | 20% | 5% | 7% | 4% |
| | 3 times a week | 6% | 11% | 8% | 7% | 6% | 4% |
| | 4 times a week | 3% | 7% | 8% | 4% | 3% | 9% |
| | 5 times a week | 4% | 5% | 2% | 2% | 5% | 2% |
| | 6 or more times a week | 1% | 4% | 2% | 2% | 2% | 1% |
| 2021 Fall COVHITS | None | 74% | 43% | 38% | 58% | 54% | 66% |
| | Once a week | 15% | 11% | 30% | 22% | 23% | 19% |
| | Twice a week | 5% | 8% | 20% | 11% | 14% | 8% |
| | 3 times a week | 3% | 7% | 6% | 5% | 4% | 3% |
| | 4 times a week | 2% | 7% | 2% | 2% | 2% | 2% |
| | 5 times a week | 1% | 16% | 2% | 1% | 1% | 1% |
| | 6 or more times a week | 1% | 9% | 2% | 1% | 2% | 2% |

# REGIONAL MUNICIPALITY OF YORK


N

0 7 14

Kilometers

Area = 197,600 Hectares

**REGIONAL MUNICIPALITY OF YORK**

## REGIONAL MUNICIPALITY OF YORK

### HOUSEHOLD CHARACTERISTICS

| Households (unweighted) | | Dwelling Type | | | | Household Size | | | | | Number of Available Vehicles | | | | | Household Averages | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | House | Townhouse | Apartment | Other | 1 | 2 | 3 | 4 | 5+ | 0 | 1 | 2 | 3 | 4+ | Persons | Workers | Drivers | Vehicles | Trips/Day |
| 2016 TTS | 357,000 | 70% | 12% | 17% | N/A | 15% | 26% | 20% | 23% | 15% | 4% | 30% | 48% | 13% | 6% | 3.1 | 1.7 | 1.9 | 2.1 | 5.9 |
| 2020 Fall COVHITS | 6,161 (942) | 77% | 14% | 9% | 1% | 15% | 26% | 20% | 23% | 15% | 3% | 34% | 52% | 10% | 2% | 3.1 | 1.8 | 2.2 | 1.8 | 2.8 (of age 6+)<br>2.5 (of age 11+) |
| 2021 Fall COVHITS | 3,174 (824) | 76% | 11% | 12% | 1% | 15% | 26% | 20% | 23% | 15% | 3% | 38% | 45% | 11% | 4% | 3.0 | 1.8 | 2.2 | 1.8 | 2.9 [11] (of age 6+)<br>2.6 [12] (of age 11+) |

### HOUSEHOLD CHARACTERISTICS

| | Number of Available Adult Bikes | | | | | Household Income | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4+ | $0 - $14,999 | $15,000 - $39,999 | $40,000 - $59,999 | $60,000 - $99,999 | $100,000 - $124,999 | $125,000 and above | Decline / don't know |
| 2016 TTS | N/A | N/A | N/A | N/A | N/A | 3% | 11% | 12% | 20% | 12% | 22% | 21% |
| 2020 Fall COVHITS | 40% | 23% | 24% | 7% | 5% | 1% | 8% | 10% | 23% | 20% | 30% | 9% |
| 2021 Fall COVHITS | 47% | 20% | 19% | 8% | 6% | 3% | 8% | 8% | 22% | 22% | 30% | 8% |

### POPULATION CHARACTERISTICS

| Population/records (unweighted) | | Age | | | | | | | Daily Trips per Person age 11+ (6+) | Daily Work Trips per Worker | Population (unweighted) | | Employment Type | | | Student | Licensed | Transit Pass |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0-10 | 11-15 | 16-25 | 26-45 | 46-64 | 65+ | Median | | | | | Full Time | Part Time | At Home | | | |
| | | | | | | | | | | | | 531,800 | 46% | 6% | 5% | 24% | 72% | 13% |
| | | | | | | | | | | | Male | 8,918 (1,047) | 44% | 8% | N/A | 29% | 70% | 7% |
| | | | | | | | | | | | | 4,551 (909) | 47% | 8% | N/A | 26% | 71% | 8% |
| 2016 TTS | 1,091,000 | 13% | 7% | 13% | 26% | 28% | 14% | 40.7 | 2.2 | 0.74 | | 559,200 | 34% | 10% | 4% | 22% | 67% | 14% |
| 2020 Fall COVHITS | 18,801 (2,248) | 13% | 7% | 13% | 26% | 28% | 14% | 39.0 | 0.94 (0.98) | 0.32 | Female | 9,699 (1,177) | 35% | 13% | 7% | 28% | 69% | 7% |
| 2021 Fall COVHITS | 9,613 (1,909) | 13% | 7% | 13% | 26% | 28% | 13% | 39.0 | 1.0 [13] (1.0) | 0.30 [14] | | 4,968 (983) | 34% | 11% | N/A | 28% | 68% | 8% |

[11] 95% confidence interval (2.79, 3.02)
[12] 95% confidence interval (2.53, 2.76)
[13] 95% confidence interval (0.97, 1.03)
[14] 95% confidence interval (0.25, 0.34)

## POPULATION CHARACTERISTIC

| | Current Workplace Arrangement | | | | Pre-COVID Workplace Arrangement | | | | Pre-COVID Usual Mode of Travel to Work | | | Current Study Arrangement | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | WFH only | Hybrid | WOHO only | No usual place | WFH only | Hybrid | WOHO only | No usual place | Auto Driver | Transit | Other | SFH only | Hybrid | Go to School |
| 2016 Census | N/A | N/A | N/A | N/A | 9% | N/A | 80% | 12% | 77% | 13% | 10% | N/A | N/A | N/A |
| 2020 Fall COVHITS | 49% | 9% | 36% | 5% | 15% | 19% | 59% | 6% | 74% | 19% | 7% | 45% | 31% | 24% |
| 2021 Fall COVHITS | 38% | 13% | 45% | 4% | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 20% | 67% | 12% |

