



Australian Government

Department of Infrastructure and Regional Development

Bureau of Infrastructure, Transport and Regional Economics



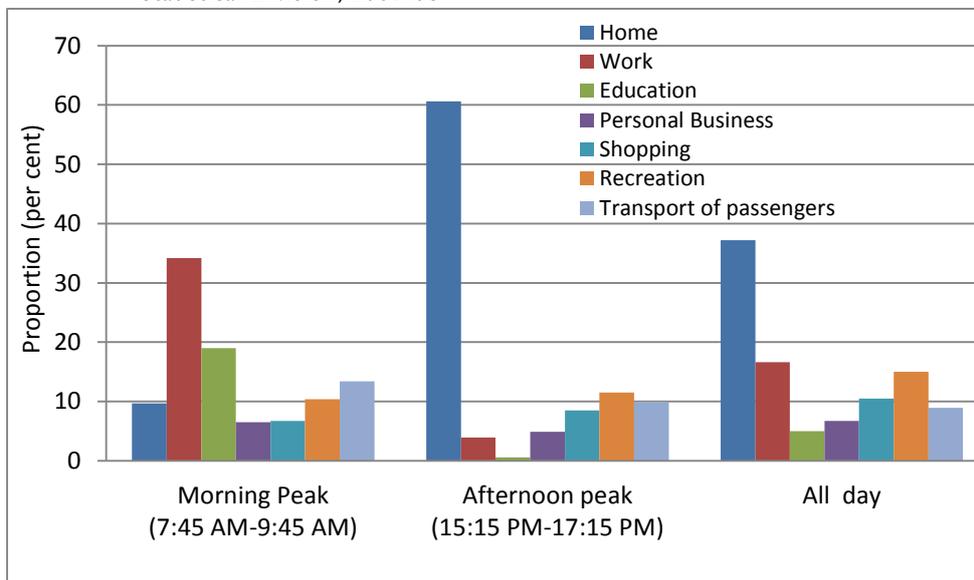
Five facts about commuting in Australia

The purpose of this Information Sheet is to provide the reader with a quick source of basic facts about commuting in Australia. Beneath each fact there is the essential data (in figures). If you need to know more, a list of further readings is included at the end.

1. *Is commuting a big part of urban transport demand?*

The transport network is catering for different trip purposes through the day. In the morning peak when the network in large cities is handling peak demand, only a third of people are on their way to work. One in five are on their way to school, TAFE or University and the rest (around half) are doing other things.

Figure 1: Motorised trip proportions by time of the day and destination purpose, Weekday, Melbourne Statistical Division, 2007-08

