Transport and Main Roads

Travel in south-east Queensland

An analysis of travel data from 1992 to 2009

Travel in south-east Queensland

About this report | **South-east Queensland**

How to use this report

This document is a quick reference to help readers understand travel behaviour in south-east Queensland. It contains an overview of the region, and of a number of specific sectors of interest.

It is primarily descriptive in purpose; some interpretive text is provided, but this is mainly to provide basic insight and prompt further thought. In-depth analysis is outside the scope of this report. The information is limited to a broad snapshot on the state of travel behaviour in the region, using data that was current at the time of publication.

Need more detail on a topic presented in this report?

Bringing evidence into policy and planning processes is an important part of the Modelling, Data and Analysis Centre's work. We hold more data than what is shown here, and may be able to assist in drawing deeper insights out of the data.

Please contact us: MDAC@tmr.qld.gov.au

Can't find what you're looking for?

This document is primarily about the travel behaviour of south-east Queensland residents. Other bodies hold transport related data, the Modelling, Data and Analysis Centre may be able to assist you in locating data material.

Data sources, boundaries & limitations

This report uses data from household travel surveys conducted between 1992 and 2009. The years are indicated throughout the report either in text or on the graphs where time-series graphs are used. Population data is from the Australian Bureau of Statistics. Any other data sources used are indicated as they appear in the report.

The geographical boundaries for the south-east Queensland household travel survey are shown in the map on page 4. South-east Queensland includes Greater Brisbane, the Sunshine Coast and the Gold Coast. Unless otherwise stated, Brisbane in this report refers to Greater Brisbane not just Brisbane City.

The household travel survey only surveys residents living in private dwellings. The visitor travel survey only surveys visitors staying in commercial dwellings.

About this report | **South-east Queensland**

Key findings

The following are a selection of findings from the report. This is not exhaustive and is intended to be a subjective selection of interesting facts. Please consult the full report for more details on each.

- **3.3**
  is the average number of trips travelled per person per day in south-east Queensland.
- **One quarter**
  of all trips in south-east Queensland are generated by the Brisbane CBD and surrounds.
- **Three in four**
  Brisbane CBD workers travel to work by public transport in the AM peak.
- **Nine in ten**
  south-east Queensland bus travellers walk to the bus stop compared to 5 in 10 train travellers.
- **Over 65's**
  have a higher walking and vehicle driver mode share that the average for all of south-east Queensland residents.
- **One in three**
  visitors to the Sunshine Coast or Gold Coast walk to access their activities.
- **317,000**
  fewer private vehicle trips were travelled in Brisbane in 2009 compared to 2007 (a 2% decrease).
- **Two in five**
  university students make an interim stop on their way home from university.
- **30 mins**
  is the average duration of a work commute in south-east Queensland. This has been relatively stable since 2004.
- **Double**
  the growth in public transport trips relative to the population in population in Brisbane.

Glossary

Accompany others:
Trips that are not primarily for your own needs (for example, children accompanying their parents to the shops).

Mode share:
The proportion of travel that is done by each mode of transport.

Serve passenger:
Trips that are made primarily as a non-work service to someone else (for example, driving children to school or an elderly person to the shops).

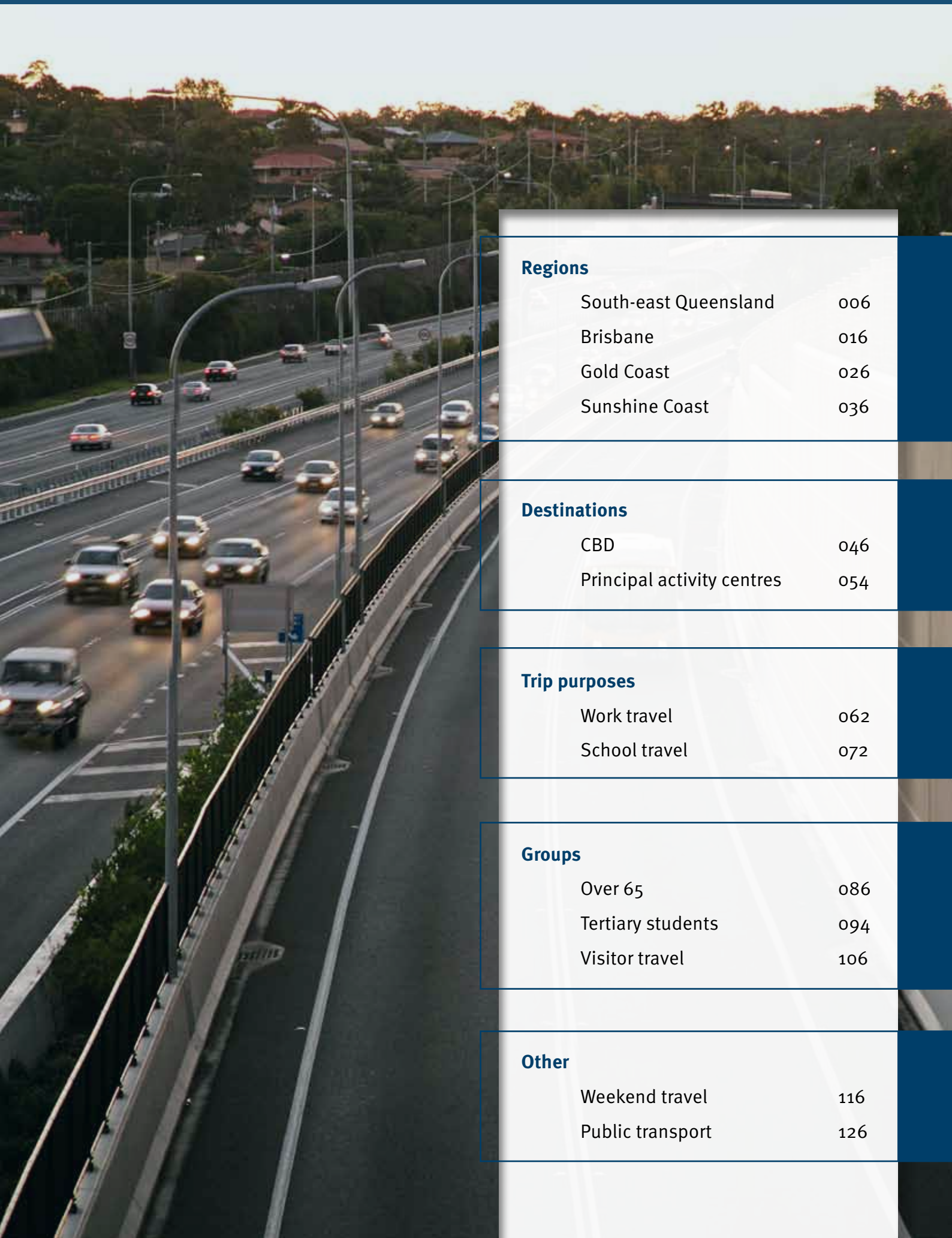
Trip rate:
The average number of trips made per person per day.

Trip purpose:
The main reason that a trip was made.

Vehicle kilometres travelled (VKT):
The distance travelled by vehicles in kilometres.

Trip chaining:
Where two or more purposes are achieved within a single journey (for example, going to the shops after work).

Contents



South-east Queensland

-3%

Decrease in total kilometres travelled in south-east Queensland from 2007 to 2009.

3·3

Average number of trips travelled per person per day in south-east Queensland.

317 000

The reduction in private vehicle trips travelled per day from 2007 to 2009.

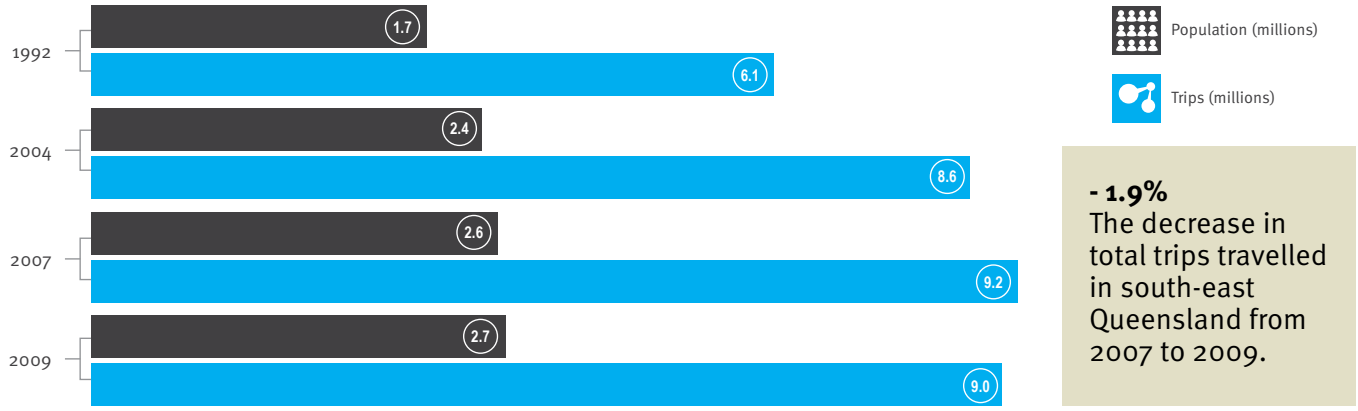
Total daily travel | **South-east Queensland**

In 2009, south-east Queensland residents collectively made 9 million trips and travelled 86 million kilometres on an average weekday. Between 2007 and 2009, the total number of trips and kilometres travelled in south-east Queensland reduced. From a historical perspective, growth in travel has traditionally outstripped population growth. Since 1992, kilometres travelled has grown by 85%, compared to a growth in residential population of 59%.

The downwards trend in travel activity observed in south-east Queensland in 2009 may be due, in part, to the global financial crisis when there was a slight decrease in economic activity.

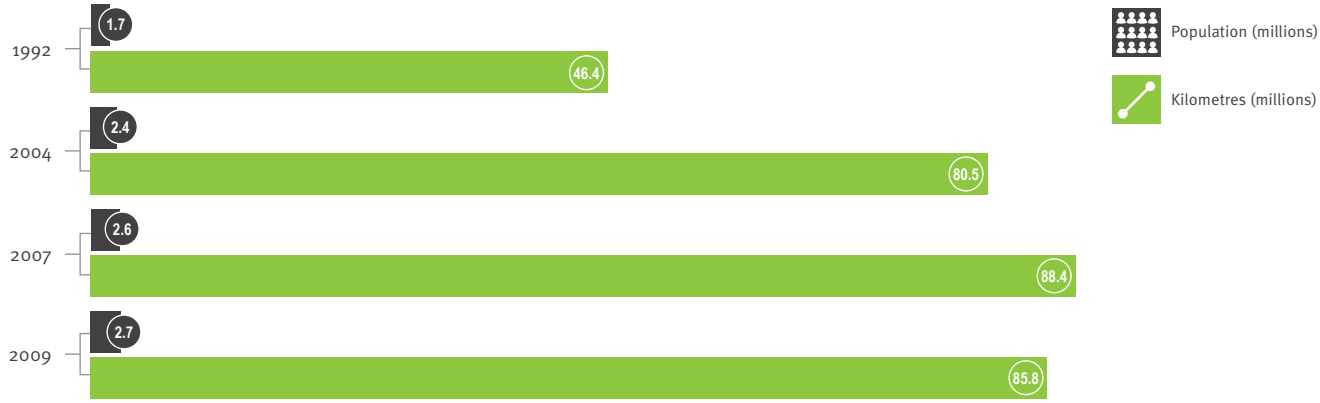
9 million: Total number of trips made by all south-east Queensland residents each weekday in 2009.

Daily total trips and population



- 1.9%
The decrease in total trips travelled in south-east Queensland from 2007 to 2009.

Daily total kilometres travelled



Data source: household travel surveys conducted between 1992 and 2009.

Please note: 1992 population is census usual resident population, while 2004 to 2009 populations are estimated resident population in private dwellings.

Daily travel | South-east Queensland

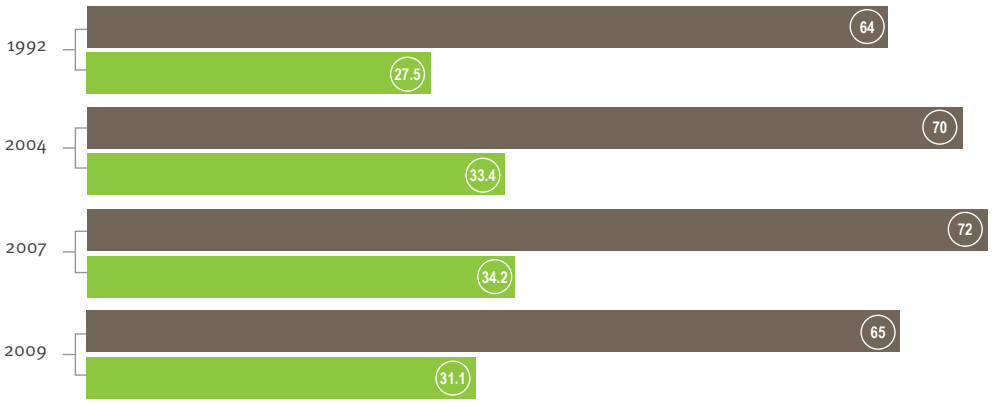
The total decline in travel during 2009 was due to residents making fewer trips on average.

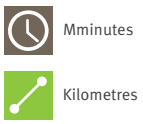
Residents making fewer trips has seen a resultant decline in the distance and time travelled each day. On average, each resident travels 31 kilometres per day, taking 65 minutes to do so.

Average trips (per person, per day) dropped to 3.3 trips in 2009. This is equivalent to one in three residents making one less trip per day.

Trips (millions) per person

Daily travel time and distance per day

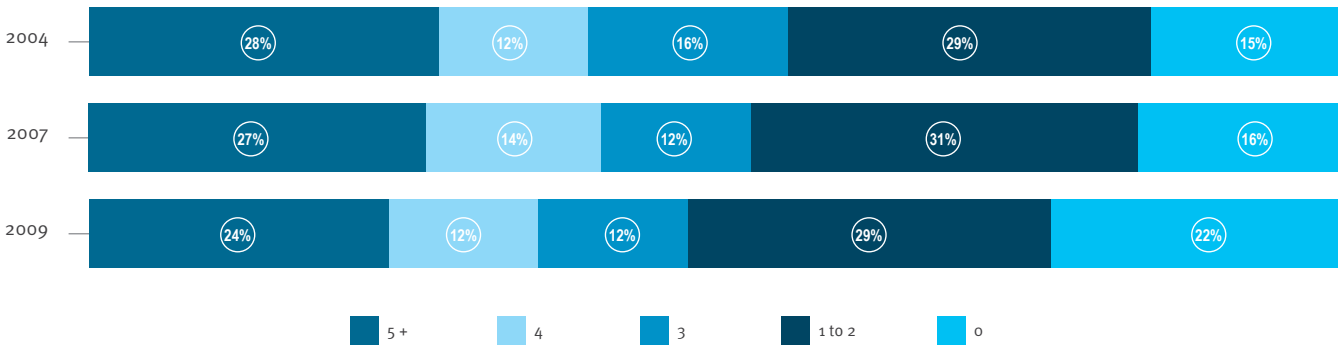




*Due to trip weight variation averages of distance and time cannot be used to calculate average speed.

31km
Average kilometres travelled per day per person in south-east Queensland.

Number of trips

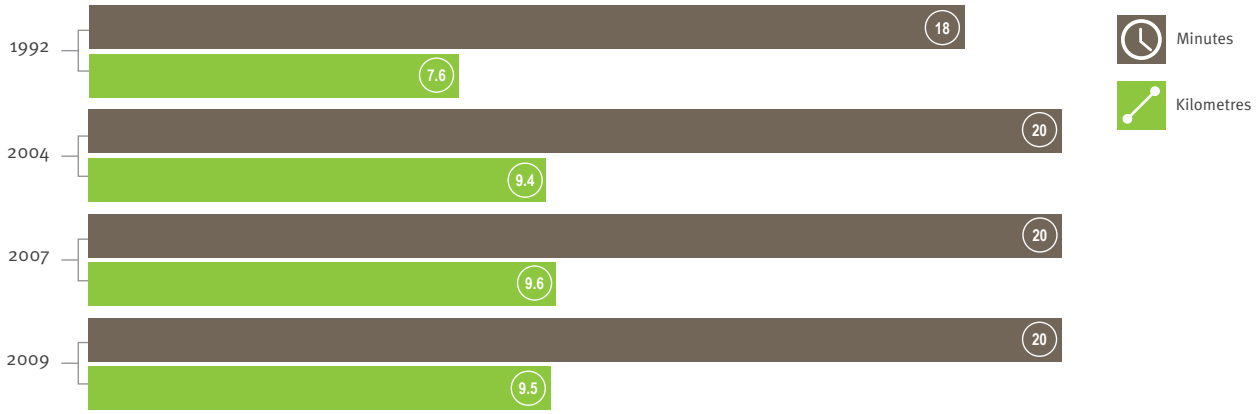


Daily travel and purpose of travel | South-east Queensland

A lower average trip rate in 2009, is due to a decrease in the proportion of residents who travel a lot (5+ trips a day) and an increase in the proportion of residents making no trips.

Although daily travel time and distance decreased in 2009, the average trip travel time and distance remained consistent.

Average trip travel time and distance



*Due to trip weight variation averages of distance and time cannot be used to calculate average speed.

Although trips on average have decreased, the reasons people travelled in 2009 remained consistent with previous years. This indicates that the reduction in the total number of trips in south-east Queensland was across the board – for all trip purposes.

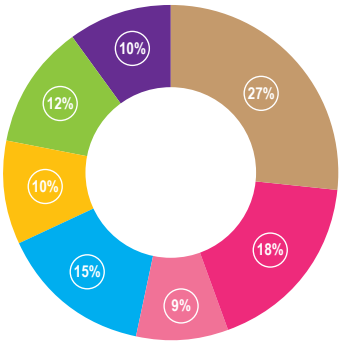
Work-related trips continued to be the largest reason for travel in 2009, accounting for roughly one quarter (27%) of all trips by south-east Queensland residents. In terms of distance travelled, however, work related trips account for a much larger proportion of travel – representing 42% of the demand on the transport network.

The next largest demand on the south-east Queensland transport network in terms of total distance travelled was social and recreation (11%) and shopping (14%) trips.

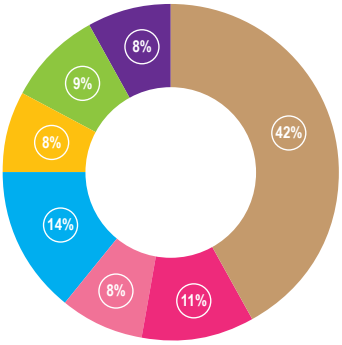
Shopping, education and serve passenger trips have less demand on the network in terms of kilometres compared to the number of trips made.

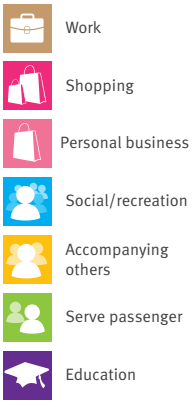
Work is the main purpose for one quarter of trips but accounts for over 40% of kilometres travelled.

Trip purpose based on trips



Trip purpose based on distance





Purpose of travel and travel mode | South-east Queensland

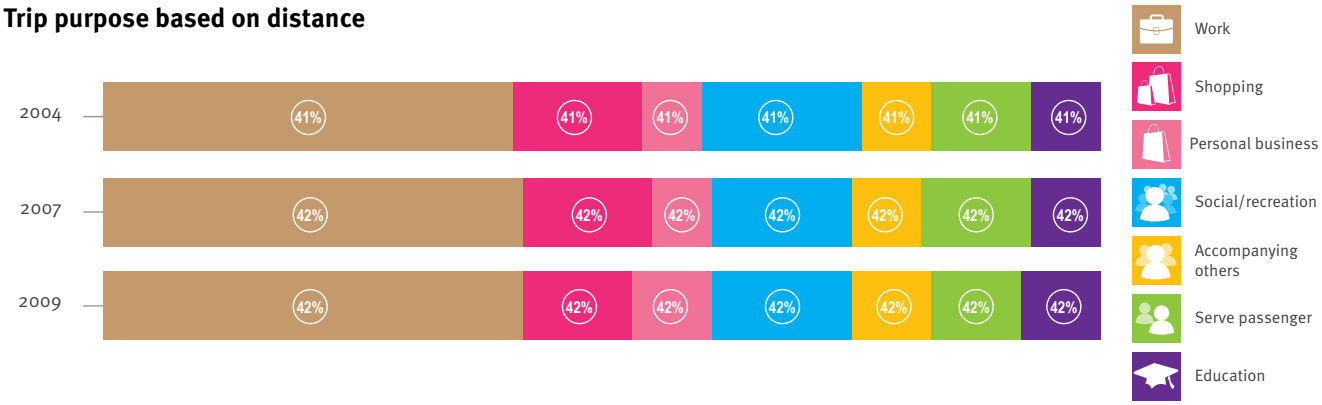
In comparison to 2007, the proportion of kilometres travelled for shopping trips decreased in 2009. Serve passenger trips also decreased. This is likely to be due to the marked increase in the proportion of educational trips being undertaken by active transport in 2009 (see Chapter on School Travel).

In contrast, non-discretionary travel such as education and work remained steady.

Average trips (per person, per day) dropped to 3.3 trips in 2009, this is equivalent to one in three residents making one less trip per day.

1.6 million
The decrease in kilometres spent travelling for shopping each day in south-east Queensland from 2007 to 2009.

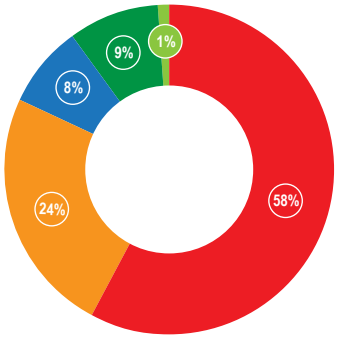
Trip purpose based on distance



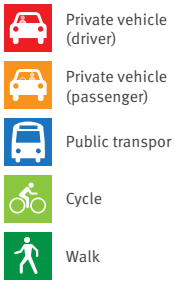
Although private vehicle still dominates as the primary mode of travel, there has been an increase in the mode share of public transport and a modest increase in active transport mode share in 2009. This increase in active transport mode share reflects a reverse in the steady decline since 1992.

82%
Percentage of trips are made by private vehicle in south-east Queensland.

Mode share based on trips



Four out of five trips are made in a private vehicle.



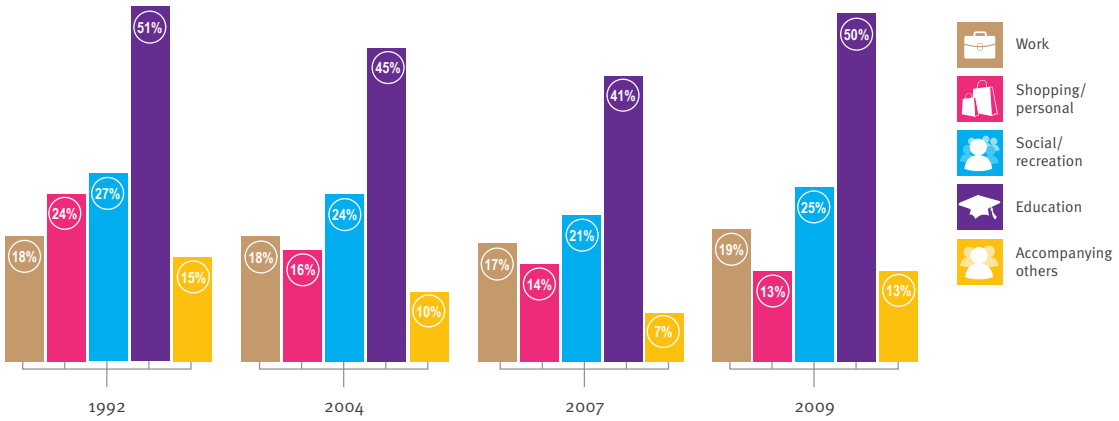
Mode share based on trips

Travel mode, trip distance and duration | South-east Queensland

Active and public transport travel has increased across most purposes of travel (especially education travel), whereas it has been decreasing for shopping trips.

317 000
The reduction in private vehicle trips travelled per day from 2007 to 2009.

Public and active transport mode share by trip purpose

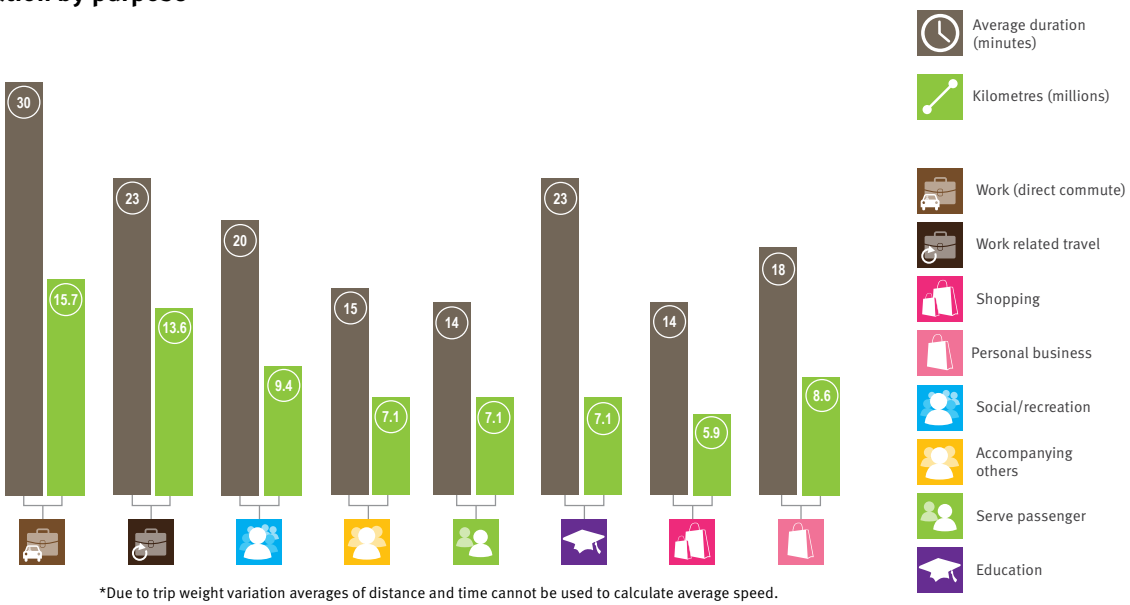


The high average distance (15.7 kilometres) and long average duration (30 minutes) of work trips demonstrates the high level of demand placed on the network by work related travel. Furthermore, this travel is typically concentrated around peak times.

The high number of work-related trips and their tendency to aggregate at certain times helps to explain the very large demands placed on the network during peak periods. It seems that people are prepared to spend more time commuting to work than they would spend on other travel purposes.

Distance and duration by purpose

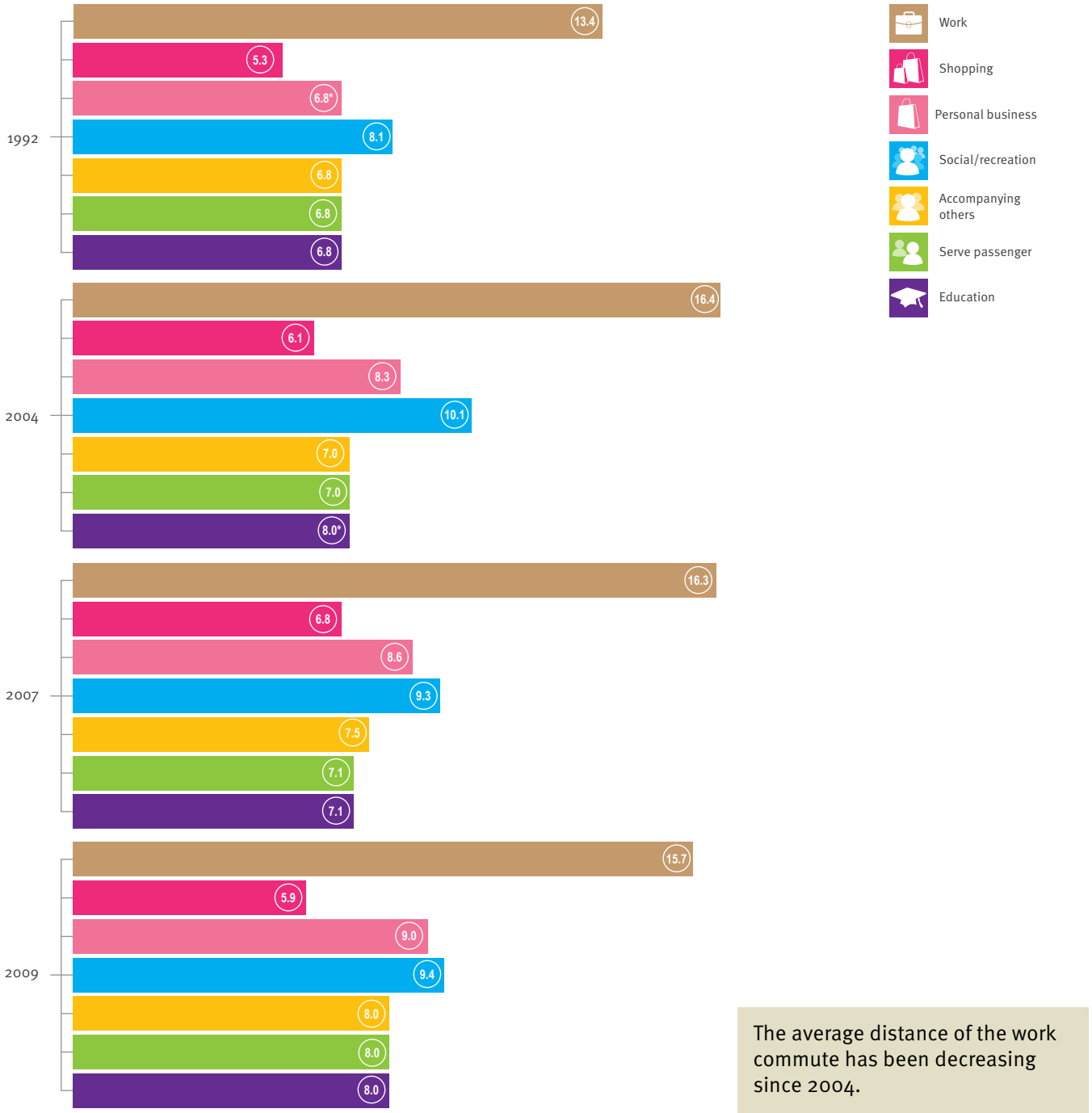
Work-related trips are generally twice the distance of other trips.



*Due to trip weight variation averages of distance and time cannot be used to calculate average speed.

Trip distance and duration | South-east Queensland

Average distance (kilometres) by purpose



The average distance of the work commute has been decreasing since 2004.

Trip distance and duration | South-east Queensland

On average, trips using public transport take significantly longer than other modes; this includes the time taken waiting for the public transport service to arrive, and the time spent travelling to and from the public transport stop.

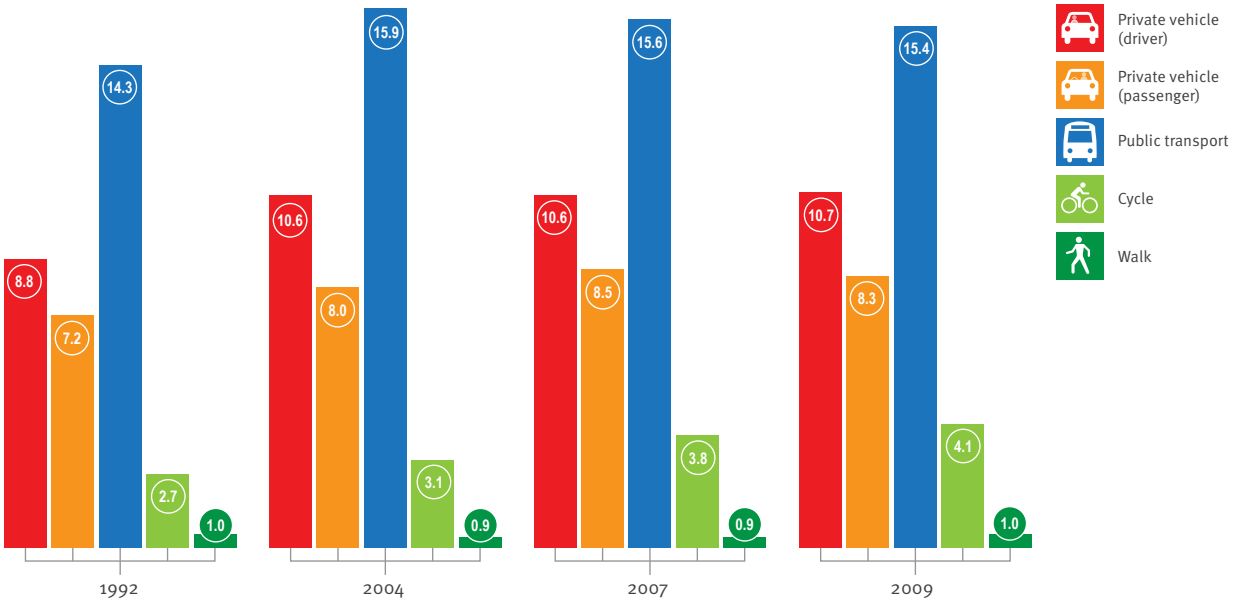
The average distance travelled by public transport has been decreasing since 2004, while the distance of cycling trips has been increasing.

