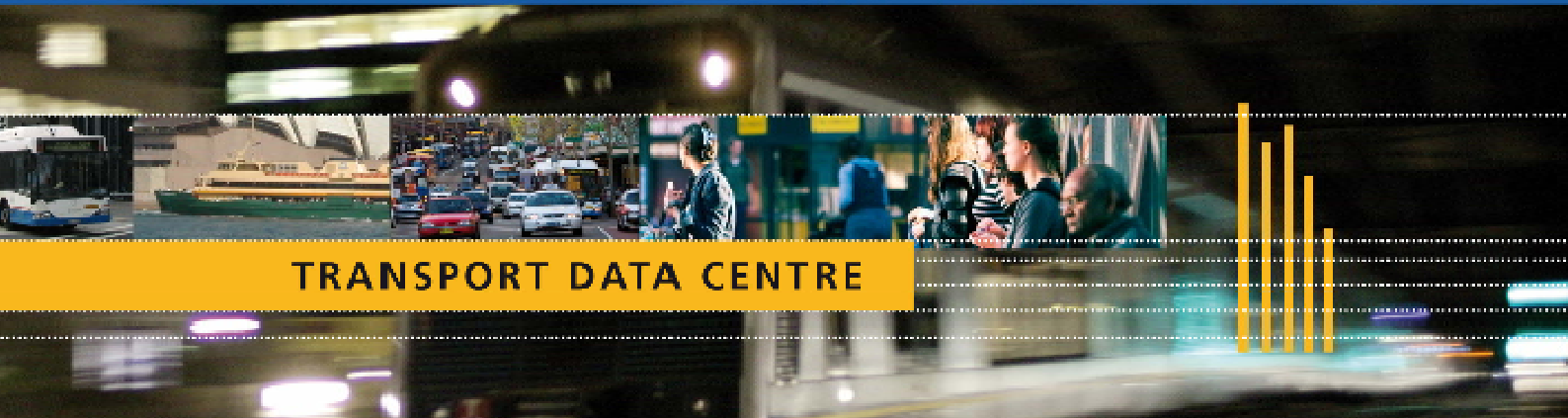


2008/09 HOUSEHOLD TRAVEL SURVEY



TRANSPORT DATA CENTRE

SUMMARY REPORT
2010 Release



Transport

About the Transport Data Centre

The Transport Data Centre (TDC), of Transport NSW, provides data on current and future demographic, employment and travel patterns. This data is used as inputs to transport and land use planning and policy making in NSW.

The TDC's main datasets include:

- Personal travel data for the Sydney Greater Metropolitan Area from the continuous Household Travel Survey (HTS)
- Commercial vehicle travel data for the Sydney Greater Metropolitan Area from the Freight Movement Model (FMM)
- Journey to Work (JTW) data for NSW derived from the Australian Bureau of Statistics (ABS) Census of Population and Housing
- Travel zone population and employment forecasts for the Sydney Greater Metropolitan Area (5-yearly)
- Travel zone trip forecasts for the Sydney Greater Metropolitan Area (5-yearly)

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1.

About this Publication

This publication is a compilation of annual statistics on the travel behaviour of Sydney residents derived from the Transport Data Centre's continuous Household Travel Survey (HTS). It updates last year's summary report with the addition of the most recent estimates for the 2008/09 wave of the survey. Readers will note a change to the more precise way of referring to HTS data by financial year.

The annual estimates reported here are each based on three waves of data pooled and weighted to the latest estimated resident population (ERP). The 2008/09 estimates are based on the 2008/09, 2007/08 and 2006/07 waves of survey data, weighted to the June 30th 2008 ERP.

The HTS is the largest and most comprehensive source of personal travel data for the Greater Metropolitan Area (GMA) - see Figure 1 on the following page.

In line with previous summary reports the focus is on travel by residents of Sydney Statistical Division. The remainder of the report is divided into the following sections:

Section 2 Travel in Sydney – Key Indicators

The Key Indicators summarize the main travel trends for 2001/02 to 2008/09.

Section 3 Travel in Sydney – Characteristics

This section provides more detail on the travel behaviour of Sydney residents in text and graphs, on the following topics:

- Travel trends
- Purpose of travel
- Mode of travel
- Purpose by mode
- Reason for mode choice
- Customer satisfaction with public transport
- Public transport fare and ticket type
- Trip distance and duration
- Time of day of travel
- Profile of travellers
- Vehicle use

Section 4 Detailed Tables

Comprehensive statistics for each of the above topics are provided in Section 4, including historical data and long term growth rates.

Appendices

This section contains background information about the HTS, its methodology, statistical validity and data items, including a glossary of terms and definitions to further clarify the concepts used in this report. Information is also provided on other TDC publications at the rear of this report.

Figure 1 Greater Metropolitan Area (GMA)



2. Travel in Sydney - Key Indicators

2.1 Summary

State Plan Targets

Public transport % share for Commute trips

To/from CBD in peak hours

2001/02	73%
2002/03	74%
2003/04	72%
2004/05	71%
2005/06	71%
2006/07	74%
2007/08	77%
2008/09	76%

2016 Target 80%

Across Sydney SD all day

2001/02	21%
2002/03	21%
2003/04	21%
2004/05	20%
2005/06	22%
2006/07	22%
2007/08	24%
2008/09	24%

2016 Target 28%

Trends in Travel

The Key Indicators tables on pages 4 and 5 summarise the main travel patterns for 2008/09 and show percentage change over the previous year as well as since 2001/02.

In 2008/09 Sydney residents made 16.3 million trips on an average weekday and 14.7 million on an average weekend day. Weekday trip growth slowed over the past year to 0.2%, despite population growth of 1.5% for the period.

The changes in mode use and trip distance described in this report suggest a range of influences on recent travel patterns, including the rise in population and urban densities in inner areas, making alternatives to car travel more accessible. Economic conditions over the period may have also influenced trip purpose and mode choice.

Purpose of Travel

In the 12 months to 2008/09 trips for commuting grew by 0.7% but this was slower than in previous years. Work related travel other than commuting declined however, by 0.3% for trips and 2.9% for distance.

While social and recreational trip making remained strong – growing by 1.4% – other discretionary travel declined, shopping trips fell by 0.1% and personal business trips fell by 1.3%.

Mode of travel

Over the past year there was a growth in public transport and walk trips which exceeded the average rate of trip growth, while car trips declined.

Average weekday train trips grew by 3.1% and bus trips by 2.4%. Walk only trips grew by 2.7%. Vehicle driver trips declined by 0.8% and passenger trips declined by 0.2%.

Kilometres travelled

Distance travelled grew a little faster than total trips but by only 0.7% for total distance and 0.4% for the average trip length. However, per capita trip distance declined, due to the faster growth in population over the year.

Vehicles

The drop in car trips is not reflected in levels of household vehicle ownership, which grew at 2.8%. Despite growth in vehicle ownership, people appear to be more selective about how often they use the car.

Trip duration

Average travel time has remained steady. The average time spent travelling each day is 81 minutes per person. The average duration of a work trip is 34 minutes and the average duration of a non-work trip is 18 minutes.

Key Transport Indicators – for residents of Sydney SD

Indicator		2001/02	2005/06	2006/07	2007/08	2008/09	% change 07/08- 08/09	AAGR 01/02- 08/09
POPULATION	Persons ('000)	4,067	4,181	4,218	4,269	4,334	1.5%	0.9%
	No. of households ('000)	1,499	1,564	1,583	1,602	1,626	1.5%	1.2%
trips								
TOTAL TRAVEL	Trips av. weekday ('000)	15,207	15,757	15,939	16,263	16,299	0.2%	1.0%
	Trips av. weekend day ('000)	13,013	13,686	14,700	14,581	14,735	1.1%	1.8%
	Trips per capita - weekday	3.74	3.77	3.78	3.81	3.76	-1.3%	0.1%
	Trips per capita - weekend	3.20	3.27	3.49	3.42	3.40	-0.5%	0.9%
	Trips per household - weekday	10.14	10.08	10.07	10.15	10.02	-1.2%	-0.2%
	Trips per household - weekend	8.68	8.75	9.29	9.10	9.06	-0.4%	0.6%
vehicles								
VEHICLES	Private vehicles ('000)	2,115	2,315	2,339	2,388	2,455	2.8%	2.1%
	Vehicles per household	1.41	1.48	1.48	1.49	1.51	1.3%	1.0%
kilometres								
DISTANCE	Total travel ('000 kms)	127,560	129,401	131,273	133,765	134,656	0.7%	0.8%
	Total travel per capita	31.4	30.9	31.1	31.3	31.1	-0.8%	-0.1%
	Av. trip length	8.4	8.2	8.2	8.2	8.3	0.4%	-0.2%
	Vehicle travel (VKT) ('000)	74,091	74,689	75,614	76,346	77,022	0.9%	0.6%
	VKT per capita (km)	18.2	17.9	17.9	17.9	17.8	-0.6%	-0.4%
minutes								
TRAVEL TIME	Av. work trip duration	31	33	34	34	34	0.0%	1.3%
	Av. non-work trip duration	18	18	18	18	18	0.0%	0.0%
	Daily travel time per capita	79	79	80	81	81	0.0%	0.4%
trips '000s								
REASON FOR TRAVEL (trips)	Social/recreation	3,359	3,614	3,670	3,659	3,711	1.4%	1.4%
	Serve passenger	2,653	2,858	2,939	2,968	2,930	-1.3%	1.4%
	Shopping	2,453	2,489	2,473	2,555	2,553	-0.1%	0.6%
	Commuting	2,262	2,389	2,468	2,540	2,557	0.7%	1.8%
	Work related business	1,567	1,384	1,355	1,443	1,439	-0.3%	-1.2%
	Education/childcare	1,279	1,329	1,377	1,424	1,447	1.6%	1.8%
	Personal business	1,198	1,221	1,198	1,192	1,177	-1.3%	-0.3%
	Other	436	473	459	483	487	0.8%	1.6%
trips '000s								
MODE OF TRAVEL (trips)	Vehicle driver	7,686	7,952	7,992	8,080	8,015	-0.8%	0.6%
	Vehicle passenger	3,462	3,470	3,550	3,642	3,635	-0.2%	0.7%
	Train	775	794	815	863	890	3.1%	2.0%
	Bus	893	924	923	962	986	2.4%	1.4%
	Walk only	2,741	2,973	2,964	3,035	3,118	2.7%	1.9%
	Other modes	338	380	384	405	406	0.4%	2.7%
kilometres '000s								
REASON FOR TRAVEL (distance)	Social/recreation	27,961	26,924	26,970	26,881	27,181	1.1%	-0.4%
	Serve passenger	16,016	16,385	16,728	16,677	17,364	4.1%	1.2%
	Shopping	11,812	12,341	12,564	13,186	12,490	-5.3%	0.8%
	Commuting	32,398	33,747	34,756	36,585	37,030	1.2%	1.9%
	Work related business	20,522	20,616	20,611	21,114	20,511	-2.9%	0.0%
	Education/childcare	8,392	9,020	9,606	9,604	9,951	3.6%	2.5%
	Personal business	8,252	8,120	7,827	7,681	7,780	1.3%	-0.8%
	Other	1,675	1,673	1,668	1,729	1,682	-2.7%	0.1%
kilometres '000s								
MODE OF TRAVEL (distance)	Vehicle driver	74,091	74,689	75,614	76,346	77,022	0.9%	0.6%
	Vehicle passenger	27,684	27,439	27,354	26,952	27,024	0.3%	-0.3%
	Train	13,957	15,113	15,758	17,203	16,627	-3.3%	2.5%
	Bus	5,677	5,492	5,658	6,101	6,329	3.7%	1.6%
	Walk only	2,497	2,623	2,585	2,602	2,654	2.0%	0.9%
	Other modes	1,802	2,018	2,147	2,322	2,549	9.8%	5.1%

Key Transport Indicators *continued*

Indicator		2001/02	2005/06	2006/07	2007/08	2008/09
trips %						
REASON FOR TRAVEL (trips %)	Social/recreation	22.1%	22.9%	23.0%	22.5%	22.8%
	Serve passenger	17.4%	18.1%	18.4%	18.2%	18.0%
	Shopping	16.1%	15.8%	15.5%	15.7%	15.7%
	Commuting	14.9%	15.2%	15.5%	15.6%	15.7%
	Work related business	10.3%	8.8%	8.5%	8.9%	8.8%
	Education/childcare	8.4%	8.4%	8.6%	8.8%	8.9%
	Personal business	7.9%	7.7%	7.5%	7.3%	7.2%
Other	2.9%	3.0%	2.9%	3.0%	3.0%	
trips %						
MODE OF TRAVEL (trips %)	Vehicle driver	48.4%	48.2%	48.1%	47.6%	47.0%
	Vehicle passenger	21.8%	21.0%	21.4%	21.4%	21.3%
	Train	4.9%	4.8%	4.9%	5.1%	5.2%
	Bus	5.6%	5.6%	5.5%	5.7%	5.8%
	Walk only	17.2%	18.0%	17.8%	17.9%	18.3%
	Other modes	2.1%	2.3%	2.3%	2.4%	2.4%
distance %						
REASON FOR TRAVEL (distance %)	Social/recreation	22.0%	20.9%	20.6%	20.1%	20.3%
	Serve passenger	12.6%	12.7%	12.8%	12.5%	13.0%
	Shopping	9.3%	9.6%	9.6%	9.9%	9.3%
	Commuting	25.5%	26.2%	26.6%	27.4%	27.6%
	Work related business	16.2%	16.0%	15.8%	15.8%	15.3%
	Education/childcare	6.6%	7.0%	7.3%	7.2%	7.4%
	Personal business	6.5%	6.3%	6.0%	5.8%	5.8%
Other	1.3%	1.3%	1.3%	1.3%	1.3%	
distance %						
MODE OF TRAVEL (distance %)	Vehicle driver	58.9%	58.6%	58.6%	58.0%	58.3%
	Vehicle passenger	22.0%	21.5%	21.2%	20.5%	20.4%
	Train	11.1%	11.9%	12.2%	13.1%	12.6%
	Bus	4.5%	4.3%	4.4%	4.6%	4.8%
	Walk only	2.0%	2.1%	2.0%	2.0%	2.0%
	Other modes	1.4%	1.6%	1.7%	1.8%	1.9%

Table notes

AAGR – Annual average growth rate.

Unless otherwise indicated data is reported for average weekday.

Table numbers are rounded, but percentages are calculated from original unrounded data.

Population and household estimates from the HTS refer to people living in occupied private dwellings.

When reporting Purpose of travel, linked trips are used, with trips to 'return home' are recoded to the main previous ('priority') purpose.

When reporting Mode of travel, unlinked trips are used with the exception of walk only trips.

See Glossary for variable definitions.

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3.

Travel in Sydney - Characteristics

3.1 Travel trends

As the Key Indicators Table shows, despite strong growth in population (1.5%) and vehicle registrations (2.8%) for the period, there was a slowing in the growth of travel demand among Sydney residents over the year to 2008/09.

Slow growth rates occurred for all of the main indicators of travel demand – total trips, total kilometres travelled by all modes and vehicle kilometres travelled (VKT).