## TRIP RATES BY YROK REGION RESIDENTS

| | 0 | 1 | 2 | 3 | 4 | 5+ |
|---|---|---|---|---|---|---|
| 2016 TTS (11+) | 22% | 1% | 49% | 8% | 11% | 8% |
| 2020 COVHITS (6+) | 56% | 1% | 37% | 3% | 2% | 1% |
| 2020 COVHITS (11+) | 58% | 1% | 34% | 4% | 2% | 1% |
| 2021 COVHITS (6+) | 58% | 3% | 29% | 4% | 4% | 2% |
| 2021 COVHITS (11+) | 59% | 3% | 28% | 4% | 4% | 2% |

## TRIPS MADE BY RESIDENTS OF YORK REGION

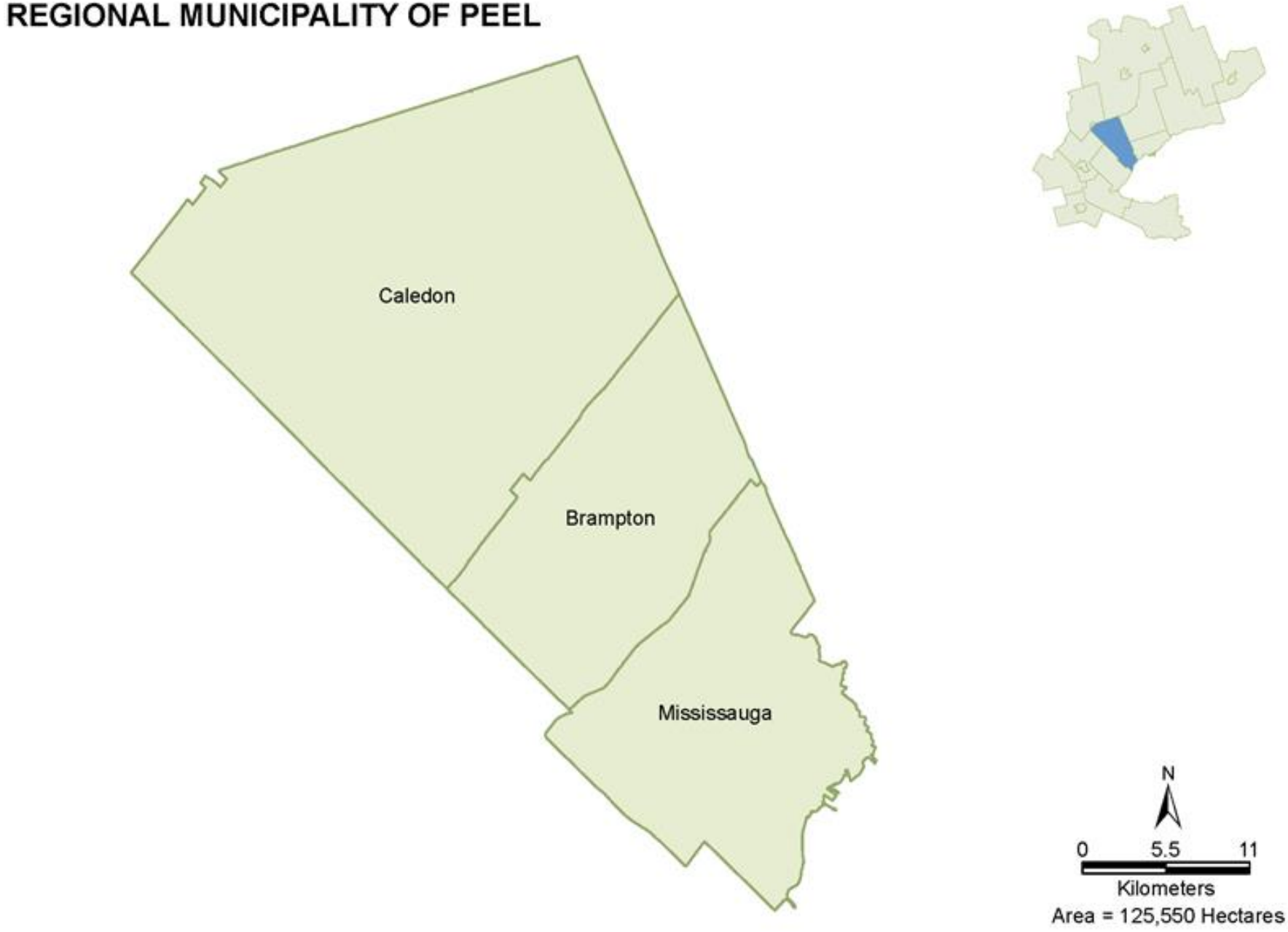
| Time Period | Trips (unweighted) | % 24hr | Trip Purpose | | | | Mode of Travel | | | | | | Average Trip Length (km) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | HB-W | HB-S | HB-D | N-HB | Driver | Pass. | Transit | GO Train | Walk & Cy | Other | Driver | Pass. | Transit | Walk & Cy | |
| 6-9 AM | 541,600 | 25.7% | 48% | 20% | 22% | 9% | 65% | 12% | 7% | 3% | 7% | 4% | 13.7 | 10.1 | 17.8 | 1.4 | 2016 TTS |
| | 3,508 (408) | 22.7% | 59% | 24% | 14% | 3% | 74% | 6% | 5% | N/A | 12% | 3% | 11.9 | 3.7 | 12.7 | 1.2 | 2020 COVHITS (11+) |
| | 4,334 (442) | 25.2% | 47% | 40% | 11% | 2% | 60% | 15% | 4% | N/A | 12% | 8% | 11.9 | 2.7 | 12.4 | 1.0 | 2020 COVHITS (6+) |
| | 1,848 (344) | 22.0% | 56% | 30% | 12% | 2% | 67% | 18% | 5% | N/A | 4% | 6% | 17.2 | 6.9 | 17.2 | 1.9 | 2021 COVHITS (11+) |
| | 2,093 (362) | 22.7% | 49% | 39% | 11% | 1% | 59% | 19% | 5% | N/A | 6% | 10% | 17.2 | 6.0 | 15.6 | 1.4 | 2021 COVHITS (6+) |
| 24 Hrs | 2,109,800 | | 35% | 12% | 39% | 15% | 70% | 15% | 6% | 2% | 5% | 3% | 12.4 | 10.6 | 16.1 | 1.3 | 2016 TTS |
| | 15,469 (1,927) | | 33% | 11% | 37% | 19% | 78% | 8% | 3% | N/A | 10% | 2% | 11.9 | 6.0 | 13.2 | 1.1 | 2020 COVHITS (11+) |
| | 17,177 (1,998) | | 30% | 19% | 34% | 17% | 70% | 11% | 3% | N/A | 10% | 5% | 11.9 | 5.1 | 13.0 | 1.0 | 2020 COVHITS (6+) |
| | 8,396 (1,748) | | 31% | 17% | 33% | 19% | 71% | 16% | 5% | N/A | 5% | 3% | 15.8 | 12.7 | 13.6 | 1.7 | 2021 COVHITS (11+) |
| | 9,216 (1,810) | | 28% | 22% | 32% | 18% | 65% | 19% | 5% | N/A | 7% | 5% | 15.8 | 13.0 | 12.7 | 1.5 | 2021 COVHITS (6+) |

