Transport
for NSW

Household Travel Survey 2021/22
Data Document

November 2022

NSW
GOVERNMENT

Transport
for NSW

Table of Contents

Introduction

This document provides a brief background to assist with the interpretation of the Household Travel Survey (HTS) data. Currently, approximately 2000-3,000 households from the Greater Sydney Metropolitan region are randomly approached to participate in the HTS. The HTS study area, or Greater Sydney Metropolitan region, includes Sydney, the Lower Hunter and Illawarra. The Sydney region aligns with the Sydney Greater Capital City Statistical Area (GCCSA) as defined by the Australian Bureau of Statistics (ABS). HTS study area map can be viewed in Appendix A.

For the 2021/22 wave, the data collection for HTS was suspended from July 2021 to October 2022 due to the impact and restrictions following the Delta wave of COVID-19 and was resumed from November 2021 to July 2022. Annual estimates from the HTS are usually produced on a rolling basis using multiple years of pooled data for each reporting year. Due to the impact of changed travel behaviours resulting from COVID-19 breaking previous trends, HTS 2020/21 release (previous year) was based on a single wave of data collection. However, with the current release, two years of post-COVID sample has been pooled – from 2020/21 and 2021/22 – to allow for a relatively larger sample and more reliable estimates.

However, disruption to the 2021/22 data collection due to the Delta wave related lockdown, has led to some adjustments being made to the HTS 2021/22 estimates:

- SA3 level data will not be released for HTS 2021/22 due to low sample collection.

- LGA level data is released for selected LGAs with a robust Relative Standard Error for total trips by Mode and Purpose

- Mode categories for all geographies are aggregated consistent to the 2020/21 release

- Purpose categories for the region level data are expanded to the pre-COVID categories (8 purpose categories). However, for the six cities and LGAs, they are aggregated consistent to the 2020/21 release (6 purpose categories) due to low sample.

- A new data release – for six cities[1] as defined by the Greater Sydney Commission is included in the HTS 2021/22 release

Please refer the Data Dictionary for details.

All estimates are weighted to the Australian Bureau of Statistics' Estimated Resident Population as on 30 June 2021.

Sample design and benchmarks

The sampling unit for the HTS is a household. Households are selected using a stratified, three-stage cluster sampling method. Each household is randomly assigned a different day of the week for its Travel Day.

The collection of data for the HTS is stratified by Statistical Area Level 3 (SA3) and covers 57 SA3s.

In determining the household benchmarks, ERP from ABS is adjusted to reflect the number of *usual residents in occupied private dwellings*. An occupied private dwelling is usually a house or flat but can also be a caravan or houseboat. Unoccupied private dwellings and non-private dwellings are out-of-scope for the HTS. Non-private dwellings include communal or transitory accommodation types such as hotels, motels, prisons and hospitals.

---

[1] Six cities as defined by the Greater Sydney Commission **do not** cover the entire study area under HTS.

The definition of a usual resident is a person who lives or intends to live for three months or more at the address. Overseas visitors staying at the residence for three months or more are also included. According to the Census, 97-99% of the counted population are usual residents. This proportion is applied to ERP; hence the HTS person benchmarks are marginally lower than the ABS reported ERP.

For this reason, the population and household totals in the HTS data may differ slightly from those on the ABS website.

Data Dictionary

Data by Region

The corresponding tables provide the total number of trips made by residents of the region, on an average weekday. The total number of trips is further broken down by mode of transport and purpose of travel.

Table below lists the variables supplied in this dataset, and their description.

VARIABLE NAME	DESCRIPTION
WAVE	Financial year of data collection
REGION_ID	Household Region ID 1 Sydney GCCSA 3 Hunter 5 Illawarra
REGION_NAME	Household Region name (as above)
AREA_SQ_KM	Area of the region in square kilometers
WEIGHTED_POPULATION	Total population of the region (rounded to '000)
WEIGHTED_HOUSEHOLDS	Total households in the region (rounded to '000)
WEIGHTED_VEHICLES	Total number of vehicles in the region (rounded to '000)
MODE_LABEL	Code assigned to mode categories: 1= Vehicle Driver 2=Vehicle Passenger 3=Public Transport 4=Walk linked 5=Walk only 6=Other
MODE_DESC	Mode description for the label: Vehicle (incl motorcycle) Driver Vehicle (incl motorcycle) passenger Public Transport (includes Train, Bus, LR, Ferry) Walk only[2] Walk linked[3]

---

[2] where the whole trip is made by walking and no change of mode is involved.
[3] walking trips where the purpose is access to, or egress from, another mode e.g. Walk to the bus stop to catch the bus or walk from the bus stop after getting off the bus at the other end.

	Other[4] (includes Taxi/rideshare/carshare, wheelchair, bicycle, aircraft)
WEIGHTED_TRIPS	Total number of trips (rounded to '000)
PCT_OF_RGN_WEIGHTED_TRIPS	% of total trips for each region
WEIGHTED_TOTAL_DISTANCE	Total distance travelled in kilometers (rounded to '000)
PCT_OF_RGN_WGTD_TOTAL_DISTANCE/ PCT_OF_RGN_WEIGHTED_DISTANCE	% of total distance travelled for each region
WEIGHTED_TRIPS_AVG_DISTANCE	Average distance travelled in kilometers
WEIGHTED_TRIPS_AVG_TIME (Mode by Region)	Average on-mode time for travel by mode (in minutes)
WEIGHTED_TRIPS_AVG_JRNY_TIME (Purpose by Region)	Average journey time for travel by purpose (in minutes)
PURPOSE	Purpose for trips, coded into eight categories[5]: Commute Work related business Education/Childcare Shopping Social/Recreation Personal business Serve passenger Other

Data by Six Cities

The corresponding tables provide the total number of trips made by residents of the six cities, on an average weekday. The total number of trips is further broken down by mode of transport and purpose of travel.

