Transport for NSW

Transport Performance and Analytics

HOUSEHOLD TRAVEL SURVEY

About the Data

Current as at August 2020

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1 Introduction

This document provides a brief background to assist with the interpretation of the Household Travel Survey (HTS) data. Currently, approximately 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.

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 June 2016 Estimated Resident Population (ERP) published by the ABS. See Section 2 below for adjustments made to the published figures.

The rationale of using the pooled approach is to create a bigger sample that would reduce the variability of the estimates, measured in terms of Relative Standard Error (RSE) 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 (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	Modes used for trips, coded into seven categories: Vehicle Driver Vehicle passenger Train Bus Walk only Walk linked Other
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	% 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: Commute 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 (rounded to '000)
WEIGHTED_HOUSEHOLDS	Total households in the SA3 (rounded to '000)
WEIGHTED_VEHICLES	Total number of vehicles in the SA3 (rounded to '000)
MODE_LABEL	Modes used for trips, coded into seven categories: Vehicle Driver Vehicle passenger Train Bus Walk only Walk linked Other
WEIGHTED_TRIPS	Total number of trips (rounded to '000)
PCT_OF_SA3_WEIGHTED_TRIPS	% of total trips for each SA3
WEIGHTED_TOTAL_DISTANCE	Total distance travelled in kilometers (rounded to '000)
PCT_OF_SA3_WGTD_TOTAL_DISTANCE	% of total distance travelled for each SA3
WEIGHTED_TRIPS_AVG_DISTANCE	Average distance travelled in kilometers
WEIGHTED_TRIPS_AVG_TIME (Mode by SA3)	Average on-mode time for travel by mode (in minutes)
WEIGHTED_TRIPS_AVG_JRNY_TIME (Purpose by SA3)	Average journey time for travel by purpose (in minutes)
PURPOSE	Purpose for trips, coded into eight categories: Commute 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.

Singleton and Mid-Coast 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.

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 (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	Modes used for trips, coded into seven categories: Vehicle Driver Vehicle passenger Train Bus Walk only Walk linked Other
WEIGHTED_TRIPS	Total number of trips (rounded to '000)
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	% of total distance travelled for each LGA
WEIGHTED_TRIPS_AVG_DISTANCE	Average distance travelled in kilometers (rounded to '000)
WEIGHTED_TRIPS_AVG_TIME (Mode by LGA)	Average on-mode time for travel by mode (in minutes)
WEIGHTED_TRIPS_AVG_JRNY_TIME (Purpose by LGA)	Average journey time for travel by purpose (in minutes)
PURPOSE	Purpose for trips, coded into eight categories: Commute Education/Childcare Personal business Serve passenger Shopping Social/Recreation Work related business Other

4. Reliability of estimates

TPA has computed standard errors (SE) and relative standard errors (RSE) for the **total weighted trips** for each Region, SA3 and LGA, for the 2018/19 HTS estimates.

Estimates with RSEs of 25% or more are not considered reliable for most purposes. These estimates are subject to high sampling errors and should be used with caution.

The following estimates have an RSE =>25%:

Geography	Wave	Estimate
SA3 Hawkesbury	2018/19	Total WEIGHTED_TRIPS by Mode and by Purpose
SA3 Richmond-Windsor	2018/19	Total WEIGHTED_TRIPS by Purpose
LGA Mosman	2018/19	Total WEIGHTED_TRIPS by Mode and by Purpose
LGA Dungog	2018/19	Total WEIGHTED_TRIPS by Mode and by Purpose
LGA Lane Cove	2018/19	Total WEIGHTED_TRIPS by Mode
LGA Hunters Hill	2018/19	Total WEIGHTED_TRIPS by Mode

Appendix A: HTS Study area map