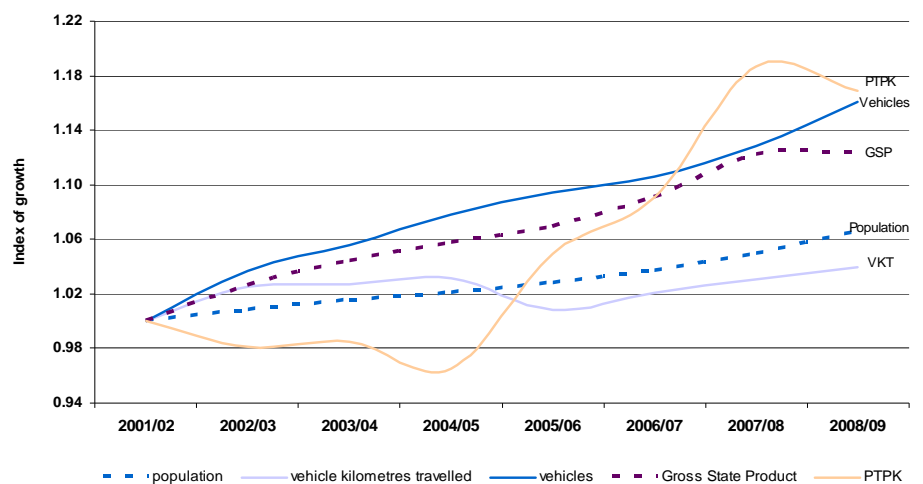
Average weekday trips grew by 0.2% from 2007/08 to 2008/09 – well below the long term annual average rate of growth of 1.0% since 2001/02.

Total distance travelled on an average weekday grew by 0.7% over the year with vehicle kilometres travelled (VKT) higher at 0.9%.

A notable exception has been the significant growth in total passenger kilometres travelled by public transport (PTPK), which has grown steadily since 2004/05, peaking in 2007/08.

Figure 3.1 shows the growth in some of these indicators indexed over 2001/02 - population, household vehicle ownership, PTKP, VKT and Gross State Product (GSP).

Figure 3.1 Travel by Sydney residents on an average weekday¹



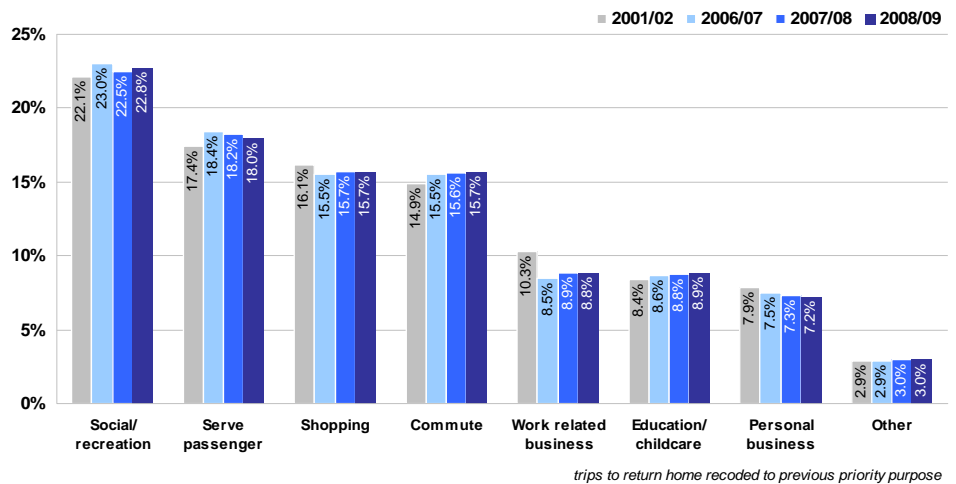
¹ Note – in contrast to previous years this graph has a 2001/02 base

Purpose of travel

The reasons for travel indicate the types of activities that residents undertake across the day. The relative importance of each trip purpose has remained fairly consistent over time, although the share for an individual purpose can vary slightly from year to year, depending on the broader demographic and economic context.

Figure 3.2 shows that most weekday trips are to undertake discretionary activities. The single largest trip purpose is social/recreational, followed by serve passenger (to accompany or provide a lift to someone), then shopping. The travel purposes generally regarded as non-discretionary - commute, work related business and education - account for about a third of daily trips.

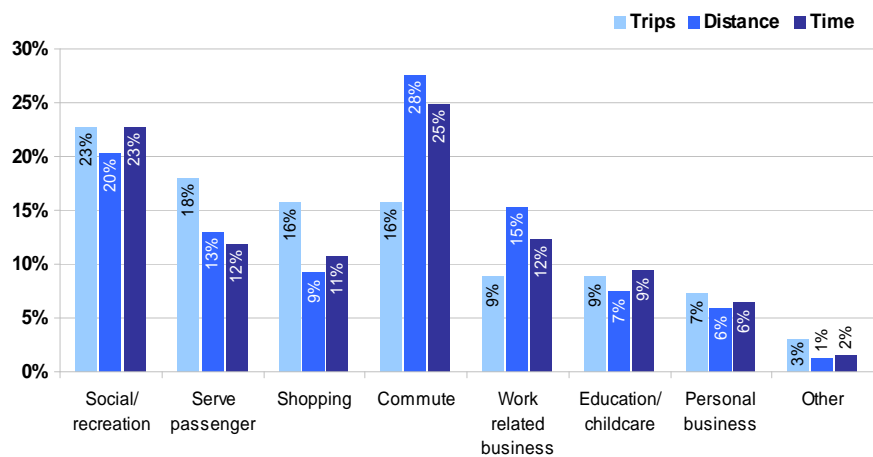
Figure 3.2 Purpose of average weekday trips over time



The breakdown of trip distance and travel time by purpose shows how far and how long people are prepared to travel to undertake different activities. The importance of commuting is demonstrated by the fact that while it accounts for only 16% of trips on an average weekday, it makes up just over a quarter (28%) of the total distance travelled and a quarter of total time spent travelling (Figure 3.3).

Conversely, shopping also accounts for 16% of trips but only about 10% of both travel time and distance. This indicates that these trips tend to be short and local. Serve passenger travel shows a similar pattern.

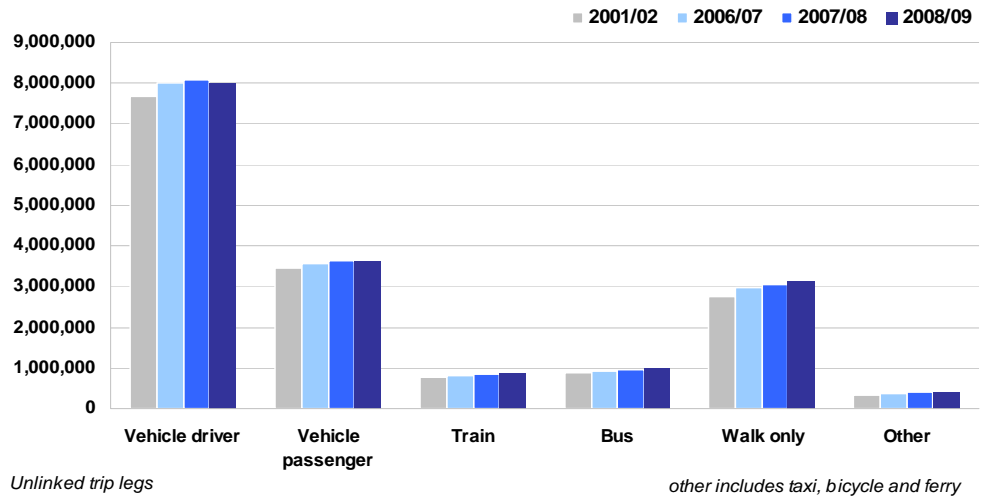
Figure 3.3 Purpose share of trips, distance and time, average weekday



Mode of travel

Vehicle remains the dominant mode of travel for Sydney residents. About 8 million vehicle driver and 3.6 million vehicle passenger trips are made each weekday. Vehicle travel has remained fairly stable in recent years, while train, bus and walk trips have grown at a faster rate than total trips.

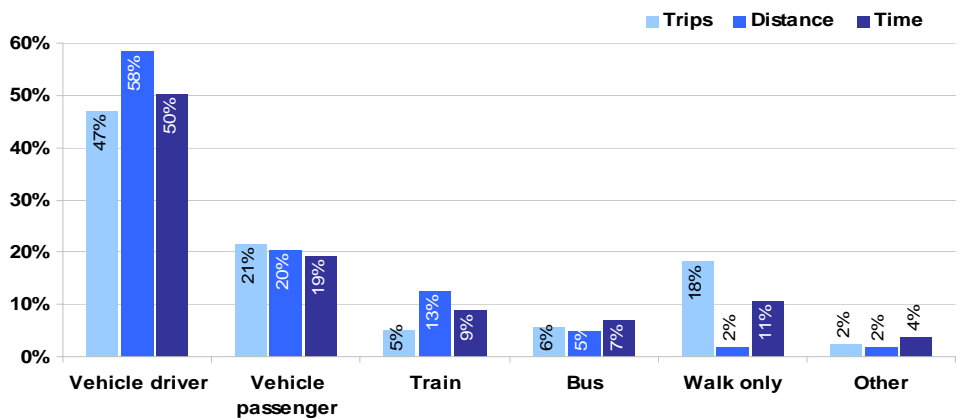
Figure 3.4 Number of trips by mode on an average weekday



Travel demand can be expressed in terms of the number of trips, distance travelled or time spent travelling. Together, these measures provide a more complete picture of the nature of demand across the transport network.

For example, rail accounts for only 5% of average weekday trips but its importance in catering for long journeys is demonstrated by its 13% share of total distance travelled and 9% of travel time on an average weekday (Figure 3.5). Walking on the other hand accounts for a much larger share of trips (18%) and time (11%) than distance (2%).

Figure 3.5 Mode share of trips, distance and travel time, 2008/09



Purpose by mode

Patterns of mode use vary depending on the trip purpose, and provide an indication of the markets for each mode.

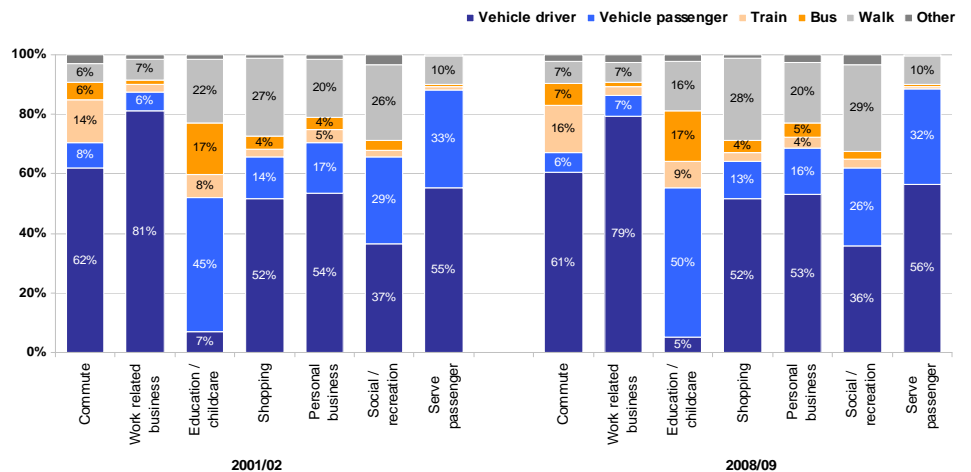
Across all purposes, the majority of trips are by private vehicle, with serve passenger and work related business trips the most likely to be undertaken by car.

The activities most likely to be accessed by walking are social/recreation, shopping, and personal business. This is probably because many of these trips are part of trip chains, with a number of activities undertaken in the same locality.

The overall pattern of mode use by purpose has not changed significantly over time. Car still accounts for the majority of trips for all trip purposes; however a few notable trends are evident in Figure 3.6. Since 2001/02, car use has declined to some extent for commuting and social/recreation, with these trips shifting to public transport and walking respectively.

On the other hand, car use has grown for travel to education, with more of these trips undertaken as a vehicle passenger rather than walking.

Figure 3.6 Mode share of trips purpose, on an average weekday over time¹



¹ Proportions of less than 4% are not labelled in the graph to save space but are reported in the tables in Section 4.

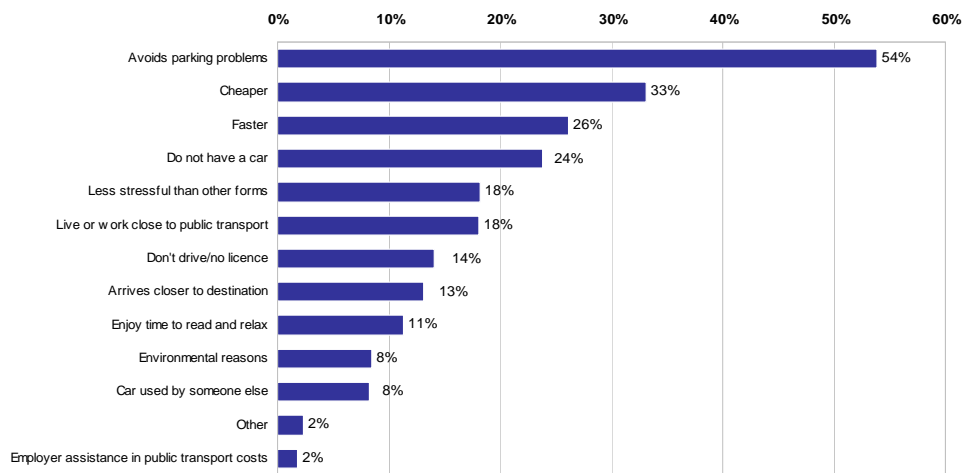
Reason for mode choice

The reasons why people choose a particular mode of travel for a given trip purpose can be complex. Figure 3.6 (on the previous page) shows the importance of public transport for commuting.

The reasons reported by HTS respondents for using public transport as part of the commute to work have remained fairly consistent over time (Figure 3.7). The most important being the availability and cost of parking, as well as trip costs and speed.

In 2008/09 there has been a large increase in the number of respondents reporting parking – 54% in 2008/09 compared with 47% for 2007/08 reported in the 2009 HTS Summary Report. The cost advantage of public transport was reported by 33% in 2008/09, up from 27% in the previous year. For some people public transport is faster than driving. The reporting of this reason has remained relatively stable at around 26%.

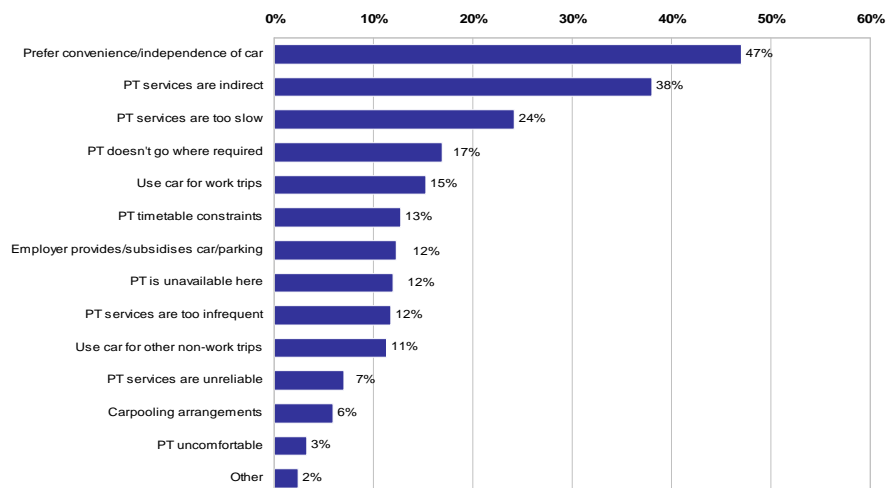
Figure 3.7 Reasons for commuting by public transport¹, 2008/09²



For those who commuted by car only, the convenience and independence afforded by private vehicle is still the most important reason given, growing from 44% to 47% over the past year. Obviously those who drive to work also have access to parking and for some, vehicle costs are employer subsidised.