Distance and duration by mode

*Due to trip weight variation averages of distance and time cannot be used to calculate average speed.

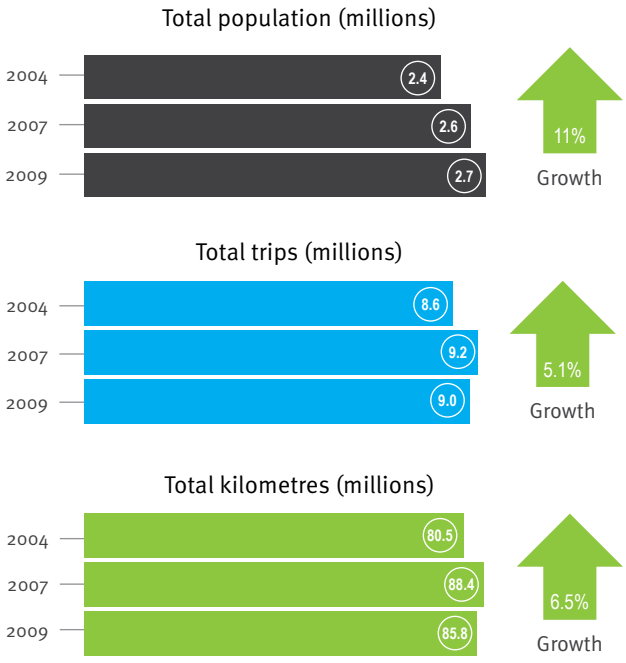
In 2009, the average public transport trip was 49 minutes, decreasing from an average of 56 minutes in 2007.

Average distance (kilometres) by mode

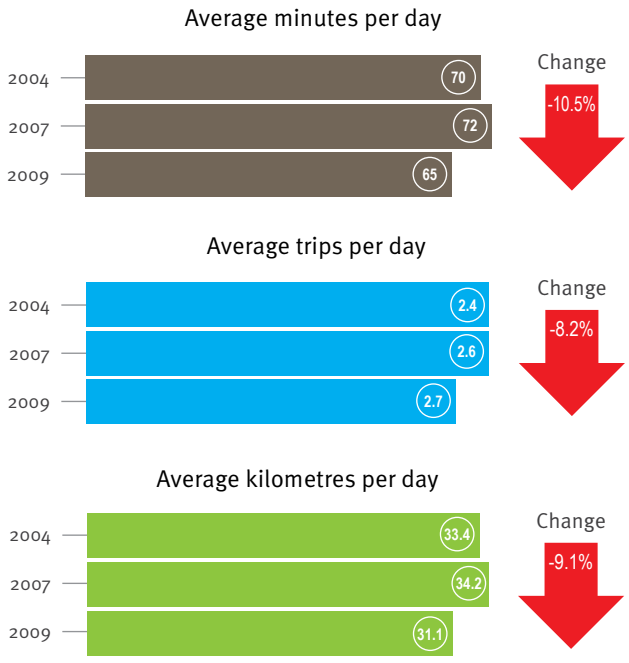


Summary | South-east Queensland

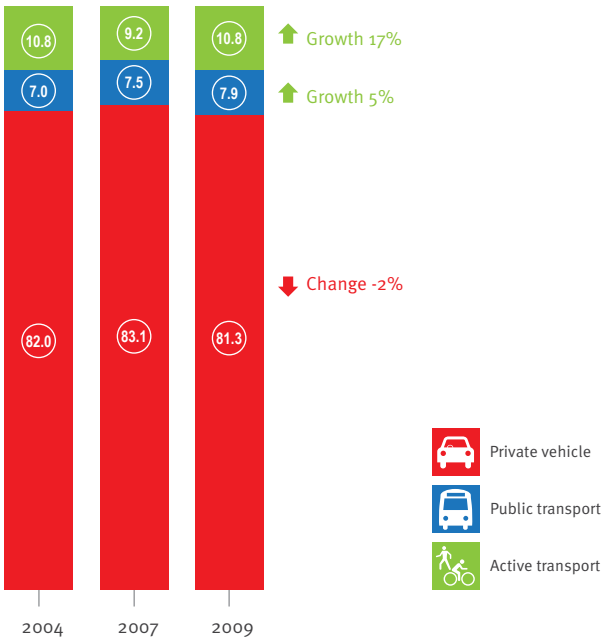
Total travel



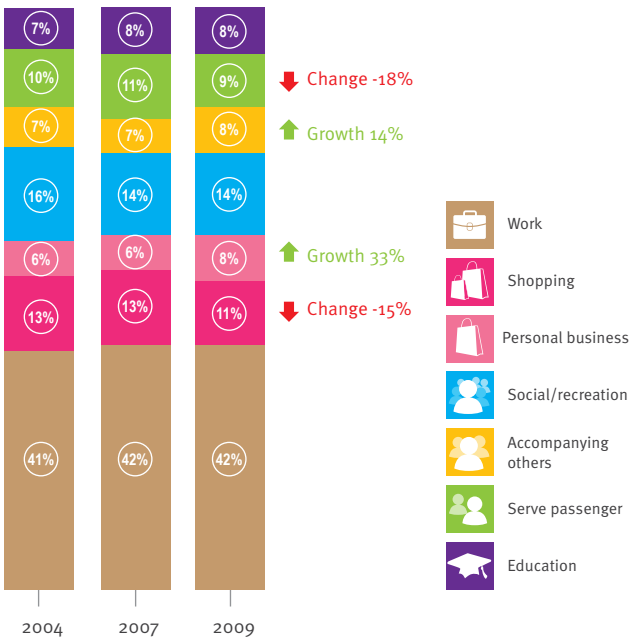
Average travel



Mode share based on trips (percentages)



Purpose of trips based on distance



Data source: household travel surveys conducted between 1992 and 2009.

Please note: 1992 population is census usual resident population, while 2004 to 2009 populations are estimated resident population in private dwellings.

Brisbane

-3.1%

Decrease in total kilometres travelled in Brisbane from 2007 to 2009.

3.3

Average number of trips travelled per person per day in Brisbane.

307 000

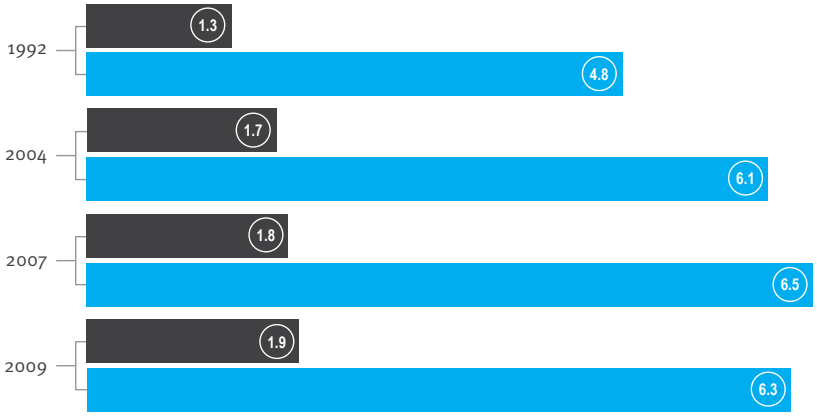
The reduction in private vehicle trips travelled per day from 2007 to 2009.

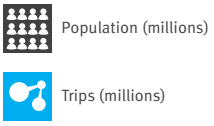
Total daily travel | **Brisbane**

Collectively, Brisbane residents made 6.3 million trips per weekday in 2009, covering 57 million kilometres. This accounts for 70% of weekday trips within south-east Queensland and represents a 62% increase on the total distance travelled by Brisbane residents from 1992. There is a decrease in total trips travelled and total kilometres travelled in Brisbane in 2009, despite an increase in the total population.

6.3 million
Total amount of trips made by Brisbane residents per weekday in 2009.

Daily total trips and population





-3.1%
The decrease in total trips travelled in Brisbane from 2007 to 2009.

Daily total kilometres travelled

Data source: household travel surveys conducted between 1992 and 2009.

Please note: 1992 population is census usual resident population, while 2004 to 2009 populations are estimated resident population in private dwellings.

Daily travel | **Brisbane**

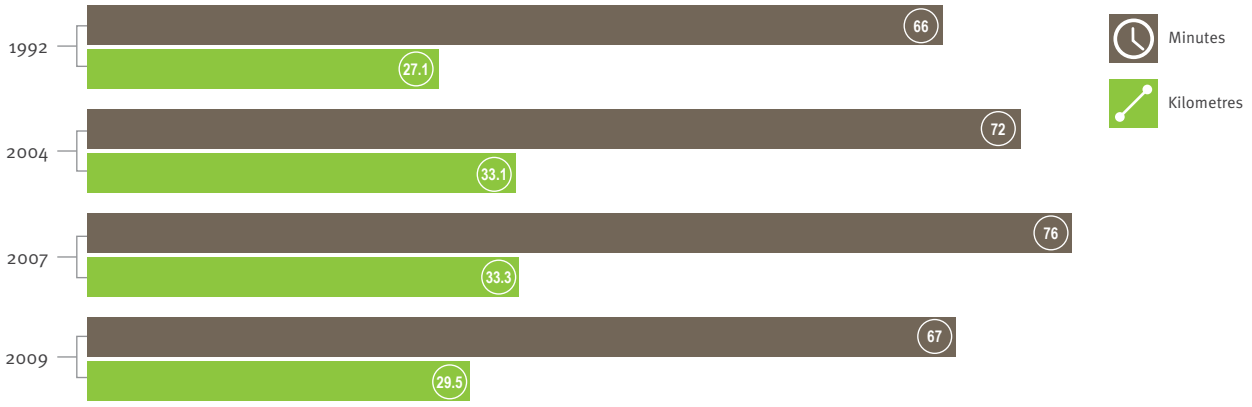
The average number of trips undertaken per person per day remained steady at 3.6 from 1992 until 2007, but dropped to 3.3 in 2009. This may, in part, be due to the global financial crisis when there was a slight decrease in economic activity.
This drop in trip rates is estimated to have caused a decrease in total kilometres travelled by Brisbane residents in 2009. Brisbane is the only region that saw a decrease in total kilometres and total trips made in 2009, and is primarily responsible for the decrease in kilometres travelled for south-east Queensland overall.

An average trip in Brisbane is 21 minutes long, covering 9.1 kilometres.

Average trips (per person) per weekday decreased in 2009.

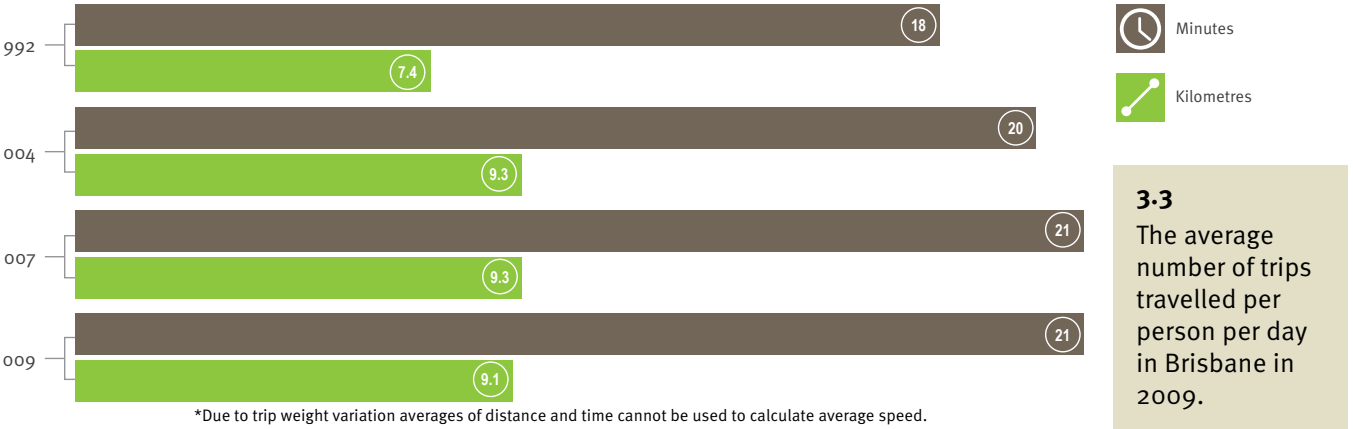
Trips (millions) per person

Daily travel time and distance per day



*Due to trip weight variation averages of distance and time cannot be used to calculate average speed.

Average trip travel time and distance per day



*Due to trip weight variation averages of distance and time cannot be used to calculate average speed.

3.3
The average number of trips travelled per person per day in Brisbane in 2009.

Purpose of travel | Brisbane

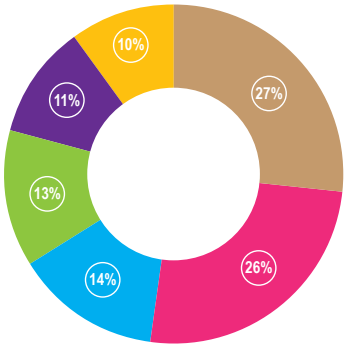
Work-related trips continued to be the primary reason for travel in 2009, being the purpose for 27% of all trips by Brisbane residents. This is followed by shopping trips that account for 18% of trips. Aside from a moderate increase in the proportion of work-related trips, the reasons Brisbane residents travel has changed little since 1992.

In terms of distance travelled, work-related travel accounts for 44% of demand on the transport network.

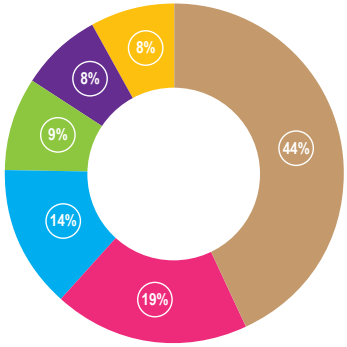
The next two largest demands on the transport network in terms of total distance travelled was shopping (11%) and social/recreation (14%).

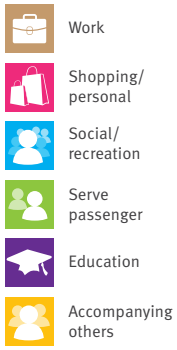
Work-related travel accounts for 44% of demand on the transport network in terms of kilometres travelled.

Trip purpose based on trips

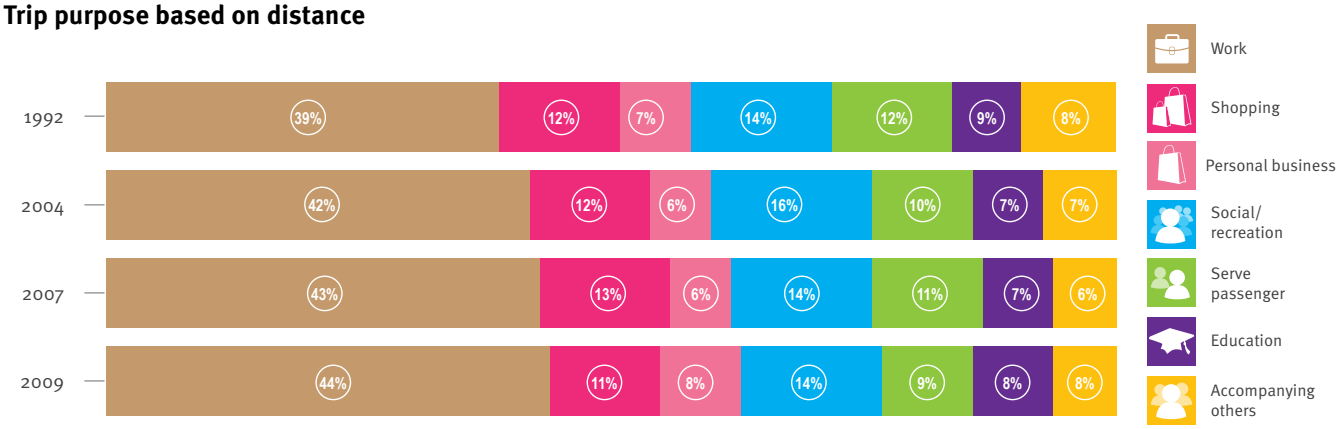


Trip purpose based on distance





Trip purpose based on distance



In 2009, there was a decrease in the proportion of discretionary travel, such as shopping. Serve passenger trips also decreased as a proportion of distance travelled. This is due to the marked increase in the proportion of educational trips being undertaken by active transport.

Social/recreation, education and work travel remained fairly constant as a proportion of distance travelled.

In 2009, there was a decrease in serve passenger and shopping trips as a proportion of kilometres travelled.

1.7 million

The decrease in total kilometres spent travelling for shopping per day from 2007 to 2009.

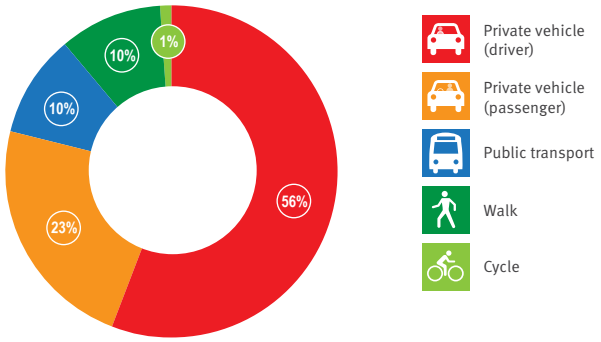
Travel mode | **Brisbane**

Although the private vehicle still dominates as the primary mode of travel, there has been a continued increase in the mode share of public transport since 1992 and a modest increase in active transport mode share in 2009. This increase in active transport mode share reflects a reverse in the persistent decline since 1992.

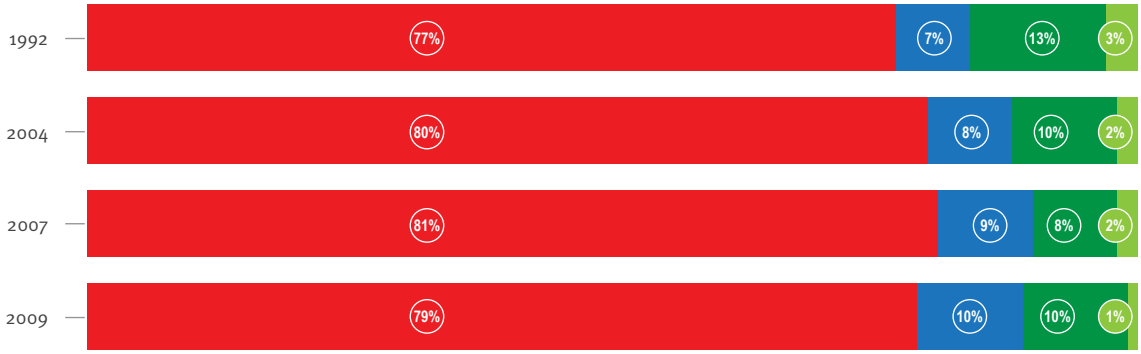
Between 2007 and 2009

- 307 000 less private vehicle trips per day.
- 19 300 more public transport trips per day.
- 94 000 more active transport trips per day.

Mode share based on trips

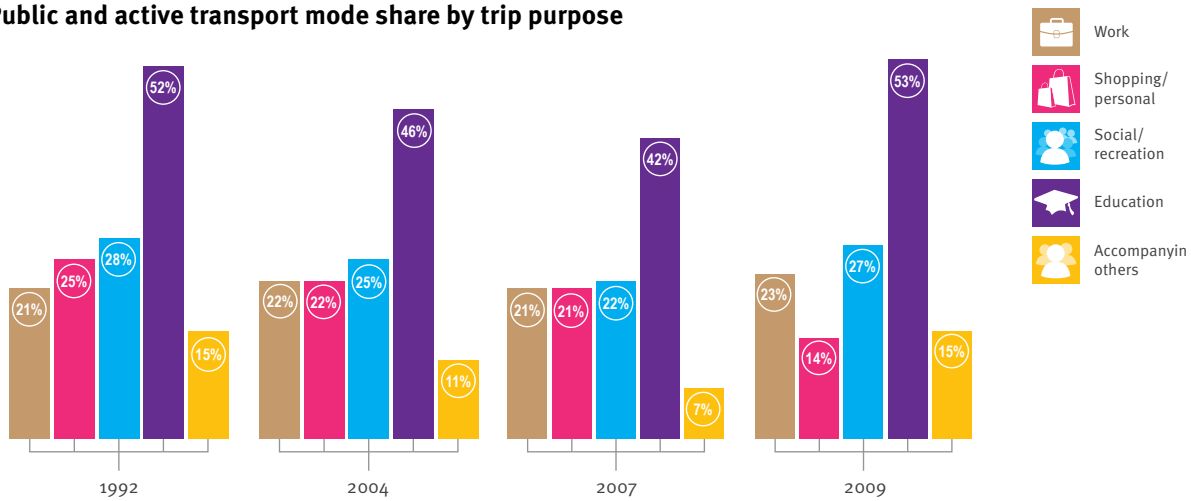


Mode share based on trips



Four out of five trips are made in a private vehicle.

Public and active transport mode share by trip purpose



After a decline in active mode share up to 2007, the mode share for active and public transport has improved in education travel and accompanying others. The increase in sustainable modes for accompanying others is likely to be driven by change in education mode shares (from private vehicle to walk or public transport) for parents accompanying their children to school.

Public and active transport mode share increased significantly for education trips in 2009.

307 000

The reduction in private vehicle trips travelled per day from 2007 to 2009.

Trip distance and duration | **Brisbane**

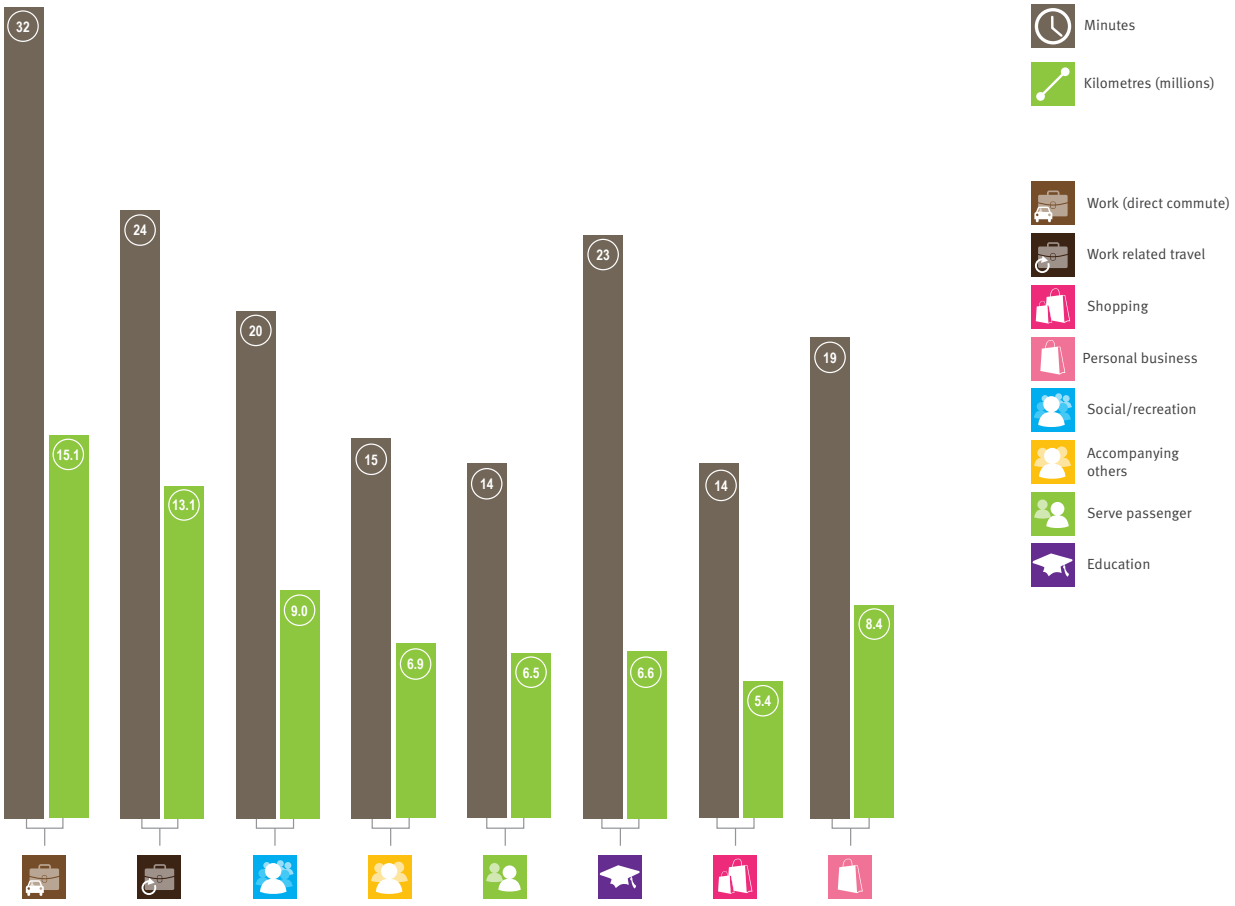
On average, work related trips are generally twice the distance of other trip purposes. This explains the high demand placed on the network by work related travel.

The high number of work related trips and their tendency to aggregate during certain time periods helps to explain the very large demands placed on the network during peak periods.

The average time for the direct commute to work is the longest of all trip purposes at 32 minutes. In comparison, the average trip length to access shopping or to drop off a passenger is the shortest trip type at 14 minutes.

Work-related trips are generally twice the distance of other trips.

Distance and duration by purpose



*Due to trip weight variation averages of distance and time cannot be used to calculate average speed.

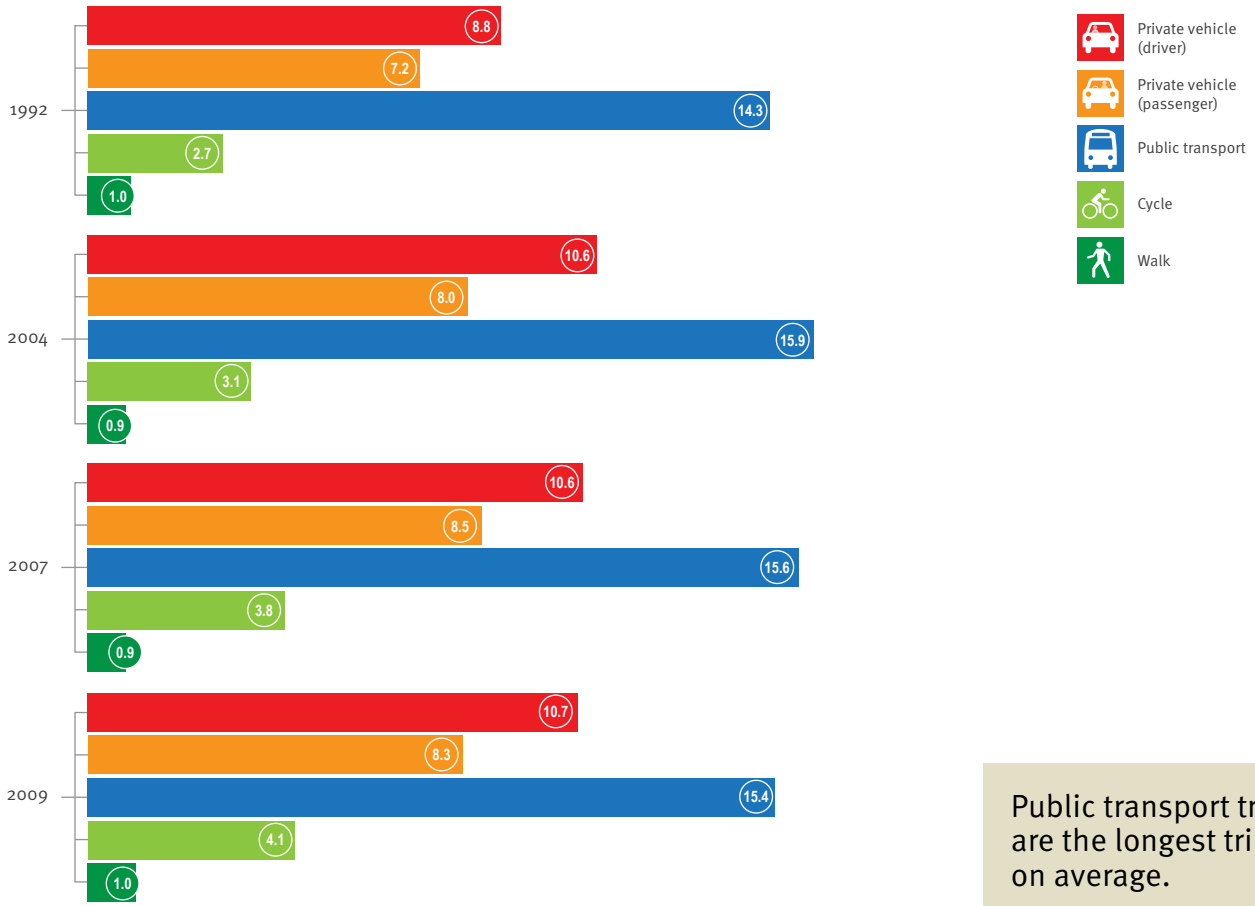
Trip distance and duration | **Brisbane**

The average public transport trip is by far the longest of all modes at 49 minutes. This includes the time taken waiting for the public transport service to arrive and the time spent travelling to and from the public transport stop. The average vehicle driver trip is 19 minutes long.

Distance and duration by mode

*Due to trip weight variation averages of distance and time cannot be used to calculate average speed.

Average distance (kilometres) by mode



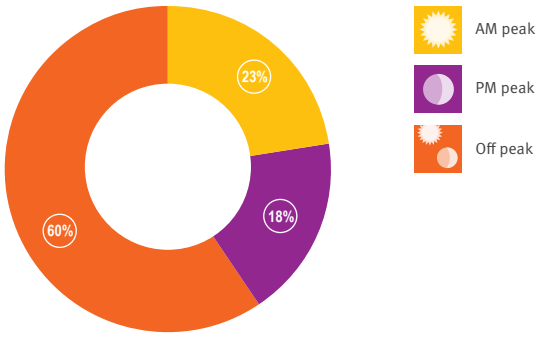
Public transport trips are the longest trips on average.

Time of travel | **Brisbane**

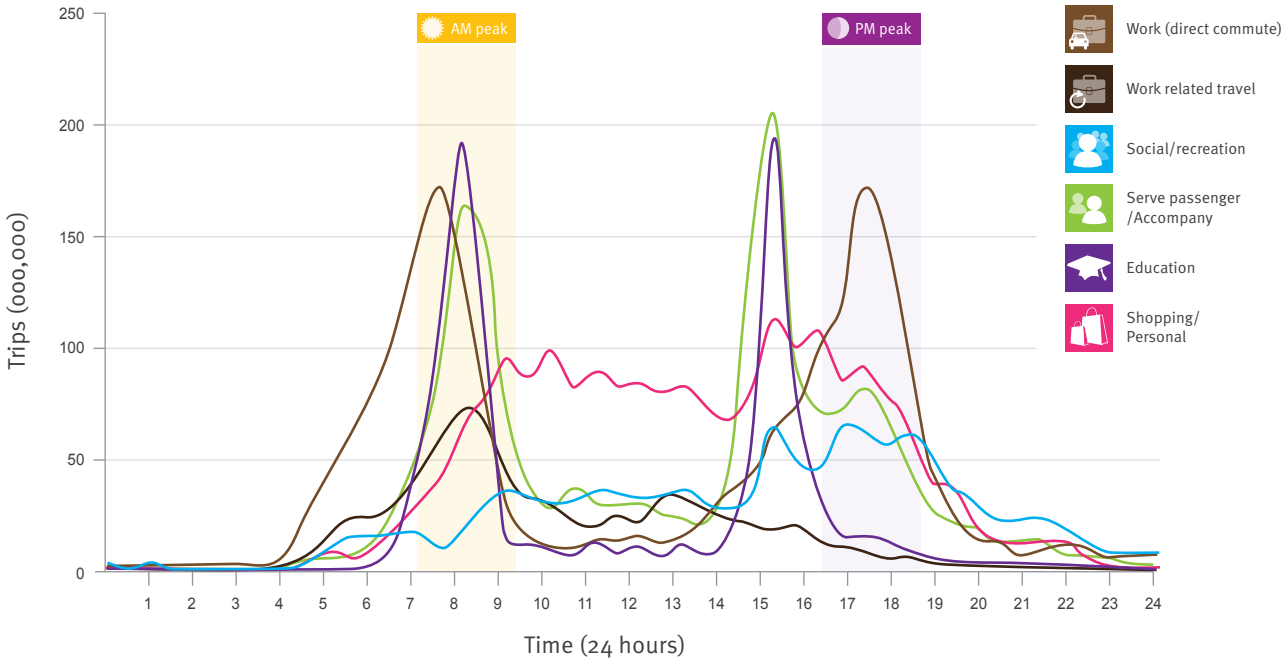
The direct work commute peaks at around 7.30am and 5pm, while education and serve passenger had the largest volumes at 8am and 3pm.