| TRIPS MADE TO YORK REGION | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Period | Trips (unweighted) | % 24hr | Trip Purpose | | | | Mode of Travel | | | | | | Average Trip Length (km) | | | | |
| | | | Work | School | Home | Other | Driver | Pass. | Transit | GO Train | Wlk & Cy | Other | Driver | Pass. | Transit | Walk & Cy | |
| 6-9 AM | 458,496 | 23.2% | 52% | 21% | 6% | 21% | 69% | 13% | 4% | 0% | 8% | 5% | 11.5 | 6.0 | 9.9 | 0.9 | 2016 TTS |
| | 4,680 (320) | 25.6% | 60% | 24% | 6% | 9% | 74% | 4% | 6% | N/A | 11% | 6% | 13.2 | 4.8 | 12.7 | 1.0 | 2020 COVHITS (11+) |
| | 5,462 (352) | 27.4% | 51% | 35% | 5% | 8% | 64% | 11% | 5% | N/A | 11% | 9% | 13.2 | 3.0 | 12.6 | 0.9 | 2020 COVHITS (6+) |
| | 1,765 (320) | 21.7% | 54% | 23% | 12% | 11% | 68% | 20% | 5% | N/A | 4% | 3% | 16.3 | 7.7 | 18.9 | 1.3 | 2021 COVHITS (11+) |
| | 2,010 (338) | 22.5% | 47% | 32% | 11% | 10% | 60% | 21% | 4% | N/A | 6% | 9% | 16.3 | 6.8 | 17.0 | 1.0 | 2021 COVHITS (6+) |
| 24 Hrs | 1,975,662 | | 20% | 5% | 46% | 29% | 71% | 15% | 5% | 1% | 5% | 3% | 11.1 | 8.6 | 13.6 | 1.2 | 2016 TTS |
| | 18,304 (1,719) | | 27% | 7% | 37% | 28% | 79% | 7% | 3% | N/A | 8% | 2% | 12.0 | 6.6 | 12.7 | 1.0 | 2020 COVHITS (11+) |
| | 19,968 (1,788) | | 25% | 11% | 39% | 26% | 73% | 10% | 3% | N/A | 9% | 6% | 12.0 | 5.5 | 12.6 | 0.9 | 2020 COVHITS (6+) |
| | 8,131 (1,669) | | 18% | 8% | 48% | 27% | 71% | 17% | 5% | N/A | 6% | 2% | 14.2 | 8.9 | 13.4 | 1.4 | 2021 COVHITS (11+) |
| | 8,927 (1,729) | | 16% | 11% | 48% | 25% | 65% | 19% | 5% | N/A | 7% | 5% | 14.2 | 8.9 | 12.4 | 1.3 | 2021 COVHITS (6+) |

| Weekly Home Delivery Frequency by Households | | | | | | |
|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5+ |
| 2021 Fall COVHITS | 41% | 19% | 18% | 11% | 4% | 7% |

| OTHER INFORMATION – Household level responses | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | In-Store Shopping Frequency | | | | Online Shopping Frequency | | | |
| | | Meals | Groceries | Clothing | Other | Meals | Groceries | Clothing | Other |
| 2020 Fall COVHITS | None | 34% | 25% | 72% | 69% | 49% | 46% | 74% | 65% |
| | Once in a month | 20% | 7% | 19% | 21% | 12% | 7% | 17% | 22% |
| | Once every two weeks | 13% | 13% | 6% | 6% | 12% | 10% | 6% | 8% |
| | Once a week | 22% | 34% | 2% | 3% | 19% | 24% | 1% | 3% |
| | Twice a week | 8% | 15% | 0% | 1% | 5% | 8% | 1% | 1% |
| | 3 times or more a week | 4% | 6% | 0% | 0% | 3% | 4% | 0% | 0% |
| 2021 Fall COVHITS | None | 53% | 3% | 51% | 44% | 61% | 62% | 64% | 51% |
| | Once in a month | 29% | 2% | 35% | 32% | 25% | 15% | 27% | 31% |
| | Once every two weeks | 9% | 8% | 8% | 12% | 10% | 8% | 4% | 8% |
| | Once a week | 5% | 49% | 5% | 7% | 3% | 10% | 3% | 7% |
| | Twice a week | 3% | 27% | 1% | 3% | 1% | 3% | 2% | 2% |
| | 3 times or more a week | 1% | 12% | 0% | 2% | 1% | 2% | 0% | 1% |

| OTHER INFORMATION – Individual-level responses | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | Transit Usage Frequency of Transit User (who used transit at least during the survey a week) Only | | | | | |
| | | Work /School | Shopping | Restaurant | Recreation | Visiting | Other |
| 2020 Fall COVHITS | None | 87% | 46% | 38% | 73% | 69% | 88% |
| | Once a week | 10% | 13% | 34% | 14% | 16% | 4% |
| | Twice a week | 2% | 17% | 19% | 7% | 7% | 2% |
| | 3 times a week | 0% | 8% | 1% | 2% | 3% | 0% |
| | 4 times a week | 0% | 7% | 8% | 4% | 5% | 5% |
| | 5 times a week | 0% | 8% | 0% | 0% | 0% | 0% |
| | 6 or more times a week | 0% | 2% | 0% | 0% | 0% | 0% |
| 2021 Fall COVHITS | None | 90% | 36% | 58% | 76% | 77% | 84% |
| | Once a week | 6% | 21% | 25% | 13% | 14% | 10% |
| | Twice a week | 2% | 10% | 11% | 5% | 7% | 3% |
| | 3 times a week | 0% | 4% | 2% | 3% | 2% | 1% |
| | 4 times a week | 1% | 4% | 2% | 1% | 0% | 3% |
| | 5 times a week | 0% | 18% | 1% | 1% | 0% | 0% |
| | 6 or more times a week | 0% | 7% | 0% | 0% | 0% | 0% |