The most frequently reported public transport constraints were the indirectness of services (38% up from 26%) and slowness (24% up from 18%).

Figure 3.8 Reasons for commuting by car¹, 2008/09²



¹ Percentages do not add to 100% as respondents may give multiple reasons.

² Unlike data in the rest of this report, the data used for these graphs are not pooled, rather, they represent a single year of data.

Public transport customer satisfaction

Not everyone uses the same modes of travel every day, so to more accurately gauge satisfaction with public transport, respondents were asked which types of public transport they used in the last 7 days. Satisfaction with each mode used was reported on four service characteristics; frequency, safety, comfort and on-time running. Although the HTS does not gauge how important each of these is for public transport users.

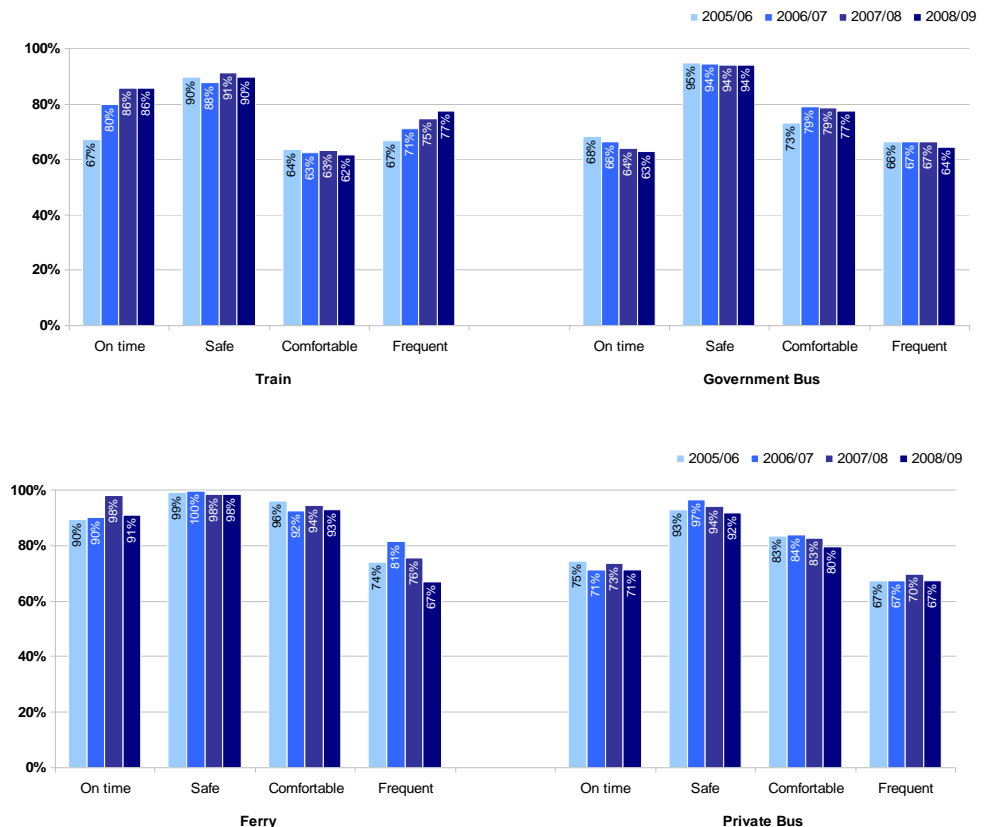
Satisfaction with train frequency and on-time running has improved considerably since 2005/06. Satisfaction with rail comfort and safety has been much more stable but showed a slight decline over the year to 2008/09. Notably, satisfaction with safety is very high – at around 90% for each of the last 4 years.

Over the past few years, satisfaction with government bus services has remained fairly stable on most indicators, with the exception of on-time running, which has shown a small decline each year since 2005/06. Satisfaction with safety on government buses has been at or above 94% over this time.

Private bus users are most satisfied with safety, followed by comfort then on-time running and frequency.

Satisfaction with ferry services is high on all measures except frequency – which has also declined over the past few years.

Figure 3.9 Proportion of respondents satisfied¹ with public transport



¹ 'always' or 'mostly' satisfied.
Satisfaction data is wave based not pooled

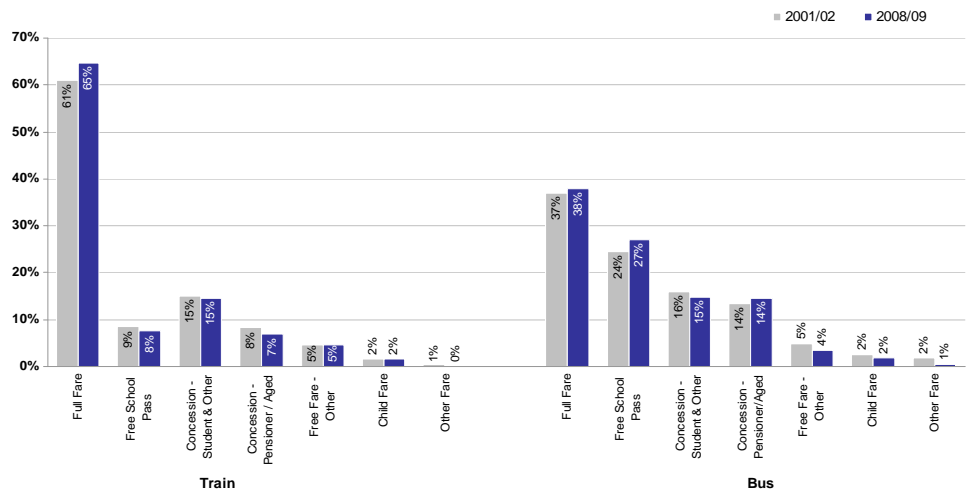
Public transport – fare and ticket type

The distribution of trips by fare and ticket type reflects the different markets for public transport. Figures 3.10 and 3.11 show train and bus trips by fare and ticket type, and how this has changed over time.

Fares

By far the majority of train trips are made by full-fare paying passengers and this increased from 61% in 2001/02 to 65% in 2008/09. While full-fare is also the single largest category for bus services - at more than a third (38% in 2008/09), Figure 3.10 shows the importance of bus services for student travel to school and for the transport of other concession card holders.

Figure 3.10 Proportion of train and bus trips by fare type over time

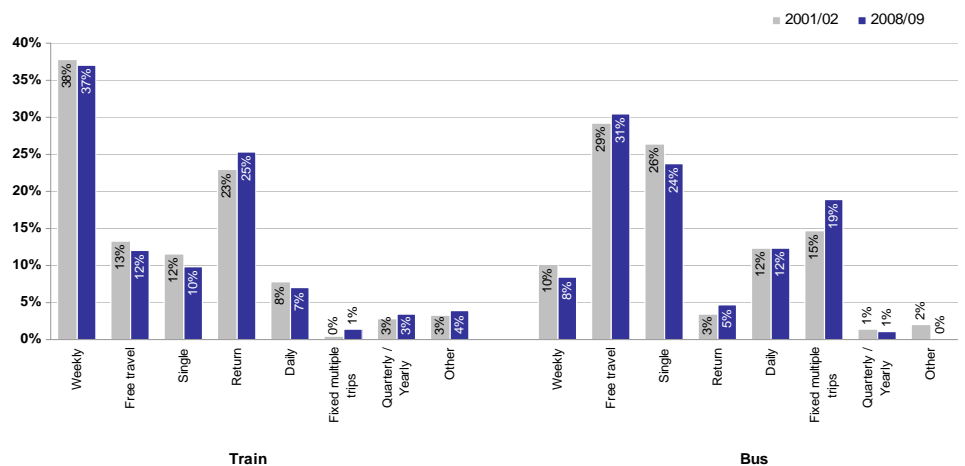


Ticket type

There is much greater variation in the spread of trips by different ticket types than fares, which is partly a reflection of the ticket products available for different modes of public transport.

Weekly tickets are used for over a third of train trips and return tickets for a quarter. For paying travellers on bus, single tickets are the most commonly used, followed by the fixed multiple and all day tickets. The most notable change since 2001/02 has been the growth in the use of fixed multiple tickets, such as Travel Tens for bus trips.

Figure 3.11 Proportion of train and bus trips by ticket type over time

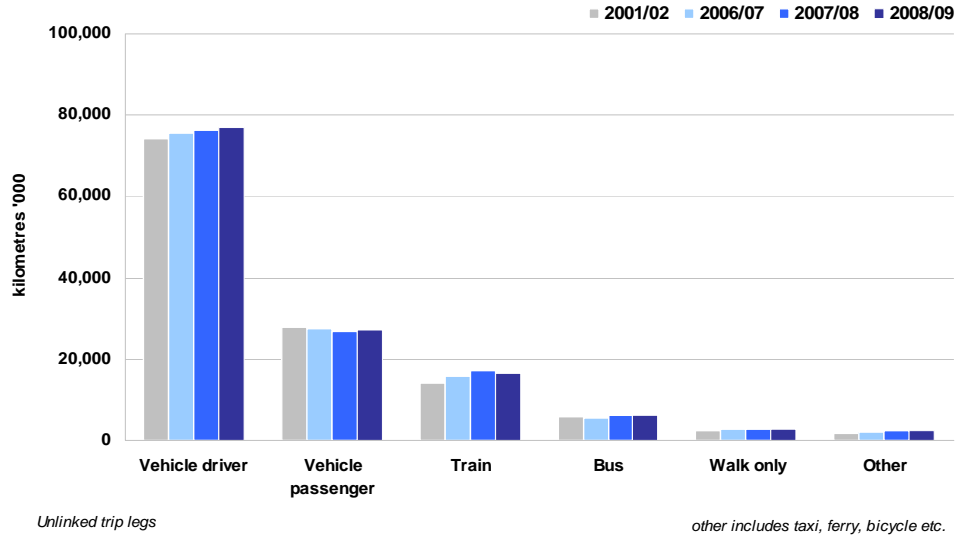


Distance¹

Distance by mode

Of the 134.6 million kilometres travelled by Sydney residents in 2008/09, a little over half, 77 million kilometres, was as a vehicle driver and a further 27 million person trip kilometres were as a vehicle passenger. This reflects the dominance of car as a proportion of all trips.

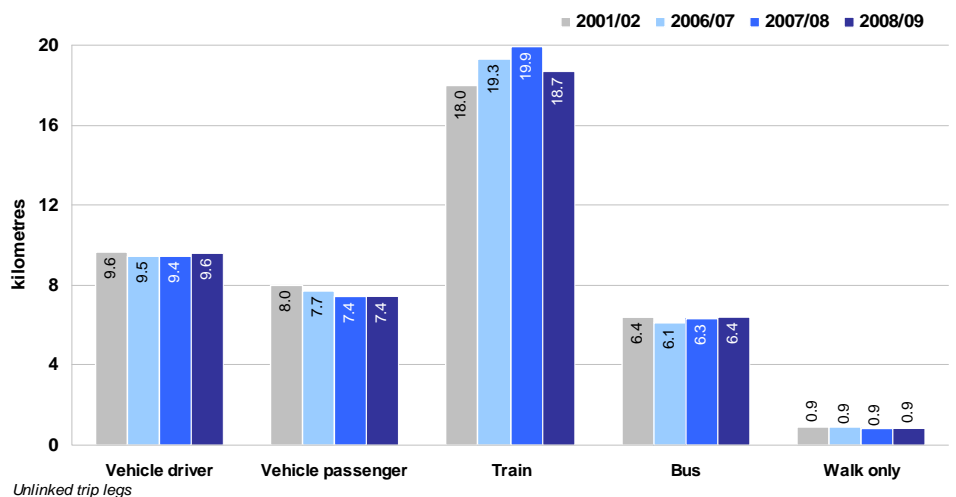
Figure 3.12 Total trip distance by mode



The importance of train for long haul travel is reflected by the fact that the average train trip is about twice the length of the average car driver trip. The average walk trip is just under one kilometre.

The average trip lengths for each mode have remained fairly stable, with the exception of train which has been increasing but showed a slight decline over 2008/09.

Figure 3.13 Average trip distance by mode



¹ Distance method updated for 2008/09 and revised back to 2006/07

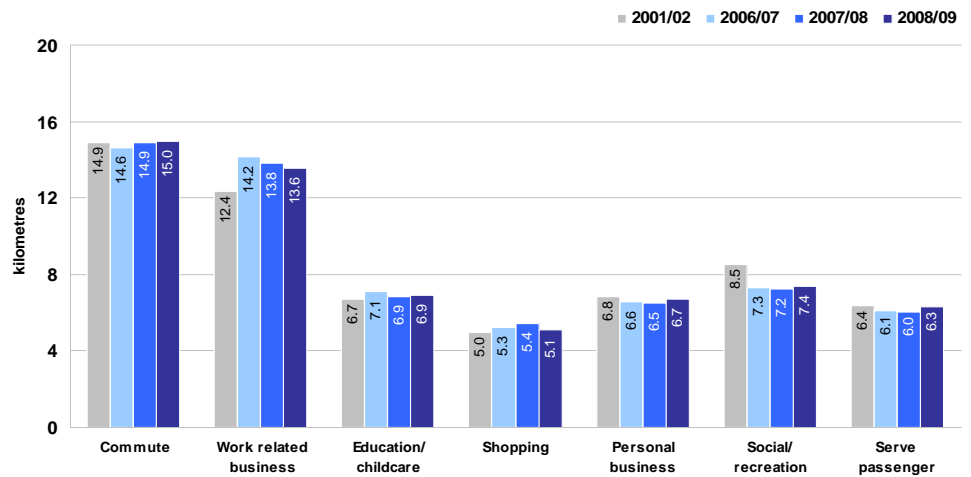
Distance cont.

Distance by purpose

Average trip distance by purpose gives an indication of how far people are inclined to travel to undertake different activities. Trips to work and for work related business are on average the longest at around 15 kilometres. Trips for discretionary purposes are about half the length of commute trips.

Average trip length by purpose has remained fairly stable over time.

Figure 3.14 Average trip distance by purpose

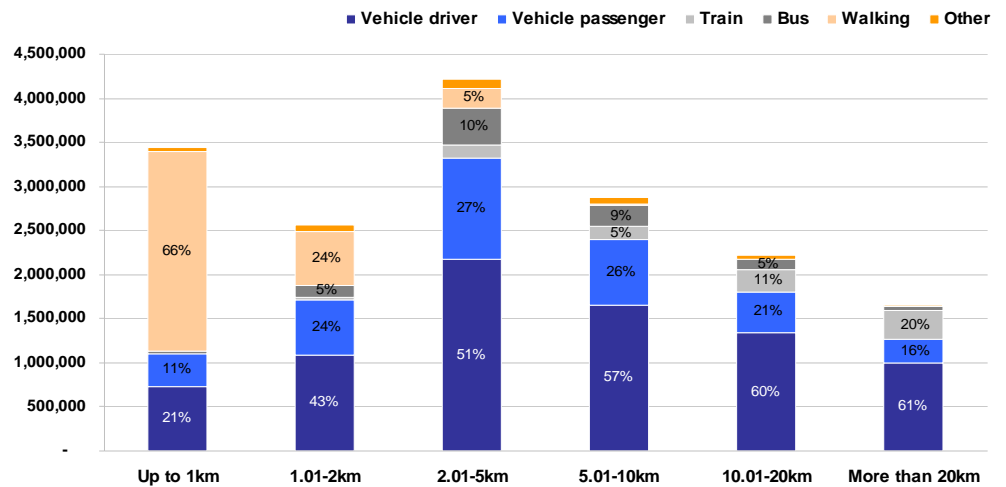


Distance range of trips by mode

Of all trips made on an average weekday in 2008/09, 20% are less than 1km, 35% are less than 2km and 60% are less than 5km.