Shopping/personal business trips remain at fairly consistent levels from 9am throughout the day, peaking at 3pm.

Proportion of travel during peak time

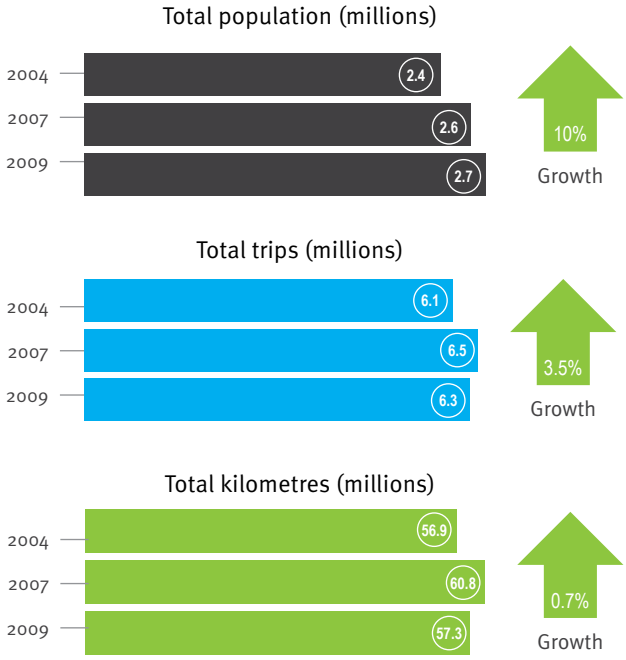


Time of travel

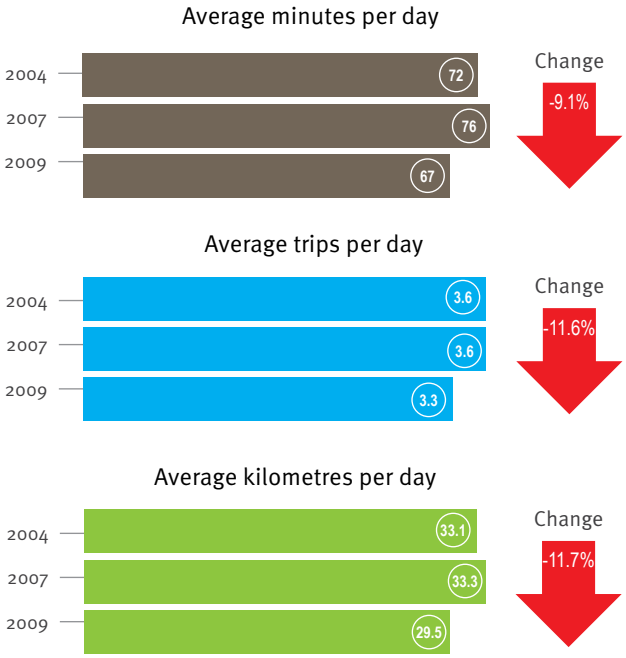


Summary | Brisbane

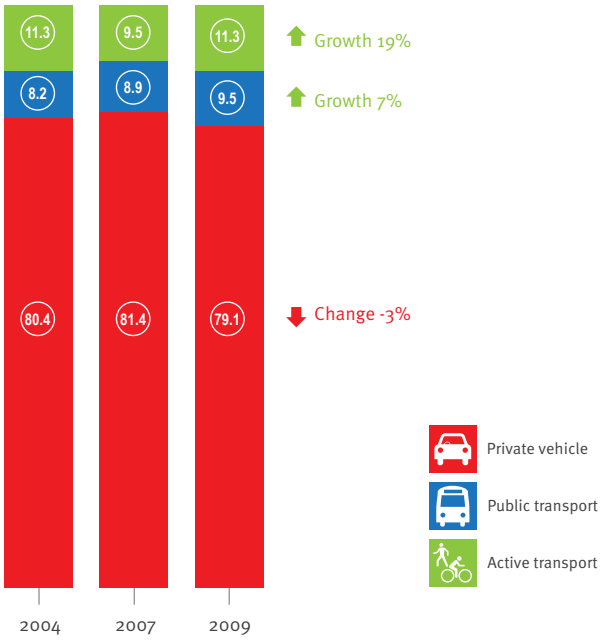
Total travel



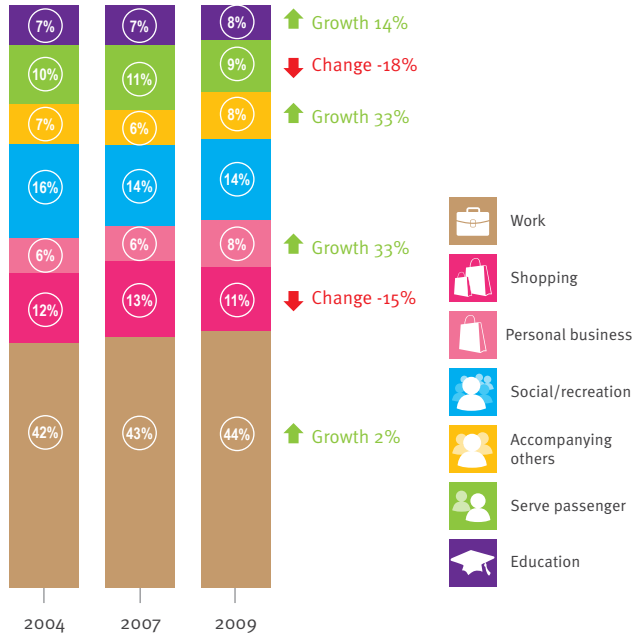
Average travel



Mode share based on trips (percentages)



Purpose of trips based on distance



Data source: household travel surveys conducted between 1992 and 2009.

Please note: 1992 population is census usual resident population, while 2004 to 2009 populations are estimated resident population in private dwellings.

Gold Coast

2%

Increase in total kilometres travelled on the Gold Coast from 2007 to 2009.

3.3

Average number of trips travelled per person per day on the Gold Coast.

52 mins

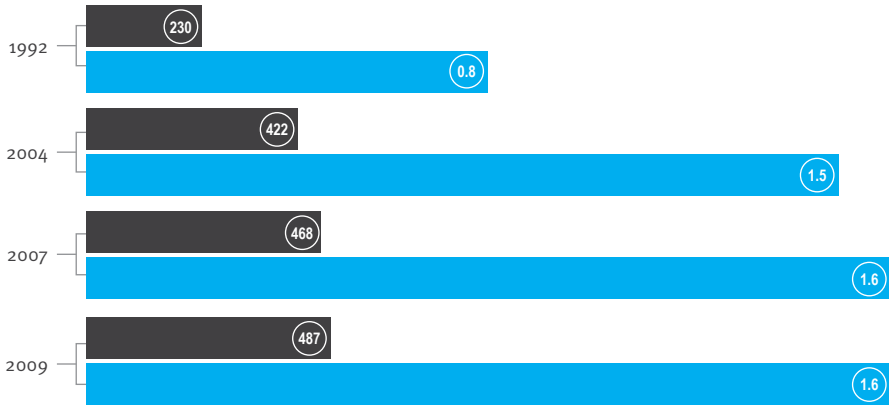
The average duration of a public transport trip.

Total daily travel | **Gold Coast**

Gold Coast residents made 1.6 million trips per weekday in 2009, covering 17 million kilometres. This accounts for 18% of weekday trips within south-east Queensland and represents a 28% increase on the total kilometres travelled by Gold Coast residents in 2004.

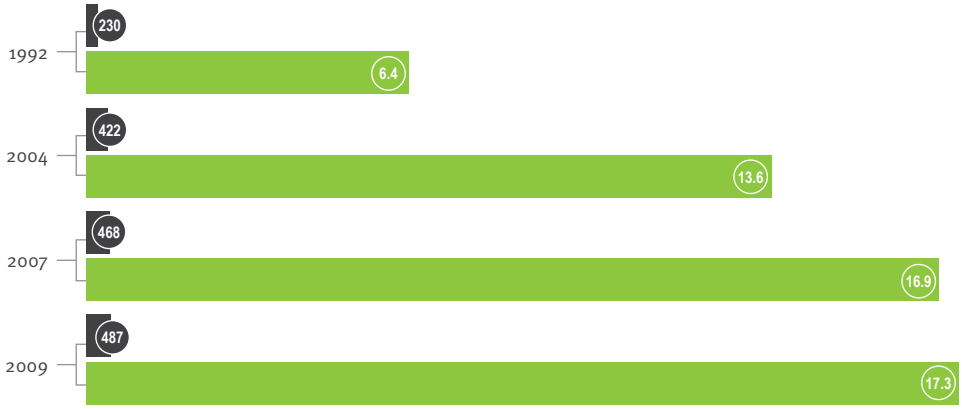
The total trips and kilometres travelled on the Gold Coast remained fairly consistent between 2007 and 2009, increasing by 1.2% and 2% respectively. The growth in population outstripped growth in total trips and distance travelled for this period.

Daily total trips and population



1.6 million
Collective number of trips made by Gold Coast residents per weekday in 2009.

Daily total kilometres travelled



1.2%
The growth in total trips travelled on the Gold Coast from 2007 to 2009.

Data source: household travel surveys conducted between 1992 and 2009.

Please note: 1992 population is census usual resident population, while 2004 to 2009 populations are estimated resident population in private dwellings.

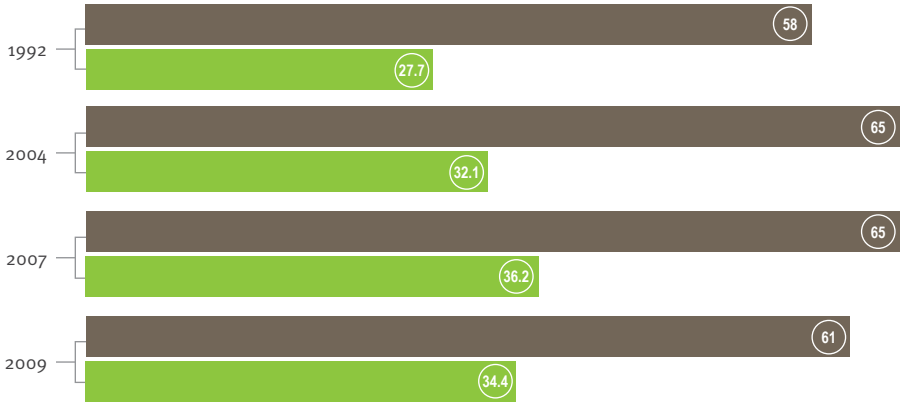
Daily travel | Gold Coast

The average number of trips undertaken per person per day remained steady at 3.5 from 1992 until 2007, but dropped to 3.3 in 2009. This may, in part, be an effect of the global financial crisis when there was a slight decrease in economic activity and full-time employment. This decline in average trip rates per day is the reason why total travel and total trips on the Gold Coast increased at lower rates than the population.

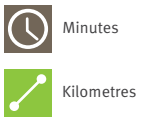
Average trips (per person) per weekday decreased in 2009.

Trips (millions) per person

Daily travel time and distance per day



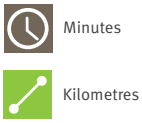
*Due to trip weight variation averages of distance and time cannot be used to calculate average speed.



Average trip travel time and distance have remained stable in 2009.

Average trip travel time and distance per day

*Due to trip weight variation averages of distance and time cannot be used to calculate average speed.



3.3
The average number of trips travelled per person per day on the Gold Coast.

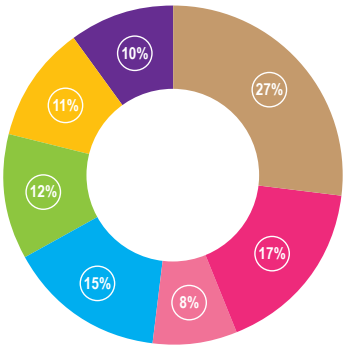
Purpose of travel | **Gold Coast**

Work-related trips continued to be the largest reason for travel on the Gold Coast in 2009, being the purpose for 27% of all trips by Gold Coast residents. Shopping trips account for 17% of trips made. Gold Coast residents travel for largely the same reasons as they did in 1992, although work has increased slightly as a proportion of travel.

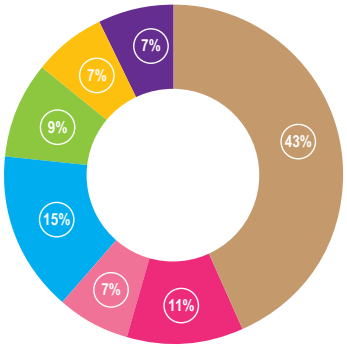
In terms of distance travelled, work-related travel accounts for 43% of demand on the transport network. At 7.2 million kilometres per weekday, this is far larger than any other single trip purpose. Each of the other purposes represents 15% or less of the total distance travelled.

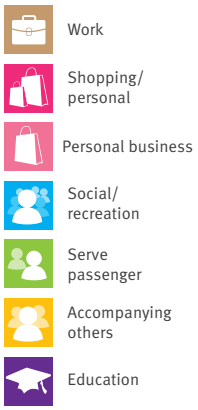
Work-related travel accounts for 43% of demand on the transport network in terms of kilometres travelled.

Trip purpose based on trips

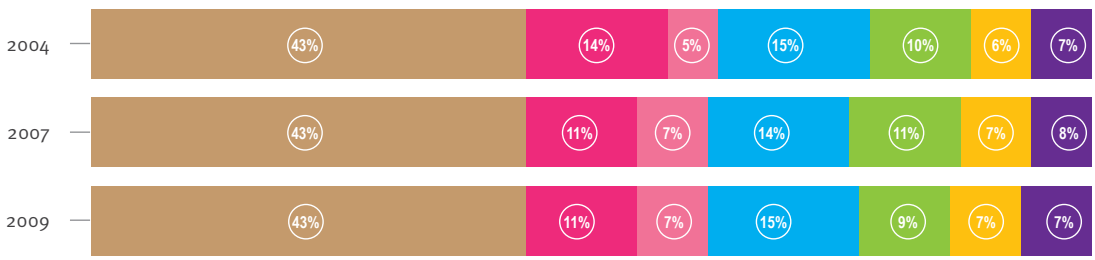


Trip purpose based on distance





Trip purpose based on distance



In 2009, there was a decrease in serve passenger trips as a proportion of kilometres travelled.

In 2009 there was a decrease in the proportion of serve passenger travel (from 11% to 9%). This is likely to be due to the increase in education trips being undertaken by active transport.

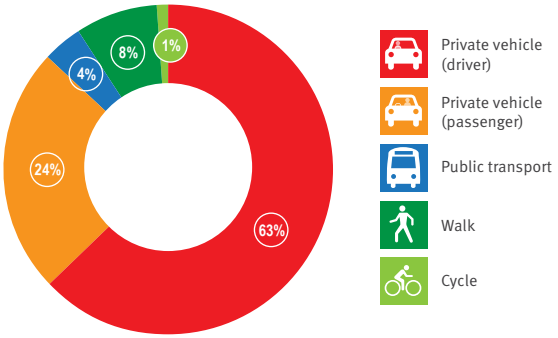
326 000
The decrease in kilometres spent travelling for serve passenger per day from 2007 to 2009.

Travel mode | Gold Coast

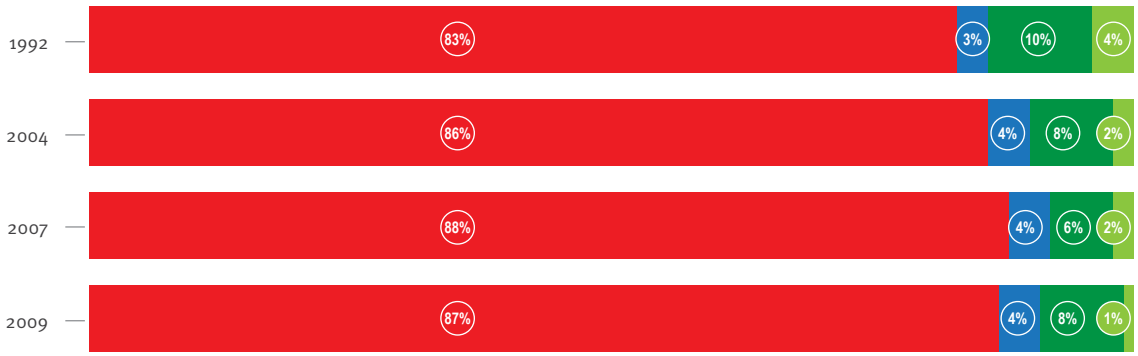
Although private vehicle still dominates as the primary mode of travel on the Gold Coast, there has been a slight decline in mode share between 2007 and 2009. This is compared to a slight increase in active transport between 2007 and 2009. The increase in active transport mode share reflects a reverse in the steady decline since 1992. Public transport mode share has remained steady over time.

Almost 9 in 10 trips are made in a private vehicle.

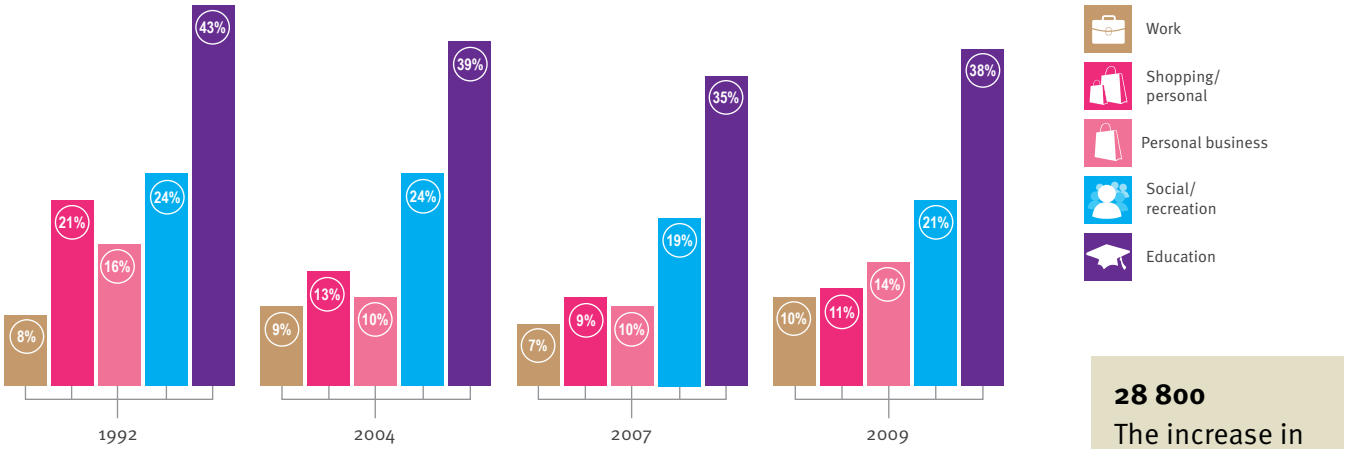
Mode share based on trips



Mode share based on trips



Public and active transport mode share by trip purpose



28 800
The increase in active transport trips travelled per day from 2007 to 2009.

The increase in active transport is evident across most trip purposes on the Gold Coast, primarily education trips.

Trip distance and duration | **Gold Coast**

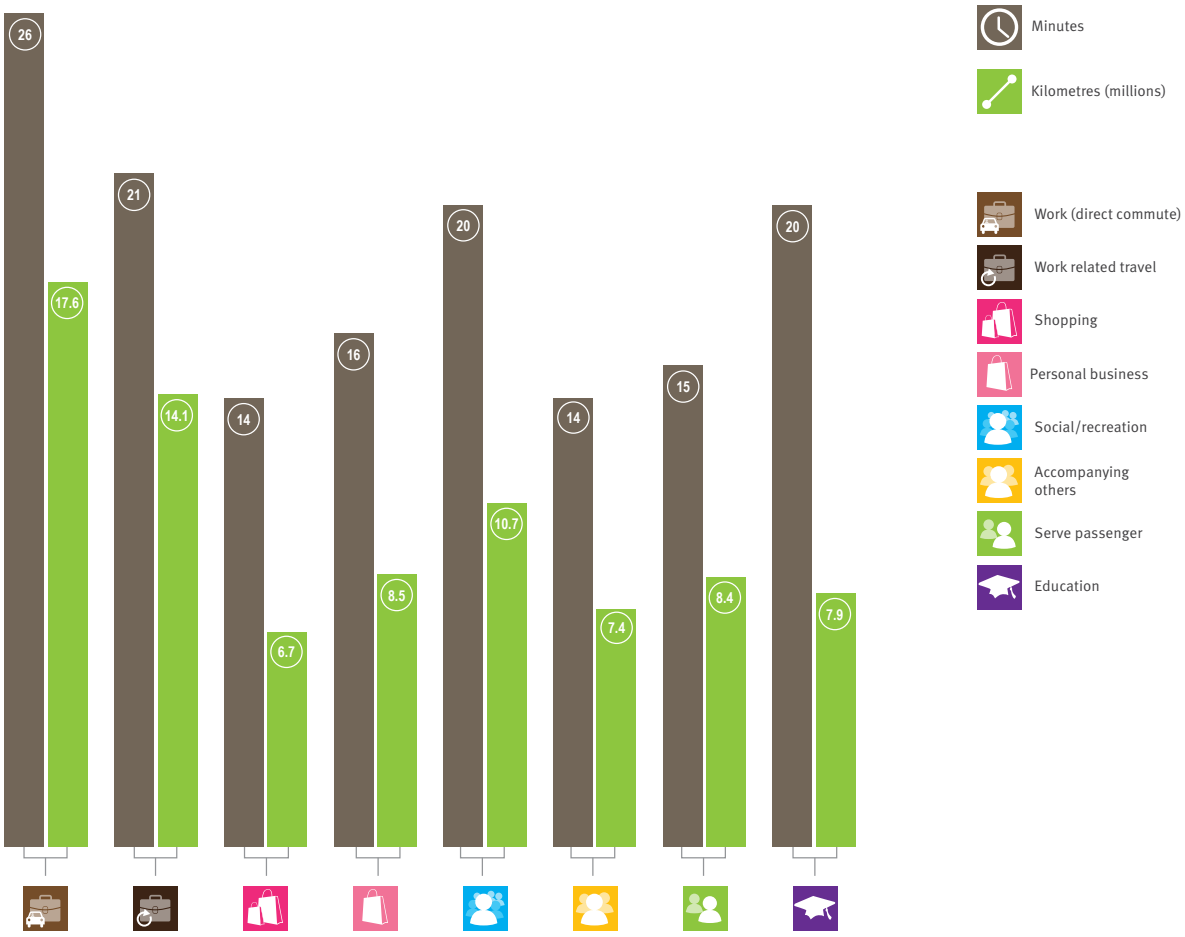
Gold Coast residents travel the furthest for work-related travel, nearly twice the distance of all other trip purposes.

Less variation is shown between the other trips purposes. On average, Gold Coast residents travel the shortest distance to access shopping and to accompany others.

In comparison to Brisbane, Gold Coast residents travel a slightly further distance for all trip purposes, especially for the direct work commute, but interestingly the trip duration is shorter for the work commute (26 minutes compared to 32 minutes in Brisbane).

Work-related trips are generally twice the distance of other trips.

Distance and duration by purpose

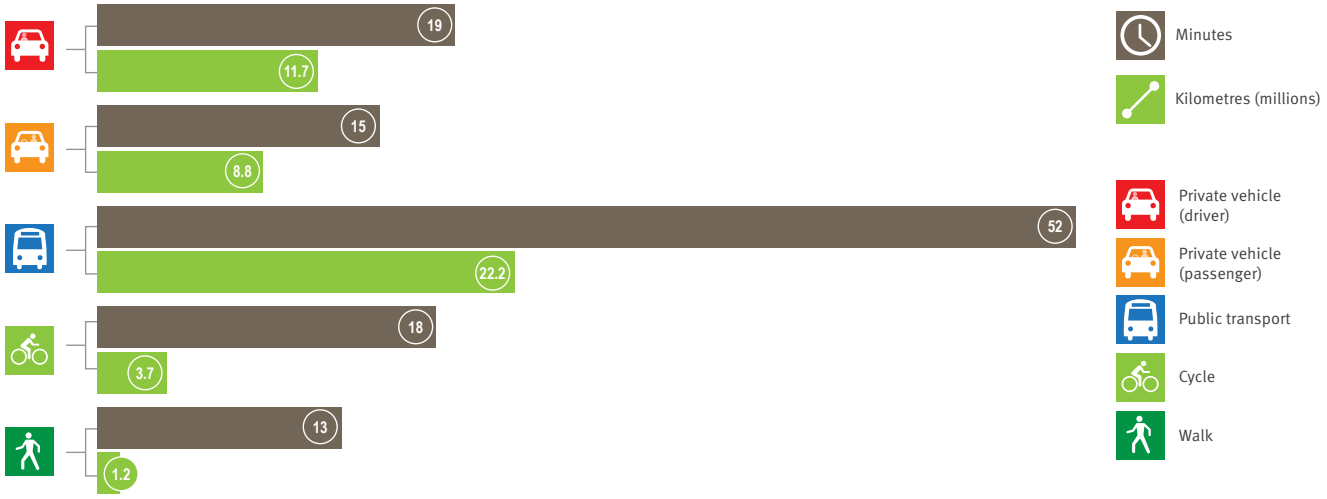


*Due to trip weight variation averages of distance and time cannot be used to calculate average speed.

Trip distance and duration | Gold Coast

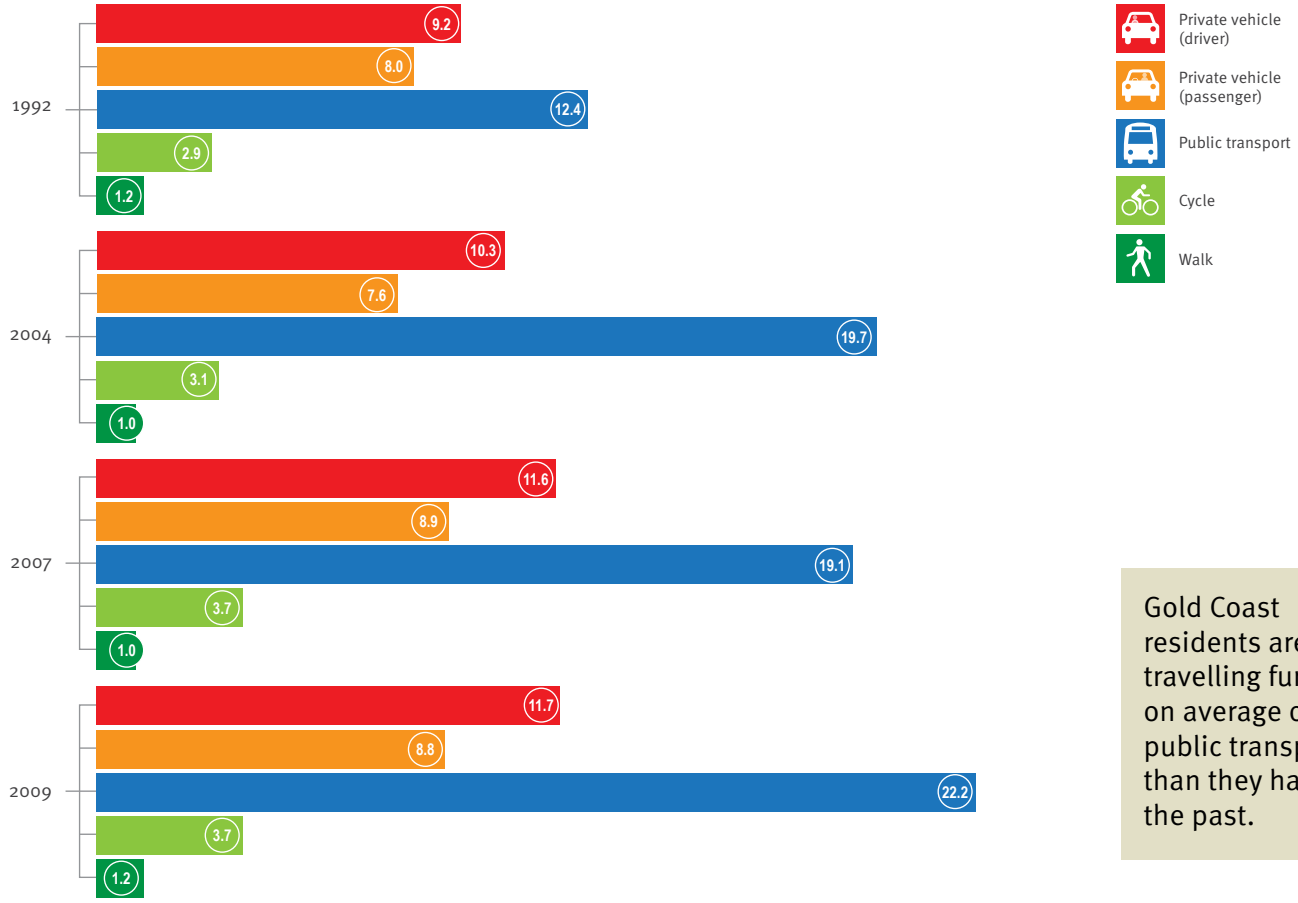
The average public transport trip is by far the longest of all modes at 52 minutes. This includes the time taken waiting for the public transport service to arrive and the time spent travelling to and from the public transport stop. The average vehicle driver trip is 19 minutes long. Gold Coast residents travel the furthest on public transport compared to other regions. The average public transport trip is 22 kilometres long, a 3 kilometre increase since 2007.

Distance and duration by mode



*Due to trip weight variation averages of distance and time cannot be used to calculate average speed.

Average distance (kilometres) by mode



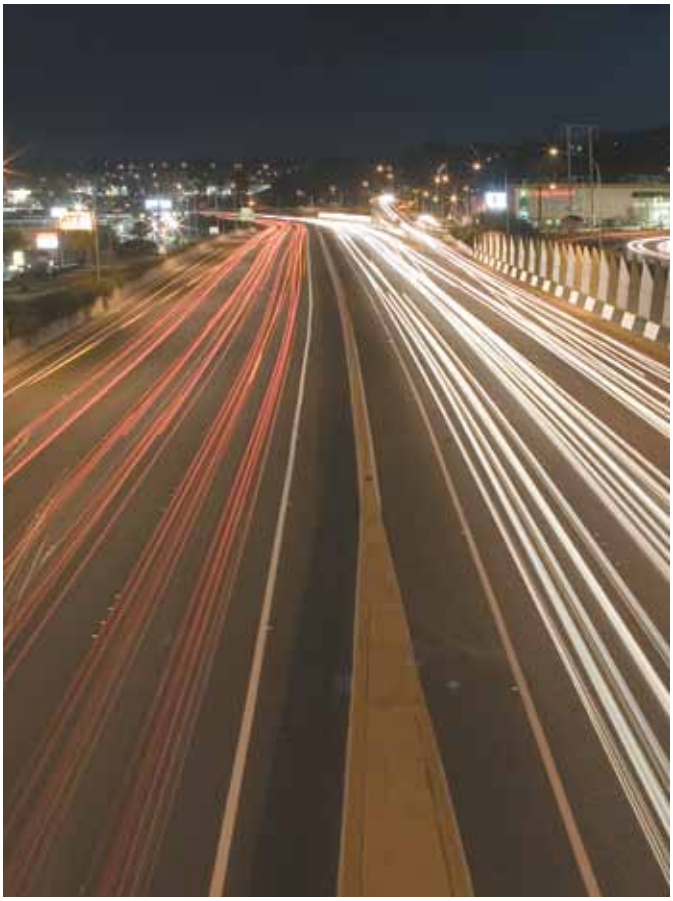
Gold Coast residents are travelling further on average on public transport than they have in the past.

Time of travel | **Gold Coast**

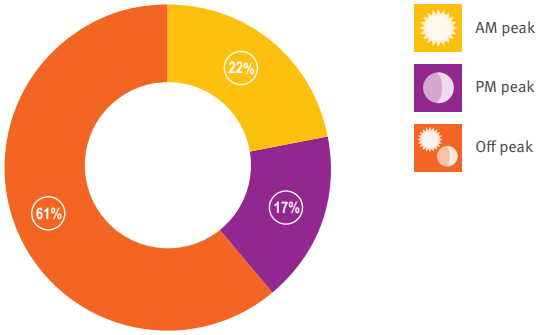
The direct work commute peaks at around 7.30am and 5pm, while education and serve passenger had the largest volumes at 8am and 3pm.

Shopping/personal business trips remain at fairly consistent levels from 9am throughout the day, peaking at 3pm.