**REGIONAL MUNICIPALITY OF PEEL**

## REGIONAL MUNICIPALITY OF PEEL

### HOUSEHOLD CHARACTERISTICS

| Households (unweighted) | | Dwelling Type | | | | Household Size | | | | | Number of Available Vehicles | | | | | Household Averages | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | House | Townhouse | Apartment | Other | 1 | 2 | 3 | 4 | 5+ | 0 | 1 | 2 | 3 | 4+ | Persons | Workers | Drivers | Vehicles | Trips/Day |
| 2016 TTS | 430,100 | 59% | 13% | 28% | N/A | 16% | 24% | 19% | 22% | 19% | 7% | 36% | 42% | 12% | 4% | 3.1 | 1.7 | 1.7 | 2.1 | 5.8 |
| 2020 Fall COVHITS | 67,919 (913) | 69% | 14% | 15% | 2% | 16% | 24% | 19% | 22% | 19% | 6% | 39% | 43% | 10% | 1% | 3.1 | 1.8 | 2.1 | 1.7 | 2.6 (of age 6+) 2.5 (of age 11+) |
| 2021 Fall COVHITS | 3,856 (854) | 63% | 17% | 19% | 1% | 16% | 24% | 19% | 22% | 19% | 6% | 42% | 37% | 10% | 5% | 3.1 | 1.9 | 2.1 | 1.8 | 2.9 [15] (of age 6+) 2.7 [16] (of age 11+) |

### HOUSEHOLD CHARACTERISTICS

| | Number of Available Adult Bikes | | | | | Household Income | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4+ | $0 - $14,999 | $15,000 - $39,999 | $40,000 - $59,999 | $60,000 - $99,999 | $100,000 - $124,999 | $125,000 and above | Decline / don't know |
| 2016 TTS | N/A | N/A | N/A | N/A | N/A | 4% | 13% | 15% | 24% | 11% | 16% | 19% |
| 2020 Fall COVHITS | 45% | 23% | 22% | 8% | 2% | 3% | 10% | 11% | 34% | 18% | 18% | 9% |
| 2021 Fall COVHITS | 55% | 18% | 15% | 7% | 6% | 3% | 11% | 12% | 26% | 16% | 24% | 9% |

### POPULATION CHARACTERISTICS

| Population/records (unweighted) | | Age | | | | | | | Daily Trips per Person age 11+ (6+) | Daily Work Trips per Worker | Population (unweighted) | | Employment Type | | | Student | Licensed | Transit Pass |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0-10 | 11-15 | 16-25 | 26-45 | 46-64 | 65+ | Median | | | | | Full Time | Part Time | At Home | | | |
| | | | | | | | | | | | | 663,700 | 46% | 7% | 3% | 25% | 69% | 20% |
| | | | | | | | | | | | Male | 97,224 (980) | 45% | 6% | N/A | 29% | 68% | 9% |
| | | | | | | | | | | | | 5,349 (929) | 48% | 5% | N/A | 26% | 69% | 11% |
| 2016 TTS | 1,352,100 | 13% | 7% | 14% | 28% | 26% | 12% | 38.0 | 2.1 | 0.75 | Female | 688,500 | 33% | 10% | 3% | 24% | 61% | 23% |
| 2020 Fall COVHITS | 209,158 (2,106) | 13% | 7% | 14% | 28% | 26% | 12% | 38.0 | 0.92 (0.93) | 0.42 | | 110,861 (1,103) | 34% | 8% | N/A | 29% | 66% | 8% |
| 2021 Fall COVHITS | 11,968 (2,058) | 13% | 7% | 14% | 28% | 26% | 12% | 37.5 | 1.0 [17] (1.0) | 0.32 [18] | | 6,491 (1,112) | 34% | 11% | N/A | 30% | 62% | 9% |

[15] 95% confidence interval (2.81, 3.04)
[16] 95% confidence interval (2.60, 2.82)
[17] 95% confidence interval (0.98, 1.04)
[18] 95% confidence interval (0.27, 0.35)

## POPULATION CHARACTERISTIC

| | Current Workplace Arrangement | | | | Pre-COVID Workplace Arrangement | | | | Pre-COVID Usual Mode of Travel to Work | | | Current Study Arrangement | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | WFH only | Hybrid | WOHO only | No usual place | WFH only | Hybrid | WOHO only | No usual place | Auto Driver | Transit | Other | SFH only | Hybrid | Go to School |
| 2016 Census | N/A | N/A | N/A | N/A | 6% | N/A | 82% | 12% | 74% | 16% | 10% | N/A | N/A | N/A |
| 2020 Fall COVHITS | 37% | 9% | 47% | 7% | 12% | 15% | 66% | 7% | 75% | 18% | 8% | 55% | 24% | 21% |
| 2021 Fall COVHITS | 33% | 12% | 50% | 5% | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 32% | 49% | 19% |

## TRIP RATES BY PEEL REGION RESIDENTS

| | 0 | 1 | 2 | 3 | 4 | 5+ |
|---|---|---|---|---|---|---|
| 2016 TTS (11+) | 23% | 1% | 50% | 7% | 11% | 7% |
| 2020 COVHITS (6+) | 58% | 2% | 35% | 3% | 1% | 1% |
| 2020 COVHITS (11+) | 58% | 2% | 35% | 4% | 2% | 1% |
| 2021 COVHITS (6+) | 58% | 4% | 29% | 3% | 4% | 2% |
| 2021 COVHITS (11+) | 59% | 3% | 28% | 4% | 4% | 2% |