Almost 3.5 million trips of less than one kilometre are made each weekday and about 65% of these are walk only trips. A further million trips are by vehicle and about two thirds of these are as a driver. Figure 3.15 presents trips by distance range and mode and shows that vehicle use jumps for trips over one kilometre.

Figure 3.15 Average weekday trips: distance by mode, 2008/09



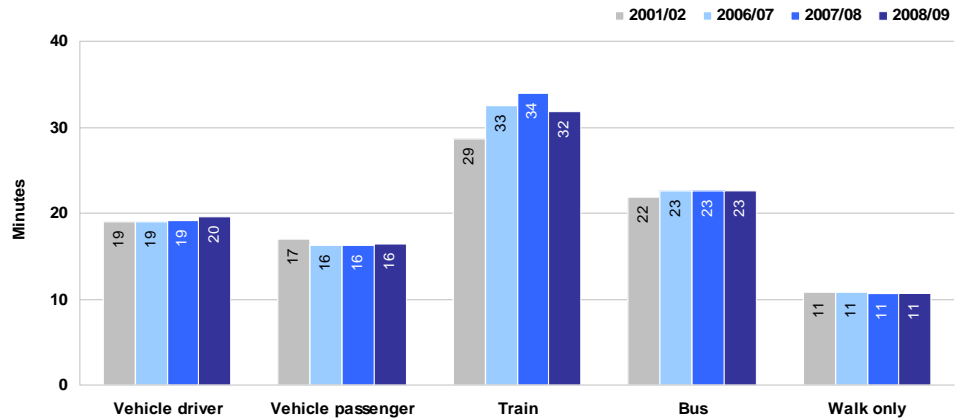
Duration¹

The time spent travelling reflects the distance travelled and the speed of the different transport networks.

Duration by mode

The longest average trip length is for train trips, at just over 30 minutes. Bus trips have the next longest average trip duration at 23 minutes. The average car driver trip is slightly shorter at 20 minutes.

Figure 3.16 Average trip duration by mode

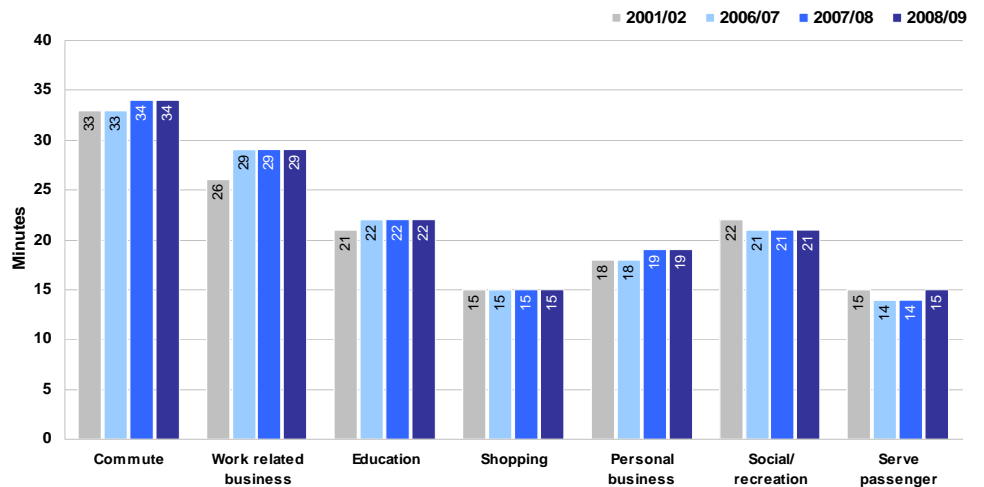


Duration by purpose

Commuter trips have the longest average duration at 34 minutes, followed by work related business (29 minutes) then education (22 minutes). Social/recreation trips are 21 minutes on average. Shopping and serve passenger trips are both about 15 minutes in duration.

Average trip duration by purpose has not changed significantly over time.

Figure 3.17 Average trip duration by purpose



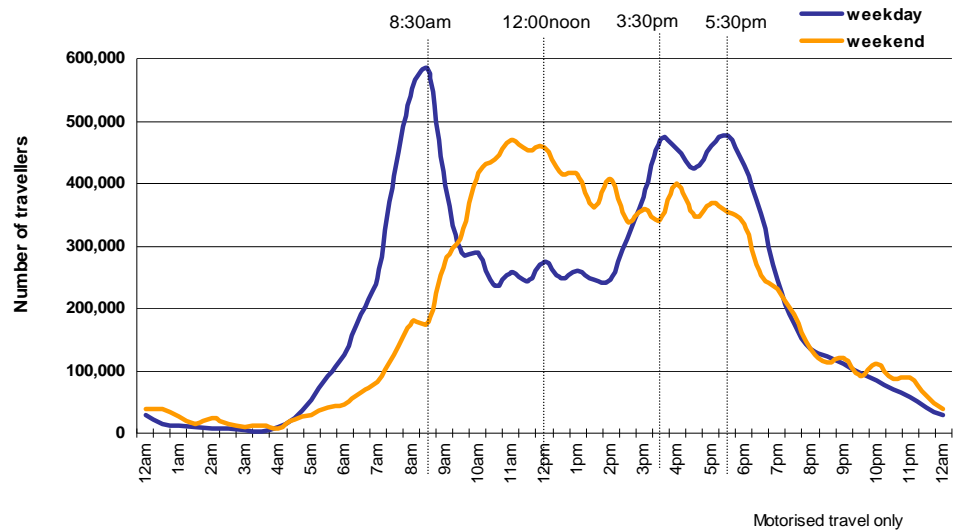
¹ Trip duration by purpose is based on the door-to-door journey time of linked trips. Trip duration by mode is based on unlinked trip legs, which refers to in-vehicle time in the case of motorised modes.

Time of day

Graphing the distribution of trips across the day shows the strong peaks in travel during the morning, mid afternoon and evening.

The pattern of travel demand is quite different on weekends, with a much later morning start, building up over a number of hours, peaking by the middle of the day and tapering off gradually through the afternoon and evening. This reflects the dominance of discretionary travel on weekends compared with weekdays.

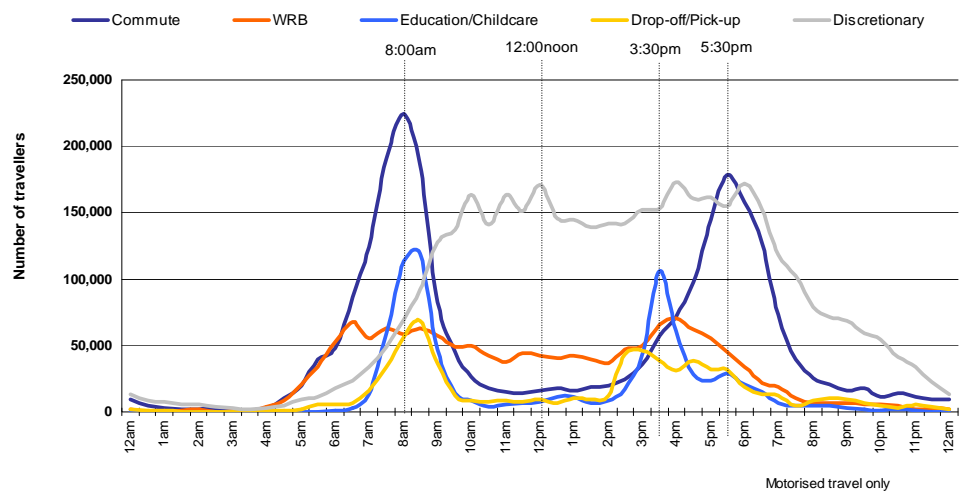
Figure 3.18 Motorised trips by time of day, average weekday and weekend, 2008/09



Further breaking down these trips by purpose shows that on weekdays the am and pm peaks are dominated by travel for commuting, education and to drop-off or pick up someone.

Discretionary travel, for social/recreation, personal business and shopping purposes, are more spread across the day, with a later start than non-discretionary purposes (work and education travel) and begin to decline from around 6pm.

Figure 3.19 Motorised (unlinked) trips for selected purposes by time of day, average weekday, 2008/09



Profile of travellers

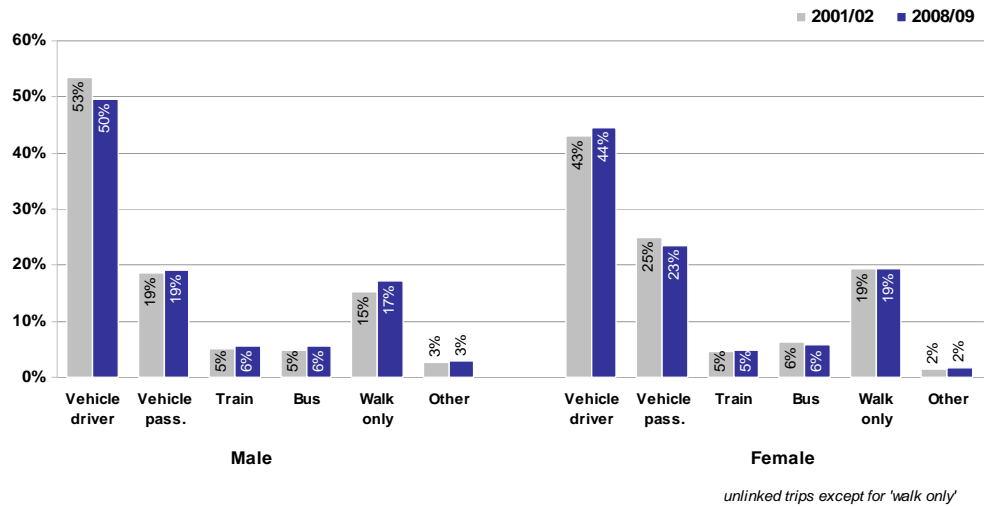
Mode by Gender

Males and females have similar patterns of mode use – both are dominated by private vehicle use. Vehicle driver is the most common mode followed by vehicle passenger and then walking.

Females are slightly less likely to be the driver and more likely to be a passenger than males. Females are also more likely to walk than males. Rates of train and bus use are similar for both groups.

This general pattern has remained consistent since 2001/02, but with a gradual shift away from the dominance of men behind the wheel and towards men walking more.

Figure 3.20 Mode share of trips by gender

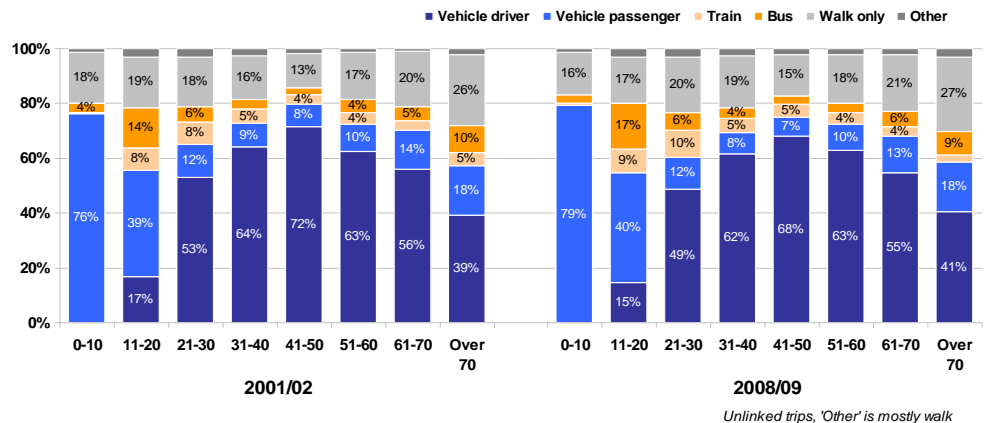


Mode by Age

Patterns of mode use change with age. After the age of 10, car use increases until the fifties and then declines. Walking shows the reverse pattern, decreasing until the fifties then growing. Public transport use is highest for those in their teens and twenties and those aged over 70 years.

From 2001/02 to 2008/09 children and teenagers walked less but adults of most age groups walked more. The share of trips as a car driver fell slightly for most groups of driving age but mostly for those in their twenties and forties.

Figure 3.21 Mode share of trips by age group

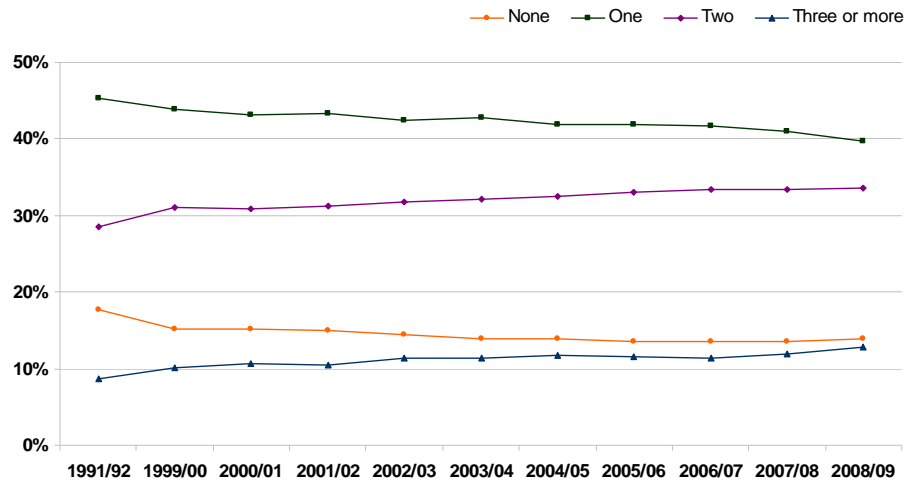


Vehicles

Vehicle Ownership

Household vehicle ownership has continued to grow over the last 10 years. Multiple car households continue to outgrow those with only one car.

Figure 3.22 Household vehicle ownership over time



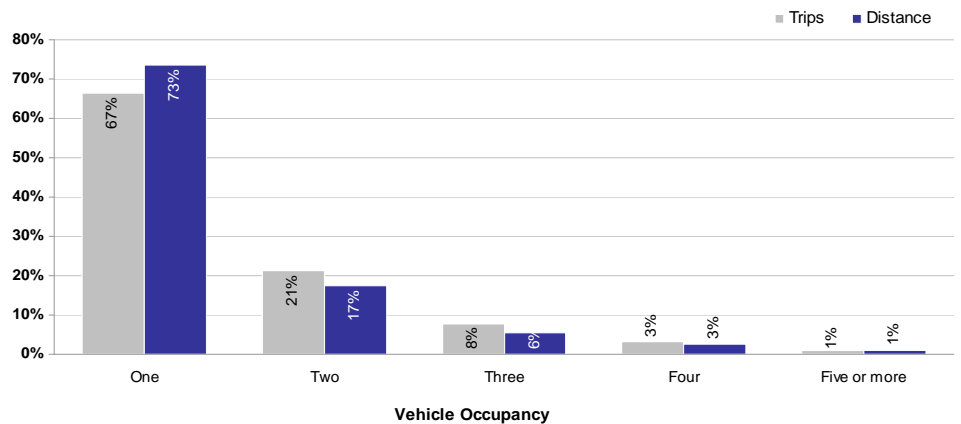
Vehicle Occupancy

This graph shows the distribution of car driver trips and vehicle kilometres travelled (VKT) by vehicle occupancy. Over two-thirds of vehicle driver trips and VKT involves vehicle drivers travelling alone. The proportion is higher for distance than trips.