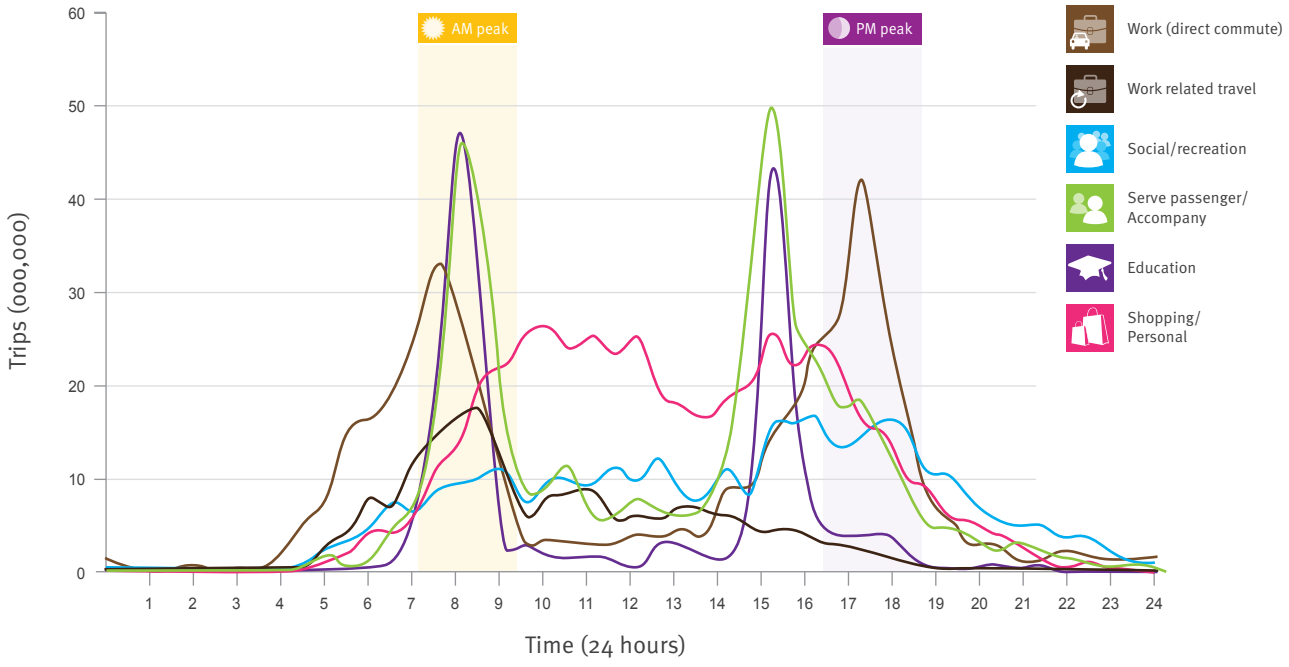
The highest volume of travel occurs outside of peak travel times.



Proportion of travel during peak time

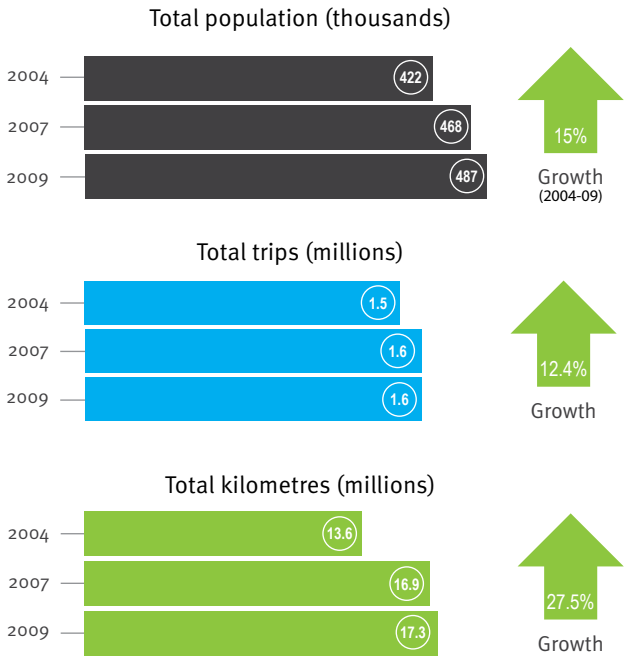


Time of travel

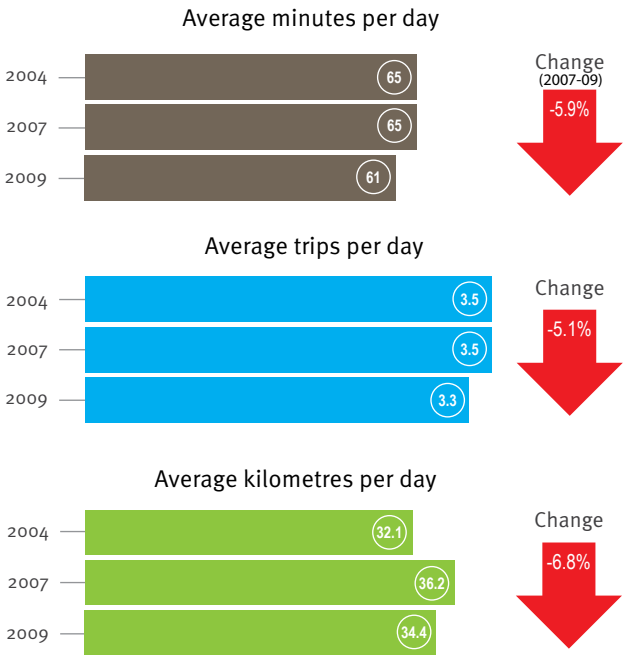


Summary | Gold Coast

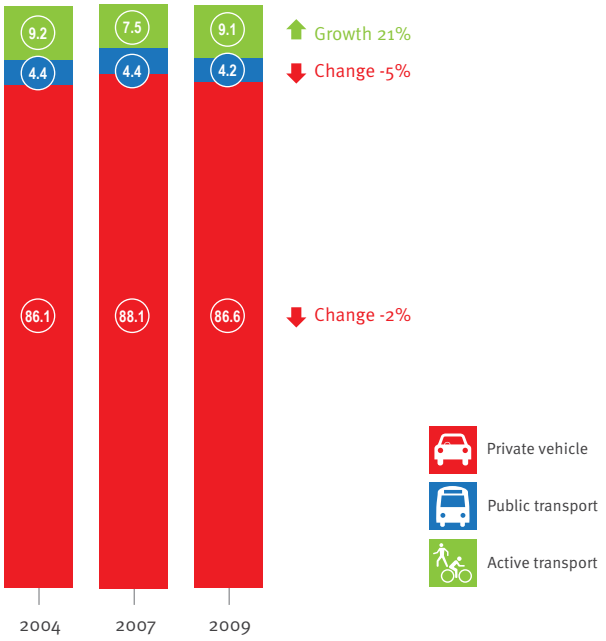
Total travel



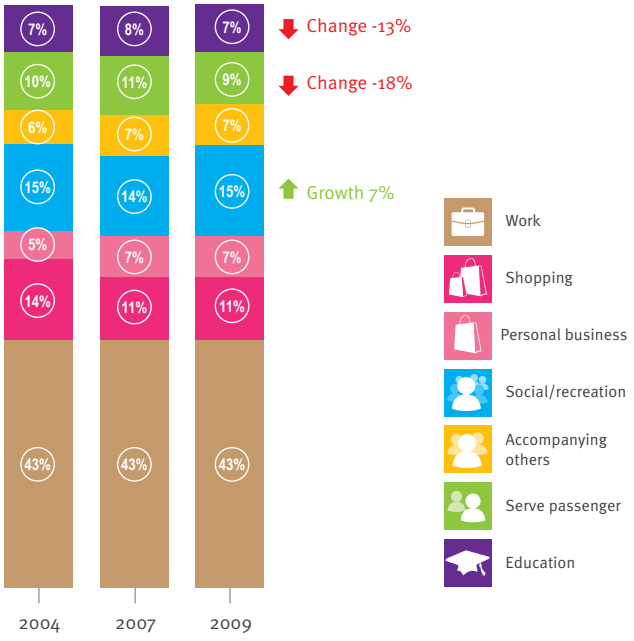
Average travel



Mode share based on trips (percentages)



Purpose of trips based on distance



Data source: household travel surveys conducted between 1992 and 2009.

Please note: 1992 population is census usual resident population, while 2004 to 2009 populations are estimated resident population in private dwellings.

Sunshine Coast

4.7%
Increase in total kilometres travelled on the Sunshine Coast from 2007 to 2009.

3.4
Average number of trips travelled per person per day on the Sunshine Coast.

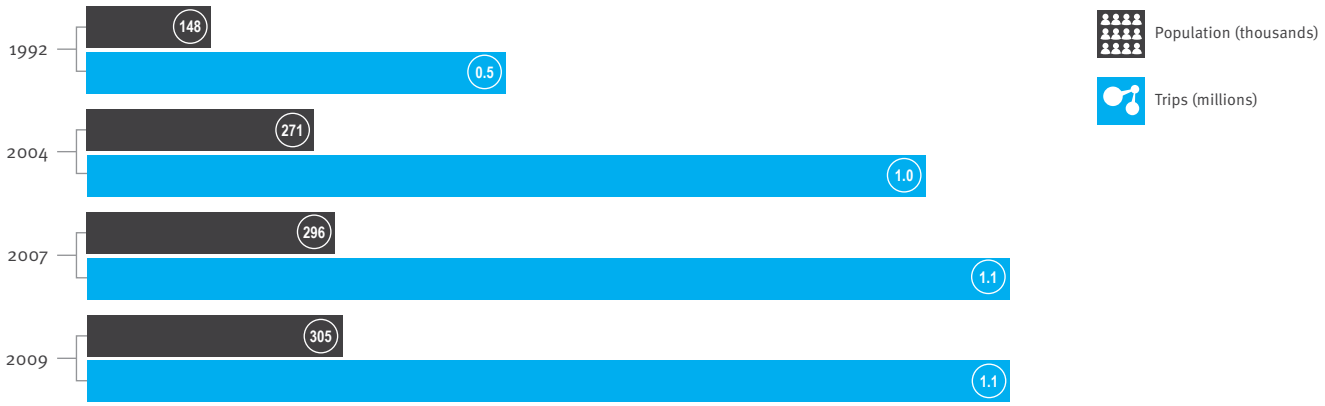
10.4 km
The average distance of a trip made by Sunshine Coast residents.

Total daily travel | Sunshine Coast

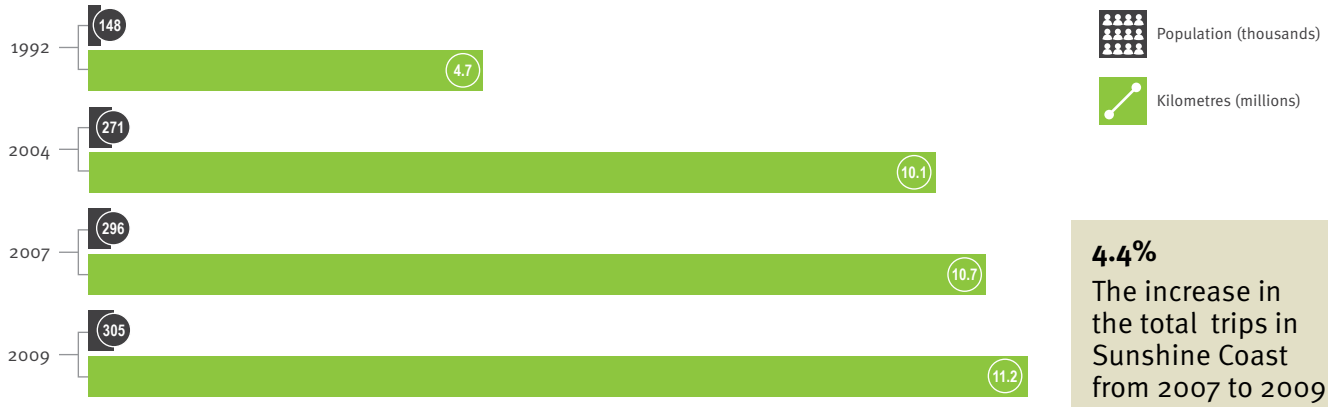
Sunshine Coast residents collectively made 1.1 million trips per weekday in 2009, covering 11 million kilometres. This accounts for 12% of weekday trips within south-east Queensland and represents an 11% increase on the total kilometres travelled by Sunshine Coast residents in 2004.

1.1 million
Number of total trips made by Sunshine Coasts residents per weekday in 2009.

Daily total trips and population



Daily total kilometres travelled



4.4%
The increase in the total trips in Sunshine Coast from 2007 to 2009.

Data source: household travel surveys conducted between 1992 and 2009.

Please note: 1992 population is census usual resident population, while 2004 to 2009 populations are estimated resident population in private dwellings.

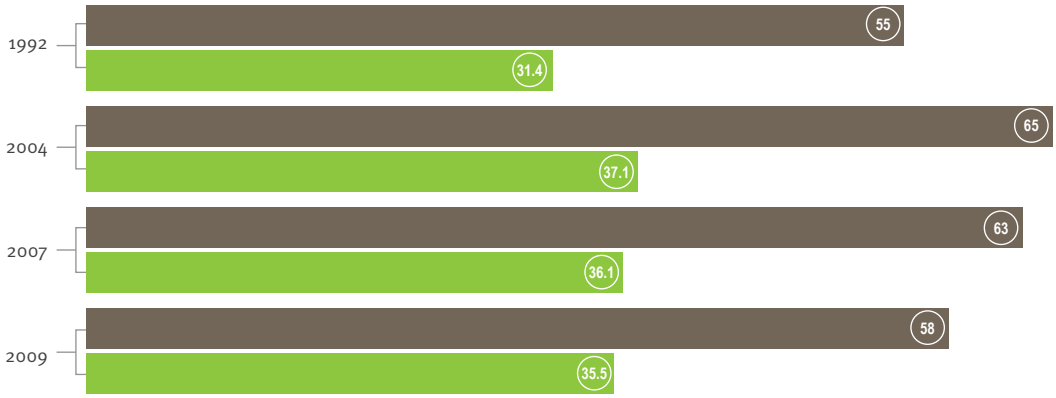
Daily travel | **Sunshine Coast**

The average number of trips undertaken per person per day peaked at 3.8 in 2004 and decreased to 3.4 in 2009. This lower trip rate in 2009 may, in part, be an effect of the global financial crisis when there was a slight decrease in economic activity and full-time employment. The lower trip rate explains why the number of trips travelled on the Sunshine Coast has remained fairly stable despite a growing population.

Average trips per weekday decreased in 2009.

Trips (millions) per person

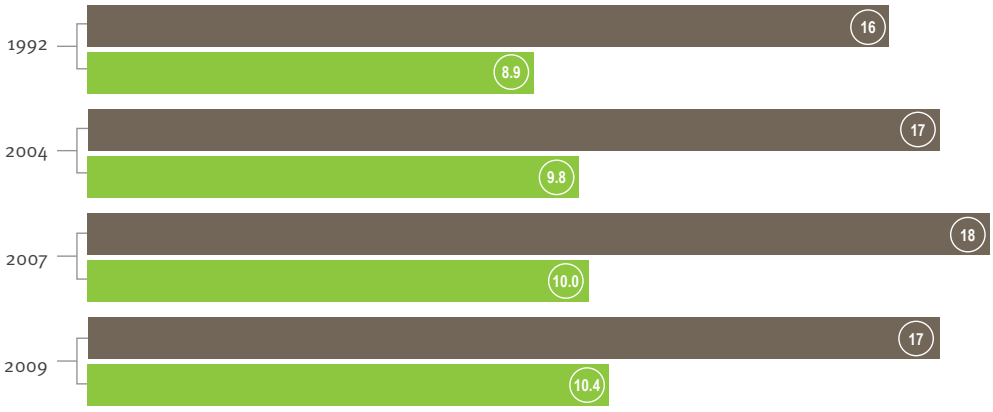
Daily travel time and distance per day



*Due to trip weight variation averages of distance and time cannot be used to calculate average speed.

The average trip time on the Sunshine Coast is the lowest of all the regions.

Average trip travel time and distance per day



*Due to trip weight variation averages of distance and time cannot be used to calculate average speed.

3.4
The average number of trips travelled per person per day on the Sunshine Coast.

Purpose of travel | Sunshine Coast

Work trips were the largest reason for travel on the Sunshine Coast in 2009, being 22% of all trips. This is followed closely by shopping and social/recreation, which each account for 19% of trips. This proportion is higher when compared to Brisbane and the Gold Coast. The travel purposes of Sunshine Coast residents as a proportion of trips has varied little since 1992, aside from a slight decrease in the proportion of shopping trips and slight increase in social/recreation trips.

In terms of distance travelled, work-related travel accounts for 34% of demand on the Sunshine Coast transport network.

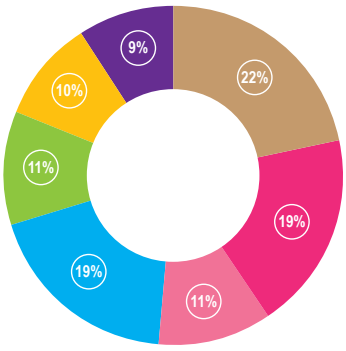
Social/recreation (18%) and shopping and personal business (13%) represent the next two largest demands on the transport network in terms of total distance travelled. All other trips purposes represent 10% or less of all trips.

Work-related travel accounts for one third of demand on the transport network in terms of kilometres travelled.

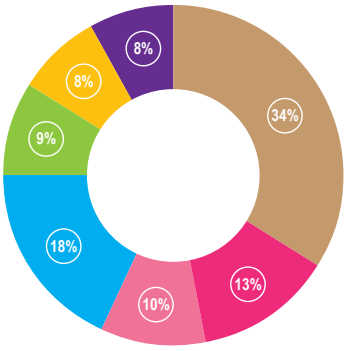
326 000

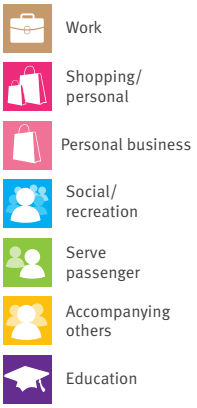
The decrease in kilometres generated per day from trips made to serve a passenger from 2007 to 2009.

Trip purpose based on trips

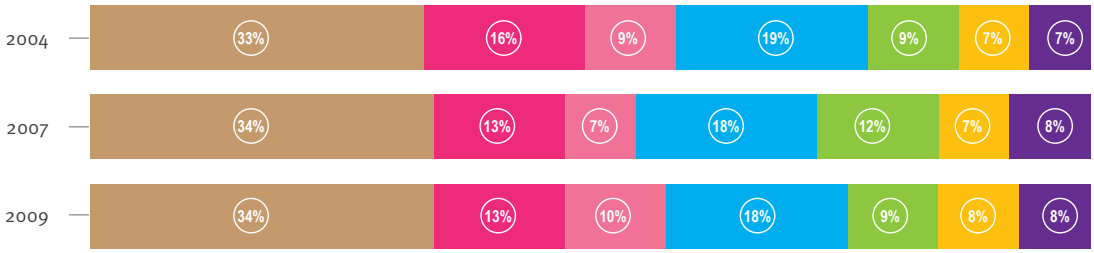


Trip purpose based on distance





Trip purpose based on distance

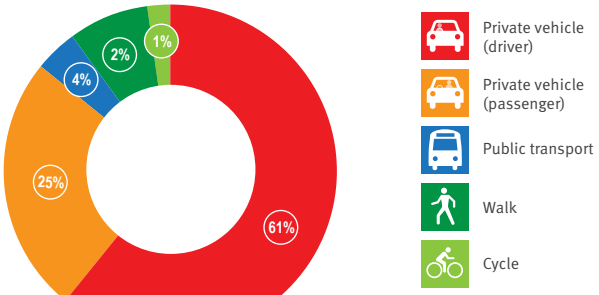


In 2009, there was a decrease in serve passenger trips as a proportion of kilometres.

Travel mode | Sunshine Coast

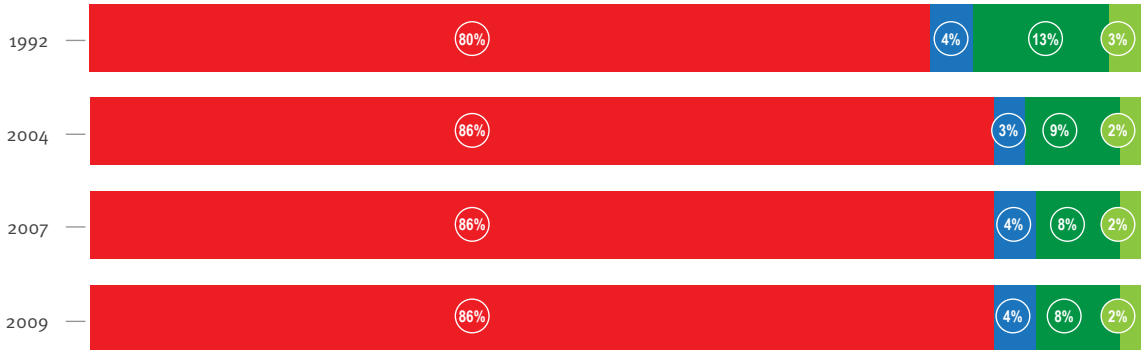
Private vehicle still dominates as the primary mode of travel, and has remained steady between 2004 and 2009. Both active transport and public transport have maintained similar levels of mode share on the Sunshine Coast since 2004.

Mode share based on trips

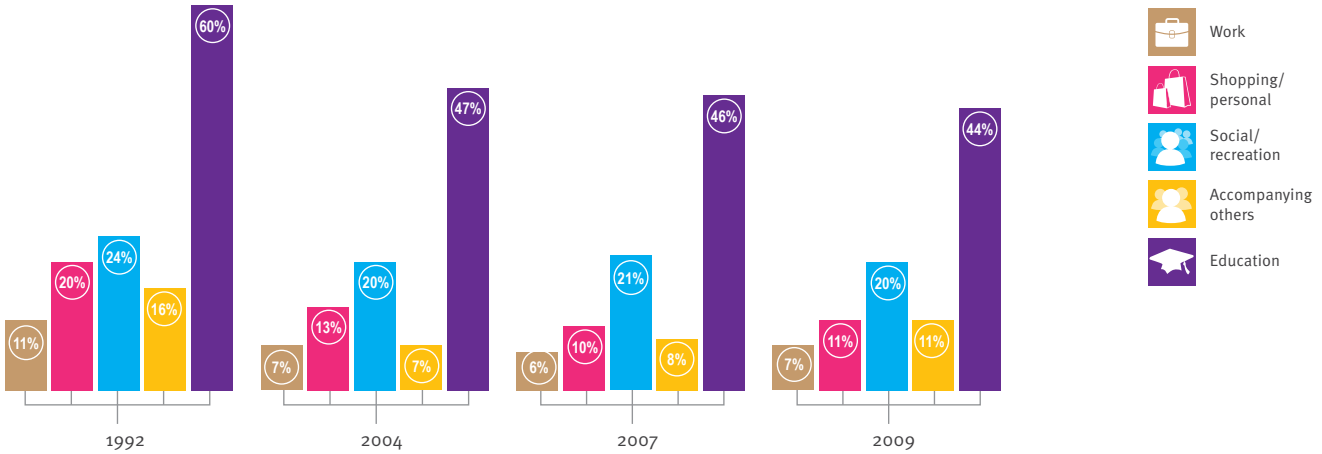


Almost 9 in 10 trips are made in a private vehicle.

Mode share based on trips



Public and active transport mode share by trip purpose



Active and public transport mode share has remained fairly consistent across trip purposes over time. Use of public and active transport for education has been declining over time, while for accompanying other trips there has been an increase.

The public and active transport mode share increased for accompanying others in 2009.

Trip distance and duration | **Sunshine Coast**

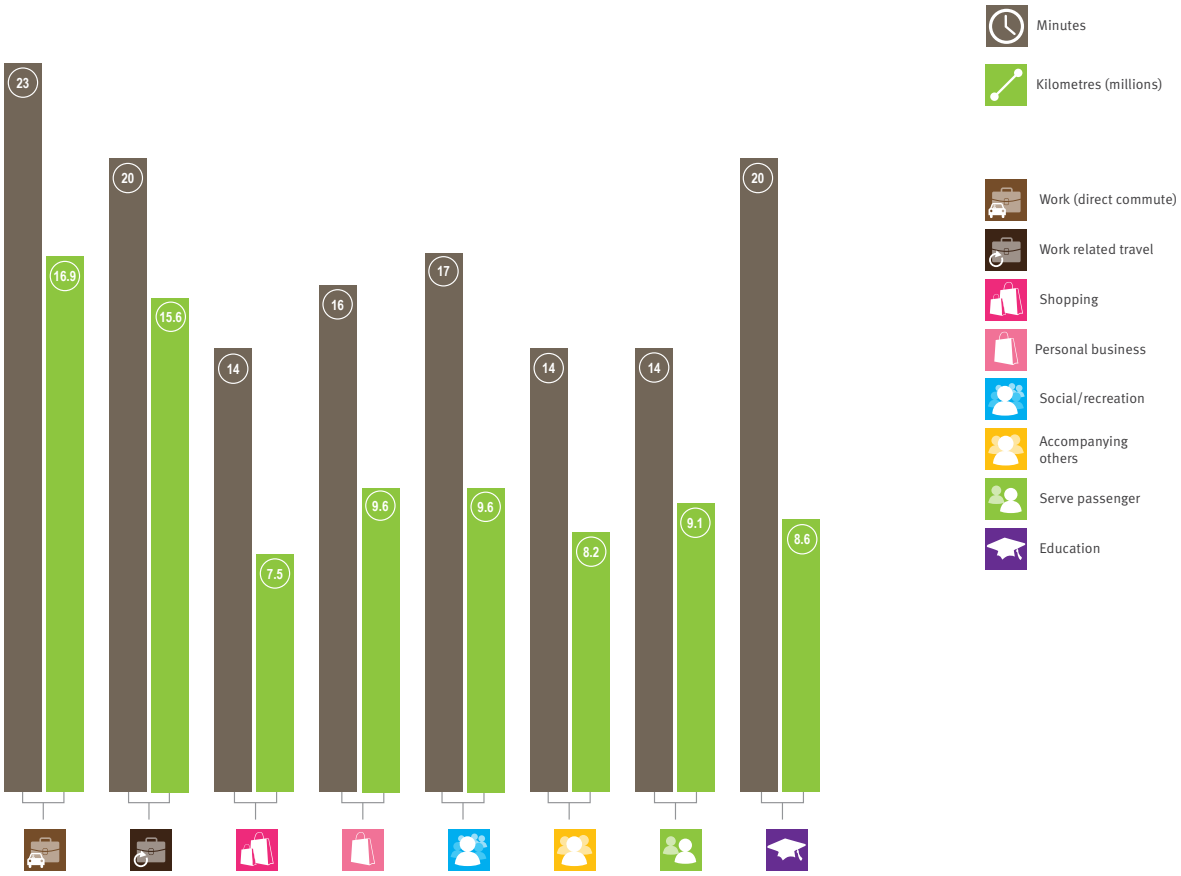
Sunshine Coast residents travel the furthest for work-related travel at 16.9 kilometres, nearly twice the distance of discretionary travel trips including social/recreation, personal business and shopping.

On average, Sunshine Coast residents travel the shortest distance to access shopping at 7.5kilometres.

In comparison to Brisbane, Sunshine Coast residents travel a slightly greater distance for all trip purposes but typically have shorter average travel times.

Work-related trips are generally twice the distance of discretionary trips.

Distance and duration by mode



*Due to trip weight variation averages of distance and time cannot be used to calculate average speed.

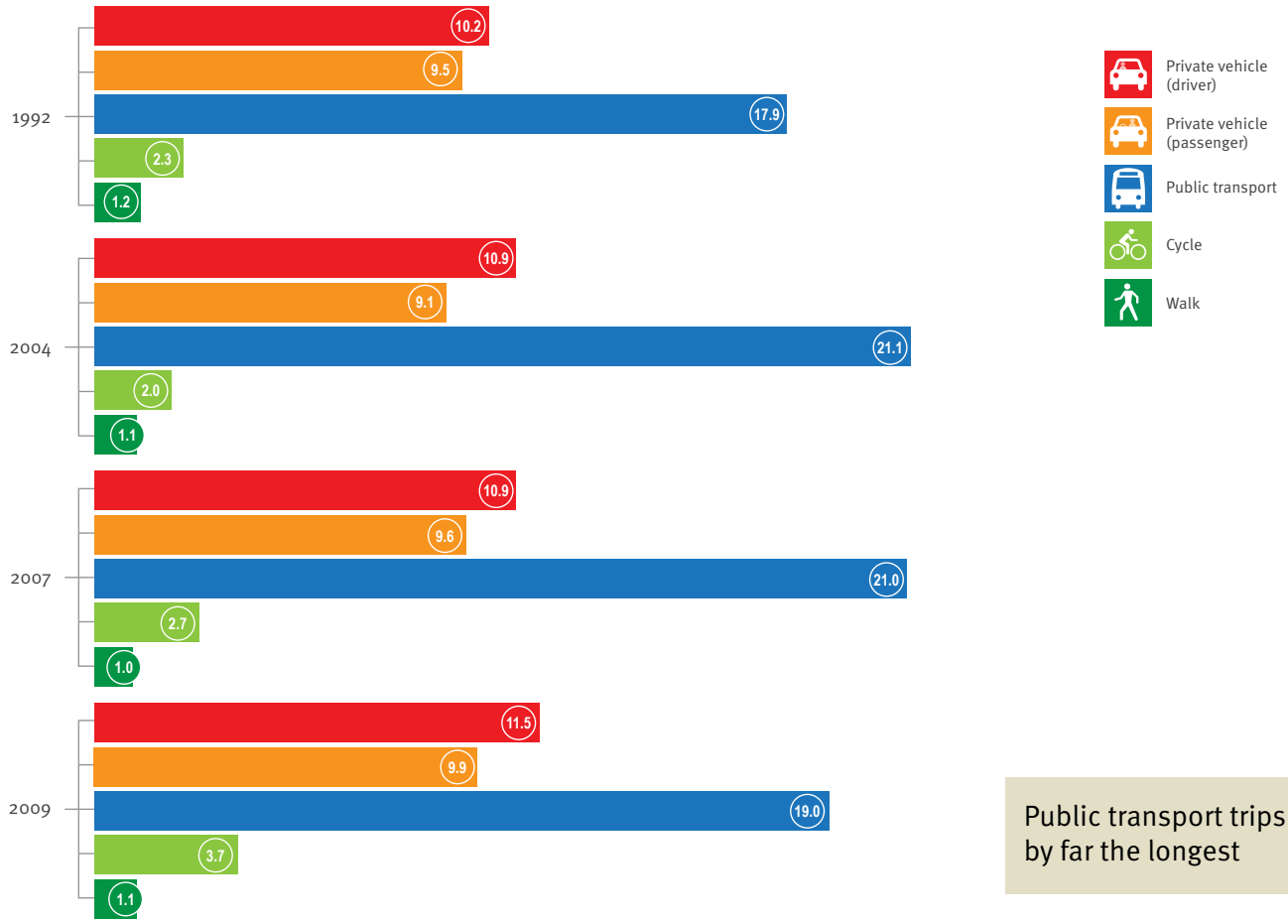
Trip distance and duration | **Sunshine Coast**

The average public transport trip is by far the longest of all modes at 47 minutes. This includes the time taken waiting for the public transport service to arrive and the time spent travelling to and from the public transport stop. In comparison, the average vehicle driver trip is 16 minutes long.

Distance and duration by mode

*Due to trip weight variation averages of distance and time cannot be used to calculate average speed.