## TRIPS MADE BY RESIDENTS OF PEEL REGION

| Time Period | Trips (unweighted) | % 24hr | Trip Purpose | | | | Mode of Travel | | | | | | Average Trip Length (km) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | HB-W | HB-S | HB-D | N-HB | Driver | Pass. | Transit | GO Train | Walk & Cy | Other | Driver | Pass. | Transit | Walk & Cy | |
| 6-9 AM | 660,200 | 26.5% | 47% | 22% | 23% | 9% | 63% | 13% | 8% | 4% | 8% | 5% | 12.5 | 7.6 | 14.3 | 1.0 | 2016 TTS |
| | 43,054 (366) | 25.5% | 59% | 25% | 13% | 3% | 68% | 8% | 5% | N/A | 15% | 4% | 10.6 | 5.0 | 19.0 | 1.1 | 2020 COVHITS (11+) |
| | 47,869 (384) | 26.7% | 52% | 33% | 12% | 3% | 61% | 14% | 5% | N/A | 15% | 5% | 10.6 | 4.4 | 19.0 | 0.9 | 2020 COVHITS (6+) |
| | 2,493 (389) | 23.9% | 47% | 35% | 13% | 5% | 59% | 12% | 6% | N/A | 17% | 6% | 19.1 | 8.9 | 9.6 | 1.1 | 2021 COVHITS (11+) |
| | 2,826 (423) | 25.1% | 41% | 43% | 12% | 4% | 52% | 19% | 6% | N/A | 17% | 6% | 19.1 | 7.1 | 9.6 | 1.0 | 2021 COVHITS (6+) |
| 24 Hrs | 2,495,400 | | 37% | 13% | 37% | 13% | 67% | 14% | 8% | 2% | 6% | 3% | 11.6 | 8.8 | 12.9 | 1.0 | 2016 TTS |
| | 168,528 (1,654) | | 41% | 11% | 33% | 15% | 73% | 10% | 3% | N/A | 11% | 3% | 10.7 | 7.3 | 17.6 | 1.1 | 2020 COVHITS (11+) |
| | 179,208 (1,694) | | 39% | 15% | 32% | 14% | 69% | 13% | 3% | N/A | 12% | 3% | 10.7 | 6.2 | 17.6 | 1.0 | 2020 COVHITS (6+) |
| | 10,451 (1,914) | | 30% | 17% | 32% | 21% | 67% | 14% | 7% | N/A | 10% | 3% | 16.5 | 14.5 | 12.3 | 1.2 | 2021 COVHITS (11+) |
| | 11,273 (1,999) | | 28% | 22% | 31% | 19% | 62% | 17% | 6% | N/A | 11% | 3% | 16.5 | 11.9 | 12.1 | 1.1 | 2021 COVHITS (6+) |

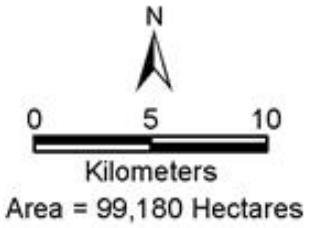
| TRIPS MADE TO PEEL REGION | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Period | Trips (unweighted) | % 24hr | Trip Purpose | | | | Mode of Travel | | | | | | Average Trip Length (km) | | | | |
| | | | Work | School | Home | Other | Driver | Pass. | Transit | GO Train | Walk & Cy | Other | Driver | Pass. | Transit | Walk & Cy | |
| 6-9 AM | 610,291 | 25.6% | 52% | 21% | 7% | 20% | 67% | 13% | 6% | 0% | 8% | 5% | 11.4 | 6.1 | 9.0 | 1.1 | 2016 TTS |
| | 34,281 (349) | 23.2% | 49% | 27% | 10% | 14% | 65% | 10% | 2% | N/A | 18% | 4% | 6.9 | 4.7 | 7.5 | 0.9 | 2020 COVHITS (11+) |
| | 38,900 (366) | 24.5% | 43% | 36% | 9% | 12% | 58% | 16% | 2% | N/A | 19% | 6% | 6.9 | 3.5 | 7.5 | 0.8 | 2020 COVHITS (6+) |
| | 2,462 (382) | 24.6% | 42% | 34% | 11% | 12% | 59% | 13% | 5% | N/A | 17% | 6% | 15.4 | 13.9 | 13.0 | 1.1 | 2021 COVHITS (11+) |
| | 2,796 (415) | 25.8% | 37% | 42% | 10% | 11% | 52% | 20% | 5% | N/A | 18% | 6% | 15.4 | 9.4 | 13.0 | 1.8 | 2021 COVHITS (6+) |
| 24 Hrs | 2,386,920 | | 22% | 6% | 45% | 26% | 68% | 14% | 7% | 1% | 6% | 3% | 10.8 | 7.6 | 11.0 | 1.1 | 2016 TTS |
| | 148,080 (1,587) | | 19% | 7% | 51% | 24% | 72% | 10% | 3% | N/A | 12% | 3% | 8.2 | 6.3 | 14.0 | 1.0 | 2020 COVHITS (11+) |
| | 158,453 (1,625) | | 17% | 9% | 51% | 23% | 67% | 14% | 2% | N/A | 13% | 3% | 8.2 | 5.3 | 14.0 | 1.0 | 2020 COVHITS (6+) |
| | 9,992 (1,810) | | 16% | 10% | 49% | 25% | 67% | 13% | 6% | N/A | 10% | 3% | 14.8 | 13.6 | 12.6 | 1.2 | 2021 COVHITS (11+) |
| | 10,824 (1,894) | | 15% | 12% | 49% | 23% | 62% | 17% | 6% | N/A | 12% | 3% | 14.8 | 11.2 | 12.4 | 1.4 | 2021 COVHITS (6+) |

| Weekly Home Delivery Frequency by Households | | | | | | |
|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5+ |
| 2021 Fall COVHITS | 36% | 23% | 16% | 11% | 6% | 8% |

| OTHER INFORMATION – Household level responses | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | In-Store Shopping Frequency | | | | Online Shopping Frequency | | | |
| | | Meals | Groceries | Clothing | Other | Meals | Groceries | Clothing | Other |
| 2020 Fall COVHITS | None | 31% | 7% | 73% | 71% | 59% | 63% | 81% | 66% |
| | Once in a month | 21% | 6% | 18% | 17% | 16% | 11% | 11% | 20% |
| | Once every two weeks | 11% | 16% | 5% | 7% | 8% | 6% | 6% | 9% |
| | Once a week | 23% | 47% | 3% | 4% | 9% | 16% | 1% | 3% |
| | Twice a week | 8% | 18% | 0% | 1% | 5% | 2% | 1% | 1% |
| | 3 times or more a week | 7% | 7% | 0% | 1% | 4% | 1% | 0% | 1% |
| 2021 Fall COVHITS | None | 54% | 1% | 57% | 47% | 67% | 61% | 66% | 52% |
| | Once in a month | 24% | 6% | 31% | 29% | 21% | 15% | 24% | 29% |
| | Once every two weeks | 11% | 12% | 5% | 10% | 5% | 9% | 3% | 8% |
| | Once a week | 7% | 48% | 3% | 8% | 5% | 11% | 2% | 5% |
| | Twice a week | 2% | 22% | 2% | 3% | 1% | 3% | 1% | 2% |
| | 3 times or more a week | 3% | 11% | 2% | 4% | 2% | 2% | 2% | 3% |