The distribution of trips and distance by vehicle occupancy has not changed markedly over time.

In 2008/09, average vehicle occupancy per trip was 1.45. For trips to work the average occupancy was 1.10.

Figure 3.23 Vehicle driver trips and distance (VKT) by vehicle occupancy



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DETAILED TABLES



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Table 4.1.1: Total population, households and number of travellers

	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	AAGR % 01/02-08/09
	'000								
Population ¹	4,067	4,101	4,128	4,151	4,181	4,218	4,269	4,334	0.9%
ERP ²	4,128	4,163	4,191	4,214	4,245	4,282	4,334	4,400	0.9%
Travellers	3,377	3,439	3,481	3,540	3,554	3,597	3,615	3,667	1.2%
PT users - average day	610	612	624	613	607	596	617	623	0.3%
PT users - last 7 days	N/A	N/A	353	687	1,081	1,064	1,084	1,096	N/A
Households	1,499	1,517	1,533	1,547	1,564	1,583	1,602	1,626	1.2%
Av. household size	2.71	2.70	2.69	2.68	2.67	2.66	2.66	2.67	-0.2%

Table 4.1.2: Number of trips³

	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	AAGR % 01/02-08/09
	'000								
Average weekday	15,207	15,575	15,826	15,848	15,757	15,939	16,263	16,299	1.0%
Av. weekend day	13,013	13,395	13,478	13,680	13,686	14,700	14,581	14,735	1.8%
Average day	14,580	14,952	15,155	15,229	15,165	15,585	15,783	15,852	1.2%
Av weekday AM peak	3,087	3,187	3,235	3,247	3,267	3,368	3,474	3,513	1.9%
Total weekly (M – F)	76,034	77,874	79,132	79,242	78,787	79,695	81,315	81,497	1.0%
Total weekend (S – S)	26,026	26,790	26,956	27,360	27,371	29,399	29,163	29,469	1.8%
Total weekly (M - S)	102,059	104,665	106,087	106,603	106,158	109,094	110,478	110,966	1.2%

Table 4.1.3: Trip rates⁴ for persons and households (average weekday)

Day type	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	AAGR % 01/02-08/09
Average weekday									
Per person	3.74	3.80	3.83	3.82	3.77	3.78	3.81	3.76	0.1%
Per household	10.14	10.27	10.32	10.24	10.08	10.07	10.15	10.02	-0.2%

4.1 Total Travel

1. Population reported here is derived from the HTS and is for residents of private dwellings only.
2. ERP (ABS Estimated Resident Population) is higher than HTS population as it includes people in non-private dwellings.
3. Number of trips is based on linked trips. See Glossary for the definition of a linked trip.
4. Person trips rates are per capita, that is they are estimated for the total population including those who did not make a trip.

Table 4.2.1: Number of trips by purpose¹

Purpose	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	AAGR % 01/02-08/09
	'000								
Average weekday									
Social/ recreation	3,359	3,620	3,675	3,716	3,614	3,670	3,659	3,711	1.4%
Serve passenger	2,653	2,633	2,756	2,781	2,858	2,939	2,968	2,930	1.4%
Shopping	2,453	2,506	2,492	2,512	2,489	2,473	2,555	2,553	0.6%
Commuter	2,262	2,373	2,381	2,389	2,389	2,468	2,540	2,557	1.8%
Work related business	1,567	1,518	1,497	1,414	1,384	1,355	1,443	1,439	-1.2%
Education/ childcare	1,279	1,286	1,306	1,323	1,329	1,377	1,424	1,447	1.8%
Personal business	1,198	1,195	1,240	1,255	1,221	1,198	1,192	1,177	-0.3%
Other	436	445	480	458	473	459	483	487	1.6%
Total	15,207	15,575	15,826	15,848	15,757	15,939	16,263	16,299	1.0%
Average weekend day									
Social/recreation	6,295	6,473	6,439	6,618	6,651	7,208	7,163	7,171	1.9%
Serve passenger	1,879	1,889	1,901	1,995	1,999	2,198	2,131	2,108	1.7%
Shopping	3,179	3,300	3,228	3,155	3,188	3,377	3,418	3,494	1.4%
Commuter	575	564	580	587	622	663	634	622	1.1%
Work related business	330	350	408	394	377	338	338	342	0.5%
Education/childcare	29	28	36	31	29	37	37	38	3.7%
Personal business	666	707	801	807	739	795	796	897	4.4%
Other	60	84	83	94	81	82	64	63	0.7%
Total	13,013	13,395	13,478	13,680	13,686	14,700	14,581	14,735	1.8%

4.2 Purpose of Travel

1. Linked trips are used when reporting trips by purpose. Trips to 'return home' have been allocated to the previous 'priority purpose'. See Glossary for an explanation and definitions.

Table 4.2.2: Proportion of trips by purpose (average weekday)

Purpose	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
Average weekday								
Social/ recreation	22.1%	23.2%	23.2%	23.4%	22.9%	23.0%	22.5%	22.8%
Serve passenger	17.4%	16.9%	17.4%	17.5%	18.1%	18.4%	18.2%	18.0%
Shopping	16.1%	16.1%	15.7%	15.8%	15.8%	15.5%	15.7%	15.7%
Commute	14.9%	15.2%	15.0%	15.1%	15.2%	15.5%	15.6%	15.7%
Work related business	10.3%	9.7%	9.5%	8.9%	8.8%	8.5%	8.9%	8.8%
Education/ childcare	8.4%	8.3%	8.3%	8.4%	8.4%	8.6%	8.8%	8.9%
Personal business	7.9%	7.7%	7.8%	7.9%	7.7%	7.5%	7.3%	7.2%
Other	2.9%	2.9%	3.0%	2.9%	3.0%	2.9%	3.0%	3.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Average weekend day								
Social/recreation	48.4%	48.3%	47.8%	48.4%	48.6%	49.0%	49.1%	48.7%
Serve passenger	14.4%	14.1%	14.1%	14.6%	14.6%	15.0%	14.6%	14.3%
Shopping	24.4%	24.6%	23.9%	23.1%	23.3%	23.0%	23.4%	23.7%
Commute	4.4%	4.2%	4.3%	4.3%	4.5%	4.5%	4.3%	4.2%
Work related business	2.5%	2.6%	3.0%	2.9%	2.8%	2.3%	2.3%	2.3%
Education/childcare	0.2%	0.2%	0.3%	0.2%	0.2%	0.3%	0.3%	0.3%
Personal business	5.1%	5.3%	5.9%	5.9%	5.4%	5.4%	5.5%	6.1%
Other	0.5%	0.6%	0.6%	0.7%	0.6%	0.6%	0.4%	0.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 4.3.1: Number of trips by mode¹ (average weekday)

Mode	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	AAGR % 01/02-08/09
	'000								
Average weekday									
Vehicle driver	7,686	7,939	8,106	8,114	7,952	7,992	8,080	8,015	0.6%
Vehicle passenger	3,462	3,465	3,483	3,559	3,470	3,550	3,642	3,635	0.7%
Total vehicle	11,148	11,405	11,589	11,674	11,422	11,542	11,722	11,650	0.6%
Train	775	775	779	768	794	815	863	890	2.0%
Public Bus	558	561	555	562	582	579	592	598	1.0%
Private Bus	335	330	331	320	342	344	370	387	2.1%
Ferry	37	43	47	47	38	37	38	39	0.7%
Total public transport	1,706	1,710	1,712	1,696	1,756	1,775	1,863	1,915	1.7%
Walk only	2,741	2,825	2,905	2,870	2,973	2,964	3,035	3,118	1.9%
Bicycle	101	115	124	113	115	114	119	106	0.6%
Taxi	115	118	119	124	117	121	113	127	1.4%
Other	83	97	112	98	110	112	135	134	7.0%
Total	15,895	16,270	16,561	16,574	16,493	16,628	16,987	17,051	1.0%

Table 4.3.2: Proportion of trips by mode (average weekday)

Mode	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
Average weekday								
Vehicle driver	48.4%	48.8%	48.9%	49.0%	48.2%	48.1%	47.6%	47.0%
Vehicle passenger	21.8%	21.3%	21.0%	21.5%	21.0%	21.4%	21.4%	21.3%
Total vehicle	70.1%	70.1%	70.0%	70.4%	69.3%	69.4%	69.0%	68.3%
Train	4.9%	4.8%	4.7%	4.6%	4.8%	4.9%	5.1%	5.2%
Public Bus	3.5%	3.4%	3.3%	3.4%	3.5%	3.5%	3.5%	3.5%
Private Bus	2.1%	2.0%	2.0%	1.9%	2.1%	2.1%	2.2%	2.3%
Ferry	0.2%	0.3%	0.3%	0.3%	0.2%	0.2%	0.2%	0.2%
Total public transport	10.7%	10.5%	10.3%	10.2%	10.6%	10.7%	11.0%	11.2%
Walk only	17.2%	17.4%	17.5%	17.3%	18.0%	17.8%	17.9%	18.3%
Bicycle	0.6%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.6%
Taxi	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%
Other	0.5%	0.6%	0.7%	0.6%	0.7%	0.7%	0.8%	0.8%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

4.3 Mode of Travel

1. Mode figures are based on unlinked trip legs. Ferry, bicycle, taxi and other mode estimates are subject to high standard errors due to the small sample sizes for these modes.

Table 4.3.3: Proportion of trips by mode and purpose¹ (average weekday)

Purpose	Vehicle Driver	Vehicle Passenger	Train	Bus	Walk	Other ²	Total
2008/09							
Commute	60.7%	6.3%	15.9%	7.4%	7.5%	2.3%	100%
Work related business	79.5%	6.8%	3.1%	1.3%	6.9%	2.5%	100%
Education/childcare	5.2%	50.2%	8.6%	17.1%	16.4%	2.3%	100%
Shopping	51.5%	12.7%	3.0%	4.0%	27.7%	1.1%	100%
Personal business	53.2%	15.5%	3.7%	4.9%	20.0%	2.8%	100%
Social/recreation	35.8%	26.3%	2.7%	2.8%	29.3%	3.1%	100%
Serve passenger	56.3%	32.4%	0.7%	0.5%	9.6%	0.4%	100%
2007/08							
Commute	60.5%	6.6%	15.9%	7.6%	7.1%	2.3%	100%
Work related business	80.2%	5.5%	3.6%	1.3%	7.0%	2.4%	100%
Education/childcare	5.7%	50.7%	9.4%	16.7%	15.3%	2.3%	100%
Shopping	52.5%	13.0%	2.5%	3.8%	27.1%	1.1%	100%
Personal business	53.2%	16.2%	3.6%	4.4%	20.1%	2.4%	100%
Social/recreation	35.8%	26.1%	2.8%	2.8%	29.1%	3.3%	100%
Serve passenger	56.9%	32.3%	0.7%	0.4%	9.1%	0.6%	100%
2006/07							
Commute	62.6%	7.1%	14.5%	6.9%	6.7%	2.3%	100%
Work related business	80.9%	5.6%	3.7%	1.1%	6.7%	2.0%	100%
Education/childcare	6.5%	50.5%	9.7%	16.9%	14.8%	1.8%	100%
Shopping	52.9%	12.6%	2.3%	4.0%	27.0%	1.1%	100%
Personal business	54.0%	15.8%	3.4%	4.4%	20.7%	1.7%	100%
Social/recreation	35.7%	25.8%	2.9%	2.8%	29.4%	3.4%	100%
Serve passenger	57.5%	31.7%	0.7%	0.4%	9.1%	0.5%	100%
2005/06							
Commute	63.2%	7.0%	14.4%	6.8%	6.4%	2.2%	100%
Work related business	81.5%	5.2%	3.3%	0.9%	7.2%	1.9%	100%
Education/childcare	5.9%	47.9%	9.6%	17.4%	17.0%	2.2%	100%
Shopping	52.6%	12.6%	2.4%	4.1%	27.1%	1.1%	100%
Personal business	55.5%	15.5%	3.2%	3.8%	20.4%	1.5%	100%
Social/recreation	35.5%	26.6%	2.6%	3.0%	28.9%	3.3%	100%
Serve passenger	57.2%	31.2%	0.7%	0.5%	9.8%	0.6%	100%
2004/05							
Commute	64.9%	7.6%	13.5%	5.9%	5.7%	2.5%	100%
Work related business	82.7%	5.9%	2.5%	0.9%	6.1%	1.8%	100%
Education/childcare	6.2%	48.2%	8.6%	17.7%	17.4%	2.0%	100%
Shopping	53.1%	13.1%	2.4%	3.8%	26.5%	1.1%	100%
Personal business	56.1%	15.6%	3.7%	3.6%	19.5%	1.6%	100%
Social/recreation	36.8%	27.4%	2.7%	2.8%	27.0%	3.4%	100%
Serve passenger	56.5%	31.7%	0.7%	0.5%	10.1%	0.5%	100%
2003/04							
Commute	63.8%	7.5%	14.3%	5.6%	6.0%	2.8%	100%
Work related business	82.5%	6.0%	2.0%	1.0%	6.5%	1.9%	100%
Education/childcare	6.1%	46.9%	7.8%	17.9%	19.3%	2.0%	100%
Shopping	52.8%	12.3%	2.5%	3.8%	27.5%	1.1%	100%
Personal business	55.0%	15.5%	4.5%	3.7%	19.7%	1.6%	100%
Social/recreation	37.2%	27.3%	2.6%	2.9%	26.6%	3.4%	100%
Serve passenger	56.8%	31.3%	0.8%	0.7%	10.0%	0.4%	100%

1. The data used in this table are based on linked trips. In the analysis of trip purposes, trips to return home are allocated to the previous 'priority purpose'. Mode is based on the 'priority mode' of the linked trip. For further details, please refer to the Glossary.