Average distance (kilometres) by mode



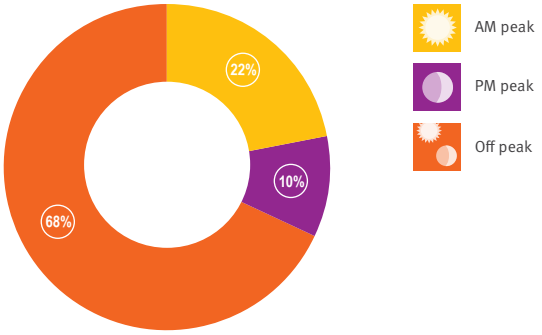
Public transport trips are by far the longest

Time of travel | **Sunshine Coast**

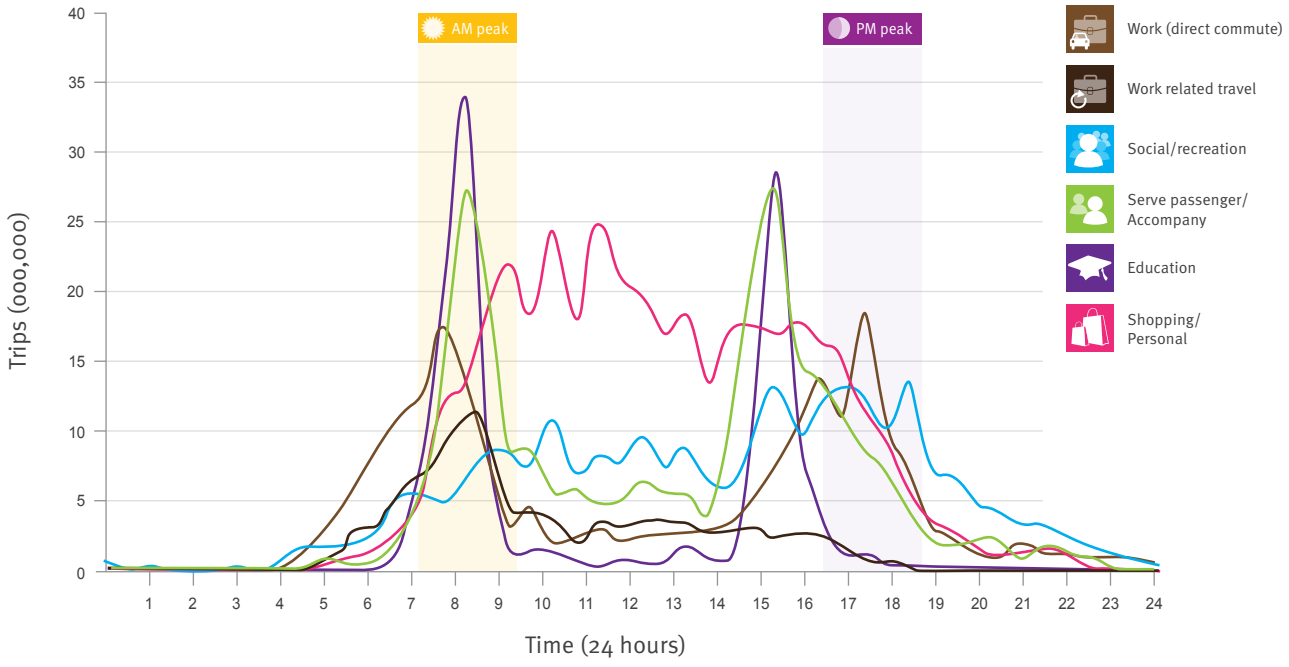
As expected, both work commuting and education travel have pronounced peaks in the morning and afternoon. In contrast, shopping/personal business and social/recreation trips are conducted throughout the day.

Of all the regions, the Sunshine Coast has the highest proportion of trips outside of typical peak times, with more than two thirds of trips outside the AM and PM peak.

Proportion of travel during peak time

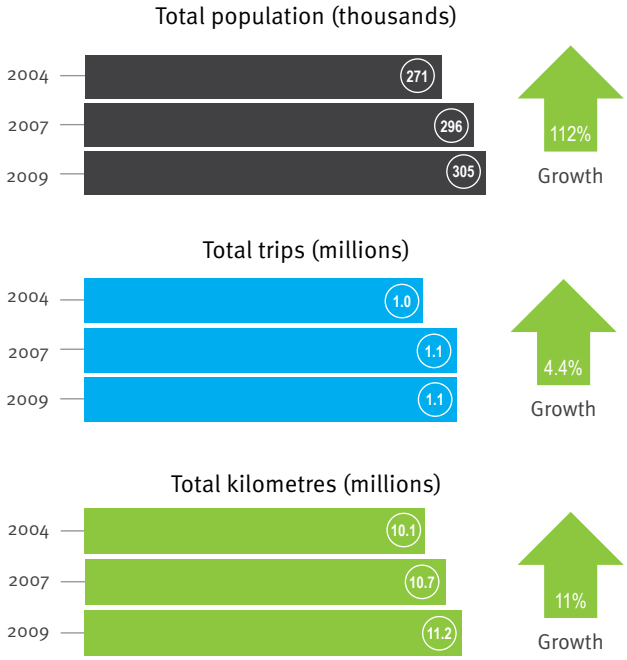


Time of travel

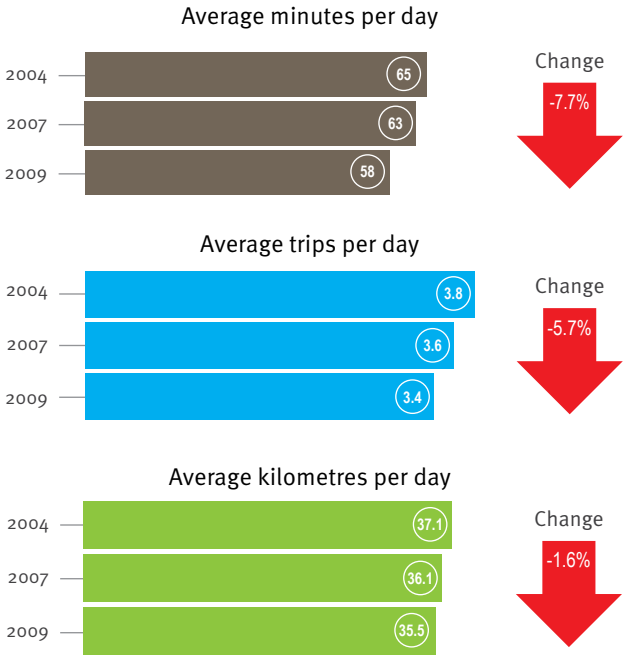


Summary | Sunshine Coast

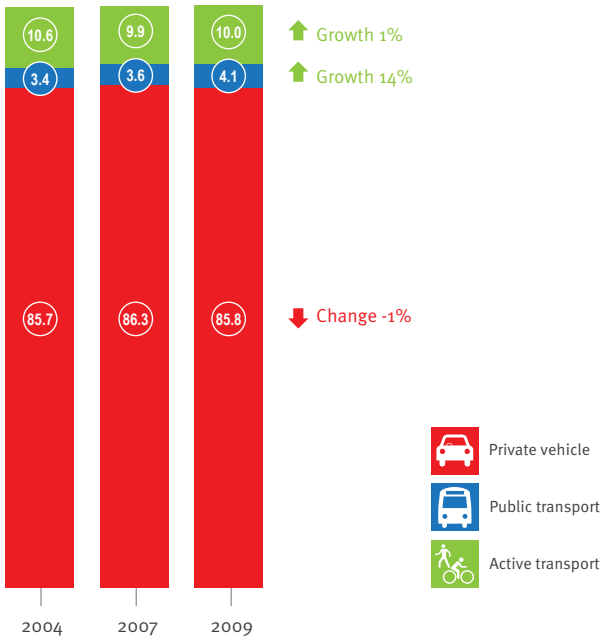
Total travel



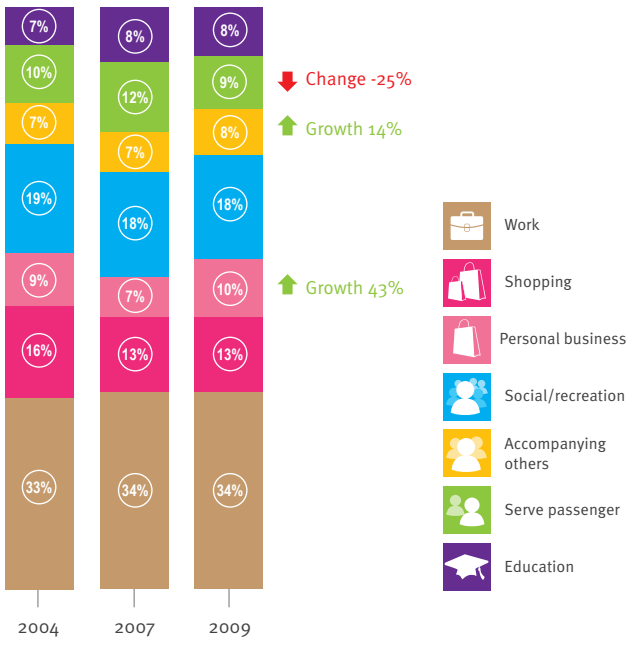
Average travel



Mode share based on trips (percentages)



Purpose of trips based on distance



Data source: household travel surveys conducted between 1992 and 2009.

Please note: 1992 population is census usual resident population, 2004 to 2009 population are estimated resident population in private dwellings.

Central Business District travel

24%

The proportion of all kilometres generated by the CBD & surrounds

3 in 4

The proportion of workers who travel to the CBD in the AM peak by public transport

50 mins

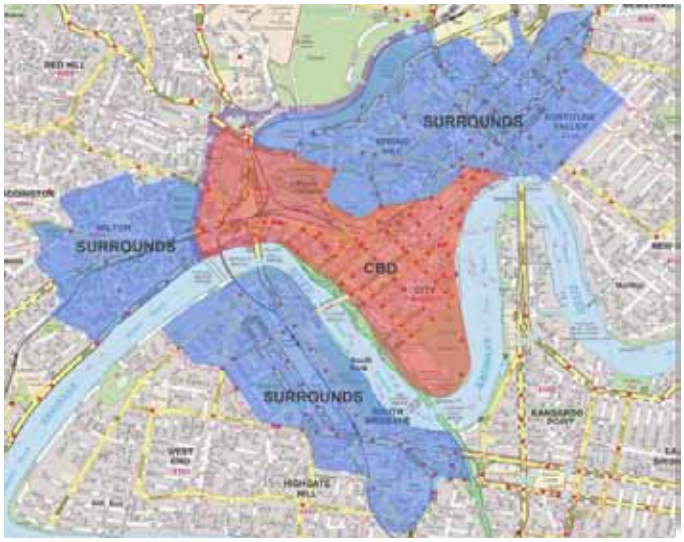
The average duration of a CBD inbound commute

Total travel and purpose of travel | CBD travel

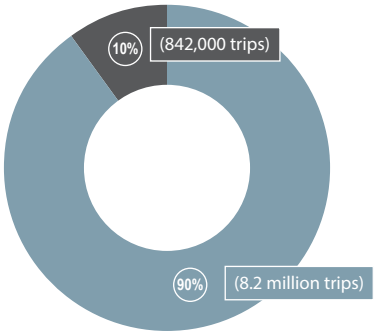
This chapter offers a brief summary of travel to and from (but not within, unless stated) the Brisbane CBD and surrounds.

The CBD and surrounds is the greatest trip generator in the region, with 10% of total trips (including trips within the CBD and surrounds) in south-east Queensland originating in or destined for the CBD. This corresponds to 12% of the distance travelled by south-east Queensland residents on a typical weekday.

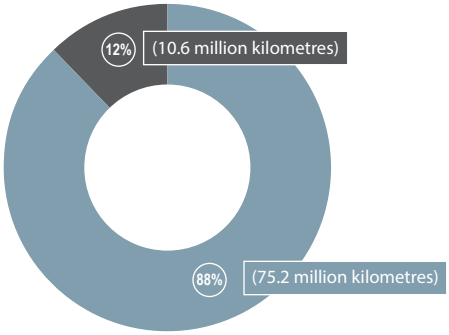
The Brisbane CBD has a very high density of jobs, and this is reflected in the dominance of the trip profile by work trips. The CBD surrounds have a greater proportion of social and recreation and education trips.

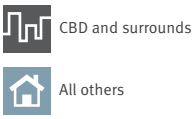


Total trips in 2009

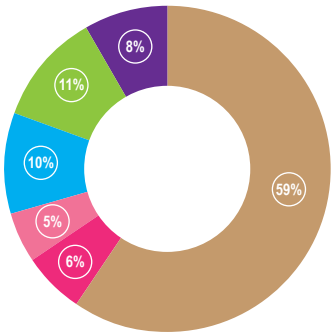


Total kilometres in 2009

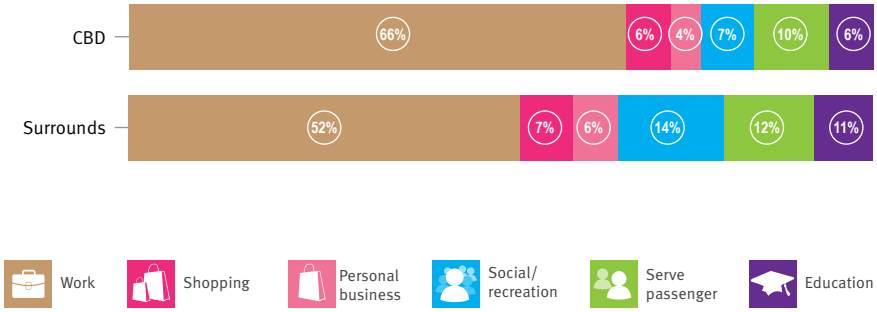




Trip purpose based on trips - Inbound to CBD



Trip purpose based on trips - Inbound to CBD



Two in three

Trips to the CBD are for work purposes.

Data Source: Combined data of 2004 & 2007 household travel survey, unless otherwise indicated.

Overall south-east Queensland results: household travel survey 2009.

Mode share | CBD travel

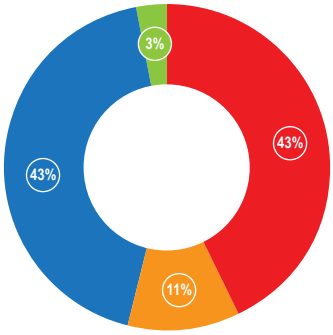
Travel to the Brisbane CBD shows a mode split very unlike the broader travel patterns of south-east Queensland. Public transport and vehicle driver trips have the same mode share for trips to the CBD. Public transport use is especially high to the CBD.

Driving conditions, parking charges and a number of competitive high-frequency radial public transport routes enhance the attractiveness of public transport for accessing the CBD. This suggests that strong demand for public transport when quality infrastructure is provided.

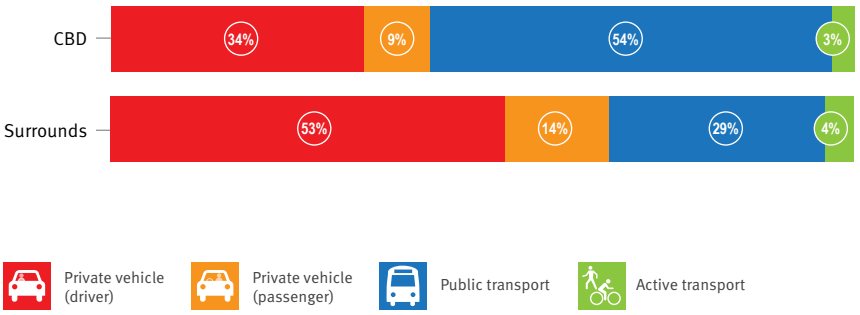
In spite of the favourable mode share seen in trips to the CBD, the volume of travel the CBD attracts, along with the concentration of much of this travel in peak periods, makes the area highly susceptible to congestion on major inbound roads.

Active transport trips to the CBD are lower than the average south-east Queensland mode share.

Trip purpose based on trips - Inbound to CBD



Trip purpose based on trips - Inbound to CBD

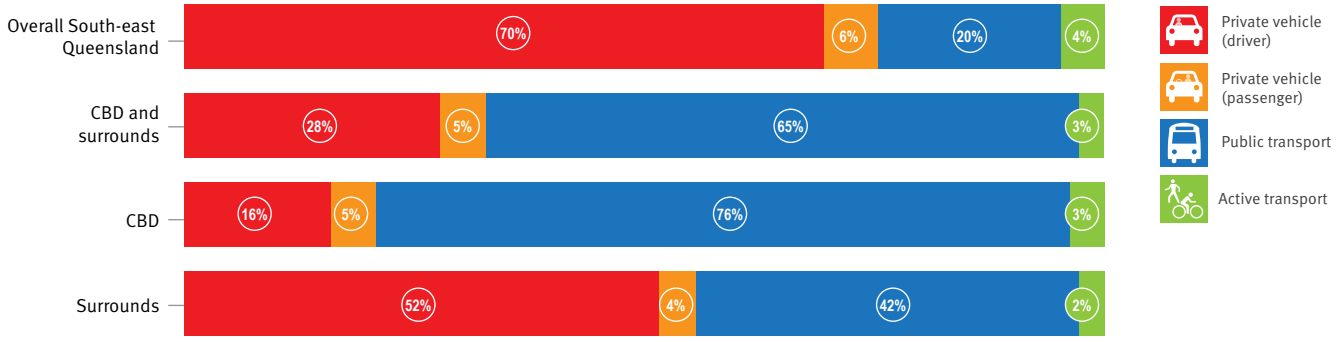


Public transport has a particularly enhanced role in bringing workers to the CBD in the AM peak. Of all trips to the CBD and surrounds two thirds are via public transport. This indicates very limited scope to shift AM peak CBD commuters from private vehicle to public transport.

Three in four

The proportion of workers who travel to the CBD in the AM peak by public transport.

Mode share - work commute AM peak



For AM work commutes to the CBD, public transport use well surpasses vehicle use.

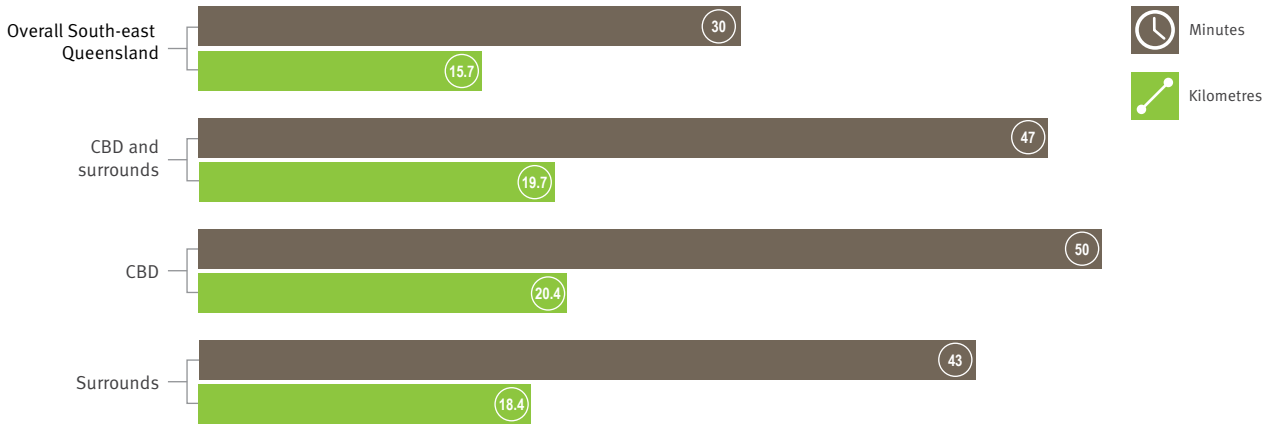
Trip distance and duration | **CBD travel**

On average, CBD workers travel further for work than the average work commute in south-east Queensland. The average work commute to the CBD is 20 kilometres, taking 50 minutes. This compares to an average work for south-east Queensland of 16 kilometres and 30 minutes.

The longer work trip distances to the CBD are driven by higher average distances for all modes – including active transport. The average active transport work commute to the CBD covers 4.7 kilometres in 31 minutes.

For CBD travel, both public transport and vehicle driver trips share the same average distance. In terms of duration, vehicle driver trips are significantly faster, 35 minutes compared to 57 minutes on average. Accessibility analysis (analysis not shown here) indicates that in areas close to major rail lines and high-frequency bus routes, public transport offers a highly competitive way of getting to the CBD, with equal or better times than car travel in the same areas.

Trip distance and duration - direct work commute



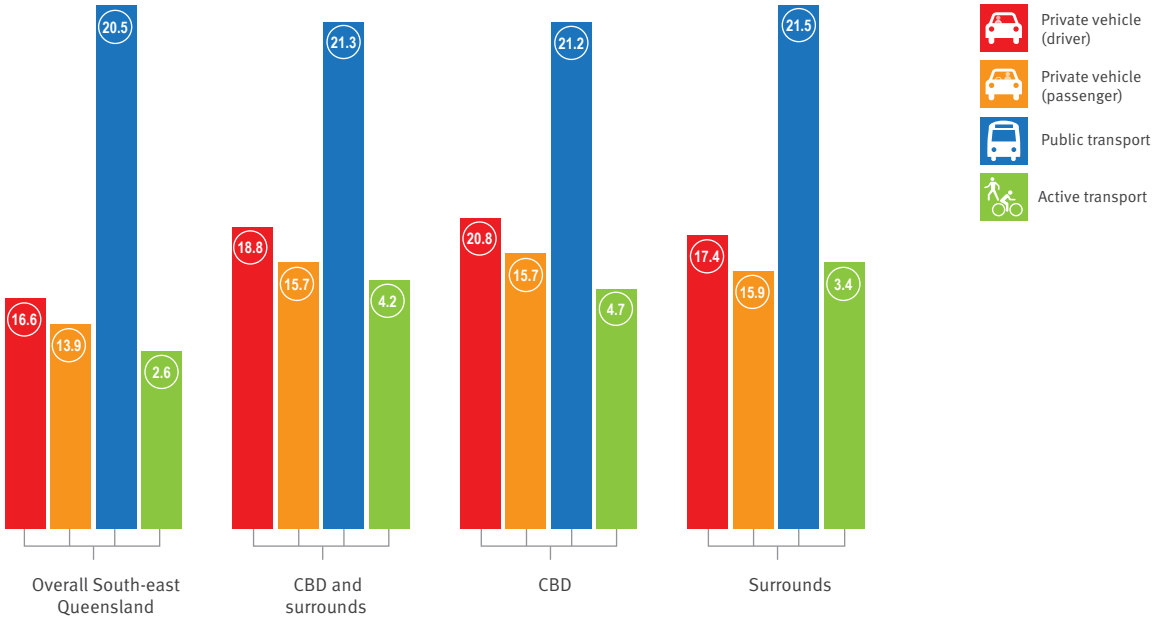
*Due to trip weight variation averages of distance and time cannot be used to calculate average speed.

CBD workers travel a further 4 kilometres and 20 minutes one way to get to work than the average south-east Queensland worker.

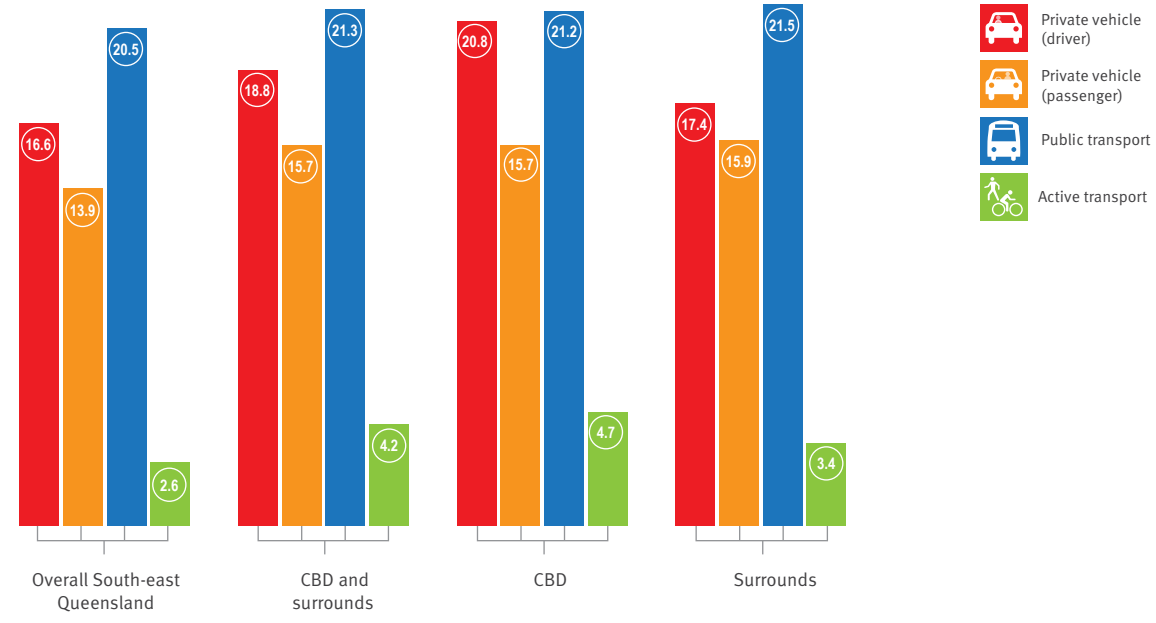
Trip distance and duration | CBD travel

For the CBD work commute, vehicle passenger distance is shorter on average than vehicle driver trips, but only slightly shorter in duration. It would be expected that there should be higher time savings for vehicle passenger travel, as it would enable the use of High Occupancy Vehicle (HOV) lanes. However, this may be offset by time spent picking up and dropping off passengers.

Distance by mode (kilometres) - inbound work commute



Distance by mode (kilometres) - inbound work commute

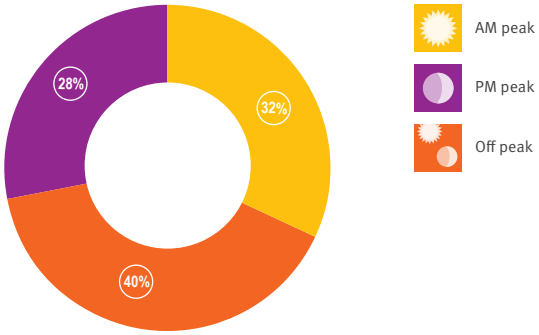


Travel time | CBD travel

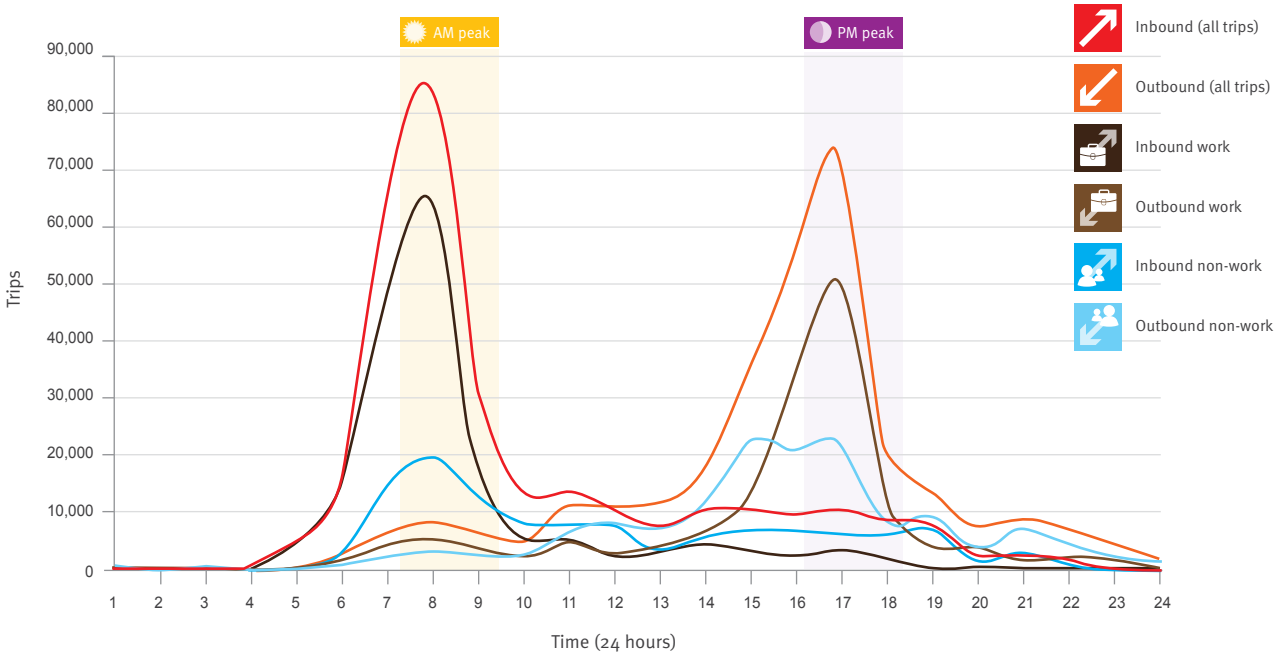
The CBD attracts a very high proportion of work trips and has very high mode shares for public transport relative to other destinations in south-east Queensland. This produces a very 'peaked' trip distribution through the day, characterised by large numbers of commute trips at the beginning and end of the working day.

Of all trips inbound and outbound from the CBD, three in five are during the AM and PM peak (32% in the AM, 28% in the PM). The effect of work trips in producing peaks in the distribution of trips is substantial and visible in this graph, while non-work trips follow a far more even distribution.

Distribution of trips



Time of travel to CBD (all modes)

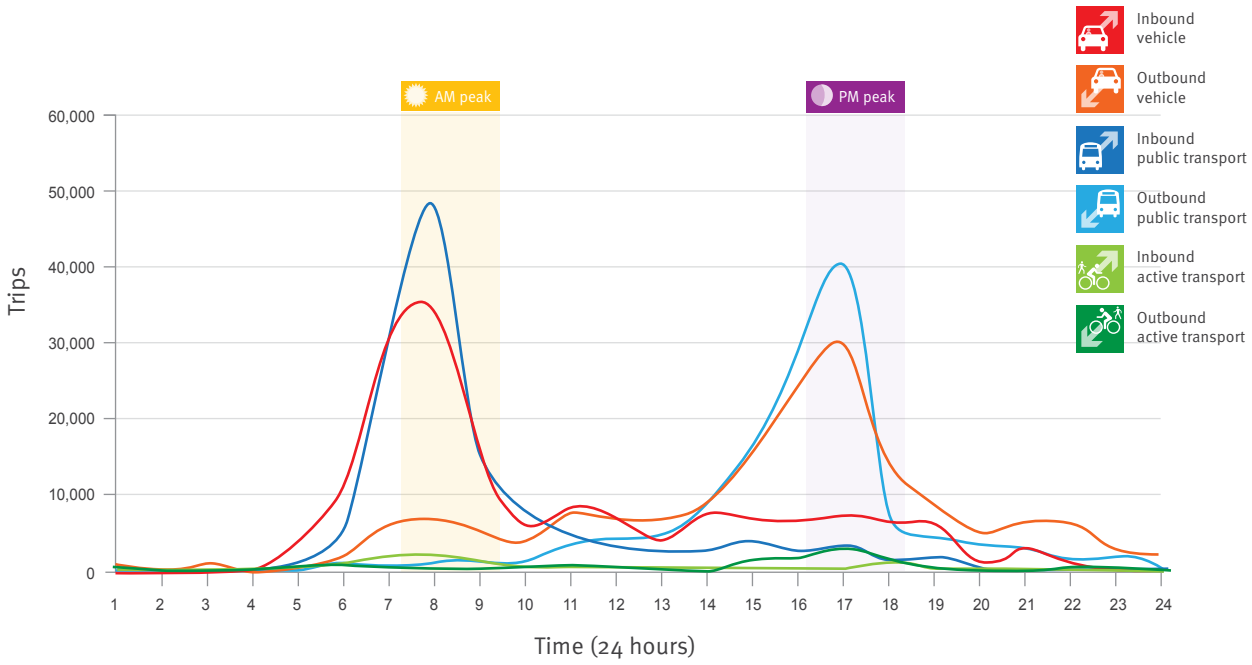


Travel time | CBD travel

Public transport travel to the CBD has shorter and more concentrated peak travel times than vehicle trips. This is likely due to the peak spreading of vehicle trips to avoid peak congestion.

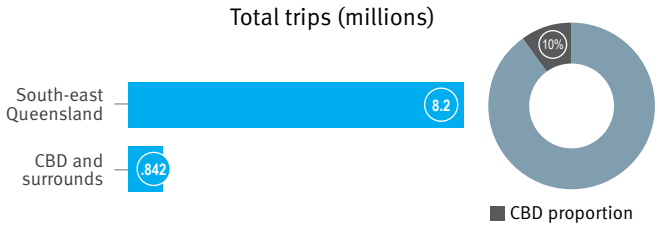
In the AM peak the number of public transport trips into the CBD is higher than vehicle trips.