| OTHER INFORMATION – Individual-level responses | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | Transit Usage Frequency of Transit User (who used transit at least during the survey a week) Only | | | | | |
| | | Work /School | Shopping | Restaurant | Recreation | Visiting | Other |
| 2020 Fall COVHITS | None | 89% | 37% | 44% | 79% | 72% | 89% |
| | Once a week | 6% | 18% | 32% | 13% | 22% | 5% |
| | Twice a week | 1% | 9% | 16% | 3% | 4% | 1% |
| | 3 times a week | 1% | 21% | 3% | 2% | 1% | 1% |
| | 4 times a week | 1% | 4% | 2% | 0% | 0% | 2% |
| | 5 times a week | 0% | 7% | 2% | 1% | 0% | 1% |
| | 6 or more times a week | 2% | 5% | 1% | 3% | 0% | 0% |
| 2021 Fall COVHITS | None | 76% | 36% | 56% | 75% | 57% | 79% |
| | Once a week | 16% | 8% | 22% | 13% | 28% | 9% |
| | Twice a week | 3% | 12% | 9% | 4% | 9% | 5% |
| | 3 times a week | 3% | 6% | 5% | 3% | 2% | 3% |
| | 4 times a week | 2% | 10% | 5% | 3% | 2% | 2% |
| | 5 times a week | 0% | 18% | 2% | 2% | 1% | 1% |
| | 6 or more times a week | 0% | 10% | 1% | 0% | 1% | 0% |

# REGIONAL MUNICIPALITY OF HALTON


**REGIONAL MUNICIPALITY OF HALTON**

## REGIONAL MUNICIPALITY OF HALTON

### HOUSEHOLD CHARACTERISTICS

| Households (unweighted) | | Dwelling Type | | | | Household Size | | | | | Number of Available Vehicles | | | | | Household Averages | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | House | Townhouse | Apartment | Other | 1 | 2 | 3 | 4 | 5+ | 0 | 1 | 2 | 3 | 4+ | Persons | Workers | Drivers | Vehicles | Trips/Day |
| 2016 TTS | 193,100 | 64% | 18% | 19% | N/A | 20% | 30% | 18% | 22% | 11% | 3% | 31% | 49% | 12% | 5% | 2.8 | 1.6 | 1.8 | 2.0 | 5.9 |
| 2020 Fall COVHITS | 3,093 (777) | 66% | 19% | 15% | 1% | 20% | 30% | 18% | 22% | 11% | 4% | 37% | 46% | 9% | 4% | 2.8 | 1.7 | 2.1 | 1.8 | 3.0 (of age 6+) 2.7 (of age 11+) |
| 2021 Fall COVHITS | 1,692 (462) | 66% | 20% | 13% | 0.3% | 20% | 30% | 18% | 22% | 11% | 3% | 39% | 42% | 11% | 4% | 2.8 | 1.8 | 2.0 | 1.8 | 2.6 [19] (of age 6+) 2.3 [20] (of age 11+) |

### HOUSEHOLD CHARACTERISTICS

| | Number of Available Adult Bikes | | | | | Household Income | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4+ | $0 - $14,999 | $15,000 - $39,999 | $40,000 - $59,999 | $60,000 - $99,999 | $100,000 - $124,999 | $125,000 and above | Decline / don't know |
| 2016 TTS | N/A | N/A | N/A | N/A | N/A | 2% | 9% | 11% | 20% | 12% | 27% | 19% |
| 2020 COVHITS | 37% | 22% | 26% | 9% | 5% | 2% | 6% | 9% | 28% | 15% | 27% | 13% |
| 2021 COVHITS | 45% | 14% | 24% | 10% | 6% | 2% | 7% | 9% | 25% | 20% | 27% | 10% |

### POPULATION CHARACTERISTICS

| Population/records (unweighted) | | Age | | | | | | | Daily Trips per Person age 11+ (6+) | Daily Work Trips per Worker | Population (unweighted) | | Employment Type | | | Student | Licensed | Transit Pass |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0-10 | 11-15 | 16-25 | 26-45 | 46-64 | 65+ | Median | | | | | Full Time | Part Time | At Home | | | |
| | | | | | | | | | | | | 262,000 | 46% | 6% | 5% | 24% | 72% | 16% |
| | | | | | | | | | | | Male | 3,978 (818) | 47% | 6% | 10% | 26% | 73% | 6% |
| | | | | | | | | | | | | 2,315 (478) | 47% | 5% | 0% | 29% | 70% | 5% |
| 2016 TTS | 539,200 | 14% | 7% | 12% | 26% | 27% | 14% | 40.3 | 2.5 | 0.73 | | 277,200 | 33% | 11% | 5% | 23% | 70% | 15% |
| 2020 Fall COVHITS | 8,723 (1,746) | 14% | 7% | 12% | 26% | 27% | 14% | 38.0 | 1.1 (1.1) | 0.35 | Female | 4,681 (909) | 33% | 10% | 5% | 31% | 69% | 5% |
| 2021 Fall COVHITS | 4,750 (1,013) | 14% | 7% | 12% | 26% | 26% | 14% | 38.3 | 1.0 [21] (1.0) | 0.33 [22] | | 2,402 (528) | 38% | 12% | 0% | 28% | 73% | 5% |