2. Other includes ferry.

Table 4.3.4: Reasons for travelling to work by public transport, weekdays 2008/09

Reason	Percent ¹
Avoids parking problems	54%
Cheaper	33%
Faster	26%
Do not have a car	24%
Less stressful than other forms	18%
Live or work close to public transport	18%
Don't drive/no licence	14%
Arrives closer to destination	13%
Enjoy time to read and relax	11%
Environmental reasons	8%
Car used by someone else	8%
Other	2%
Employer assistance in public transport costs	2%

Table 4.3.5: Reasons for travelling to work by work car, weekdays 2008/09

Reason	Percent
Prefer convenience/independence of car	47%
PT services are indirect	38%
PT services are too slow	24%
PT doesn't go where required	17%
Use car for work trips	15%
PT timetable constraints	13%
Employer provides/subsidises car/parking	12%
PT is unavailable here	12%
PT services are too infrequent	12%
Use car for other non-work trips	11%
PT services are unreliable	7%
Carpooling arrangements	6%
PT uncomfortable	3%
Other	2%

Table 4.3.6: Satisfaction by mode - Proportion of respondents "always" or "mostly"² satisfied

Mode	Year ³	On time	Safe	Comfortable	Frequent
Train	2003/04	66%	88%	67%	70%
	2004/05	51%	89%	69%	62%
	2005/06	67%	90%	64%	67%
	2006/07	80%	88%	63%	71%
	2007/08	86%	91%	63%	75%
Govt. bus	2003/04	66%	96%	75%	69%
	2004/05	69%	95%	77%	69%
	2005/06	68%	95%	73%	66%
	2006/07	66%	94%	79%	67%
	2007/08	64%	94%	79%	67%
Private bus	2003/04	63%	94%	77%	64%
	2003/04	75%	93%	81%	66%
	2004/05	78%	93%	85%	70%
	2005/06	75%	93%	83%	67%
	2006/07	71%	97%	84%	67%
Ferry	2007/08	73%	94%	83%	70%
	2008/09	71%	92%	80%	67%
	2003/04	95%	99%	94%	79%
	2004/05	92%	96%	96%	75%
	2005/06	90%	99%	96%	74%
	2006/07	90%	100%	92%	81%
	2007/08	98%	98%	94%	76%
	2008/09	91%	98%	93%	67%

1. Respondents could give more than one response, therefore percentages add to more than 100%.

2. For the wording of the customer satisfaction questions please refer to the Glossary.

3. Responses are reported for single waves of data (i.e. unpooled).

Table 4.3.7: Public transport¹ fare type, average weekday 2001/02 to 2008/09

Fare type	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
Train								
Full Fare	61.0%	61.9%	62.7%	61.8%	62.4%	61.5%	62.5%	64.7%
Child Fare	1.7%	1.7%	0.8%	0.9%	0.7%	1.2%	1.2%	1.5%
Free School Pass	8.6%	7.6%	9.0%	10.0%	10.0%	9.0%	8.5%	7.6%
Free Fare Other	4.7%	4.1%	3.8%	3.6%	3.5%	3.0%	3.3%	4.5%
Concession- Pensioner/Aged	8.3%	7.7%	6.7%	7.0%	7.2%	8.2%	7.6%	6.9%
Concession - Student and Other	15.1%	16.4%	16.7%	16.2%	15.7%	16.3%	16.6%	14.6%
Other Fare	0.5%	0.5%	0.1%	0.4%	0.6%	0.7%	0.3%	0.1%
Fare type not provided	0.0%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Fare type	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
Bus								
Full Fare	36.9%	36.9%	38.3%	37.9%	38.2%	37.2%	37.4%	37.9%
Child Fare	2.5%	2.3%	2.3%	1.6%	1.2%	0.9%	1.4%	1.9%
Free School Pass	24.4%	24.8%	25.8%	27.4%	28.2%	27.9%	27.7%	27.0%
Free Fare Other	4.8%	4.6%	3.5%	4.0%	3.7%	4.2%	3.2%	3.6%
Concession- Pensioner/Aged	13.5%	12.6%	11.5%	12.6%	13.7%	14.8%	14.7%	14.4%
Concession - Student and Other	15.9%	17.0%	17.3%	15.4%	13.9%	14.1%	14.5%	14.7%
Other Fare	1.8%	1.6%	1.1%	1.0%	1.0%	1.0%	1.0%	0.5%
Fare type not provided	0.2%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

1. Ticket type is collected for all public transport modes but only train and bus are reported here.

Table 4.3.8: Public transport ticket type, average weekday 2001/02 - 2008/09

Ticket type	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
Train								
Single	11.5%	10.3%	10.2%	9.3%	9.2%	9.0%	9.3%	9.9%
Return	23.0%	24.4%	24.4%	25.5%	26.0%	27.1%	26.6%	25.3%
Daily	7.8%	8.8%	8.0%	7.8%	7.2%	8.0%	7.6%	7.0%
Weekly	37.9%	37.6%	37.9%	36.2%	36.4%	36.2%	37.5%	37.1%
Quarterly/Yearly	2.8%	3.1%	3.1%	3.8%	4.0%	3.7%	3.2%	3.4%
Fixed multiple trips	0.4%	0.4%	0.3%	0.2%	0.3%	0.9%	1.1%	1.4%
Free travel	13.3%	11.6%	12.8%	13.7%	13.5%	12.0%	11.8%	12.1%
Other	3.2%	3.6%	3.1%	3.3%	3.5%	3.0%	2.9%	3.9%
Ticket type not provided	0.1%	0.2%	0.2%	0.3%	0.0%	0.0%	0.0%	0.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Ticket type	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
Bus								
Single	26.5%	26.0%	26.5%	24.9%	22.7%	22.1%	21.6%	23.8%
Return	3.4%	4.9%	5.4%	4.0%	3.5%	3.8%	4.8%	4.7%
Daily	12.3%	12.0%	10.6%	11.0%	11.8%	13.0%	12.4%	12.3%
Weekly	10.2%	8.9%	9.7%	9.3%	10.4%	8.8%	9.9%	8.5%
Quarterly/Yearly	1.5%	1.4%	1.2%	0.8%	1.4%	1.4%	1.4%	1.1%
Fixed multiple trips	14.7%	16.0%	16.3%	17.6%	17.0%	17.9%	18.3%	18.9%
Free travel	29.2%	29.3%	29.4%	31.4%	31.9%	32.1%	30.9%	30.5%
Other	2.0%	1.3%	0.9%	0.0%	1.2%	0.9%	0.7%	0.2%
Ticket type not provided	0.2%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 4.4.1: Distance¹ travelled by day type (average weekday)

	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	AAGR % 01/02-08/09
Average distance (km)									
Average Weekday									
Av. trip length	8.4	8.3	8.2	8.2	8.2	8.2	8.2	8.3	-0.2%
Av. km per person	31.4	31.4	31.3	31.3	30.9	31.1	31.3	31.1	-0.1%
Av. VKT per person	18.2	18.5	18.4	18.4	17.9	17.9	17.9	17.8	-0.4%
Total distance ('000 km)									
Average Weekday									
Total km	127,560	128,921	129,219	129,817	129,401	131,273	133,765	134,656	0.8%
Total VKT	74,091	75,948	76,127	76,416	74,689	75,614	76,346	77,022	0.6%
Total PT Passenger km	19,634	19,269	19,339	18,950	20,604	21,416	23,305	22,956	2.3%

Table 4.4.2: Distance travelled by mode (average weekday)

Mode	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	AAGR % 01/02-08/09
Total distance ('000 km)									
Vehicle driver	74,091	75,948	76,127	76,416	74,689	75,614	76,346	77,022	0.6%
Vehicle passenger	27,684	27,184	27,062	27,704	27,439	27,354	26,952	27,024	-0.3%
Train	13,957	13,745	14,141	13,713	15,113	15,758	17,203	16,627	2.5%
Bus	5,677	5,524	5,198	5,237	5,492	5,658	6,101	6,329	1.6%
Walk only ²	2,497	2,607	2,612	2,589	2,623	2,585	2,602	2,654	0.9%
Walk linked ³	1,853	1,926	1,971	1,956	2,028	2,157	2,238	2,451	4.1%
Other	1,802	1,988	2,108	2,203	2,018	2,147	2,322	2,549	5.1%
Total	127,560	128,921	129,219	129,817	129,401	131,273	133,765	134,656	0.8%
Average distance (km)									
Train	18.0	17.7	18.1	17.9	19.0	19.3	19.9	18.7	0.5%
Vehicle driver	9.6	9.6	9.4	9.4	9.4	9.5	9.4	9.6	0.0%
Vehicle passenger	8.0	7.8	7.8	7.8	7.9	7.7	7.4	7.4	-1.0%
Bus	6.4	6.2	5.9	5.9	5.9	6.1	6.3	6.4	0.1%
Walk only	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	-1.0%

4.4 Trip distance¹

1. Previously published HTS distances for 2006/07 and 2007/08 have been revised here based on an improved estimation method.
2. 'Walk-only' trips are those where the whole trip is made by walking and no change of mode is involved.
3. 'Walk-linked' trips are walking trips where the purpose is access to or egress from another mode eg. Walk trip to the station to catch the train or walk from the train upon arriving at the other end.

Table 4.4.3: Distance¹ travelled by purpose (average weekday)

Purpose	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	AAGR % 01/02-08/09
Total distance ('000 km)									
Commute	32,398	33,872	34,061	33,621	33,747	34,756	36,585	37,030	1.9%
Work related business	20,522	20,481	19,712	20,056	20,616	20,611	21,114	20,511	0.0%
Education/childcare	8,392	8,093	8,444	8,961	9,020	9,606	9,604	9,951	2.5%
Shopping	11,812	12,252	12,144	12,128	12,341	12,564	13,186	12,490	0.8%
Personal business	8,252	7,551	8,155	8,171	8,120	7,827	7,681	7,780	-0.8%
Social/recreation	27,961	28,696	27,880	28,133	26,924	26,970	26,881	27,181	-0.4%
Serve passenger	16,016	15,778	16,558	16,388	16,385	16,728	16,677	17,364	1.2%
Other	1,675	1,702	1,818	1,747	1,673	1,668	1,729	1,682	0.1%
Average distance (km)									
Commute	14.9	14.9	14.9	14.6	14.6	14.6	14.9	15.0	0.0%
Work related business	12.4	12.7	12.2	13.1	13.6	14.2	13.8	13.6	1.4%
Education/ childcare	6.7	6.4	6.5	6.8	6.9	7.1	6.9	6.9	0.5%
Shopping	5.0	5.0	5.0	5.0	5.1	5.3	5.4	5.1	0.4%
Personal business	6.8	6.3	6.6	6.5	6.6	6.6	6.5	6.7	-0.2%
Social/recreation	8.5	7.9	7.5	7.5	7.3	7.3	7.2	7.4	-2.0%
Serve passenger	6.4	6.3	6.2	6.2	6.0	6.1	6.0	6.3	-0.2%

1. Previously published HTS distances for 2006/07 and 2007/08 have been revised based on an improved estimation method.

Table 4.4.4: Trips by distance category¹ and mode (average weekday) - 2008/09

Mode	Up to 1km	1.01-2km	2.01-5km	5.01-10km	10.01-20km	More than 20km	Total
Vehicle driver	735,614	1,089,637	2,172,070	1,648,591	1,339,104	1,004,378	7,989,394
Vehicle passenger	363,978	619,654	1,155,046	754,022	470,246	259,314	3,622,260
Train	4,576	34,113	140,318	140,728	244,005	324,911	888,651
Bus	29,284	133,984	414,318	246,336	115,320	45,889	985,131
Ferry	977	1,931	13,613	7,460	14,895	524	39,400
Taxi	3,517	23,847	42,473	30,150	16,467	10,732	127,186
Walk only	2,266,172	604,475	226,843	18,492	1,142	404	3,117,527
Bicycle	24,403	28,690	33,234	12,896	5,903	774	105,901
Other	17,157	20,622	23,794	18,911	13,911	8,350	102,744
Total	3,445,678	2,556,953	4,221,710	2,877,585	2,220,992	1,655,277	16,978,195

1. Based on unlinked trips and in-vehicle time only.
2. Based on linked trips and door-to-door travel time.

Table 4.4.5: Trips by distance category² and purpose (average weekday) - 2008/09

Purpose	Up to 1km	1.01-2km	2.01-5km	5.01-10km	10.01-20km	More than 20km	Total
Commute	169,608	172,858	398,071	535,553	630,214	646,606	2,552,911
Work related business	171,083	119,281	246,572	274,043	273,437	333,283	1,417,699
Education/childcare	257,638	245,376	390,131	265,964	173,112	112,476	1,444,696
Shopping	794,027	426,637	666,314	359,327	197,821	104,628	2,548,754
Personal business	260,814	186,628	295,824	198,071	144,894	87,527	1,173,760
Social/recreation	926,336	580,598	839,362	604,033	419,767	314,444	3,684,541
Serve passenger	514,553	528,070	894,388	533,329	316,294	139,304	2,925,938
Other	259,574	67,867	74,470	44,672	24,162	15,413	486,159
Total	3,353,632	2,327,316	3,805,131	2,814,991	2,179,703	1,753,683	16,234,457

Table 4.5.1: Time spent travelling (average weekday)

	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	AAGR % 01/02-08/09
	Average time (mins)								
Average trip duration	21	21	21	21	21	21	21	22	0.7%
Time spent travelling a day per person	79	79	79	79	79	80	81	81	0.4%

Table 4.5.2: Average trip duration by purpose¹ (average weekday)

Purpose	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	AAGR % 01/02-08/09
	Average time (mins)								
Non-work trips	18	18	18	18	18	18	18	18	0.0%
Education/childcare	21	21	22	23	23	22	22	22	0.7%
Social/recreation	22	22	21	21	20	21	21	21	-0.7%
Shopping	15	15	14	15	15	15	15	15	0.0%
Personal business	18	18	19	18	18	18	19	19	0.8%
Serve passenger	15	14	14	14	14	14	14	15	0.0%
Work trips	31	32	31	32	33	34	34	34	1.3%
Commute	33	33	33	32	33	33	34	34	0.4%
Work related business	26	26	25	27	28	29	29	29	1.6%

Table 4.5.3: Average trip duration by mode² (average weekday)

Mode	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	AAGR % 01/02-08/09
	Average time (mins)								
Vehicle driver	19	19	19	19	19	19	19	20	0.4%
Vehicle passenger	17	17	17	16	16	16	16	16	-0.4%
Train	29	28	29	29	31	33	34	32	1.5%
Bus	22	22	22	22	23	23	23	23	0.5%
Walk only	11	11	10	10	11	11	11	11	-0.1%

4.5 Trip duration

1. Duration by purpose is based on linked trips.
2. Mode estimates are based on unlinked trips.

Table 4.6.1: Persons travelling on motorised modes¹ by time of day (average weekday)

Time of day	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	AAGR % 01/02-08/09
	'000								
6:30 am	192	187	183	181	188	199	206	189	-0.2%
8:00 am	455	454	469	478	483	506	541	553	2.8%
10:00 am	270	277	276	266	254	269	283	289	1.0%
12:00 noon	247	249	250	259	251	256	260	276	1.6%
3:30 pm	419	426	443	481	479	464	473	470	1.7%
5:30 pm	420	430	456	467	461	458	470	477	1.8%
7:30 pm	193	200	197	197	186	186	167	175	-1.4%
10:30 pm	73	71	72	66	67	73	72	70	-0.5%

Table 4.6.2: Morning peak² trips (average weekday)

	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	AAGR % 01/02-08/09
Morning peak trips (000)	3,087	3,187	3,235	3,247	3,267	3,368	3,474	3,513	1.9%
Total trips (000)	15,207	15,575	15,826	15,848	15,757	15,939	16,263	16,299	1.0%
% of total day in AM peak	20.3%	20.5%	20.4%	20.5%	20.7%	21.1%	21.4%	21.6%	0.9%

4.6 Time of day of travel

1. The estimates are based on unlinked trips. Estimates published prior to 2007 were based on linked trips.
2. Estimates of morning peak trips are based on linked trips arriving at their destination between 6.31 am and 9.30 am.