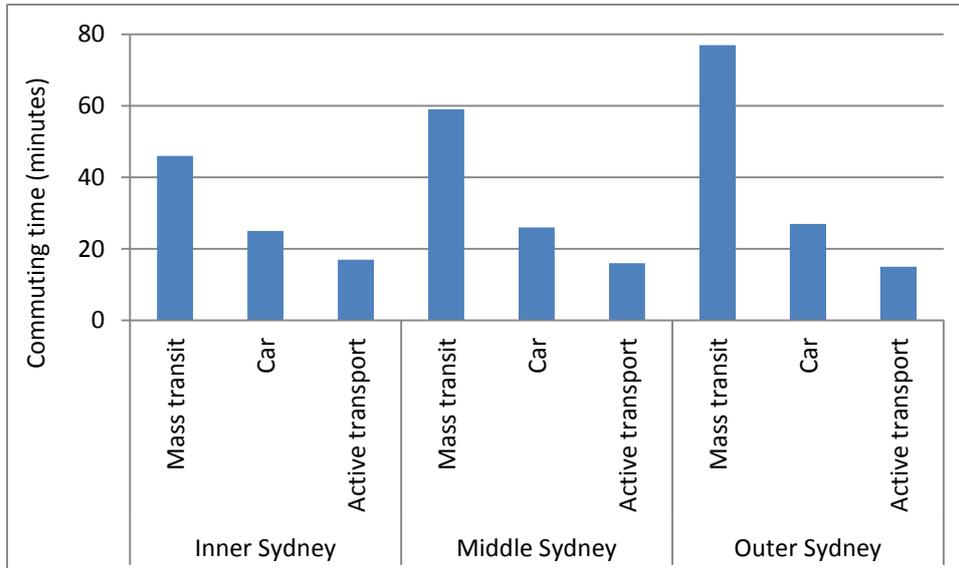


Source: McGreoch C A (2011), 30 years of travel in Melbourne: 1978/79 and 2007/08, Australasian Transport Research Forum (ATRF) Conference, 28-30 September 2011, Adelaide, Table 6. (http://atrf.info/papers/2011/2011_McGeoch.pdf)

2. Is it true that a lot of people are spending hours stuck in traffic?

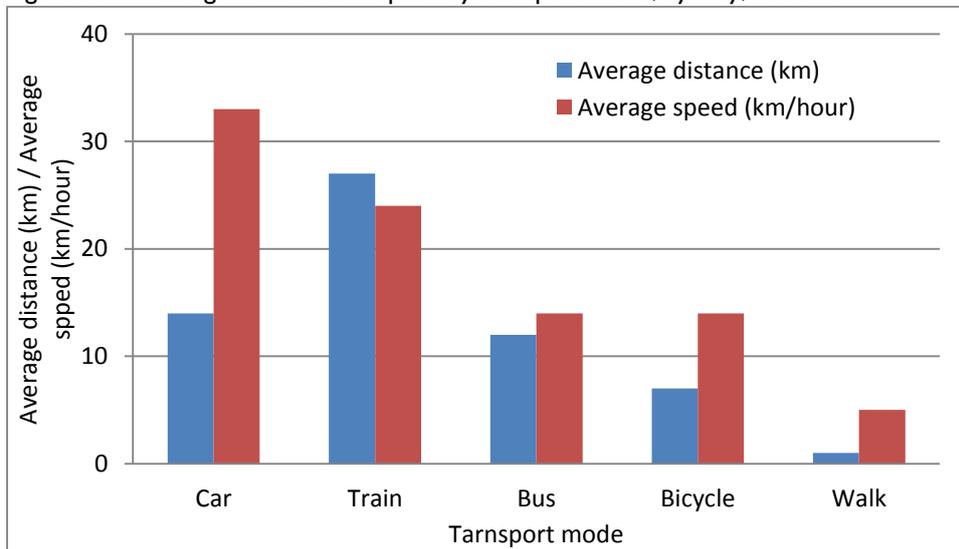
The vast majority of people doing the longest commutes are sitting in trains not cars. The average mass transit commute in Sydney, for example, is 62 minutes compared to 26 minutes by car. One reason for this is that the average speed of trains in Sydney is 24 km/h. Buses are even slower at 14 km/h. Cars average 33km/h. This pattern of much longer commutes by mass transit than cars seems to be common in most of the world's cities.

Figure 2: Average duration of lengthy commutes by place of residence and priority transport mode, Sydney, 2008-13



Source: BITRE (2016) *Lengthy commutes in Australia*, Report 144, Canberra (based on NSW Bureau of Statistics and Analytics *Household Travel Survey*, 2008-2013).