[19] 95% confidence interval (2.45, 2.73)
[20] 95% confidence interval (2.19, 2.47)
[21] 95% confidence interval (0.93, 1.01)
[22] 95% confidence interval (0.26, 0.37)

| POPULATION CHARACTERISTIC | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Current Workplace Arrangement | | | | Pre-COVID Workplace Arrangement | | | | Pre-COVID Usual Mode of Travel to Work | | | Current Study Arrangement | | |
| | WFH only | Hybrid | WOHO only | No usual place | WFH only | Hybrid | WOHO only | No usual place | Auto Driver | Transit | Other | SFH only | Hybrid | Go to School |
| 2016 Census | N/A | N/A | N/A | N/A | 9% | N/A | 81% | 9% | 79% | 11% | 10% | N/A | N/A | N/A |
| 2020 Fall COVHITS | 46% | 8% | 41% | 6% | 15% | 18% | 60% | 7% | 78% | 15% | 7% | 44% | 37% | 19% |
| 2021 Fall COVHITS | 34% | 12% | 51% | 3% | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 22% | 65% | 13% |

| TRIP RATES BY HALTON REGION RESIDENTS | | | | | | |
|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5+ |
| 2016 TTS (11+) | 18% | 2% | 47% | 9% | 14% | 11% |
| 2020 COVHITS (6+) | 51% | 2% | 38% | 6% | 3% | 2% |
| 2020 COVHITS (11+) | 53% | 2% | 35% | 6% | 3% | 2% |
| 2021 COVHITS (6+) | 56% | 3% | 33% | 4% | 3% | 1% |
| 2021 COVHITS (11+) | 58% | 3% | 30% | 4% | 4% | 1% |

| TRIPS MADE BY RESIDENTS OF HALTON REGION | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Period | Trips (unweighted) | % 24hr | Trip Purpose | | | | Mode of Travel | | | | | | Average Trip Length (km) | | | | |
| | | | HB-W | HB-S | HB-D | N-HB | Driver | Pass. | Transit | GO Train | Walk & Cy | Other | Driver | Pass. | Transit | Walk & Cy | |
| 6-9 AM | 279,300 | 24.4% | 47% | 20% | 23% | 9% | 69% | 11% | 2% | 5% | 8% | 5% | 15.2 | 8.8 | 17.1 | 1.1 | 2016 TTS |
| | 1,749 (345) | 21.2% | 56% | 25% | 16% | 3% | 70% | 8% | 4% | N/A | 16% | 2% | 17.5 | 9.0 | 7.3 | 1.2 | 2020 COVHITS (11+) |
| | 2,150 (380) | 23.5% | 46% | 38% | 13% | 3% | 57% | 14% | 7% | N/A | 17% | 5% | 17.5 | 5.4 | 5.6 | 1.2 | 2020 COVHITS (6+) |
| | 998 (187) | 25.3% | 53% | 29% | 11% | 7% | 63% | 12% | 6% | N/A | 12% | 7% | 16.4 | 4.9 | 8.3 | 2.9 | 2021 COVHITS (11+) |
| | 1,185 (204) | 27.1% | 45% | 41% | 9% | 6% | 53% | 14% | 5% | N/A | 18% | 9% | 16.4 | 4.3 | 7.8 | 2.1 | 2021 COVHITS (6+) |
| 24 Hrs | 1,143,900 | | 31% | 11% | 43% | 15% | 73% | 13% | 2% | 3% | 6% | 3% | 13.2 | 11.0 | 14.6 | 1.1 | 2016 TTS |
| | 8,237 (1,799) | | 30% | 10% | 40% | 20% | 76% | 9% | 3% | N/A | 10% | 1% | 12.2 | 7.3 | 11.8 | 1.1 | 2020 COVHITS (11+) |
| | 9,169 (1,885) | | 27% | 17% | 37% | 19% | 69% | 12% | 5% | N/A | 12% | 2% | 12.2 | 5.7 | 8.7 | 1.1 | 2020 COVHITS (6+) |
| | 3,941 (938) | | 35% | 14% | 30% | 21% | 69% (67.7,70.6)[23] | 12% (10.5,12.5) | 5% (4.0,5.3) | N/A | 11% (9.9,.11.9) | 4% (3.2,4.4) | 17.1 | 8.4 | 8.6 | 2.2 | 2021 COVHITS (11+) |
| | 4,375 (979) | | 32% | 21% | 27% | 20% | 62% (60.8,63.7) | 14% (13.1,15.2) | 4% (3.8,5.0) | N/A | 14% (12.7,14.7) | 5% (4.7,6.1) | 17.1 | 7.1 | 8.3 | 1.8 | 2021 COVHITS (6+) |

[23] 95 percentile confidence intervals are reported

| TRIPS MADE TO HALTON REGION | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Time Period | Trips (unweighted) | % 24hr | Trip Purpose | | | | Mode of Travel | | | | | | Average Trip Length (km) | | | | |
| | | | Work | School | Home | Other | Driver | Pass. | Transit | GO Train | Wlk & Cy | Other | Driver | Pass. | Transit | Walk & Cy | |
| 6-9 AM | 206,271 | 20.4% | 43% | 25% | 8% | 24% | 67% | 12% | 2% | 0% | 11% | 7% | 11.4 | 6.1 | 9.0 | 1.1 | 2016 TTS |
| | 3,410 (261) | 27.1% | 64% | 13% | 2% | 20% | 86% | 3% | 2% | N/A | 8% | 1% | 15.5 | 4.5 | 2.6 | 1.3 | 2020 COVHITS (11+) |
| | 3,811 (296) | 28.2% | 58% | 22% | 2% | 18% | 77% | 7% | 4% | N/A | 9% | 3% | 15.5 | 3.3 | 3.4 | 1.3 | 2020 COVHITS (6+) |
| | 839 (151) | 22.7% | 47% | 31% | 6% | 16% | 61% | 13% | 2% | N/A | 14% | 9% | 11.5 | 4.3 | 1.3 | 1.9 | 2021 COVHITS (11+) |
| | 1,049 (170) | 25.3% | 38% | 45% | 5% | 13% | 49% | 17% | 2% | N/A | 21% | 11% | 11.5 | 7.5 | 1.3 | 1.4 | 2021 COVHITS (6+) |
| 24 Hrs | 1,009,924 | | 15% | 6% | 48% | 31% | 72% | 14% | 2% | 2% | 7% | 3% | 11.0 | 8.6 | 11.3 | 1.1 | 2016 TTS |
| | 12,575 (1,610) | | 32% | 5% | 29% | 35% | 82% | 9% | 2% | N/A | 7% | 1% | 11.9 | 6.1 | 8.9 | 1.1 | 2020 COVHITS (11+) |
| | 13,507 (1,696) | | 30% | 8% | 30% | 33% | 76% | 12% | 3% | N/A | 8% | 2% | 11.9 | 5.2 | 6.8 | 1.1 | 2020 COVHITS (6+) |
| | 3,688 (863) | | 17% | 8% | 49% | 26% | 70% | 11% | 4% | N/A | 12% | 4% | 13.7 | 7.8 | 8.5 | 2.6 | 2021 COVHITS (11+) |
| | 4,146 (906) | | 15% | 12% | 49% | 24% | 62% | 14% | 3% | N/A | 15% | 6% | 13.7 | 7.7 | 8.0 | 2.1 | 2021 COVHITS (6+) |