Table 4.6.3: Morning peak trips by purpose¹ (average weekday)

Purpose	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	AAGR % 01/02-08/09
	'000								
Commute	826	878	883	880	875	907	939	952	2.0%
Work related business	345	328	314	303	299	311	344	338	-0.3%
Education/childcare	558	563	568	580	586	606	625	634	1.8%
Shopping	218	232	242	243	247	236	234	233	1.0%
Personal business	144	147	157	155	152	141	147	148	0.3%
Social/recreation	275	313	328	322	311	318	317	347	3.4%
Serve passenger	711	713	730	748	777	831	850	846	2.5%
Other	10	11	12	15	19	18	18	16	6.7%
Total	3,087	3,187	3,235	3,247	3,267	3,368	3,474	3,513	1.9%

1. The purpose analysis uses linked trips. The trip purpose definition allocates return home trips to the previous 'priority purpose'. Refer to the Glossary for details.

Table 4.6.4: Proportion of morning peak trips by purpose

Purpose	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
Commute	26.8%	27.5%	27.3%	27.1%	26.8%	26.9%	27.0%	27.1%
Work related business	11.2%	10.3%	9.7%	9.3%	9.1%	9.2%	9.9%	9.6%
Education/childcare	18.1%	17.7%	17.6%	17.9%	17.9%	18.0%	18.0%	18.0%
Shopping	7.1%	7.3%	7.5%	7.5%	7.6%	7.0%	6.7%	6.6%
Personal business	4.7%	4.6%	4.9%	4.8%	4.7%	4.2%	4.2%	4.2%
Social/recreation	8.9%	9.8%	10.1%	9.9%	9.5%	9.5%	9.1%	9.9%
Serve passenger	23.0%	22.4%	22.6%	23.0%	23.8%	24.7%	24.5%	24.1%
Other	0.3%	0.4%	0.4%	0.5%	0.6%	0.5%	0.5%	0.5%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 4.6.5: Morning peak trips by mode

Mode	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	AAGR % 01/02-08/09
	'000								
Vehicle driver	1,626	1,685	1,724	1,740	1,727	1,762	1,797	1,804	1.5%
Vehicle passenger	678	683	695	710	727	769	791	790	2.2%
Total private vehicle	2,303	2,367	2,420	2,450	2,455	2,531	2,588	2,593	1.7%
Train	245	249	260	255	266	270	292	303	3.1%
Bus	262	273	273	278	285	287	308	302	2.0%
Ferry ³	11	14	14	13	9	11	11	13	1.6%
Total public transport	519	535	547	546	561	568	611	618	2.5%
Walk only	452	470	464	451	451	445	470	503	1.5%
Other	50	59	68	63	61	62	65	64	3.6%
Total	3,323	3,432	3,499	3,510	3,528	3,606	3,735	3,778	1.8%

1. Morning peak trips arrive at their destination between 6.31 am and 9.30 am.
2. Mode uses unlinked trips.
3. Ferry estimates may have high standard errors.

Table 4.6.6: Proportion of morning peak¹ trips by mode²

Mode	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
Vehicle driver	48.9%	49.1%	49.3%	49.6%	49.0%	48.9%	48.1%	47.7%
Vehicle passenger	20.4%	19.9%	19.9%	20.2%	20.6%	21.3%	21.2%	20.9%
Total private vehicle	69.3%	69.0%	69.2%	69.8%	69.6%	70.2%	69.3%	68.6%
Train	7.4%	7.3%	7.4%	7.3%	7.5%	7.5%	7.8%	8.0%
Bus	7.9%	8.0%	7.8%	7.9%	8.1%	8.0%	8.2%	8.0%
Ferry	0.3%	0.4%	0.4%	0.4%	0.3%	0.3%	0.3%	0.3%
Total public transport	15.6%	15.6%	15.6%	15.6%	15.9%	15.8%	16.4%	16.4%
Walk only	13.6%	13.7%	13.3%	12.8%	12.8%	12.3%	12.6%	13.3%
Other	1.5%	1.7%	1.9%	1.8%	1.7%	1.7%	1.8%	1.7%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

4.7 Profile of travellers

Table 4.7.1: Travellers by sex and mode¹ for an average weekday

Mode	2001/02		2002/03		2003/04		2004/05		2005/06		2006/07		2007/08		2008/09	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
'000																
Vehicle driver	4,303	3,383	4,288	3,652	4,407	3,699	4,312	3,802	4,161	3,791	4,059	3,933	4,146	3,934	4,168	3,847
Vehicle pass.	1,502	1,960	1,474	1,992	1,486	1,997	1,513	2,046	1,497	1,973	1,547	2,004	1,594	2,048	1,604	2,031
Train	407	368	404	371	395	385	398	370	415	378	432	383	444	420	471	419
Bus	392	501	401	490	392	494	408	474	441	482	449	474	465	498	474	512
Walk only	1,231	1,510	1,249	1,576	1,279	1,626	1,284	1,586	1,357	1,616	1,341	1,623	1,392	1,643	1,436	1,682
Other	216	121	242	131	262	140	238	144	246	134	237	147	265	140	253	154
Total	8,053	7,842	8,059	8,212	8,220	8,341	8,152	8,422	8,118	8,375	8,065	8,563	8,306	8,682	8,405	8,645
Share of trips (%)																
Vehicle driver	53.4%	43.1%	53.2%	44.5%	53.6%	44.4%	52.9%	45.1%	51.3%	45.3%	50.3%	45.9%	49.9%	45.3%	49.6%	44.5%
Vehicle pass.	18.7%	25.0%	18.3%	24.3%	18.1%	23.9%	18.6%	24.3%	18.4%	23.6%	19.2%	23.4%	19.2%	23.6%	19.1%	23.5%
Train	5.1%	4.7%	5.0%	4.5%	4.8%	4.6%	4.9%	4.4%	5.1%	4.5%	5.4%	4.5%	5.3%	4.8%	5.6%	4.9%
Bus	4.9%	6.4%	5.0%	6.0%	4.8%	5.9%	5.0%	5.6%	5.4%	5.8%	5.6%	5.5%	5.6%	5.7%	5.6%	5.9%
Walk only	15.3%	19.3%	15.5%	19.2%	15.6%	19.5%	15.8%	18.8%	16.7%	19.3%	16.6%	19.0%	16.8%	18.9%	17.1%	19.5%
Other	2.7%	1.5%	3.0%	1.6%	3.2%	1.7%	2.9%	1.7%	3.0%	1.6%	2.9%	1.7%	3.2%	1.6%	3.0%	1.8%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

1. Mode data uses unlinked trip legs except for walk trips.

Table 4.7.2: Mode¹ share by age of travellers on an average weekday

Age Group	Vehicle Driver	Vehicle Passenger	Train	Bus	Walk Only	Other ²	Total
2008/09							
0-10	0.0%	79.5%	0.5%	3.0%	15.6%	1.4%	100.0%
11-20	14.6%	40.3%	8.5%	16.7%	16.8%	3.1%	100.0%
21-30	48.6%	11.8%	9.7%	6.5%	20.5%	2.9%	100.0%
31-40	61.8%	7.6%	5.3%	3.6%	19.3%	2.4%	100.0%
41-50	67.9%	7.2%	4.6%	3.0%	15.3%	2.1%	100.0%
51-60	62.7%	9.5%	4.4%	3.5%	17.7%	2.2%	100.0%
61-70	54.9%	13.2%	3.6%	5.5%	20.7%	2.1%	100.0%
Over 70	40.7%	17.8%	2.8%	8.6%	27.1%	3.1%	100.0%
2007/08							
0-10	0.0%	79.8%	0.5%	2.7%	15.6%	1.5%	100.0%
11-20	14.6%	40.4%	8.7%	16.2%	16.7%	3.4%	100.0%
21-30	48.6%	11.3%	9.6%	6.7%	20.6%	3.2%	100.0%
31-40	64.2%	7.3%	5.0%	3.4%	18.1%	2.0%	100.0%
41-50	68.4%	7.2%	4.3%	2.8%	15.0%	2.3%	100.0%
51-60	63.6%	9.7%	4.0%	3.4%	17.5%	1.9%	100.0%
61-70	53.7%	14.1%	4.2%	6.1%	19.9%	2.1%	100.0%
Over 70	42.0%	17.2%	2.2%	8.5%	27.2%	2.9%	100.0%
2006/07							
0-10	0.0%	79.2%	0.6%	2.8%	16.2%	1.2%	100.0%
11-20	14.6%	40.5%	8.5%	16.1%	16.6%	3.8%	100.0%
21-30	49.0%	11.8%	8.8%	6.3%	20.8%	3.4%	100.0%
31-40	65.8%	7.3%	4.9%	3.2%	16.8%	2.0%	100.0%
41-50	69.5%	6.7%	4.0%	2.7%	15.1%	2.0%	100.0%
51-60	62.9%	10.2%	4.4%	3.7%	17.2%	1.6%	100.0%
61-70	52.2%	14.2%	3.7%	6.2%	21.8%	1.9%	100.0%
Over 70	42.9%	16.2%	2.4%	8.2%	27.1%	3.1%	100.0%
2005/06							
0-10	0.0%	77.1%	0.7%	3.1%	17.5%	1.5%	100.0%
11-20	14.6%	39.5%	8.0%	16.4%	17.8%	3.7%	100.0%
21-30	48.1%	11.8%	7.9%	6.8%	21.5%	3.8%	100.0%
31-40	67.2%	7.5%	5.0%	2.6%	16.0%	1.8%	100.0%
41-50	69.1%	6.9%	4.2%	3.0%	14.8%	1.9%	100.0%
51-60	63.2%	10.2%	4.4%	3.8%	16.9%	1.4%	100.0%
61-70	53.1%	14.7%	3.6%	5.7%	21.2%	1.8%	100.0%
Over 70	40.2%	16.8%	2.8%	8.4%	28.7%	3.2%	100.0%
2004/05							
0-10	0.0%	76.8%	0.7%	3.3%	17.7%	1.5%	100.0%
11-20	15.6%	40.5%	7.8%	15.4%	17.2%	3.4%	100.0%
21-30	50.3%	11.9%	7.6%	6.1%	20.0%	3.9%	100.0%
31-40	67.0%	8.3%	4.7%	2.6%	15.4%	2.0%	100.0%
41-50	70.1%	7.2%	3.8%	2.8%	14.4%	1.7%	100.0%
51-60	63.6%	11.5%	4.3%	3.5%	15.6%	1.6%	100.0%
61-70	55.5%	14.3%	3.2%	5.3%	19.7%	2.0%	100.0%
Over 70	40.8%	17.6%	3.0%	7.9%	27.6%	3.1%	100.0%
2003/04							
0-10	0.0%	75.3%	0.7%	3.7%	18.6%	1.7%	100.0%
11-20	16.0%	39.7%	7.4%	15.0%	18.6%	3.4%	100.0%
21-30	51.2%	11.4%	8.3%	6.0%	19.5%	3.6%	100.0%
31-40	64.7%	8.5%	4.8%	3.1%	16.3%	2.6%	100.0%
41-50	69.7%	7.9%	3.9%	2.7%	14.1%	1.7%	100.0%
51-60	64.3%	10.6%	3.9%	3.7%	15.7%	1.8%	100.0%
61-70	57.2%	14.1%	3.3%	4.4%	19.1%	1.9%	100.0%
Over 70	42.3%	16.3%	3.3%	8.4%	27.0%	2.7%	100.0%

1. Mode data uses unlinked trip legs except for walk trips.

2. Other includes ferry.

Table 4.8.1: Number of households in Sydney by number of vehicles

Household vehicles	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	AAGR 01/02-08/09
	'000								
None	225	218	213	214	211	214	218	225	0.0%
One	650	644	655	649	654	660	658	647	-0.1%
Two	467	481	491	503	518	528	535	546	2.3%
Three or more	158	174	175	181	181	181	192	208	4.0%
Total households	1,499	1,517	1,533	1,547	1,564	1,583	1,602	1,626	1.2%

Table 4.8.2: Proportion of households in Sydney by number of vehicles

Household vehicles	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
None	15.0%	14.4%	13.9%	13.9%	13.5%	13.5%	13.6%	13.9%
One	43.3%	42.5%	42.7%	41.9%	41.8%	41.7%	41.0%	39.8%
Two	31.1%	31.7%	32.0%	32.5%	33.1%	33.4%	33.4%	33.6%
Three or more	10.6%	11.4%	11.4%	11.7%	11.6%	11.4%	12.0%	12.8%
Total households	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 4.8.3: Average vehicle occupancy per trip

Trip type	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	AAGR 01/02-08/09
Average weekday									
All day	1.45	1.44	1.43	1.44	1.44	1.44	1.45	1.45	0.0%
AM peak	1.42	1.41	1.40	1.41	1.42	1.44	1.44	1.44	0.2%
Average day									
Trips to work ¹	1.12	1.11	1.11	1.11	1.10	1.10	1.10	1.10	-0.1%
Non-work trips	1.69	1.67	1.66	1.68	1.65	1.68	1.67	1.68	0.0%

4.8 Vehicles

1. The estimate of vehicle occupancy for work trips may involve passengers travelling for non-work purposes.

Table 4.8.4: Proportion of trips by vehicle occupancy¹

Vehicle Occupancy	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
Average weekday								
One	67%	66%	66%	66%	66%	66%	67%	67%
Two	22%	22%	22%	22%	22%	22%	21%	21%
Three	7%	7%	7%	7%	8%	8%	8%	8%
Four	3%	3%	3%	3%	3%	3%	3%	3%
Five or more	1%	1%	1%	1%	1%	1%	1%	1%
Average weekend day								
One	48%	49%	49%	48%	49%	49%	49%	48%
Two	32%	30%	30%	31%	31%	31%	31%	31%
Three	10%	10%	11%	11%	11%	11%	11%	11%
Four	8%	7%	7%	7%	6%	6%	5%	6%
Five or more	3%	3%	3%	3%	3%	3%	3%	3%

1. Based on unlinked trips in private vehicles only.

Table 4.8.5: Proportion of distance travelled by vehicle occupancy¹

Vehicle Occupancy	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
Average weekday								
One	72%	72%	72%	72%	72%	73%	73%	73%
Two	18%	18%	19%	20%	19%	18%	17%	17%
Three	6%	6%	5%	5%	6%	6%	6%	6%
Four	3%	3%	2%	3%	3%	3%	2%	3%
Five or more	1%	1%	1%	1%	1%	1%	1%	1%
Average weekend day								
One	43%	43%	43%	43%	45%	45%	46%	45%
Two	31%	31%	32%	32%	32%	31%	32%	31%
Three	12%	11%	12%	12%	12%	12%	11%	11%
Four	10%	11%	9%	9%	7%	7%	6%	7%
Five or more	4%	4%	4%	4%	4%	5%	5%	6%

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APPENDICES



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About the HTS

The Household Travel Survey (HTS) is the largest and most comprehensive source of personal travel data for the Sydney Greater Metropolitan Area. This area includes the Sydney and Illawarra Statistical Divisions and the Newcastle Statistical Subdivision. It extends from Port Stephens in the north to Shoalhaven in the south and the Blue Mountains in the west. See Figure 1 on page 2 at the beginning of this report.

This survey is a benchmark for best practice in travel surveys in Australia and around the world, as well as being the longest running continuous household travel survey in the country. The HTS was first conducted in 1997/98 and has been running continuously since then.

Prior to the HTS, three major one-off household travel surveys were conducted in Sydney in 1971, 1981 and 1991/92. These had large samples (over 12,000 households) and used a face-to-face interview method. In 1996, the HTS was established to meet the needs of transport data users for more timely information. This is conducted by collecting personal travel data on a continuous basis. The HTS uses a similar method to the 1991/92 Home Interview Survey (HIS).