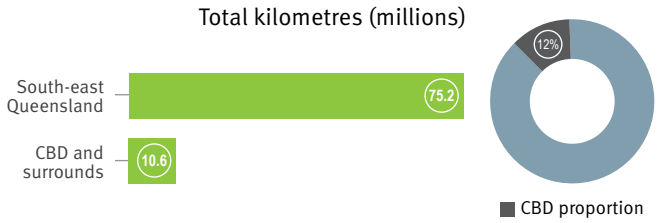
Time of travel to CBD (all modes)



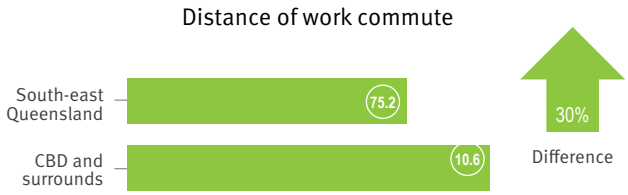
Summary | CBD travel

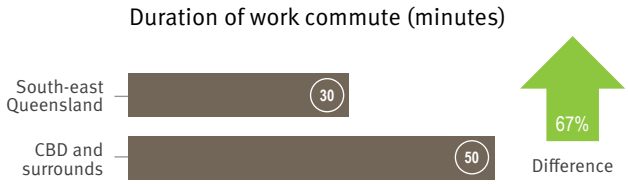
Total travel



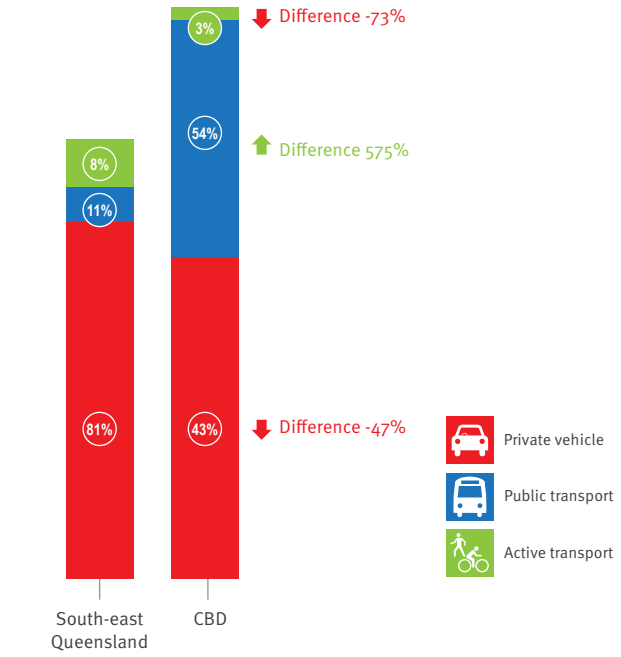


Average travel

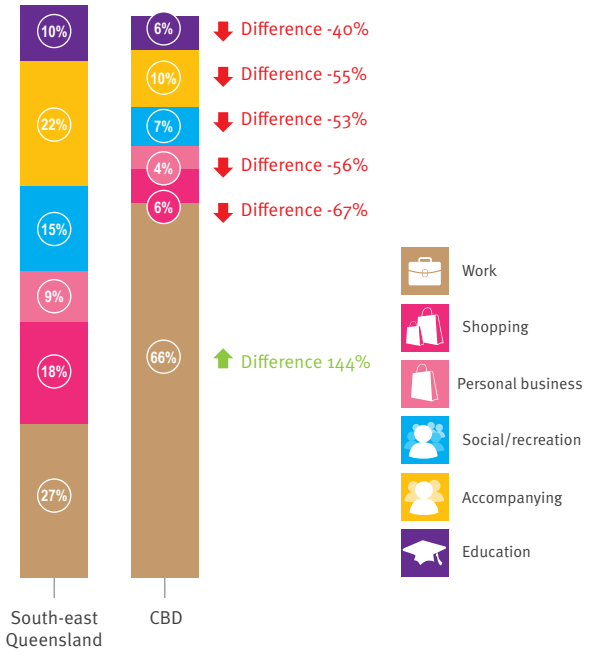




Mode share - all trip purposes



Purpose of trips - based on trips



Data Source: Combined data of 2004 & 2007 household travel survey, unless otherwise indicated.

Overall south-east Queensland results: household travel survey 2009.

Principal Activity Centres

7%

of all trips in south-east Queensland travel to a Principal Activity Centre.

1 in 2

trips to Principal Activity Centres are for shopping and personal business.

5%

the average active transport mode share for Principal Activity Centres.

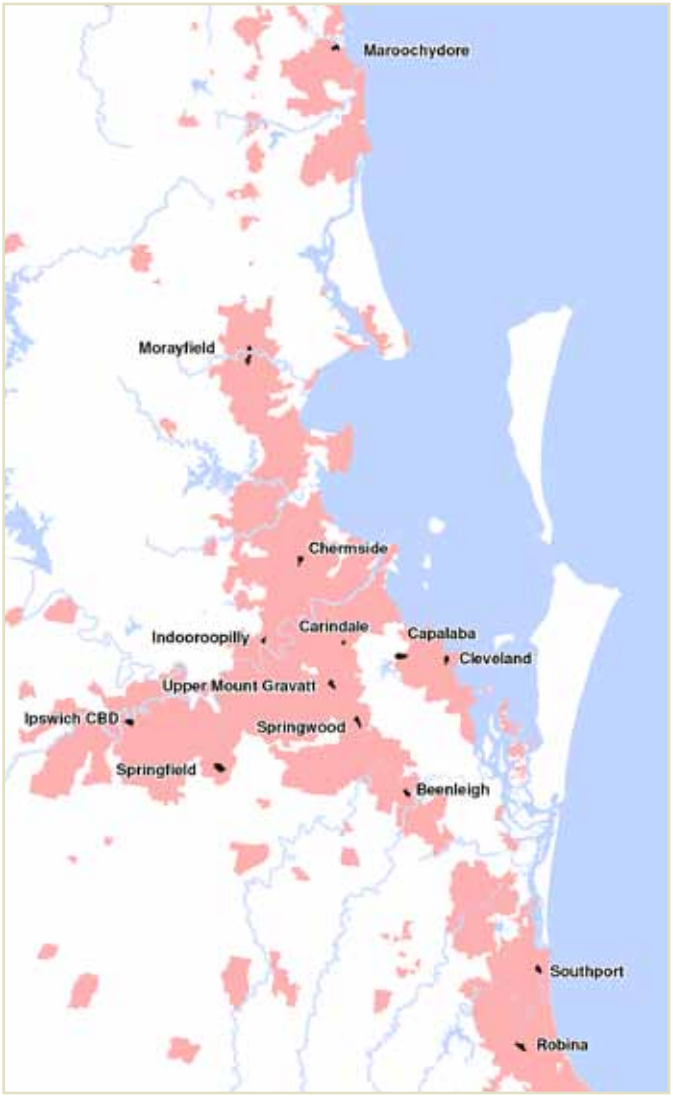
Total travel | **Principal activity centres**

The *South East Queensland Regional Plan 2009-2031* identified 18 locations as principal activity centres, around which economic activity within the region is focussed.

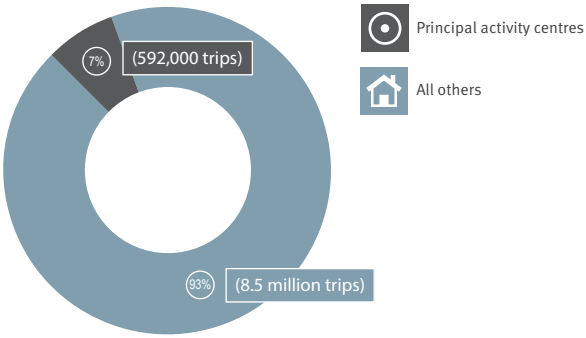
This network of centres has been developed as a planning tool with the aim of increasing accessibility to services and jobs, reducing transport demand and facilitating an efficient public transport system.

This chapter offers a brief summary of travel to and from 14 of these principal activity centres (as identified in the map).

The chapter focuses on combined travel behaviour from 2004 and 2007, to and from the centres (but not within).



Total trips in 2009



Principal activity centres generate roughly 7% of the total travel in south-east Queensland.

Between 10,000 and 35,000 trips are travelled to individual centres per day.

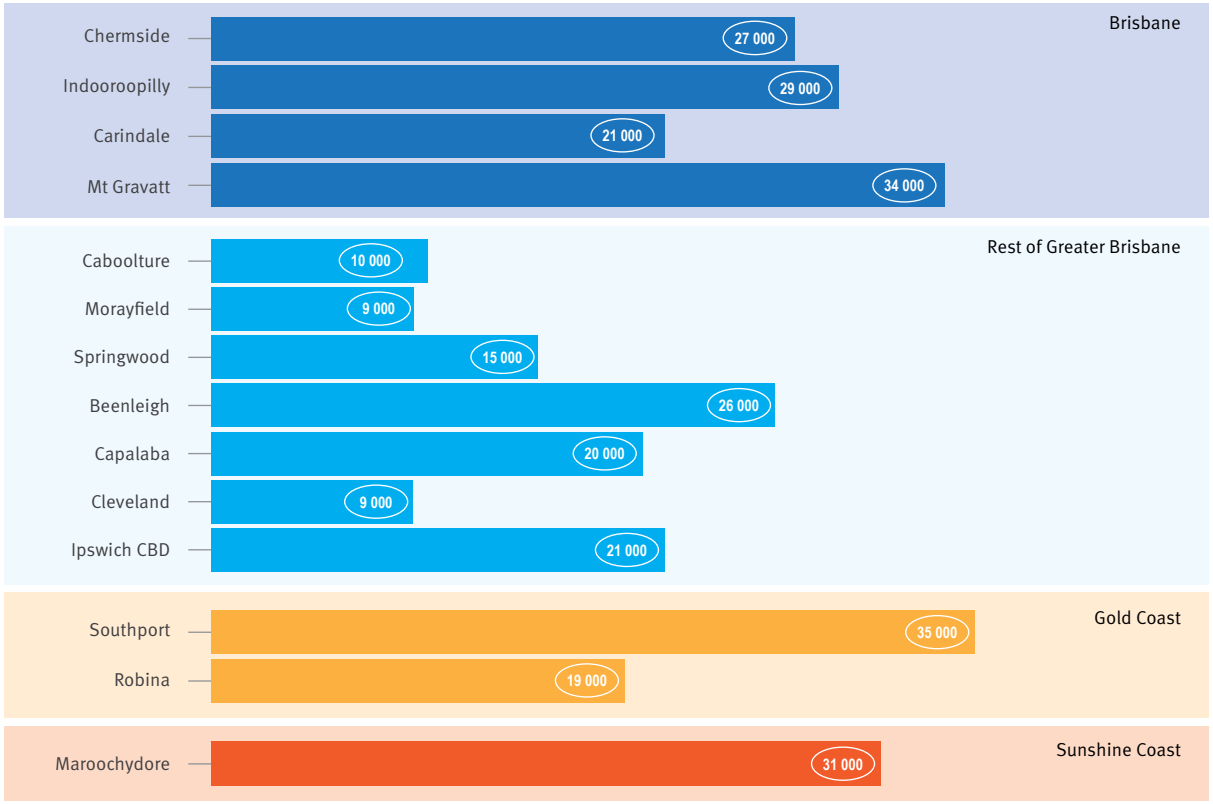
Southport and Upper Mount Gravatt have the highest transport demand of all principal activity centres with over 35,000 visits over an average weekday.

Data source: Combined data of 2004 and 2007 household travel survey.

Please note, Springfield principal activity centre was excluded from majority of analysis for statistical reasons. Unless otherwise stated, figures do not include travel within the activity centres.

Total travel and travel mode | **Principal activity centres**

Number of daily trips travelled to the principal activity centre



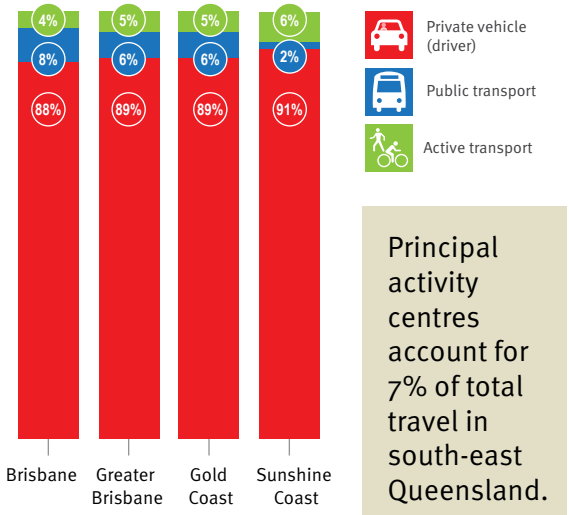
The private vehicle currently dominates as the mode of choice for travel to principal activity centres.

In most cases, private vehicle mode share for trips to principal activity centres is higher than the average within each region. The exception the Gold Coast, where vehicle mode share is comparable.

Public transport is generally slightly lower than regional averages.

Trips to principal activity centres were also less likely to be undertaken by walking, especially in Brisbane. Trips to principal activity centres were also less likely to be undertaken by bicycle, especially on the Gold Coast. This indicates there is potential to increase the mode share of walking and cycling to these principal activity centres.

Mode share



Principal activity centres account for 7% of total travel in south-east Queensland.

Travel mode | **Principal activity centres**

It is worth noting that several individual centres displayed lower private vehicle mode shares, notably Ipswich Central Business District (75%), Indooroopilly (79%) and to a lesser extent, Southport (85%). These centres illustrate that principal activity centres are able to achieve a substantially reduced private vehicle mode share to that of the regional average, under certain circumstances.

Private vehicle mode share to principal activity centres is higher than the regional average while public transport use is lower.

Mode share

Purpose of travel | **Principal activity centres**

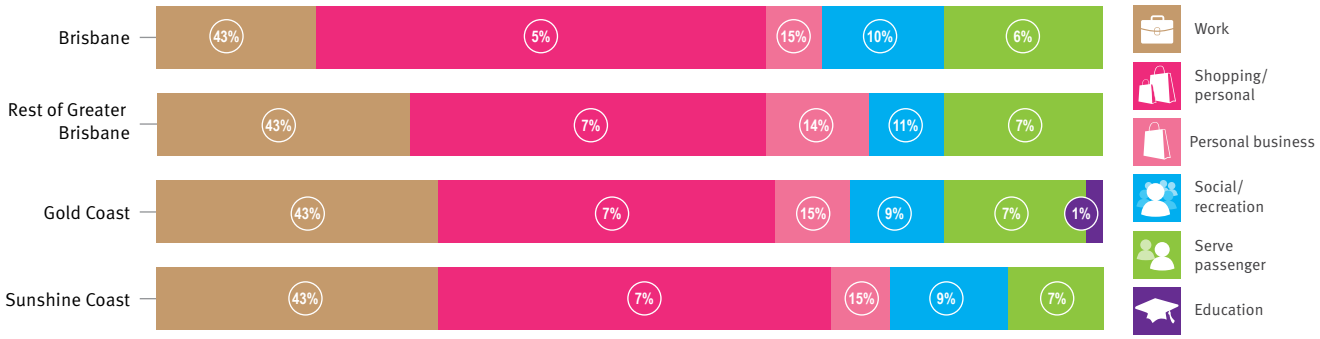
The single largest purpose for visiting principal activity centres across all regions is for shopping and personal business – the second largest purpose is for work-related trips. Brisbane principal activity centres have a lower proportion of work-related travel compared to the other principal activity centres. This suggests that the further these centres are from the primary activity centre (i.e. Brisbane CBD), the stronger employment role they play within their regions.

All other purposes are low compared to their regional averages. This suggests that many principal activity centres are still quite limited in their functions. A more integrated and diverse network of centres might show a greater mix of land use.

The trips to principal activity centres that generate higher levels of public and active transport use are social/recreation trips and shopping trips.

Around 1 in 2 trips to principal activity centres are for shopping and personal business.

Trip purpose based on trips



Mode share by trip purpose

Trip distance and duration | Principal activity centres

Trips to principal activity centres are on average between 8.5 – 9.5 kilometres (higher on the Sunshine Coast), with an average travel time of 20 minutes. For Brisbane, this compares fairly consistently to average trip rates for the region.

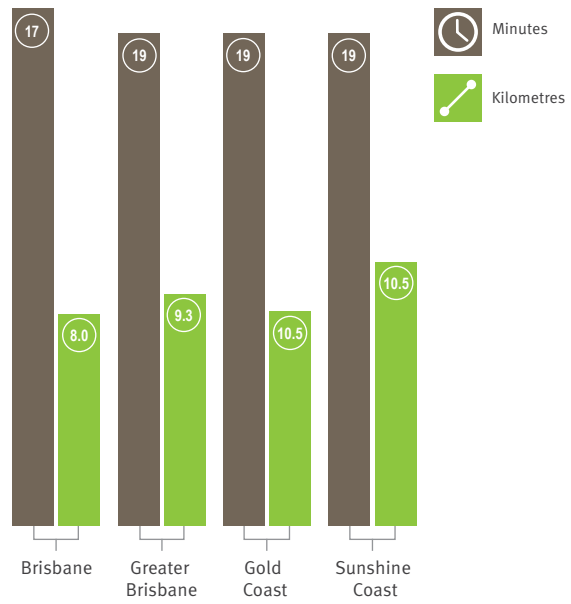
On the Gold Coast, average distance travelled to principal activity centres is further than the average trip in the region, but duration is comparable.

For the Sunshine Coast, the average distance spent travelling to principal activity centres is longer than other regions.

In Brisbane, the direct work commute to principal activity centres is fairly comparable to the regional average. However people travel further to shop at principal activity centres than the average shopping trip.

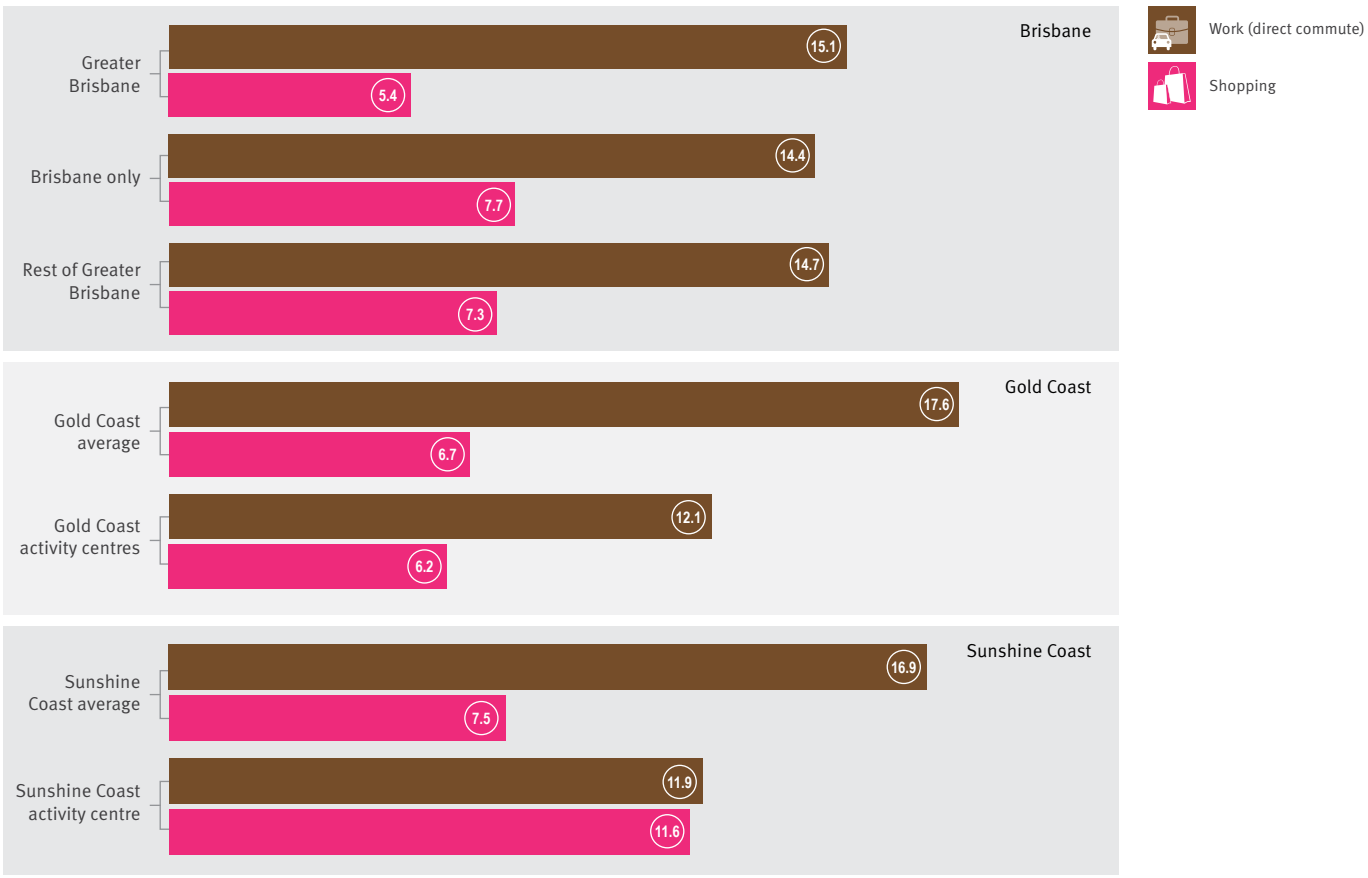
On the coasts, the direct work commute to principal activity centres is lower on average than the regional average for a work commute. However, on the Sunshine Coast people travel further than the average to access their principal activity centre for shopping.

Average trip travel time and distance per day



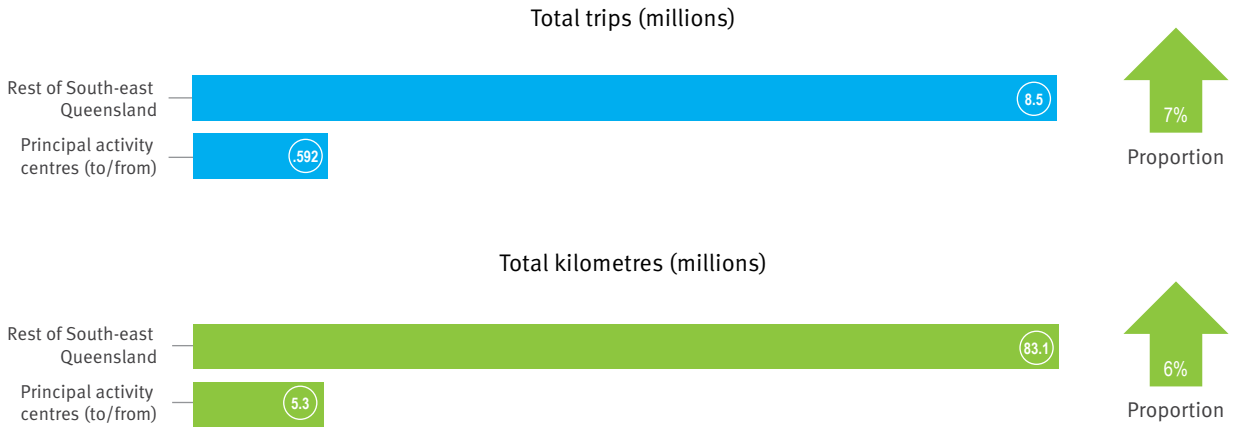
*Due to trip weight variation averages of distance and time cannot be used to calculate average speed.

Distance by purpose (kilometres)

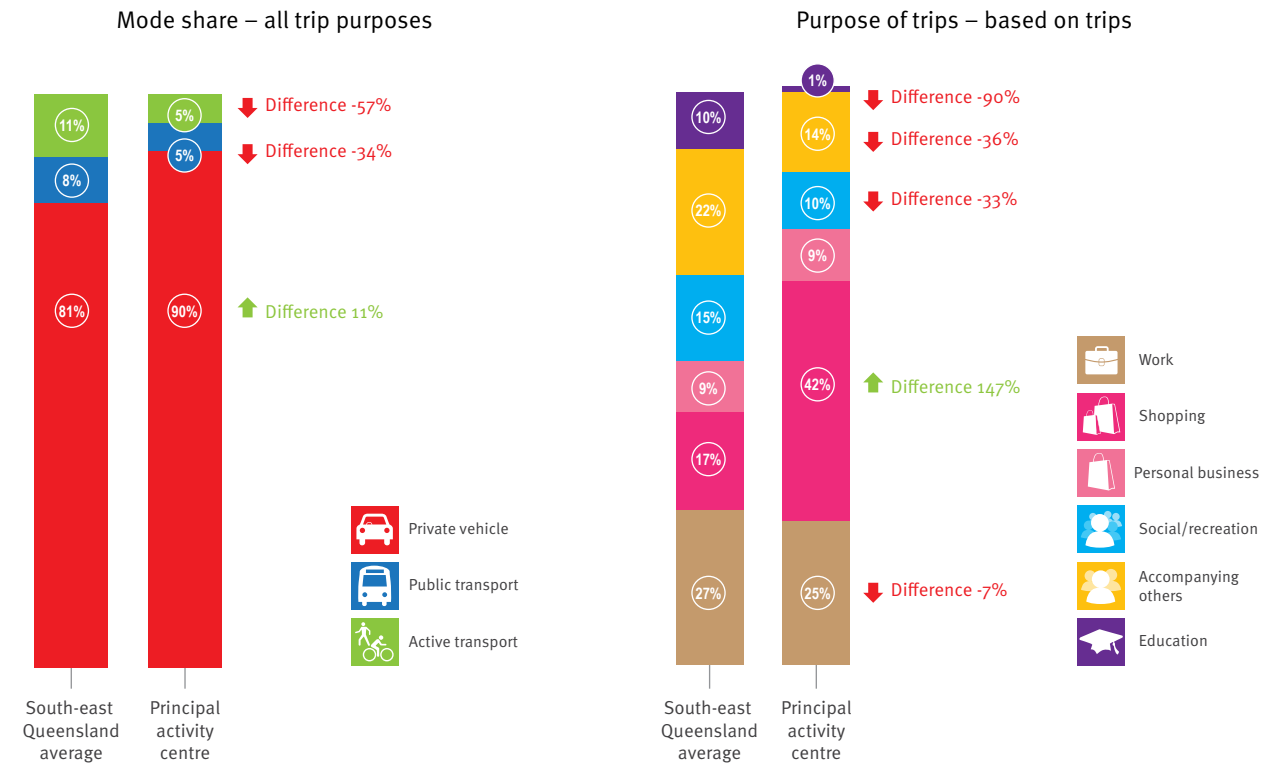


Summary | Principal activity centres

Total travel



Average travel



Data source: Combined data of 2004 & 2007 HTS

Please note, Springfield principal activity centre was excluded from majority of analysis for statistical reasons. Unless otherwise stated, figures do not include travel within the activity centres.

Work Travel

27%

The proportion of all trips that are travelled for work.

3 in 4

The proportion of workers who commute to work by private vehicle.

30 minutes

Average duration of a work commute.

Trip purposes

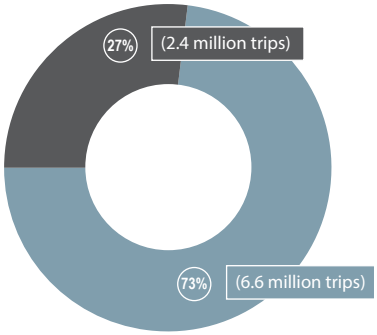
Total travel | **Work travel**

This chapter offers a brief summtary of travel for work purposes. Work-related trips continue to be the largest single reason for travel in south-east Queensland, accounting for more than one quarter of all trips made in the region, and 42% of all kilometres travelled.

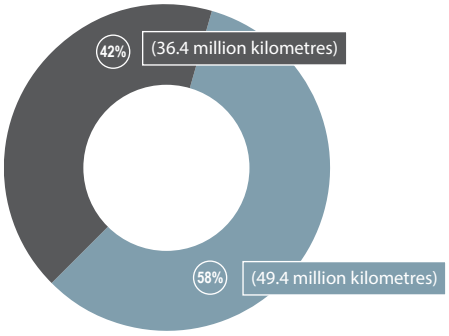
The direct work commute makes up the majority of the work travel in both trips and kilometres travelled. Other work travel accounts for roughly one quarter of all work travel. 'Other work travel' includes all trips for work besides direct work commutes, so this can include non-direct work commutes such as one that involved an interim activity such as dropping children off to school or going to the shops. It can also include other work travel such as travel to meetings.

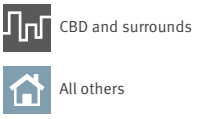
The total work trips travelled daily decreased slightly in 2009, despite a growing population.

Total trips in 2009

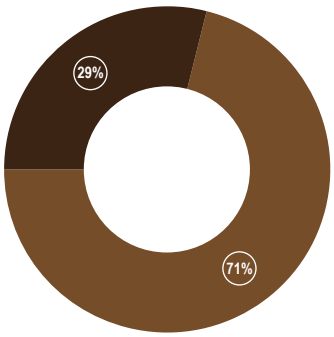


Total kilometres in 2009

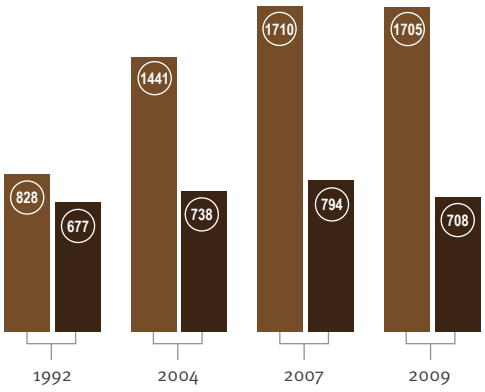


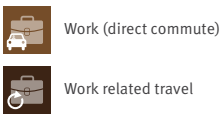


Proportion of work trips



Total daily work trips travelled (thousands)

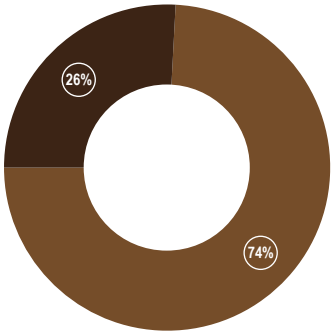




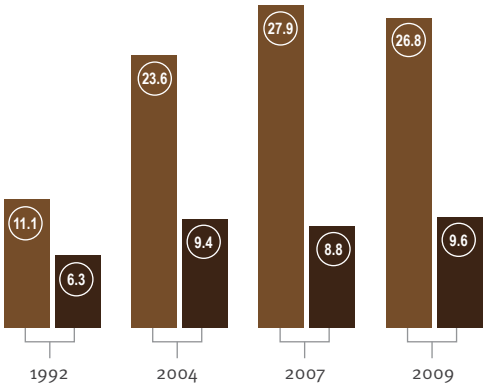
Data Source: Household Travel Survey 1992 - 2009

Total travel and travel mode | **Work travel**

Proportion of total work kilometres



Total daily work kilometres travelled (millions)



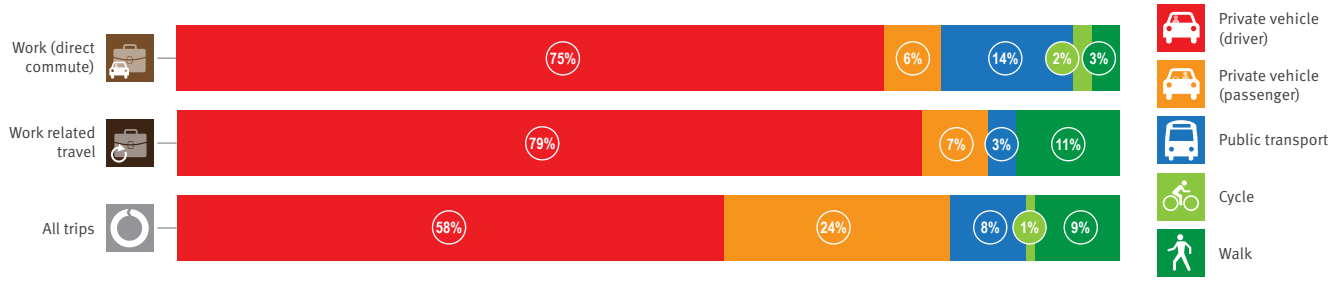
Total kilometres travelled in the direct commute to work decreased in 2009, while total kilometres for other work travel increased.

Work travel is more dependent on vehicle driver trips than the average trip in south-east Queensland. Roughly 3 in 4 work commutes are made as a vehicle driver. The larger proportion of vehicle driver trips are at the expense of vehicle passenger and active transport trips. However, the direct work commute does attract a higher mode share than average for public transport.

Since 2004, mode shares for the direct work commute have remained relatively stable.

Three in four work commutes are made as a vehicle driver.

Mode share - work travel



Mode share - direct work commute

Trip distance and duration | **Work travel**

The average direct work commute is 30 minutes on average, travelling 15.7 kilometres. Compared to the coastal regions, the average Brisbane work commute distance is shorter but duration is longer.

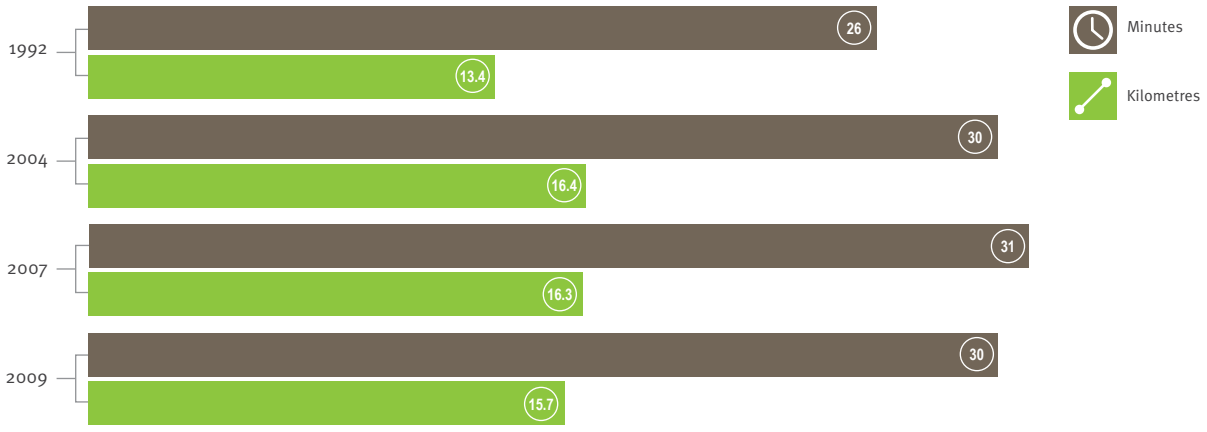
Since 2004, the average duration of the work commute has remained steady at 30 minutes, while distance travelled has been decreasing.