| Weekly Home Delivery Frequency by Households | | | | | | |
|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5+ |
| 2021 Fall COVHITS | 36% | 24% | 16% | 9% | 8% | 7% |

| OTHER INFORMATION – Household level responses | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | In-Store Shopping Frequency | | | | Online Shopping Frequency | | | |
| | | Meals | Groceries | Clothing | Other | Meals | Groceries | Clothing | Other |
| 2020 Fall COVHITS | None | 43% | 37% | 71% | 64% | 37% | 35% | 73% | 67% |
| | Once in a month | 20% | 5% | 21% | 25% | 20% | 7% | 16% | 22% |
| | Once every two weeks | 14% | 12% | 5% | 6% | 13% | 9% | 6% | 6% |
| | Once a week | 15% | 31% | 1% | 4% | 19% | 29% | 4% | 4% |
| | Twice a week | 6% | 12% | 1% | 1% | 8% | 14% | 1% | 1% |
| | 3 times or more a week | 3% | 3% | 0% | 0% | 3% | 5% | 0% | 1% |
| 2021 Fall COVHITS | None | 46% | 3% | 55% | 44% | 55% | 51% | 61% | 47% |
| | Once in a month | 36% | 7% | 34% | 35% | 30% | 17% | 28% | 32% |
| | Once every two weeks | 7% | 12% | 5% | 10% | 8% | 12% | 6% | 12% |
| | Once a week | 8% | 43% | 3% | 7% | 3% | 13% | 4% | 5% |
| | Twice a week | 1% | 26% | 1% | 3% | 3% | 6% | 1% | 2% |
| | 3 times or more a week | 1% | 9% | 1% | 2% | 1% | 2% | 1% | 2% |

| OTHER INFORMATION – Individual-level responses | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | Transit Usage Frequency of Transit User (who used transit at least during the survey a week) Only | | | | | |
| | | Work /School | Shopping | Restaurant | Recreation | Visiting | Other |
| 2020 Fall COVHITS | None | 87% | 45% | 42% | 86% | 75% | 90% |
| | Once a week | 8% | 6% | 35% | 11% | 7% | 4% |
| | Twice a week | 3% | 16% | 16% | 3% | 13% | 1% |
| | 3 times a week | 1% | 17% | 7% | 0% | 2% | 1% |
| | 4 times a week | 1% | 10% | 1% | 0% | 3% | 2% |
| | 5 times a week | 0% | 5% | 0% | 0% | 0% | 0% |
| | 6 or more times a week | 0% | 1% | 0% | 0% | 0% | 2% |
| 2021 Fall COVHITS | None | 88% | 40% | 65% | 83% | 77% | 82% |
| | Once a week | 6% | 14% | 12% | 8% | 13% | 14% |
| | Twice a week | 4% | 10% | 8% | 8% | 7% | 3% |
| | 3 times a week | 1% | 5% | 5% | 1% | 1% | 1% |
| | 4 times a week | 0% | 4% | 4% | 0% | 2% | 0% |
| | 5 times a week | 0% | 18% | 4% | 0% | 0% | 0% |
| | 6 or more times a week | 1% | 9% | 2% | 0% | 0% | 0% |

## Lessons Learned from 2021 Fall COVHITS Survey

This section summarizes the key challenges and opportunities that the research team experienced in completing this survey. These are as follows:

- The use of an online survey panel made it possible to collect data within such a short period, but it needs to be clear that there are limits on the sample size collected through such an approach. Such limits depend on the size of panels and the spatial distribution of panel members' home locations.
- Online household travel surveys should purposely design control variables for the objective of quality control in the data cleaning stage. Control variables should indicate the respondents' level of responsibleness during the survey. The 2021 Fall survey used the time spent in the attitudinal section as the control variable. The duration of the attitudinal section should stay in a reasonable range and not correlated with travel behaviour statistics revealed in the dataset. We found that reported trip rates were correlated with attitudinal section duration if the duration is fewer than two minutes. Thus, all samples that spent less than two minutes in the attitudinal section were removed from the final dataset.

# Appendix I

**Sample weighting to match individual regions household size and age distributions**

- On the individual level, weighting factors are calculated using an iterative proportional fitting (IFP)procedure constrained to household size (on the household level) and age cohort of census data (on the person level).
- Weighting factors were calculated for each sample based on household size and age cohort in each sub-region.

| | | | PERCENTILE | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Regions | Mean | Std Dev. | Min. | 0.01 | 0.05 | 0.25 | 0.5 | 0.75 | 0.95 | 0.99 | Max |
| Toronto | 2.14 | 1.45 | 1 | 1.00 | 1.14 | 1.33 | 1.71 | 2.26 | 4.59 | 8.35 | 17.74 |
| York | 3.05 | 2.89 | 1 | 1.00 | 1.07 | 1.33 | 2.14 | 3.42 | 9.05 | 15.22 | 25.86 |
| Peel | 2.62 | 1.98 | 1 | 1.00 | 1.08 | 1.34 | 2.08 | 3.16 | 6.29 | 11.68 | 17.71 |
| Halton | 3.66 | 3.15 | 1 | 1.00 | 1.16 | 2.06 | 2.43 | 4.12 | 10.73 | 17.05 | 26.77 |

**Sample weighting to combine individual region's data for the whole study area by matching regional population distributions**

- On the sub-region level, weighting factors are calculated to match the weighted-adjusted sub-regional population distributions with relative proportion of population between regions within the study area.

| | Toronto | York | Peel | Halton |
|---|---|---|---|---|
| Normalized sub-region weight | 1.82 | 1.26 | 1.73 | 1.00 |