



Transport  
for NSW

## Transport Performance and Analytics

### HOUSEHOLD TRAVEL SURVEY

#### About the Data

Current as at March 2019

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## 1 Introduction

This document provides a brief background to assist with the interpretation of the Household Travel Survey (HTS) data. Each year approximately 5,000 households from the Greater Sydney Metropolitan region are selected to participate in the HTS. Of these households, approximately 2,700-3,000 respond (i.e. 7,000-9,000 people). This is a response rate of 54%-60%.

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.

HTS trip estimates for each year are produced using a three-year-pooled approach. The pooled approach involves combining three years of HTS data into a single *pooled* dataset and expanding it to the latest population benchmarks. For example, to produce the 2016/17 estimates, survey data from 2014, 2015 and 2016 was pooled and weighted to the 2016 Estimated Resident Population (ERP) published by the ABS.

The rationale for using a pooled approach is to create sufficient sample to reduce variability in the estimates, measured in terms of Relative Standard Error, and stabilise the volatility of annual movements.

## 2 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 HTS study area is stratified by Statistical Area Level 3 (SA3). The HTS study area 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.

The definition of a usual resident is a person who lives or intends to live for six months or more in Australia. Persons visiting Australia from another country for less than one year are considered overseas visitors. 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.

## 3 Data Dictionary

### 3.1 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 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
WEIGHTED_HOUSEHOLDS	Total households in the region
WEIGHTED_VEHICLES	Total number of vehicles in the region
MODE_LABEL	Modes used for trips, coded into six categories: Vehicle Driver Vehicle passenger Train Bus Walk only Other
WEIGHTED_TRIPS	Total number of trips
PCT_OF_RGN_WEIGHTED_TRIPS	% of total trips for each region
WEIGHTED_TOTAL_DISTANCE	Total distance travelled
PCT_OF_RGN_WGTD_TOTAL_DISTANCE	% of total distance travelled for each region
WEIGHTED_TRIPS_AVG_DISTANCE	Average distance travelled
PURPOSE9	Purpose for trips, coded into nine categories: Commute Change mode of travel Education/Childcare Personal business Serve passenger Shopping Social/Recreation Work related business Other

### 3.1 Data by SA3

The corresponding tables provide the total number of trips, made by residents of the selected SA3, on an *average weekday*. The total number of trips is further broken down by mode of transport and purpose of travel.

Blue Mountains South and Illawarra Catchment are not included due to small populations in these SA3s.

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 3 Hunter 5 Illawarra
REGION_NAME	Household Region name (as above)
SA3_ID	5-digit ID for household SA3
SA3_NAME	Name of household SA3
AREA_SQ_KM	Area of the SA3 in square kilometers
WEIGHTED_POPULATION	Total population of the SA3
WEIGHTED_HOUSEHOLDS	Total households in the SA3
WEIGHTED_VEHICLES	Total number of vehicles in the SA3
MODE_LABEL	Modes used for trips, coded into six categories: Vehicle Driver Vehicle passenger Train Bus Walk only Other
WEIGHTED_TRIPS	Total number of trips
PCT_OF_SA3_WEIGHTED_TRIPS	% of total trips for each SA3
WEIGHTED_TOTAL_DISTANCE	Total distance travelled
PCT_OF_SA3_WGTD_TOTAL_DISTANCE	% of total distance travelled for each SA3
WEIGHTED_TRIPS_AVG_DISTANCE	Average distance travelled
PURPOSE9	Purpose for trips, coded into nine categories: Commute Change mode of travel Education/Childcare Personal business Serve passenger Shopping Social/Recreation Work related business Other

### 3.3 Data by LGA

The corresponding tables provide the total number of trips, made by residents of the selected Local Government Area (LGA), on an *average weekday*. The total number of trips is further broken down by mode of transport and purpose of travel.

Mid-Coast and Singleton LGAs are not included in this data as more than 10% of their boundary is outside the HTS study area. For this reason, the trip totals may not match exactly with the other HTS visualisation totals.

It is noted that trip estimates for geographically small LGAs such as Hunters Hill show a greater degree of variance year-on-year. These estimates are currently under investigation for statistical robustness.

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 3 Hunter 5 Illawarra
REGION_NAME	Household Region name (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
WEIGHTED_HOUSEHOLDS	Total households in the LGA
WEIGHTED_VEHICLES	Total number of vehicles in the LGA
MODE_LABEL	Modes used for trips, coded into six categories: Vehicle Driver Vehicle passenger Train Bus Walk only Other
WEIGHTED_TRIPS	Total number of trips
PCT_OF_LGA_WEIGHTED_TRIPS	% of total trips for each LGA
WEIGHTED_TOTAL_DISTANCE	Total distance travelled
PCT_OF_LGA_WGTD_TOTAL_DISTANCE	% of total distance travelled for each LGA
WEIGHTED_TRIPS_AVG_DISTANCE	Average distance travelled
PURPOSE9	Purpose for trips, coded into nine categories: Commute Change mode of travel Education/Childcare Personal business Serve passenger Shopping Social/Recreation Work related business Other

## Appendix A: HTS Study area map