Figure 3: Average distance and speed by transport mode, Sydney, 2008-13

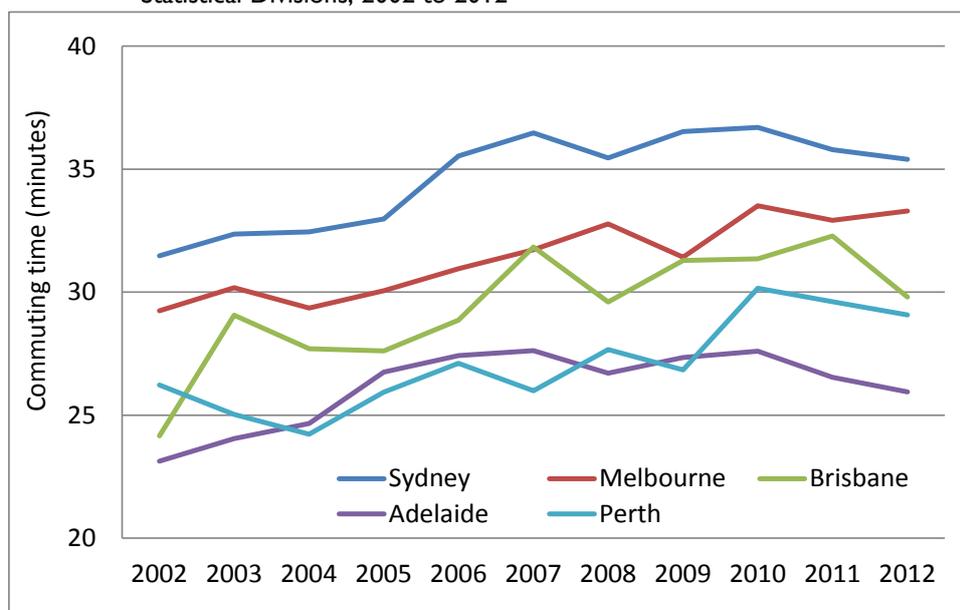


Source: BITRE (2016) *Lengthy commutes in Australia*, Report 144, Canberra (based on NSW Bureau of Statistics and Analytics *Household Travel Survey*, 2008-2013).

3. *What has an Italian physicist got to do with commuting?*

Cesare Marchetti was one of the first to realise that human travel times are highly patterned. In particular, he realised that there was a limit of about an hour and ten minutes to people's daily travel budget. A recent study of millions of phone records shows that this is the case everywhere from the Ivory Coast to Boston. What does this mean for commuters? The perceived costs of commuting rise steeply after a one way commute exceeds around 35 minutes (the Marchetti constant). This fact means cities structure themselves around average commuting times rather than people adapting to the structure of the city.

Figure 4: Average commuting times for full-time workers in Sydney, Melbourne, Brisbane, Adelaide and Perth Statistical Divisions, 2002 to 2012

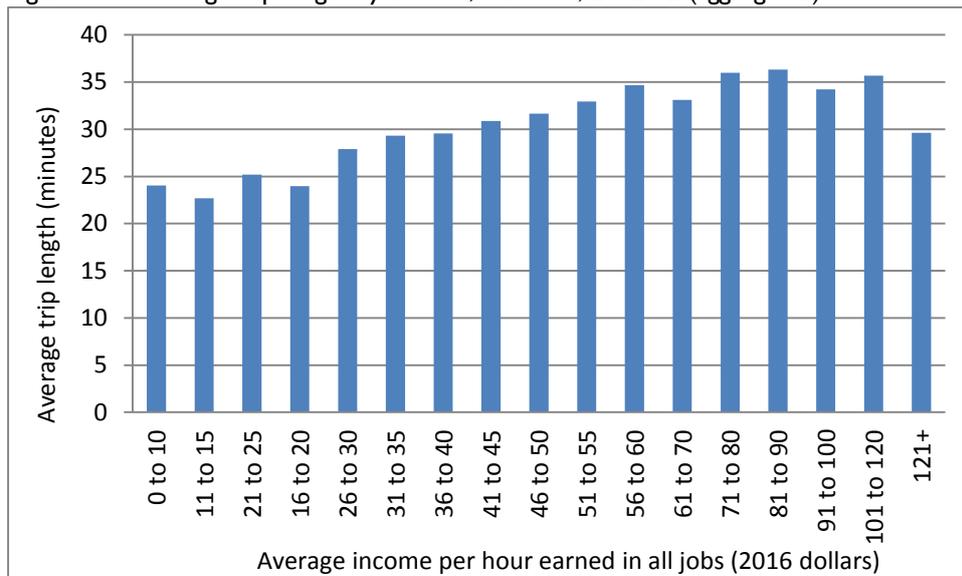


Source: BITRE analysis of HILDA survey unit record data. The HILDA survey was initiated, and is funded, by the Australian Government through the Department of Social Services (DSS). Responsibility for the design and management of the survey rests with the Melbourne Institute of Applied Economic and Social Research (University of Melbourne).