The average distance of the direct work commute has decreased since 2004.

Trip distance and duration - direct work commute

* Due to trip weight variation averages of distance and time cannot be used to calculate average speed.

Trip distance and duration - direct work commute



* Due to trip weight variation averages of distance and time cannot be used to calculate average speed.

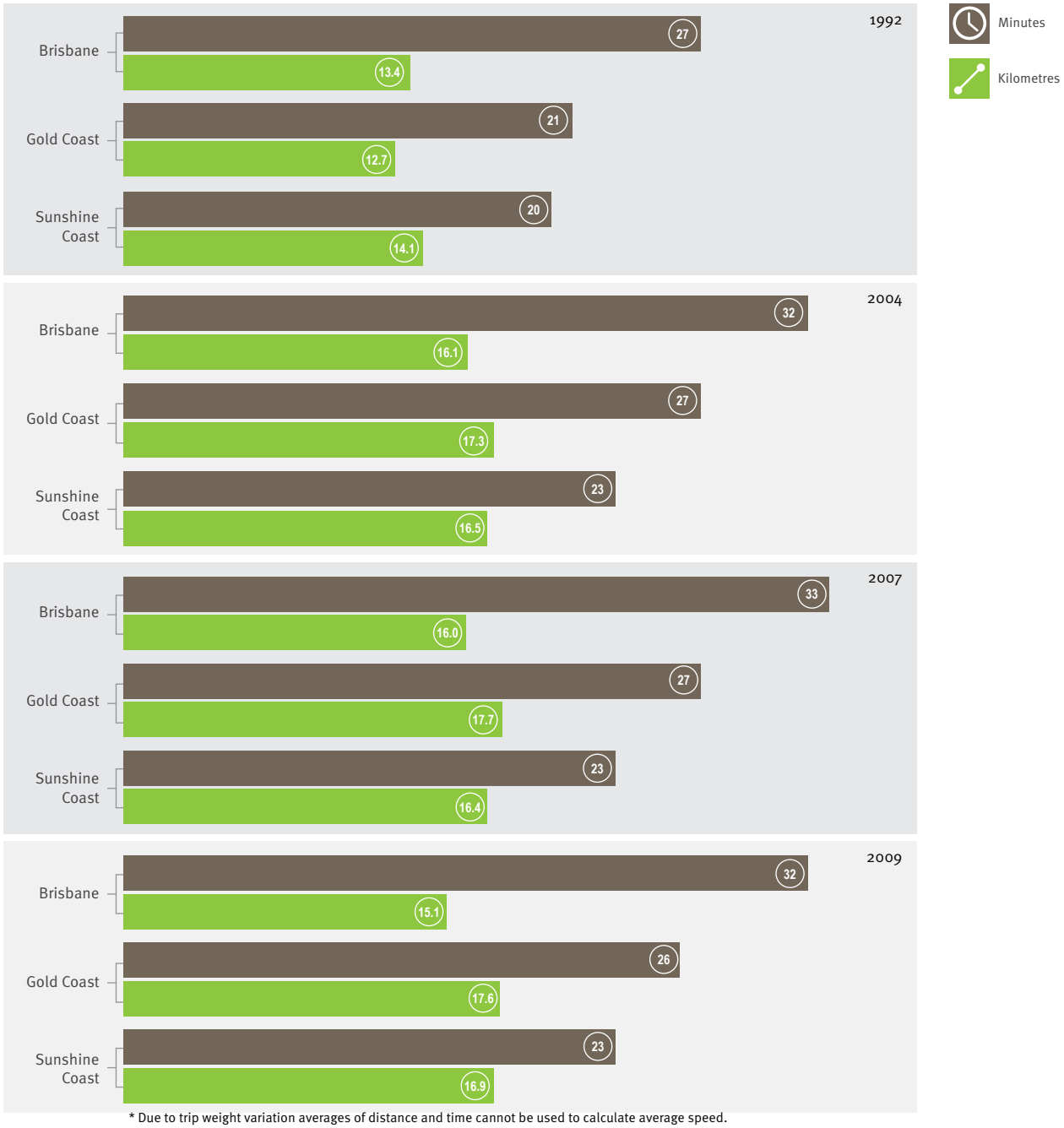
Trip distance and duration | **Work travel**

In Brisbane, the average duration travelled has remained fairly steady over time, while the distance travelled has decreased from 16.1 kilometres in 2004 to 15.1 kilometres in 2009.

On the Gold Coast and Sunshine Coast, average distance and duration has remained fairly stable since 2004.

Brisbane has seen a decrease in the average work commute distance since 2004.

Trip distance and duration - direct work commute



* Due to trip weight variation averages of distance and time cannot be used to calculate average speed.

Trip purposes

Trip distance and duration | **Work travel**

The decrease in the average distance travelled is reflected in lower commute distances for vehicle driver and public transport work commutes, whereas distance travelled for bike commutes increased in 2009.

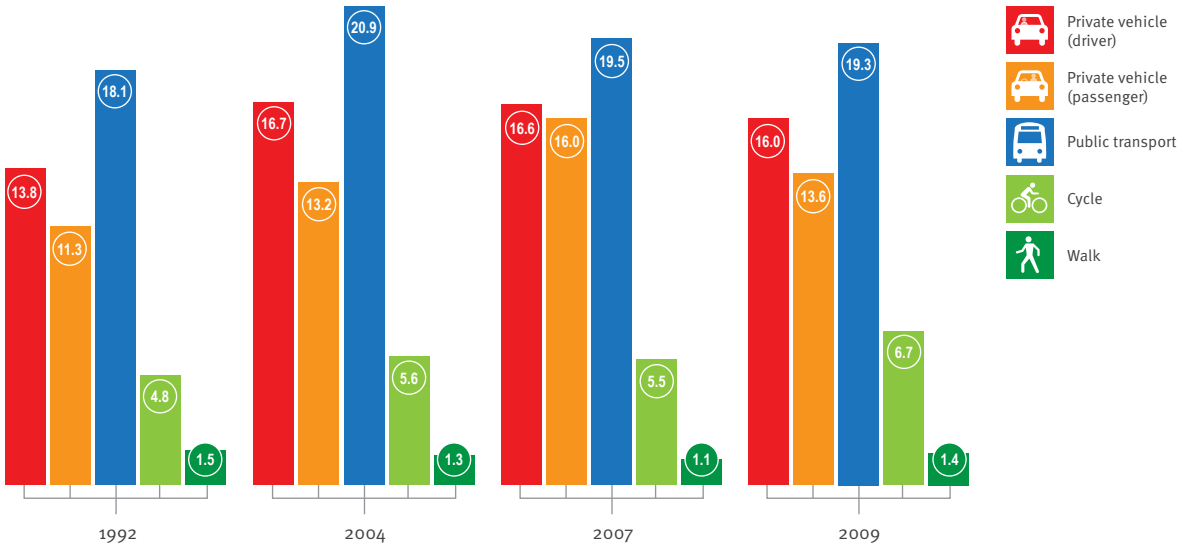
The average duration for travel to work is fairly comparable for vehicle and active transport modes, whereas public transport travel times are more than double the other modes.

Public transport commute times have decreased in 2009, while active transport and vehicle commute times have remained relatively stable.

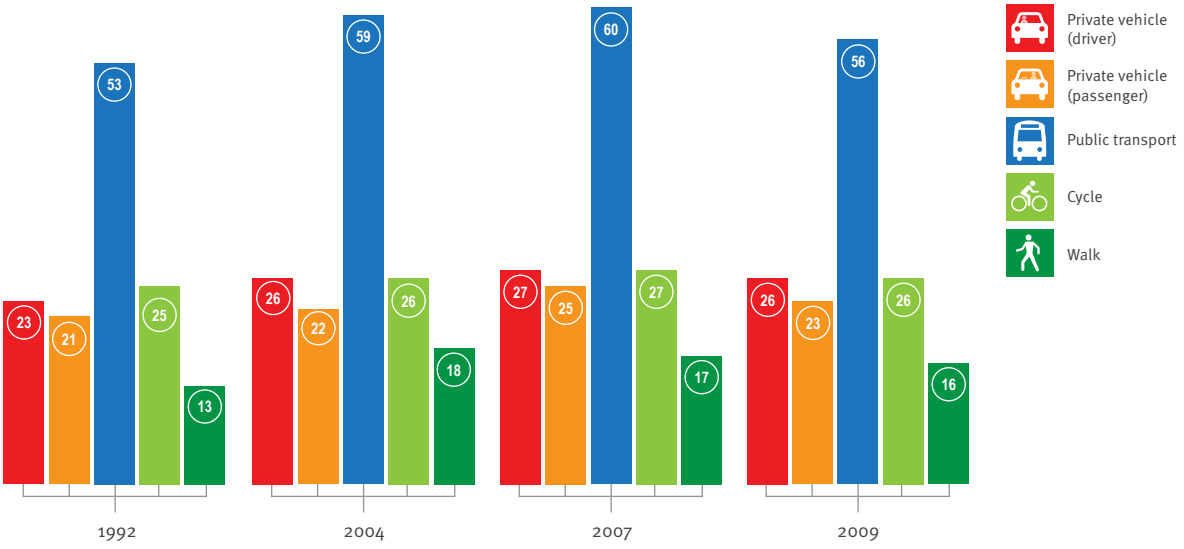
Work commute average distances have fallen for public transport and vehicle driver commutes.

Distance by mode (kilometres) - direct work commute

Distance by mode (kilometres) - direct work commute



Distance by mode (minutes) - direct work commute



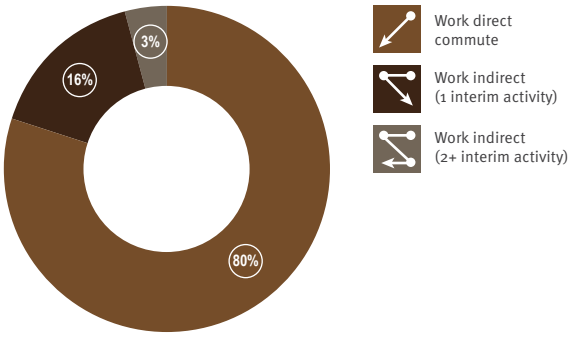
Indirect work trips | **Work travel**

In 2009, almost 20% of all journeys to work involved one or more activity on the way for any purposes. The majority of these only involve one activity, while a small proportion involve two or more.

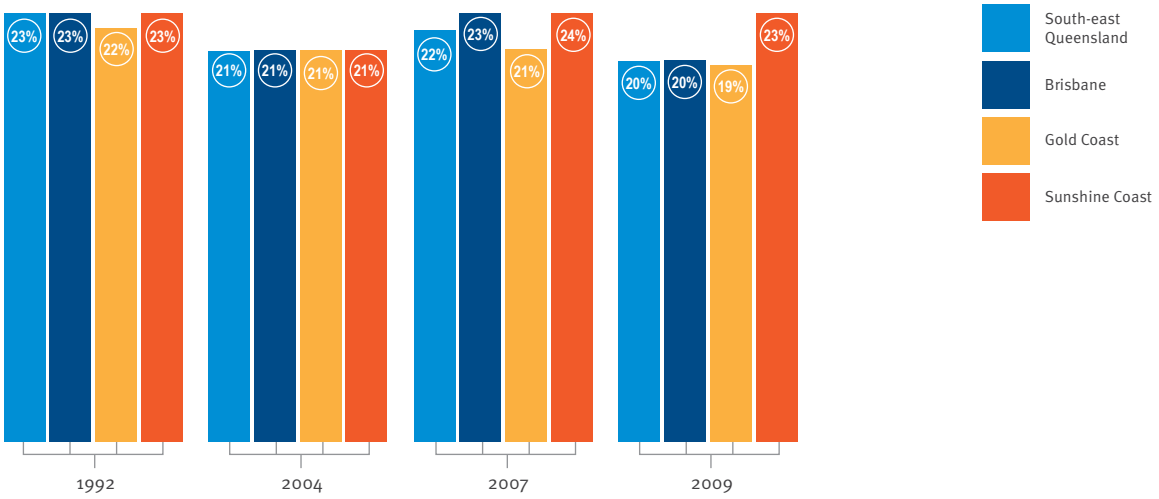
Around 40% of all indirect trips are to serve passenger, while 37% of all indirect trips are for shopping, social reasons or personal business.

In 2009, the proportion of indirect work journeys remained relatively stable. Sunshine Coast residents are slightly more likely than the rest of south-east Queensland to include an interim activity in their work journeys.

Proportion of worktips



Work commutes - proportion of indirect trips



Trip purposes

Indirect work trips – mode | **Work travel**

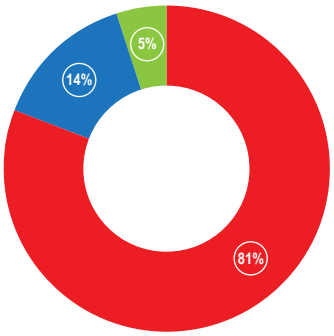
Indirect work commuters have a higher proportion of private vehicle mode share than those that travel directly to work.

This is especially the case in Brisbane, where direct work commutes are twice as likely to be using public transport or active transport for their journey than those who have an interim activity on the way to or from work.

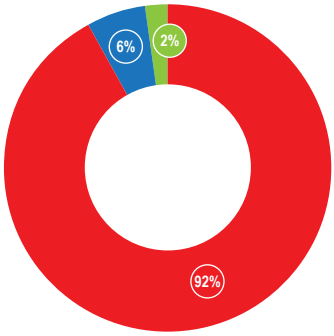
On the Sunshine Coast, indirect commuters are more likely to use public and active transport.

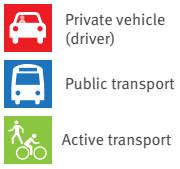
Private vehicle mode share for indirect work commuters is higher than direct commuters.

Direct work commutes



Indirect work commutes





Mode share - work commute with interim activity vs. direct work commutes

Indirect work trips distance | **Work travel**

The indirect commute is much further than a direct trip, with an interim activity for the journey to work adding an average of 6 kilometres on to the trip (or an extra 35% further than an average commute). The journey from work with an interim activity adds an extra 4 kilometres (or 26% further than an average commute).

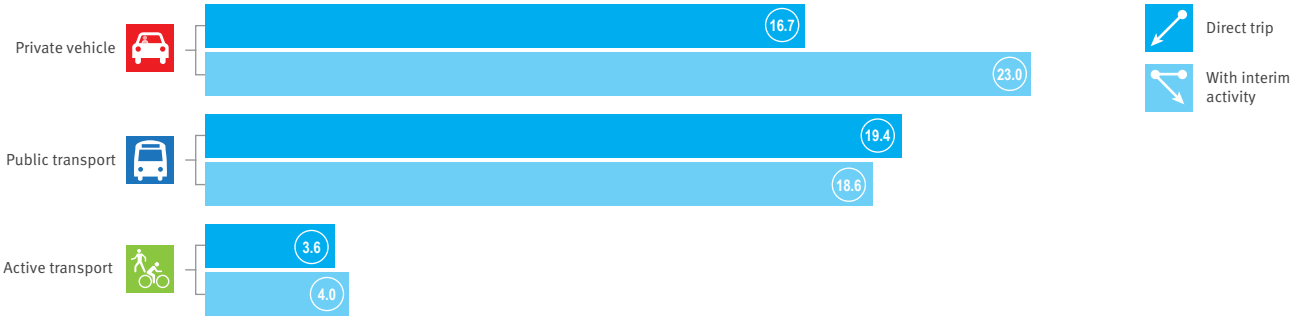
For the journey to work, indirect commuters who are using a vehicle travel an extra 6 kilometres on average, or 38% further than direct commuter.

Indirect commuters using public transport or active transport are more likely to travel further for their journey from work than their journey to work.

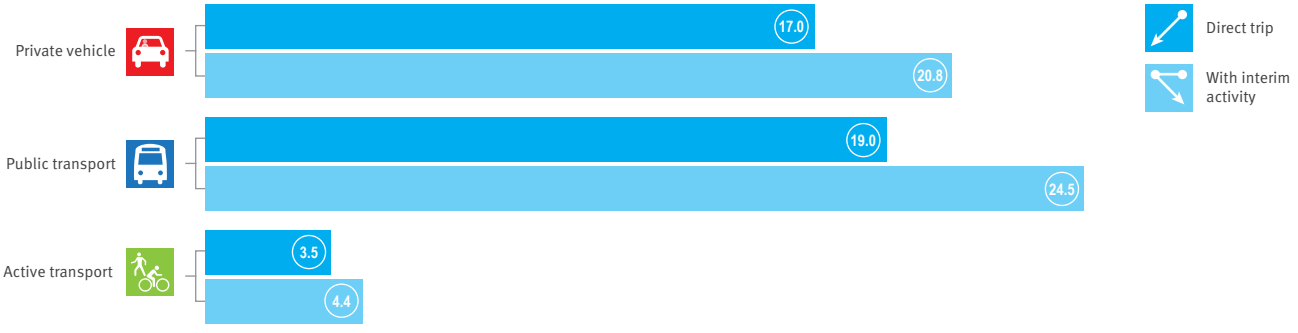
An indirect commute to work is on average 35% longer than a direct commute.

Journey distance (kilometres)

Journey distance (kilometres) - journey to work

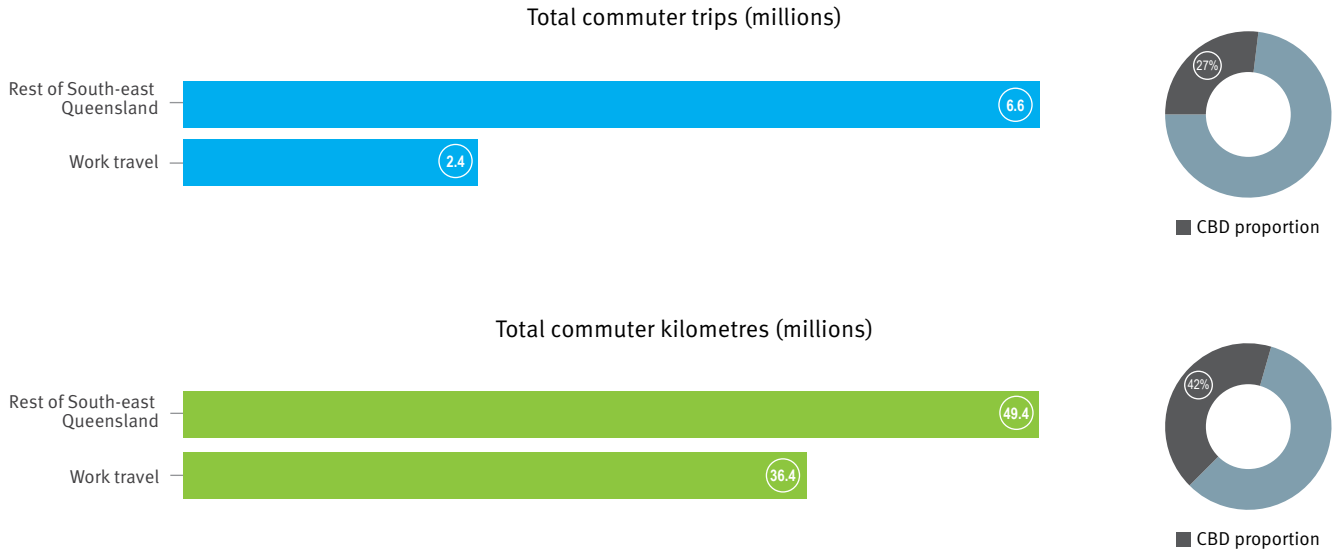


Journey distance (kilometres) - journey from work

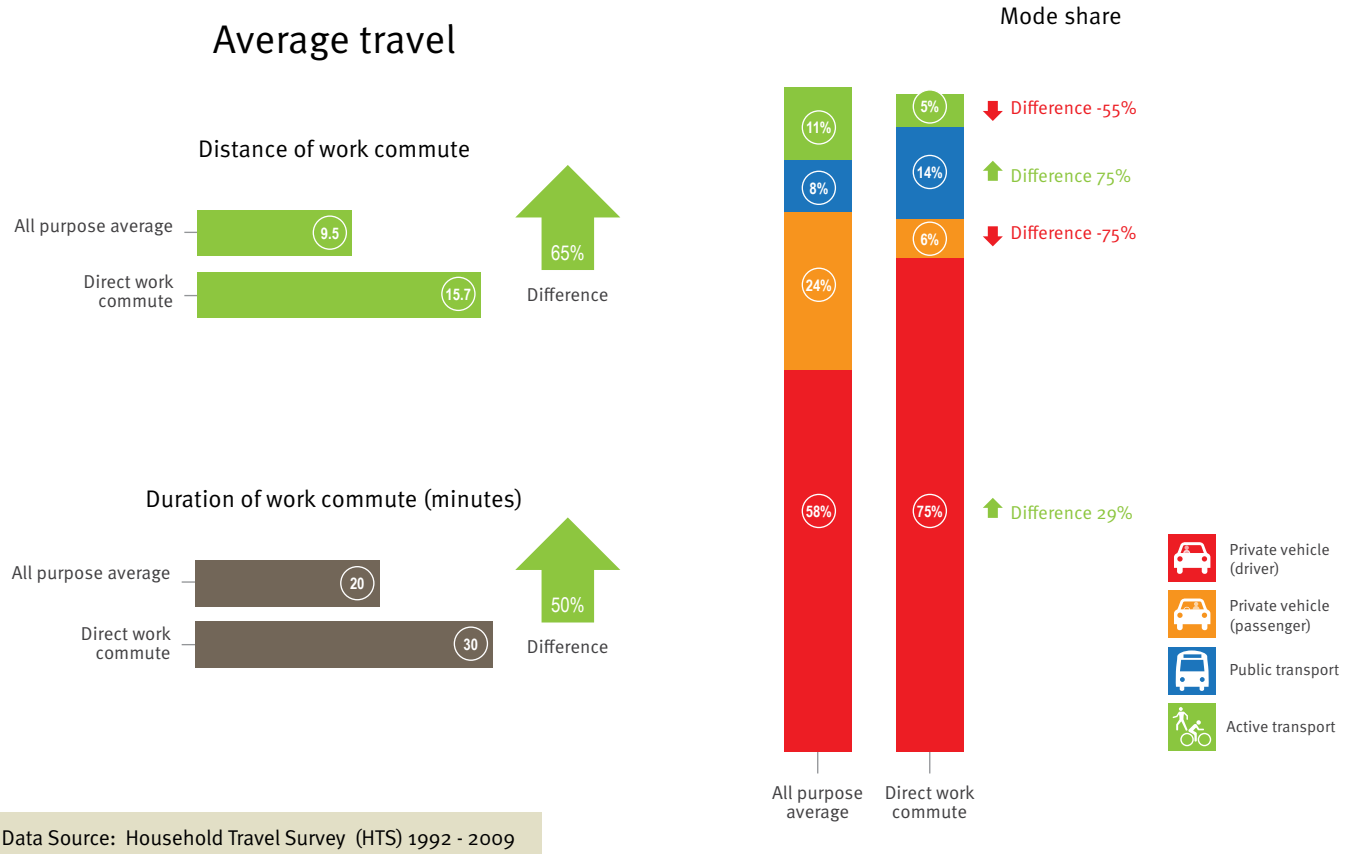


Summary | **Work travel**

Total travel



Average travel



Data Source: Household Travel Survey (HTS) 1992 - 2009

School Travel

4.2 km

Average distance travelled to school by primary school students in 2009.

1 in 4

The proportion of school students who travel to school by active transport.

1 in 4

Car trips during the AM peak is for school travel.

Trip purposes

Total travel | **School travel**

This chapters looks at school travel in south-east Queensland. The majority of analysis has been conducted at student level. Results at a total level (such as total trips, total kilometres of school travel and time of travel of school trips) have been analysed to include all travel made for school purposes, including student travel and those who take students to school.

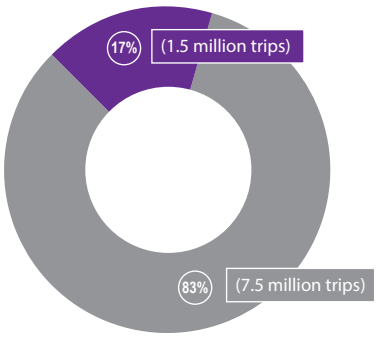
In 2006, there were around 390,000 school students in south-east Queensland. For every three primary school students, there are two secondary school students.

Total number of students 2006

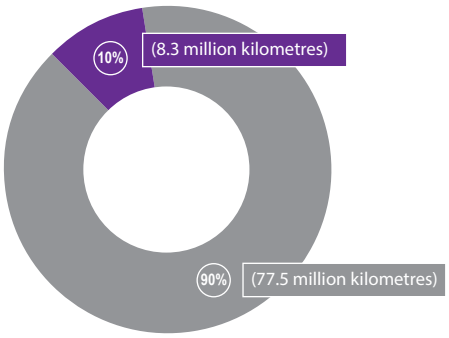
School trips make up almost 17% of all trips travelled in south-east Queensland each weekday. This includes both student travel and those involved in taking students to school.

Because school trips are shorter than the average trip, school travel accounts for one in ten kilometres travelled in south-east Queensland each weekday.

Total daily trips in 2009



Total daily kilometres in 2009



One in ten
Number of kilometres travelled in south-east Queensland are for school purposes.

Data Source: Household Travel Surveys conducted between 1992 and 2009. Number of students from Australia Bureau of Statistics Census 2006.
Please note: Majority of analysis conducted at a student level, however total travel results represent total school travel – both students and those involved in student travel i.e. serve passenger and accompany other school trips. Primary school students are from years 1 – 7 (excluding prep), while secondary school students are from years 8 – 12.

Trip distance | **School travel**

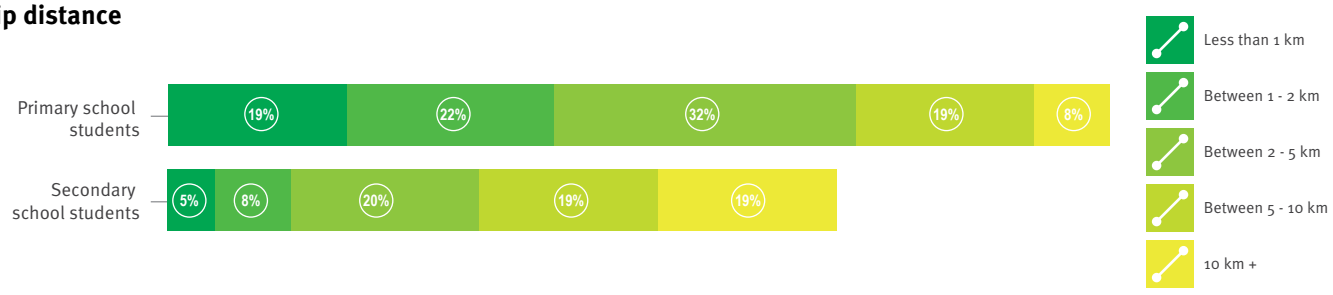
In 2009, the average distance travelled to school was 4.2 kilometres for primary school students and 7.7 kilometres for secondary school students. These distances are consistent with 1992 levels, despite some fluctuation in the years between. Shorter trips to primary education are expected since there are generally more primary schools within a community, so accessibility is typically better for primary school students.

A high proportion of school trips are within distances that are favourable to active transport. Two in five trips made by primary school students are less than two kilometres. One in three trips made by secondary school students are less than five kilometres.

The average primary school trip is half that of a secondary school trip.

Average trip distance (kilometres)

Trip distance



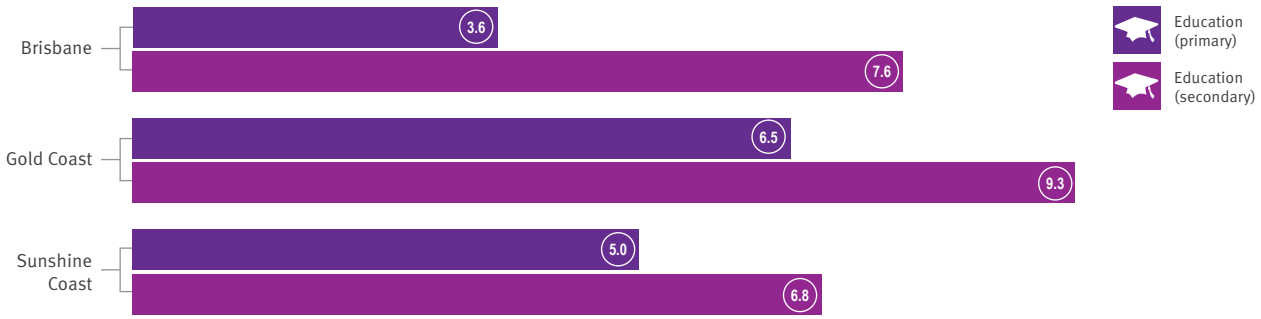
Trip purposes

Trip distance | **School travel**

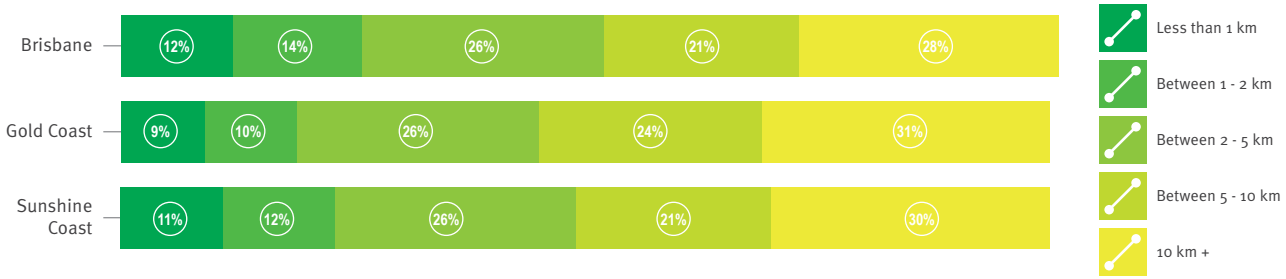
Brisbane primary school students travel a shorter distance on average than school students in the coastal regions. Sunshine Coast secondary students travel a shorter distance than the other regions.

Gold Coast primary and secondary students travel the furthest distance, a higher proportion of trips being more than five kilometres.

Average trip distance (kilometres) by region



Trip distance by region



Distance and duration by mode | School travel

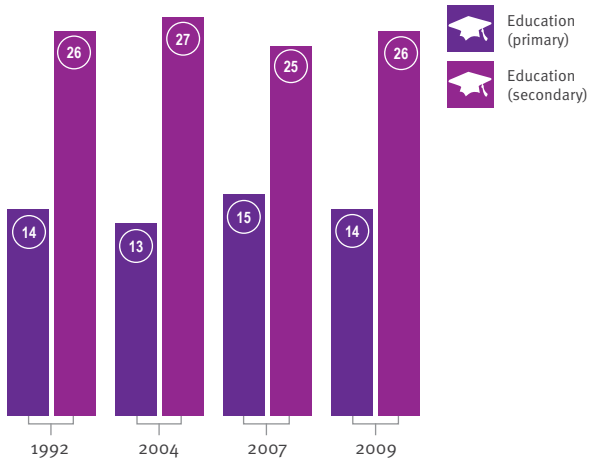
The average trip distance for primary and secondary school students varies greatly according to the mode of transport. On average, public transport has the longest trip distance.

Secondary school students travel further than primary school students across all modes, but especially on bike and public transport. This indicates that secondary students have higher cycling thresholds for getting to school than primary school students.

