



2011 Journey to Work data

About the JTW data

This is a brief guide to assist those using the Bureau of Transport Statistics (BTS) 2011 Journey to Work (JTW) dataset. Please see the [2011 JTW User Guide](#) for more details.

The JTW data are derived from the 2011 Census of Population and Housing conducted by the Australian Bureau of Statistics (ABS). It includes data on employment by industry and occupation; the workers' place of usual residence, place of work and socio-demographic characteristics; as well as method of travel to work at a detailed geographical level known as a travel zone (TZ).

Scope

The scope of all 2011 JTW tables is summarised in the list of tables but in general is:

Origin (residence):

Employed persons aged 15 and over whose usual residence is in NSW including those with no fixed address but defined to be in NSW.

OR

Destination (jobs):

Employed persons aged 15 and over who (a) work in a fixed place of work in NSW and, (b) those with no fixed place of work (NFA) defined to be in NSW.

Table format and variables

Each row of a table represents the aggregation of all employed persons that have the same combination of characteristics for each variable. The counts of employed persons with this same combination are shown in the final column ("EMPLOYED_PERSONS"). The tables do not have unit records and CANNOT be merged to link different variables.

Additional geographic variables are provided to allow for aggregation of data at a range of spatial levels. All geographic variables refer to either a destination or origin. Destination or place of work geographies have the prefix "D_" and origin or place of residence has the prefix "O_".

For more information about the variables, including associated variable descriptions and code frames, please see the complete [2011 JTW User Guide](#).

JTW Tables

The BTS 2011 JTW data are held as a series of separate tables in comma separated (CSV) files. Each JTW table has a different combination of employment and/or person variables.

All tables are subjected to confidentiality processes before release. No reliance should be placed on small cells (counts of less than or equal to three).

The BTS has released two sets of JTW tables for 2011:

- a) Tables 1-19: Standard set of tables with counts of workers based on a combination of employment and person variables.
- b) Tables EH1-EH12: Enumerated at home (EH) set. This set of tables contains different variables to the first release tables 1 to 19, including the addition of a usual address indicator variable (UAICP) that flags whether the respondent was enumerated at home or elsewhere on census day. The table numbering is different for the two datasets.

The tables below outline the full list of JTW tables available via the [BTS website](#):

Standard JTW Tables

Table name	Variables ¹	Rows of data ²	Scope	Counts of employed persons
Table 1	OSA2 by DSA2	97,363	Jobs (DTZ) in NSW only	3,112,697
Table 2	DTZ by Industry (4 digit)	264,432	Jobs (DTZ) in NSW only	3,112,642
Table 3	DTZ by Occupation (4 digit)	328,186	Jobs (DTZ) in NSW only	3,112,647
Table 4	DTZ by Industry (1 digit) by Mode15	200,486	Jobs (DTZ) in NSW only	3,112,642
Table 5	DTZ by Occupation (1 digit) by Mode15	157,724	Jobs (DTZ) in NSW only	3,112,636
Table 6	DTZ by Industry (2 digit) by Occupation (1 digit)	317,300	Jobs (DTZ) in NSW only	3,112,636
Table 7	DSA2 by Industry (1 digit) by Occupation (2 digit)	205,752	Jobs (DTZ) in NSW only	3,112,557
Table 8	OSLA by DSLA by Industry (1 digit)	81,785	Jobs (DTZ) in NSW only	3,112,594
Table 9	OSA3 by DSA3 by Industry (2 digit)	101,961	Jobs (DTZ) in NSW only	3,112,667
Table 10	OSLA by DSLA by Mode32	56,926	Jobs (DTZ) in NSW only	3,112,641
Table 11	OTZ by DTZ	572,534	Jobs (DTZ) in NSW only	3,112,625
Table 12	OSA2 by DTZ by Mode9	426,819	Jobs (DTZ) in NSW only	3,112,635
Table 13	OTZ by DSA2 by Mode9	474,883	Jobs (DTZ) in NSW only	3,112,625
Table 14	OTZ by Mode235	58,252	Residence (OTZ) in NSW only	3,138,311
Table 15	DTZ by Mode235	50,996	Jobs (DTZ) in NSW only	3,112,640
Table 16	DSA2 by Income11 by Agegroup7 by Sex by Mode9	264,201	Jobs (DSA2) in NSW only	3,112,578
Table 17	OSA2 by DSA2 by Mode15	229,671	Jobs (DSA2) in NSW only	3,112,647
Table 18	DSA2 by Industry (1 digit) by Occupation (1 digit) by Mode15	242,166	Jobs (DSA2) in NSW only	3,112,623
Table 19	OTZ by DTZ by mode9	756,557	Residence (OTZ) in NSW OR Jobs (DTZ) in NSW	3,175,193