Survey method

The HTS consists of a face-to-face interview survey carried out every day from July to June of each financial year. This collection method ensures high data quality and maximises response rates.

A simple travel diary is used by each householder to record the details of all travel undertaken for their nominated 24-hour period. An interviewer then interviews each householder to collect the details of each trip. The interviewer records the mode of travel, trip purpose, start and end location, and time of departure and arrival. Vehicle occupancy, toll roads used and parking are recorded for private vehicle trips and fare type and cost for public transport trips.

Detailed socio-demographic information is also collected on the household. This includes dwelling type, household structure and vehicle details, as well as age, gender, employment status, occupation and income of individual household members. The following section lists the major data items collected in the HTS.

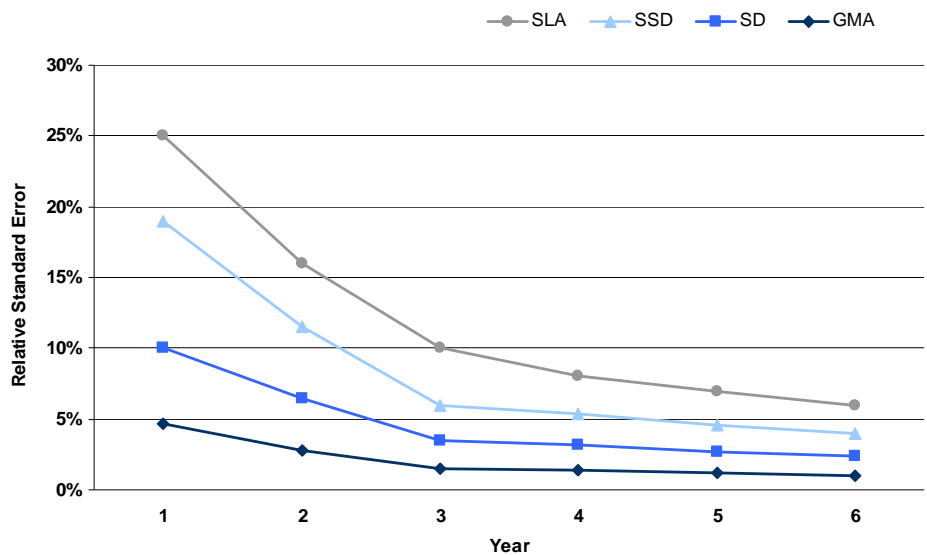
Sample design and statistical validity

The sample of the continuous HTS is designed on a three-yearly cycle so that the pooling of three years of data gives a sample size similar to that achieved in the 1991/92 HIS. About 5,000 randomly selected households are approached each year to participate in the survey.

The 2008/09 trip estimates in this report are based on three years of pooled data collected from July 2006 to June 2009. A sample of 14,409 households in the Sydney Greater Metropolitan Area were approached during this period, of which 9,561 (66%) responded. From these responding households, 24,806 people were interviewed giving a total of 105,391 trip records as the basis for the 2008/09 pooled estimates

The HTS sampling method was designed for TDC by the Statistical Consultancy section of the Australian Bureau of Statistics such that the relative standard error (RSE) decreases and the statistical reliability increases as more waves of data are pooled (Figure A.1 over the page).

Figure A.1
HTS RSEs –
Geographic level
by waves pooled



Data expansion

The data collected in the HTS is expanded (weighted) to estimate the travel of the total population in the survey area for a given year. The data is weighted by the annual ABS Estimated Resident Population (ERP).

ABS data on households and individuals from the latest Census of Population and Housing is used to adjust the ERP to ensure that the HTS estimates of population match the ABS population estimates of residents of private dwellings for the survey area in any given year.

Reference Year	Waves of the HTS in the 3 year pooled dataset	ABS ERP for weighting
2008/09	2006/2007, 2007/2008, 2008/2009	June 2008 Preliminary ERP
2007/08	2005/2006, 2006/2007, 2007/2008	June 2007 Preliminary ERP
2006/07	2004/2005, 2005/2006, 2006/2007	June 2006 Final ERP
2005/06	2003/2004, 2004/2005, 2005/2006	June 2005 Final ERP
2004/05	2002/2003, 2003/2004, 2004/2005	June 2004 Final ERP
2003/04	2001/2002, 2002/2003, 2003/2004	June 2003 Final ERP
2002/03	2000/2001, 2001/2002, 2002/2003	June 2002 Final ERP
2001/02	1999/2000, 2000/2001, 2001/2002	June 2001 Final ERP
2000/01	1998/1999, 1999/2000, 2000/2001	June 2000 Final ERP
1999/00	1997/1998, 1998/1999, 1999/2000	June 1999 Final ERP

Comparison over time

RSEs associated with estimates of change between years are greater than the RSEs for each individual year. Users should therefore be careful in interpreting the significance of over time changes.

Data collected in the HTS

People and households

Work characteristics

- Main occupation
- Work schedule
- Working hours & their flexibility
- Industry of employment
- Employer assistance with transport
- Tele-working and car pooling

Licence holding and mobility

- Types of driver's licences
- Reason for no driver's licence
- Physical disabilities preventing or restricting use of transport

Household characteristics

- Dwelling type
- Ownership status of dwelling
- Number of household vehicles
- Number of bicycles (adult & child)
- Structure of household
- Language spoken at home

Personal characteristics

- Age
- Gender
- Personal income
- Employment status
- Country of birth

Public transport use

Tickets and fares

- Amount paid
- Fare type
- Ticket type
- Multi-modal tickets

Reasons commute by public transport

Satisfaction with PT modes used

Modes

- Train
- Bus (private, public, school)
- Ferry (private, public)
- Monorail, light rail, taxi, aircraft

Trip characteristics

- Trip origin and destination
- Purpose of trip
- Time of day of trip
- Trip length - distance and duration

Vehicle use

Vehicle characteristics

- Vehicle make and model
- Vehicle age
- Engine characteristics
- Type of registration and ownership
- Type of fuel used

Reasons used car to commute

- Reasons commute by car

Toll roads used

Trip characteristics

- Trip origin
- Trip destination
- Time of day of trip
- Trip purpose
- Number of vehicle occupants
- Trip length - distance and duration

Parking

- Cost of parking and who pays
- Type of parking used

Non-motorised modes

Walking and cycling

- Trip origin
- Trip destination
- No. working adult/ child bikes in household

Trip purpose

- Time of day
- Distance

Acronyms

AAGR	Average Annual Growth Rate
ABS	Australian Bureau of Statistics
ERP	Estimated Resident Population
GMA	Greater Metropolitan Area
HIS	Home Interview Survey
HTS	Household Travel Survey
JTW	Journey to Work
RSE	Relative Standard Error
SD	Statistical Division
SSD	Statistical Sub-division
TDC	Transport Data Centre
TZ	Travel Zone
VKT	Vehicle Kilometres Travelled

Glossary

AM peak or Morning peak	Unless otherwise stated, this refers to trips arriving at their destination between 6.31 am and 9.30 am on a weekday.
Average day	Average of Mondays to Sundays. Used to calculate annual estimates, by multiplying average day by 365.
Average weekday	Average of travel over Monday to Friday including public and school holidays.
Average weekend day	Average of travel undertaken on Saturdays and Sundays.
Customer satisfaction	Respondents who travelled by public transport in the seven days prior to their interview were asked four questions about the timeliness, safety, comfort and frequency of the mode of public transport they used to measure their level of satisfaction with that mode. The questions were worded as follows: “In the last seven days did you find the <insert mode used> to be acceptably on time?” “In the last seven days did you feel safe travelling on the <insert mode used>?” “In the last seven days did you find the <insert mode used> to be comfortable?” “In the last seven days did the <insert mode used> run frequently enough for your needs?”
Distance	Network kilometres travelled between the X,Y co-ordinates of the trip origin and destination address. See <i>Trip Length</i> .
Greater Metropolitan Area (GMA)	TDC defined geographical area for core TDC datasets. Comprises Sydney SD, Newcastle SSD and Illawarra SD (Figure 1.1).
Household vehicles	Number of registered vehicles usually garaged at the household overnight, whether privately or company owned.
Illawarra SD	Covers the Local Government Areas of Wollongong, Shellharbour, Kiama, Shoalhaven and Wingecaribee.
Linked trip	A linked trip is a journey from one activity to another, ignoring changes of mode. A linked trip may comprise one or more unlinked trip legs. See <i>Unlinked Trips</i> and <i>Priority Mode</i> .
Mode	The mode of transport used for the trip. Unlinked trips have only one mode and one purpose. Where a linked trip comprises more than one journey leg by different modes, a ‘priority’ mode is allocated to the linked trip based on a pre-determined priority list of modes. See <i>Priority Mode</i> .
Motorised travel	Trips by private vehicle, train, bus, ferry, monorail, light rail or aircraft.

Newcastle SSD

Newcastle SSD covers the Local Government Areas of Newcastle, Cessnock, Lake Macquarie, Maitland and Port Stephens.

Population

Residents of private dwellings. HTS estimates are slightly lower than the ABS Estimated Resident Population (ERP), which include residents of non-private dwellings (gaols, hospitals, hotels, etc.).

PM or Afternoon peak

Unless otherwise stated, refer to weekday trips departing between 3:01 pm and 6:00 pm.

Priority mode

Where a linked trip is comprised of unlinked trips that uses more than one mode, a *priority* mode is allocated to the linked trip according to the following hierarchy, which is generally the mode with the largest likely (but not necessarily actual) duration of the trip:

Priority mode hierarchy

- Ferry *Highest*
- Train
- Light rail/monorail
- Bus
- Vehicle driver
- Vehicle passenger
- Taxi
- Bicycle
- Walk
- Other *Lowest*

Priority purpose

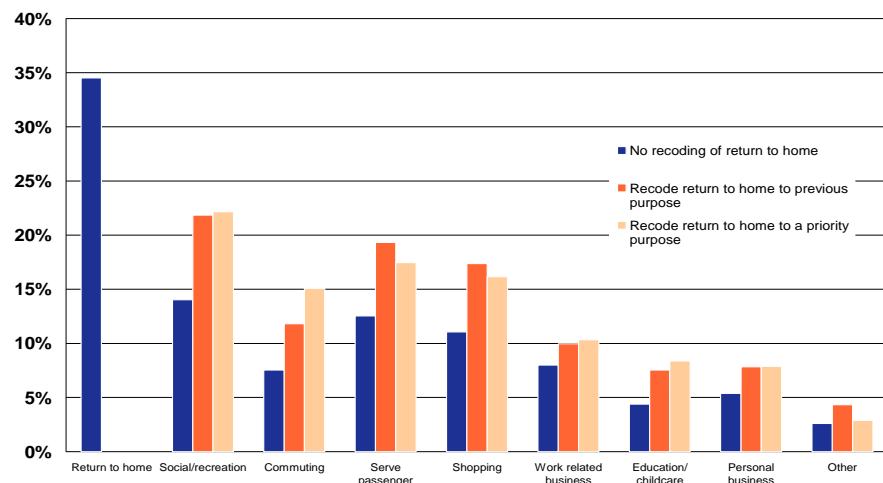
TDC collects data on a detailed list of trip purposes, including the purpose 'return to home'. 'Return home' makes up about 34% of unlinked trips on an average weekday (Figure A.2).

To give a better picture of what drives trip making, data in this report allocated 'return home' to the main previous purpose. If a person is returning home from work this trip is defined as a commute FROM work rather than a trip TO home. Return home trips with multiple previous purposes are allocated based on a hierarchy or priority. If while returning home from work a person stopped off quickly at the shops, the main previous purpose is work not shopping.

Priority purpose hierarchy

- Work *Highest*
- Work related business
- Education
- Purpose with the longest activity time
- Serve passenger *Lowest*

Figure A2
Share of trips by purpose
- as defined



Private vehicle

Includes all motorised vehicles such as cars, 4WDs, vans, motorbikes, motor scooters, utes and trucks.

Public transport	Train, government and private bus and ferry, monorail and light rail.
Sydney	Refers to Sydney Statistical Division, shown in Figure 1.1 on page 2.
Travel zone (TZ)	A level of geography which between ABS Census Collector Districts and Statistical Local Areas. The basis of TDC modelling and analysis, Travel Zones cover the TDC Study Area without omission or overlap.
Trip duration	Travel time is derived from respondent's reported trip start and end times. Total trip duration is calculated as door-to-door travel time, including changes of mode and wait time. Trip duration by mode, means in-vehicle time only.
Trip length (distance)	<p>Each trip origin and destination is coded by TDC to an X,Y co-ordinate and road network distance between these points is calculated in ARCGIS.</p> <p>Where total distance is reported is door-to-door distance, including changes of mode. Distance by mode, refers to in-vehicle distance only.</p> <p>Prior to 2007 distance was calculated between Travel Zone centroids, rather than address co-ordinates. This method was prone to overestimate distance, particularly for short trips. Distances for 1999 to 2006 have been re-estimated using the updated method and this report contains revised distance data for previous years.</p>
Trip purpose categories	
Child care	Trips by children to attend child care.
Commuting	The first trip to work of the day, usually from home, excluding trips to return to work. This also includes the first trip to a second job if any.
Work related business	Work related trips away from respondent's usual work address. Also for respondents without a fixed work address eg. A plumber, household interviewers, etc. who work at various locations.
Education	Trips by students to attend educational institutions - kindergarten, primary and secondary school, technical college or universities.
Home	Trips to return home. This publication reports trips to return home according to the previous priority purpose. See <i>Priority Purpose</i> above
Personal business	Transact personal business not involving "goods" eg. Bank, library, doctor.
Serve passenger	The purpose is to drop-off, pick-up or accompany another person eg. Man drops his children to school on the way to work, a young child "comes along for the ride" on a parent's trip to the bank, a woman takes an elderly parent to a medical appointment.
Shopping	Trips to a shop, defined as premises that sell "goods".
Social/Recreation	Social visits, entertainment, sporting activities, hobbies, holidays, etc.
Other	Trips for purposes not identified elsewhere.

Unlinked trip An unlinked trip is a single trip leg. Linked trips are made up of unlinked trips where there has been a change of mode. If a person living in Parramatta and working in Sydney CBD who travels by train with a walk trip at either end of the train trip has made three unlinked and one linked trip:

Trip	Origin	Destination	Mode	Purpose
1	Home	Parramatta Station	Walk	Change mode
2	Parramatta Station	Central Station	Train	Change mode
3	Central Station	Workplace	Walk	Work

Other TDC Publications

A range of TDC publications and some summary statistics are free to download from: <http://www.transport.nsw.gov.au/tdc/publications.html>

Recent Publications

Ferry Users in Sydney (2009 Release)
Employment and Commuting in Sydney's Centres, 1996 – 2006
2006 Journey to Work User Guide
Cycling in Sydney (2008 Release)
2006 Employment and Commuting (2008 Release)
Social and Recreational trips by Sydneysiders (2007 Release)
Train Access and Egress modes (2006 Release)

Recent Summary Statistics

2007 Household Travel Survey SLA Summary Tables in GMA
2006 TDC Journey to Work Summary Tables by LGA Destination in GMA
2006 TDC Journey to Work Summary Tables by LGA Origin in GMA
2006 Census Data by LGA of Residence in NSW

For customised data, maps and standard products, contact:

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