4. *Why do some people commute longer?*

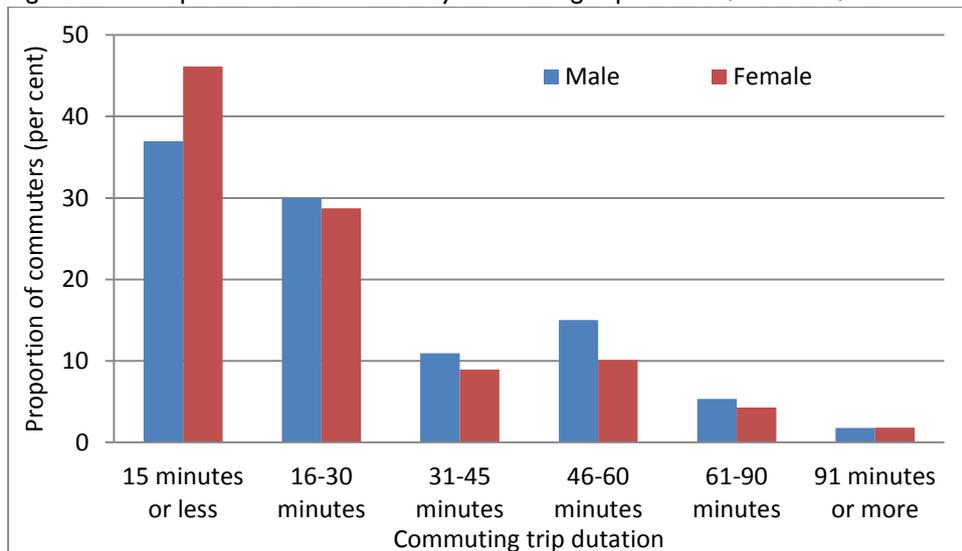
Money is the main reason some people make long commutes. One of the main ways our economy expands is through division of labour. In other words, people are doing ever more specialist jobs requiring more specialist skills. These jobs are unevenly distributed throughout the city and to reach them can often involve longer commutes. This means that longer commutes are predominantly undertaken by people travelling to higher wage jobs. This pattern seems to be common in cities all over the world. Like many other countries, men commute longer than women in Australia.

Figure 5: Average trip length by income, Australia, 2002-12 (aggregated)



Source: BITRE analysis of HILDA wave 2 and wave 12 (aggregated).

Figure 6: Proportion of commuters by commuting trip duration, Australia, 2012



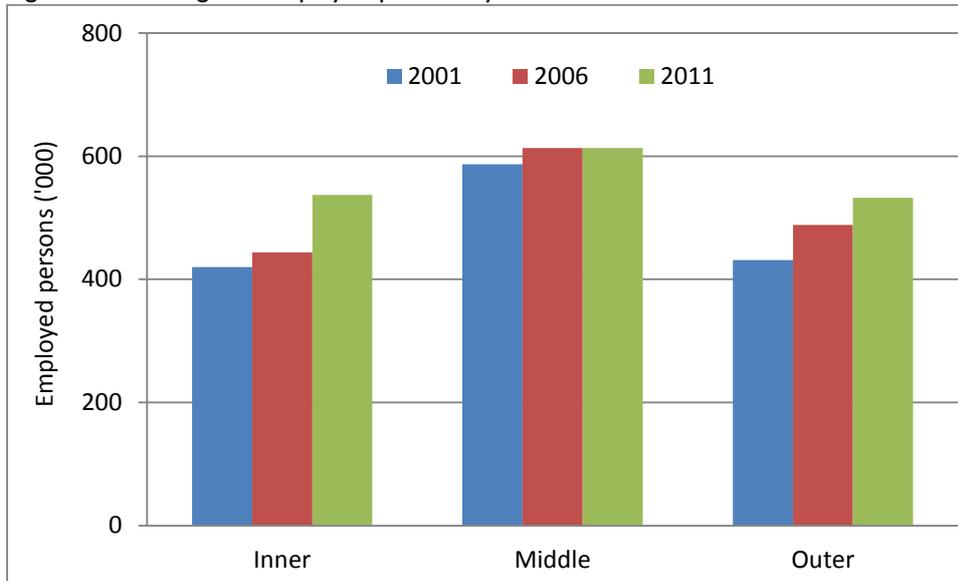
Source: BITRE analysis of HILDA wave 12.