Table below lists the variables supplied in this dataset, and their description.

VARIABLE NAME	DESCRIPTION
WAVE	Financial year of data collection
CITY_NAME/HH_CITY_NAME	Household City name. Six Cities as below: Central Coast City

---

[4] 'Other' mode category for HTS 2020/21 is not comparable to previous waves as it **does not** include Light Rail and Ferry

[5] Please refer the Glossary for detailed description of purpose categories

	Central River City Eastern Harbour City Illawarra-Shoalhaven City Lower Hunter and Greater Newcastle City Western Parkland City
AREA_SQ_KM	Area of the city in square kilometers
WEIGHTED_POPULATION	Total population of the city (rounded to '000)
WEIGHTED_HOUSEHOLDS	Total households in the city (rounded to '000)
WEIGHTED_VEHICLES	Total number of vehicles in the city (rounded to '000)
MODE_LABEL	Code assigned to mode categories: Vehicle Driver Vehicle Passenger Public Transport (includes Train, Bus, LR, Ferry) Walk linked Walk only Other (includes Taxi/rideshare/carshare, wheelchair, bicycle, aircraft)
WEIGHTED_TRIPS	Total number of trips (rounded to '000)
PCT_OF_CITY_WEIGHTED_TRIPS	% of total trips for each city
WEIGHTED_TOTAL_DISTANCE	Total distance travelled in kilometers (rounded to '000)
PCT_OF_CITY_WGTD_TOT_DISTANCE/ PCT_OF_CITY_WEIGHTED_DISTANCE	% of total distance travelled for each city by mode/purpose
WEIGHTED_TRIPS_AVG_DISTANCE	Average distance travelled in kilometers by mode & purpose
WEIGHTED_TRIPS_AVG_TIME (Mode by City)	Average on-mode time for travel by mode (in minutes)
WEIGHTED_TRIPS_AVG_JRNY_TIME (Purpose by City)	Average journey time for travel by purpose (in minutes)
PURPOSE6	Purpose for trips, coded into eight categories[6]: Commute Shopping Social/Recreation

---

[6] Please refer the Glossary for detailed description of purpose categories

| Personal business |
| Serve passenger |
| Other[7] |

Data by LGA

The corresponding tables provide the total number of trips made by residents of selected local government areas (LGAs), on an average weekday. The total number of trips is further broken down by mode of transport and purpose of travel.

Table below lists the variables supplied in this dataset, and their description.

VARIABLE NAME	DESCRIPTION
WAVE	Financial year of data collection
REGION_ID	Region ID in which the LGA falls: 1 Sydney GCCSA 3 Hunter 5 Illawarra
REGION_NAME	Region name in which the LGA falls (as above)
LGA_ID	Numerical ID for household LGA
LGA_NAME	Name of household LGA
AREA_SQ_KM	Area of the LGA in square kilometers
WEIGHTED_POPULATION	Total population of the LGA (rounded to '000)
WEIGHTED_HOUSEHOLDS	Total households in the LGA (rounded to '000)
WEIGHTED_VEHICLES	Total number of vehicles in the LGA (rounded to '000)
MODE_LABEL	Code assigned to mode categories: Vehicle Driver Vehicle Passenger Public Transport Walk linked Walk only Other
WEIGHTED_TRIPS	Total number of trips (rounded to '000)

[7] 'Other' purpose category for Six Cities and LGAs is aggregated differently to that of the Regions and consistent with 2020/21 estimates
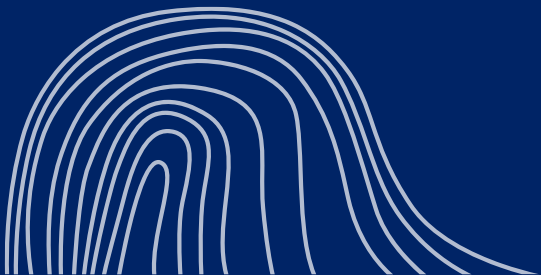
PCT_OF_LGA_WEIGHTED_TRIPS	% of total trips for each LGA
WEIGHTED_TOTAL_DISTANCE	Total distance travelled in kilometers (rounded to '000)
PCT_OF_LGA_WGTD_TOTAL_DISTANCE/ PCT_OF_LGA_WEIGHTED_DISTANCE	% of total distance travelled for each LGA by Mode/Purpose
WEIGHTED_TRIPS_AVG_DISTANCE	Average distance travelled in kilometers
WEIGHTED_TRIPS_AVG_TIME (Mode by LGA)	Average on-mode time for travel by mode (in minutes)
WEIGHTED_TRIPS_AVG_JRNY_TIME (Purpose by Region)	Average journey time for travel by purpose (in minutes)
PURPOSE6	Purpose for trips, coded into six categories: Commute Shopping Personal business Social/Recreation Serve passenger Other

Reliability of estimates

Please refer the Tab Reliability of estimates in the Excel downloadable file for details on reliability of the published estimates. Relative Standard Error is computed for all estimates for HTS 2021/22 by individual Mode and Purpose categories for each of three geographies – Region, Six Cities and LGAs.[8]

LGAs with a reasonable Relative Standard Error for total trips by Mode and Purpose have been included in this release. However, some individual mode and/or purpose categories for these LGAs may have a high standard error. All estimates with a high Relative Standard Error are annotated with an asterisk in the data tables and **must be used with caution.**

---

[8] Historically, RSEs were only computed for estimates of **Total trips** by Mode and Purpose for Region, SA3 and LGAs