¹ The finest geographic level is listed here, but broader geographies are also provided in the JTW data tables.

² Excludes column headers.

Enumerated at Home (EH) JTW tables

Table name	Variables ¹	Rows of data ²	Scope	Counts of employed persons
Table EH1	OSA2 by DSA2 by UAICP	117,527	Jobs (DTZ) in NSW	3,112,697
Table EH2	OTZ by Mode10 by UAICP	45,279	Workers who live (OTZ) in NSW	3,138,311
Table EH3	DTZ by Mode10 by UAICP	42,436	Jobs (DTZ) in NSW	3,112,641
Table EH4	OSA2 by DSA2 by Mode10 by UAICP	238,809	Jobs (DTZ) in NSW	3,112,666
Table EH5	OTZ by DSA2 by Mode10 by UAICP	510,655	Jobs (DTZ) in NSW	3,112,624
Table EH6	OSA2 by DTZ by Mode10 by UAICP	457,917	Jobs (DTZ) in NSW	3,112,645
Table EH7	OTZ by DTZ by Mode10 by UAICP	783,237	Jobs (DTZ) in NSW	3,112,624
Table EH8	OTZ by Mode32 by UAICP	70,638	Workers who live (OTZ) in NSW	3,138,311
Table EH9	DTZ by Mode32 by UAICP	60,833	Jobs (DTZ) in NSW	3,112,641
Table EH10	OSA2 by DSA2 by Mode32 by UAICP	279,508	Jobs (DTZ) in NSW	3,112,610
Table EH11	OTZ by DSA2 by Mode32 by UAICP	553,188	Jobs (DTZ) in NSW	3,112,618
Table EH12	OSA2 by DTZ by Mode32 by UAICP	498,636	Jobs (DTZ) in NSW	3,112,653

Further notes

Please note the following issues which may affect analysis and interpretation:

- The 2011 travel zone boundaries have changed compared to the 2006 boundaries. To assist in time series analysis using the same geography, [travel zone concordances](#) e.g. 2011 to 2006 TZ are provided.
- There are differences between 2006 and 2011 in the way that workplace addresses assigned to dump codes were imputed to zones.
- The geography of Census outputs has changed compared to previous censuses. Standard 2011 Census outputs follow a new SA (Statistical Area) geography as its primary output.
- Employment counts from the JTW data are lower compared to the employment estimate for the corresponding base year from the BTS Employment Forecasts. The difference is about 12.5% and is due to census under-enumeration and under-reporting of labour force status, which the BTS accounts for when producing its employment forecasts.

The BTS 2011 JTW data are an enhanced version of the standard dataset supplied by the ABS. The main differences between the two datasets are:

- The ABS' standard Census outputs include dump codes, which are codes assigned to records with incomplete workplace address information. In the BTS dataset, there are no dump codes, as all dump code data have been imputed to actual zones. The imputation method used available information about industry and method of travel to work.
- The travel zone geography used in the BTS JTW dataset (2011 BTS Travel Zone System) is at a finer level with 3,517 BTS travel zones in NSW, than the 2011 Census Destination Zone System (DZN) with 3,148 DZNs. Because ABS zones were further split into BTS travel zones, there are fractional counts of people in JTW

¹ The finest geographic level is listed here, but broader geographies are also provided in the JTW data tables.

² Excludes column headers.