5. Are our commuting patterns changing?

Yes, they are in large cities. After the Second World War jobs in Australian cities began to suburbanise as changes in manufacturing technology demanded single story factories on greenfield sites. Commuting patterns changed to reflect this and cross suburban commuting began to dominate the old radial commuting model. Now, jobs growth, particularly for high paid jobs, is often higher in the CBD and the radial commuting pattern is again becoming more common. This can mean more mass transit travel which generally means longer commutes. This is being offset to some degree by the largest construction boom of inner city apartments

Australia has ever seen. Analysis by BITRE indicates that the growth of jobs in inner Melbourne may have stabilised since 2011.

Figure 7: Changes in employed persons by sector, Melbourne, 2001, 2006 and 2011



Source: BITRE analysis of ABS 2001, 2006 and 2011 Census of Population and Housing data.

Want to know more?

BITRE publications			
Year	Title	Type	Link
BITRE (2016)	Lengthy commutes in Australia	Report 144	http://bitre.gov.au/publications/2016/rr_144.aspx
BITRE (2015)	Australia's commuting distance: cities and regions	Info Sheet 73	http://bitre.gov.au/publications/2015/is_073.aspx
BITRE (2013b)	Population growth, jobs growth and commuting flows - a comparison of Australia's four largest cities	Report 142	http://bitre.gov.au/publications/2013/report_142.aspx
BITRE (2013a)	Population growth, jobs growth and commuting flows in South East Queensland	Report 134	http://bitre.gov.au/publications/2013/report_134.aspx
BITRE (2012)	Population growth, jobs growth and commuting flows in Sydney	Report 132	http://bitre.gov.au/publications/2013/report_132.aspx
BITRE (2011)	Population growth, jobs growth and commuting flows in Melbourne	Report 125	http://bitre.gov.au/publications/2013/report_125.aspx
BITRE (2010)	Population growth, jobs growth and commuting flows in Perth	Report 119	http://bitre.gov.au/publications/2013/report_119.aspx

Other Sources								
Sources/surveys	Description	Attributes	Geography	Longitudinal	Distance	Time	Mode	Purpose
Census 2011	Five years interval (2011, 2006 and 2011)	Demography, journey-to-work by mode, distance, time	National (SLA, LGA, GCCSA, Suburbs etc.)	✓	✓	✓	✓	✓

(continued)

Sources/surveys	Description	Attributes	Geography	Longitudinal basis	Distance	Time	Mode	Purpose
HILDA	Annually from 2001	Demographic, employment and family variables (including	National (various areas, e.g. SLA, LGA, GCCSA, Suburbs etc.)	✓	✓	✓	✓	✓
PC Commuting Survey	2011 (one-off)	Commuting times and related questions (such	Selected 24 Metropolitan cities	X	X	✓	✓	✓
NSW Household Travel Survey	Since 1997-98	Household and personal demographics, labour force characteristics,	Sydney GMA (Greater Metropolitan Area)	X	✓	✓	✓	✓
VISTA (2013)	2012-13	Transport mode, method of travel, purpose of travel, distance and time	Melbourne (Inner, Middle and Outer)	X	✓	✓	✓	✓
QLD Household Travel Survey	Time series (1992, 2004, 2007 and 2009)	Transport mode, method of travel, purpose of travel, distance and time	SEQ, Brisbane, Gold Coast and Sunshine Coast	X	✓	✓	✓	✓
ABS Time Use Survey	Irregular (first conducted in 1992, then repeated in 1997 and 2006)	Transport mode and household type (collected information on how people used their time)	NSW/Sydney and VIC/Melbourne (Major statistical regions - labour force regions)	X	X	X	✓	✓

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