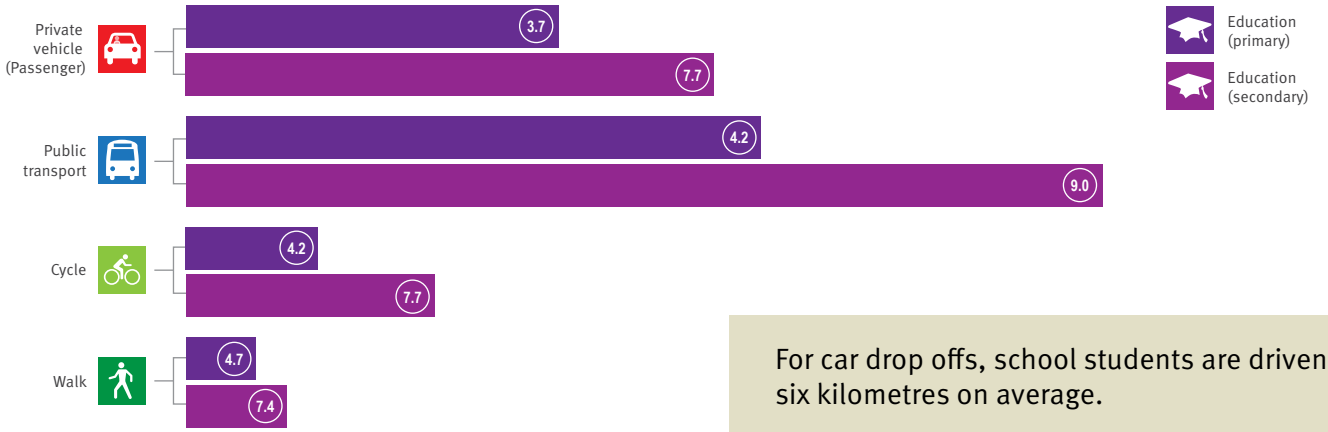
The average trip to school for a primary school student is 14 minutes on average, while for secondary school students it is 26 minutes.

School students travelling by public transport spend over 35 minutes getting to school, while vehicle passenger, walking and cycling trips are generally around 10 to 15 minutes.

Average trip duration (minutes)

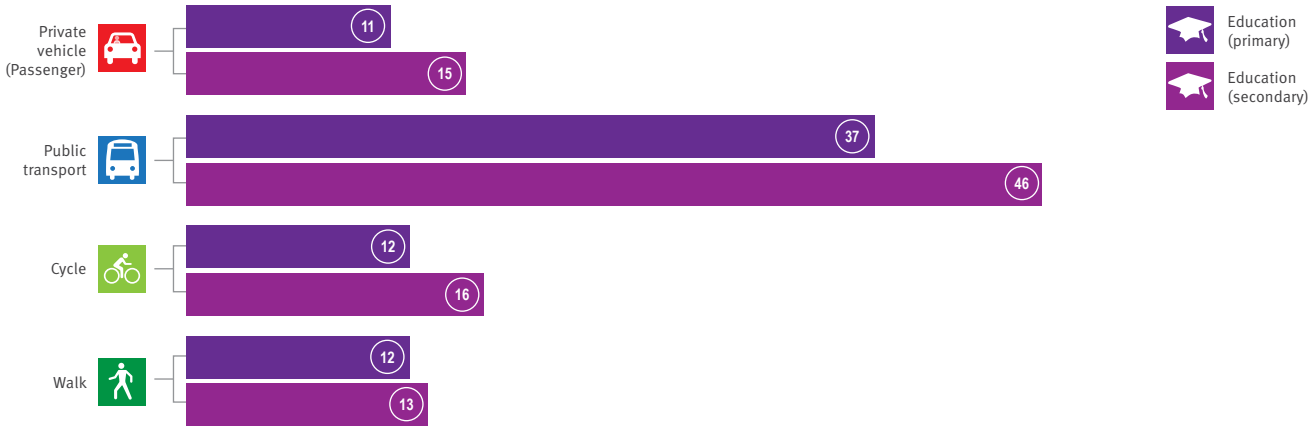


Average trip distance (kilometres) by mode



For car drop offs, school students are driven six kilometres on average.

Average trip duration (minutes) by mode



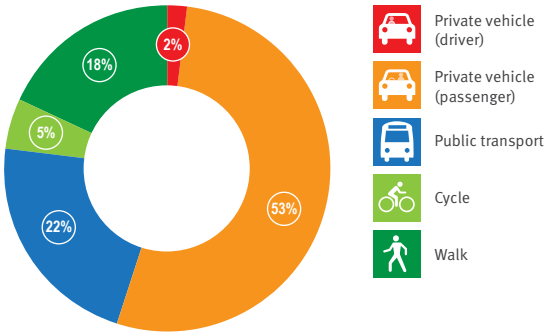
Mode share | **School travel**

Around half of all school students travel to and from school in a car, while active transport and public transport each account for just under one quarter of trips.

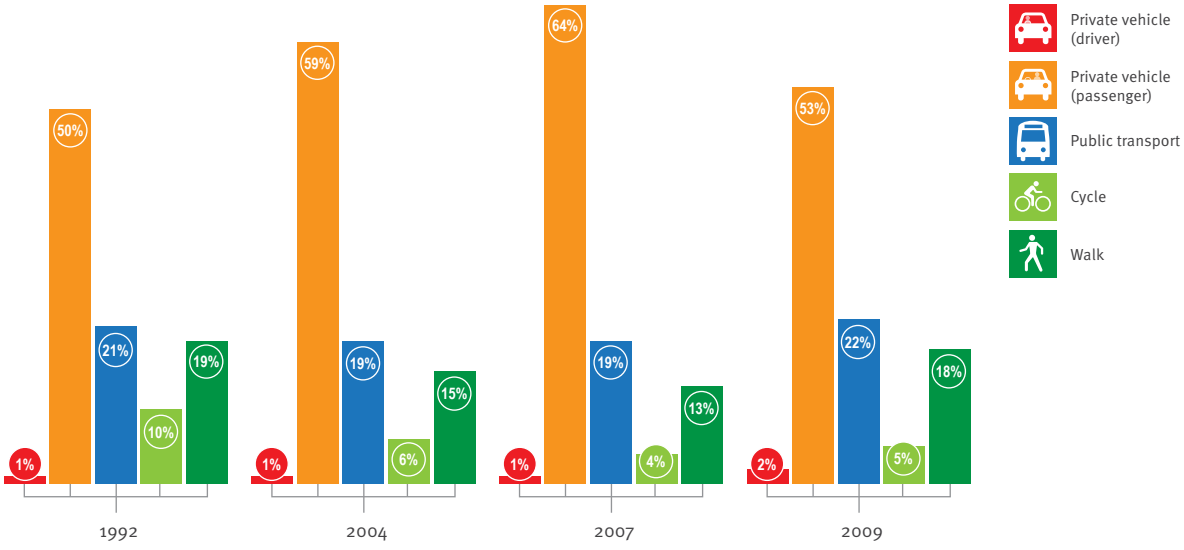
From 1992 to 2007, there was an increasing shift to vehicle passenger travel at the expense of public and active transport. This shift was primarily driven by a change in travel for primary students.

In 2009, the shift towards vehicle passenger reversed, with a decrease in vehicle passenger mode share and an increases in public and active transport. It is important to note that fewer students are taken per vehicle, which means that the number of cars driving to school has not reduced at the same rate.

Mode share - primary and secondary students



Mode share - primary and secondary students



Mode share by region | **School travel**

Mode shares for primary school children are vastly different to those of secondary school students.

In 2009, more than 1 in 3 primary school students travelled to school in a vehicle compared to 2 in 5 secondary school students. Secondary school students are more likely to use public transport.

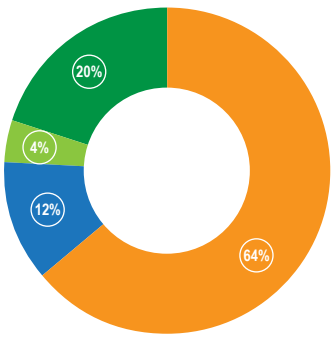
Although secondary school students travel further on average, both primary and secondary students share similar active transport mode share for trips to school. This disparity may be the product of the physical ability of these different age groups.

There are substantial modal differences for school student travel between Brisbane, the Sunshine Coast and the Gold Coast.

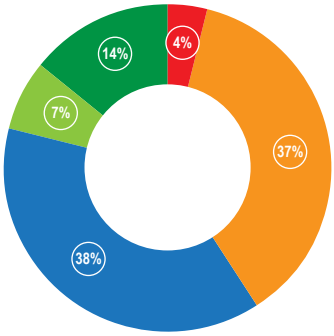
Brisbane primary school students are more likely to walk to school, which may be explained by the shorter average distances to access primary school in Brisbane. Sunshine Coast primary school students have lower walking mode share and higher public transport and bike travel than the other regions.

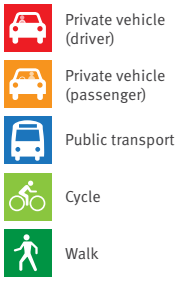
When compared to secondary students, primary school students are more likely to get to school as passengers than on public transport.

Mode share - primary students

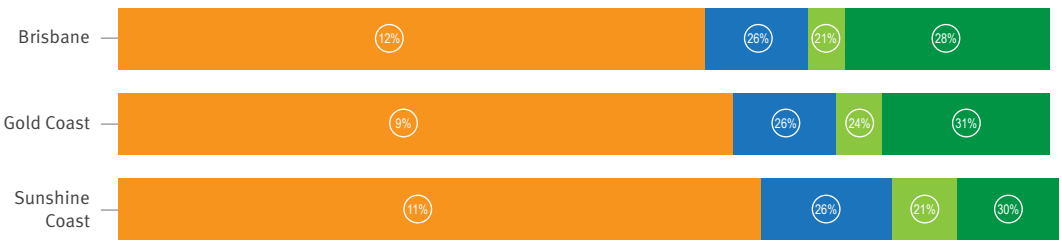


Mode share - secondary students





Mode share - primary school students



The journey from school has seen a shift from vehicle travel to public and active transport.

Trip purposes

Mode share by region | **School travel**

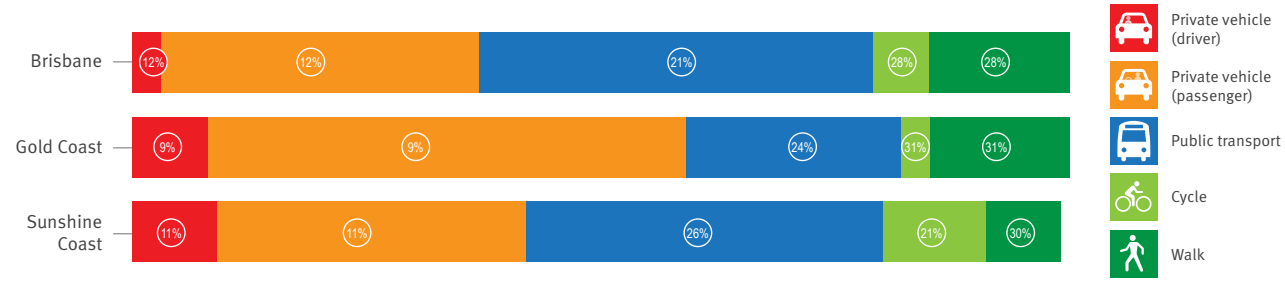
Gold Coast secondary school students have a much higher private vehicle mode share than the other regions. This may be due to the longer average distances that Gold Coast students travel to school. Brisbane and the Sunshine Coast share similar levels of public transport use and active transport use. Of these regions, Sunshine Coast secondary school students are the most likely to cycle.

It is possible to compare the number of school trips within distances favourable to active transport to the trips actually made by active transport. The vast majority of trips within walking distance (1 kilometre) are made by walking. However, one quarter of trips with this distance were as a vehicle passenger.

For school trips of between 1 - 2 kilometres, half are as a vehicle passenger. This suggests high potential to increase walking or cycling mode share for trips within these distances.

The majority of secondary school students that travel by bike travel further than 2 kilometres. This suggests that trips between 2 - 5 kilometres could also be a target for increasing bike use among secondary students.

Mode share - secondary school students



Trip distance by mode - primary and secondary school students

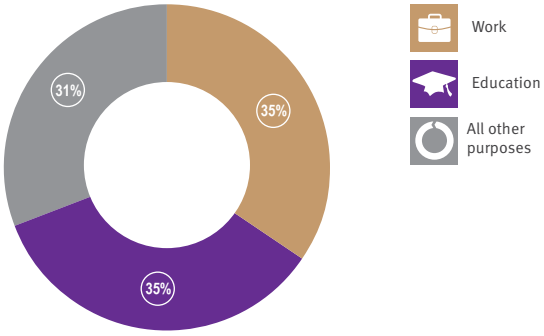
Travel time | **School travel**

School student travel has two very concentrated peaks at 8am and 3pm. Secondary school travel has a more dispersed peak in travel time than primary school travel. For example, in the AM Peak (between 7am and 9am) 1 in 5 secondary school trips are from 7am to 8am, compared to only 1 in 10 primary school trips.

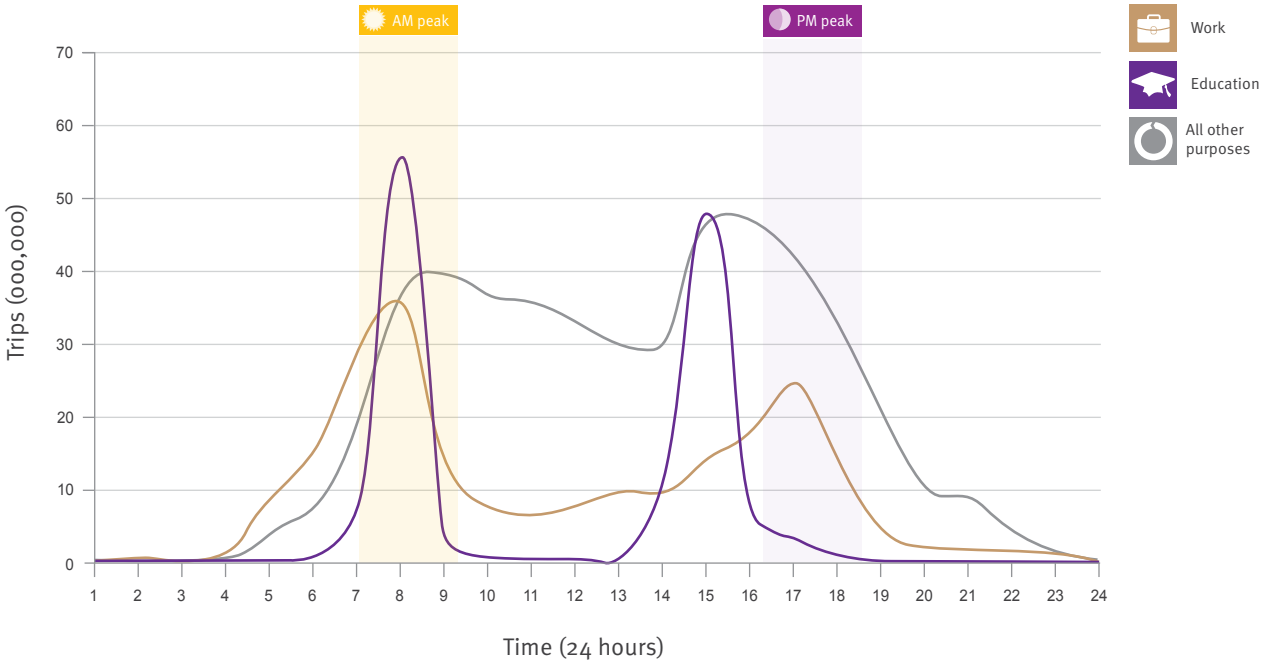
School travel accounts for one third of travel in the AM peak, but accounts for only 20% of AM peak kilometres travelled due to the shorter travel distance of school trips.

» **One third**
of AM peak trips across all modes are for school purposes.

Proportion of AM peak trips



Travel time - all modes

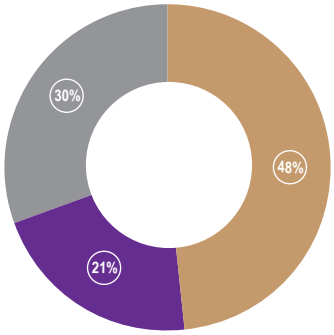


Travel time | **School travel**

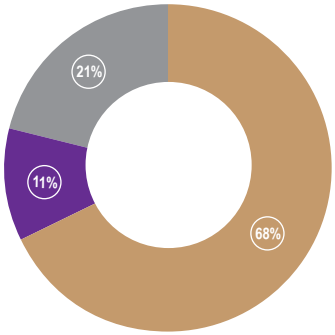
When looking at vehicle travel only, the contribution of school travel to the AM peak is lower. Around 25% of car trips in the AM peak are for school purposes, while only 11% of kilometres travelled in the AM peak are for school purposes. This difference is likely to be due to the more localised nature of school trips and resulting shorter average distances (compared to work trips).

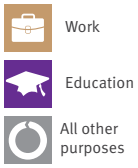
›› One in four car trips
during the AM peak is for school travel.

Proportion of AM peak trips - vehicle driver

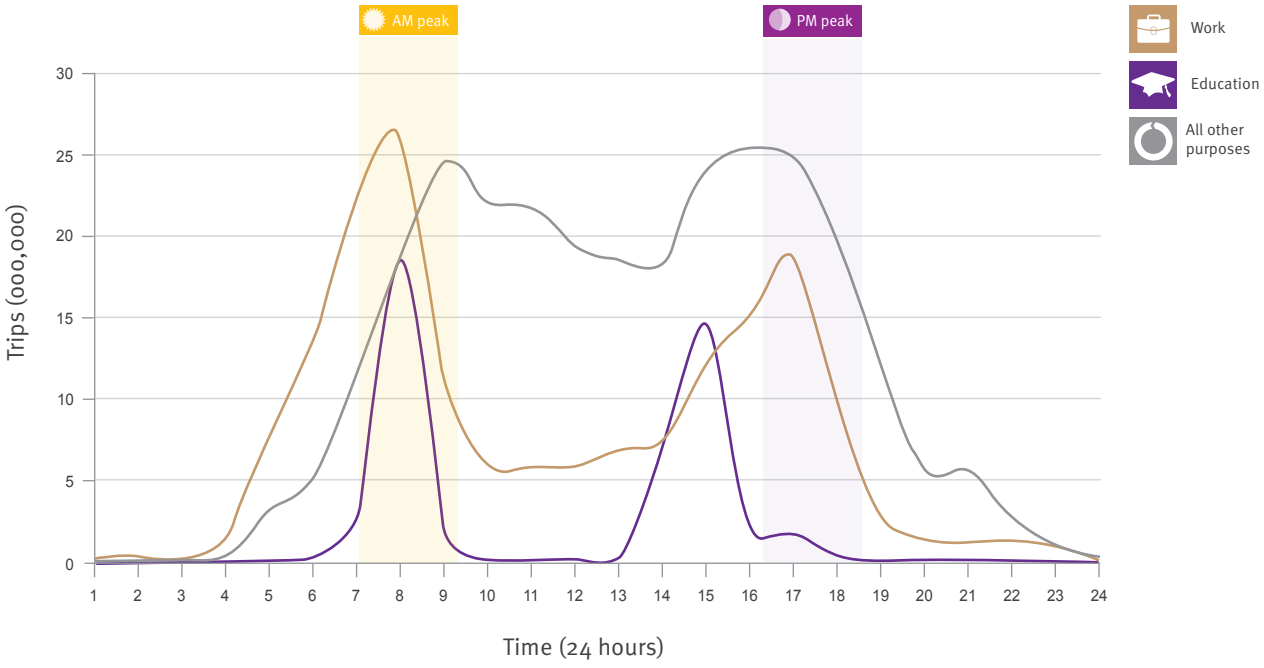


Proportion of AM peak kilometres - vehicle driver





Travel time - vehicle driver only



Vehicle passenger and accompanied travel | School travel

One quarter of public transport school trips and 1 in 12 walking trips, include vehicle passenger components. This indicates that vehicle passenger trips may play an important role in enabling other modes of travel (for example, by providing a lift to a train station).

Since 2007, this has decreased back to 1992 levels, mirroring the recent reductions seen in vehicle passenger mode share for school trips.

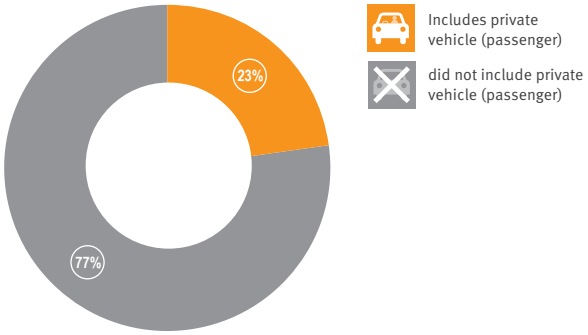
Accompanied travel is common for school students, as noted from the high 'vehicle passenger' mode share. The other modes of travel show varying levels of accompaniment.

For primary school students, bike is the mode with the lowest level of accompaniment (56% ride alone) while public transport is the mode for which primary school students are most likely to be accompanied.

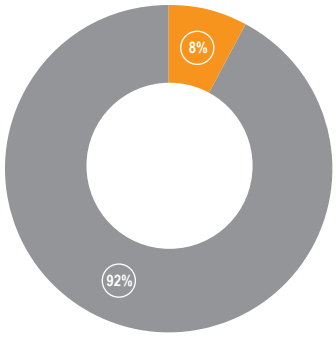
Secondary school students, are more independent than primary school students across all modes. Both walking and cycling trips are predominantly unaccompanied. Students are more likely to be partially accompanied for public transport trips.

For primary school children cycling to school, half do so independently (without being accompanied by an adult).

Vehicle passenger use in public transport trips

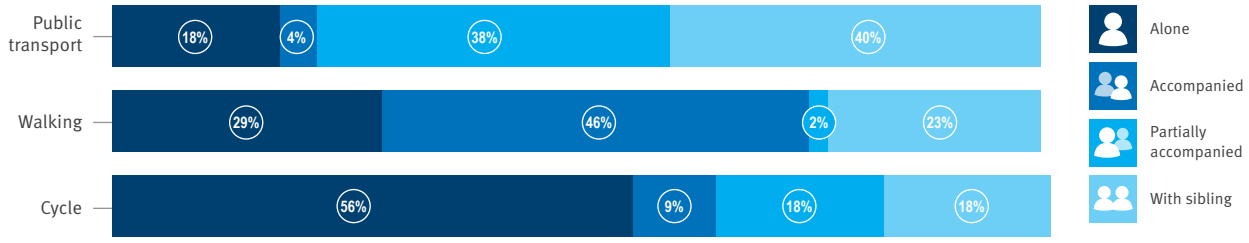


Vehicle passenger use in walking trips



Almost one quarter of public transport school trips include a vehicle passenger leg.

Accompanied travel - journey to school - primary school students



Accompanied travel - journey to school - secondary school students

Trip purposes

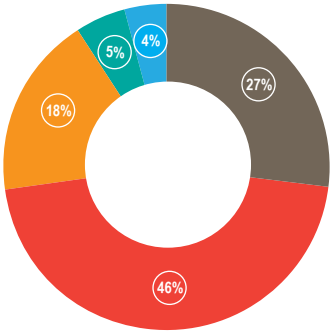
School accessability | **School travel**

Analysis shows that accessibility to school by walking and public transport is higher for primary students than secondary students. The graphs below show potential accessibility; however in reality, many students do not attend the schools closest to them.

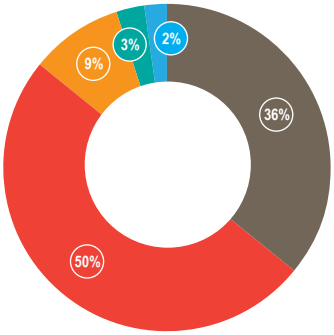
One quarter of primary students are within 15 minutes walking distance of a primary school. The proportion of secondary school students who do not have access to a school within 60 minutes by walking or public transport is greater than that for primary school students.

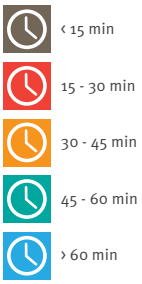
Primary school students (4 - 12 year olds)

Brisbane accessibility by walking



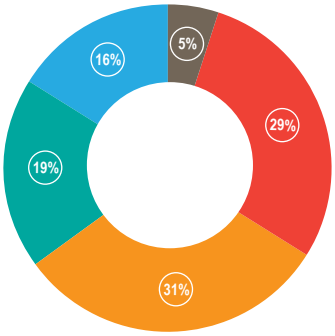
Brisbane accessibility by public transport



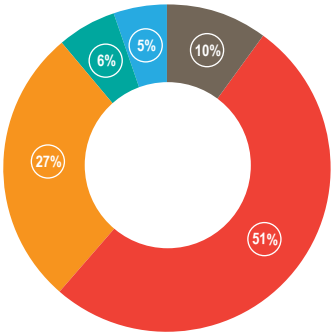


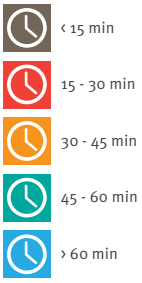
Secondary school students (13 - 17 year olds)

Brisbane accessibility by walking



Brisbane accessibility by public transport

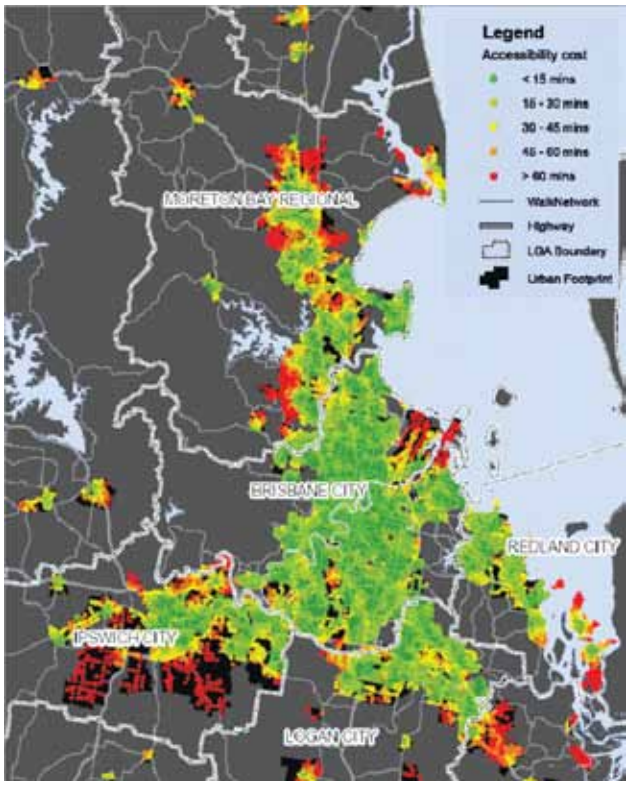




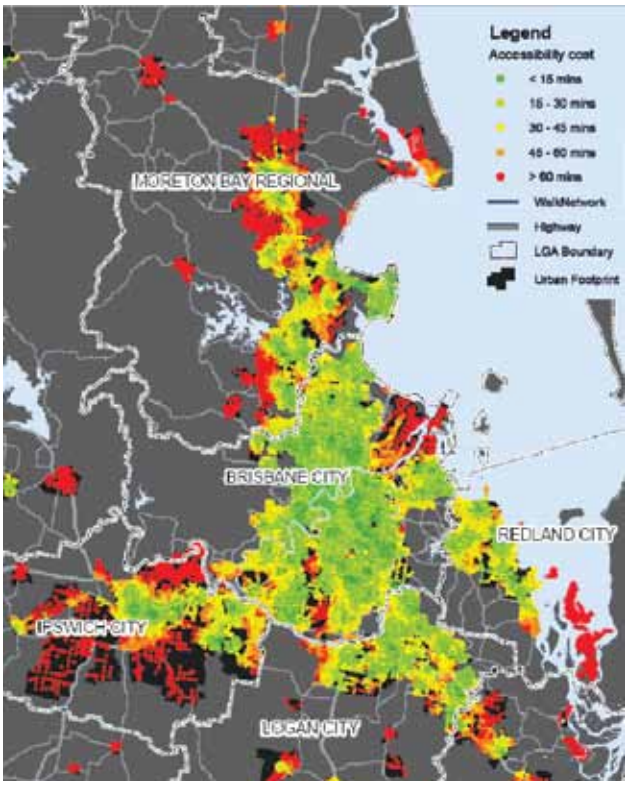
Accessibility analysis: To assess the accessibility of primary and secondary schools by the student population, the student population was estimated for areas within the urban footprint using 2006 Census data (CCD level), and a model was used to determine accessibility.

School accessability | **School travel**

Primary school students – walking and public transport accessability



Secondary school students – walking and public transport accessability

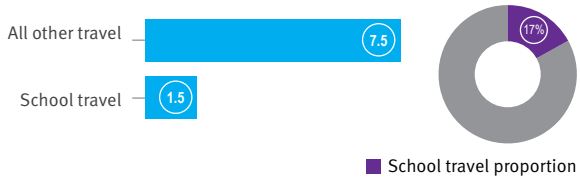


School accessibility is very good across the region. Primary schools are more accessible than secondary.

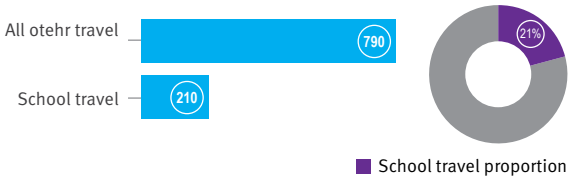
Summary | School travel

Total travel

Total daily trips (millions)

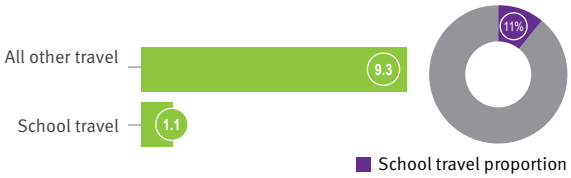


Total daily trips – AM peak vehicle travel (thousands)



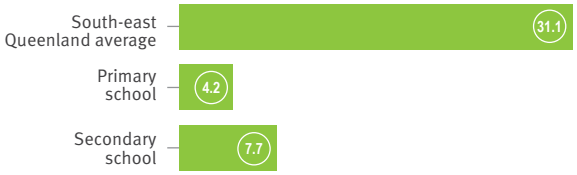
Total daily kilometres (millions)

Total daily kilometres– AM peak vehicle travel (millions)

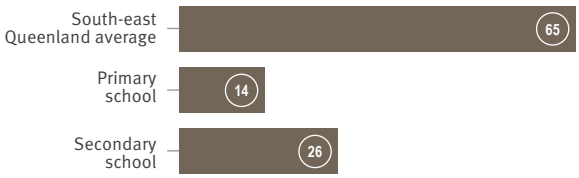


Average travel

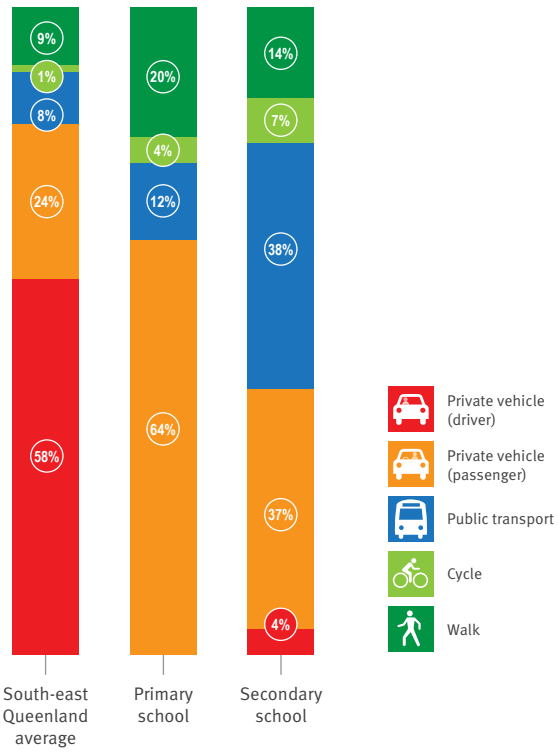
Kilometres per trip



Minutes per trip



Mode share (proportion of trips)



Data Source: Household Travel Surveys conducted between 1992 and 2009.
Number of Students from Australia Bureau of Statistics Census 2006.
Please note: Majority of analysis conducted at a student level, however total travel results represent total school travel – both students and those involved in student travel i.e. serve passenger and accompany other school trips. Primary school students are from years 1 – 7 (excluding prep), while secondary school students are from years 8 – 12.

Over 65's Travel

1 in 10

The number of trips in south-east Queensland made by over 65's.

2.6

The number of trips travelled on average per day by over 65's.

26%

The proportion of over 65's trips made during the morning peak.

Total travel | Over 65's

Over 65's can be classified as two groups; those between 65 and 75 (early retirement) and over 75 (late retirement).

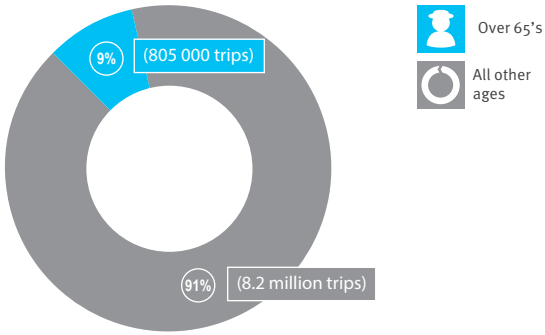
Over 65's, especially people in early retirement contribute a sizeable proportion (9%) of all south-east Queensland trips. Early retirees contribute two thirds of this, while late retirees contribute one third.

On the Sunshine Coast and Gold Coast, over 65's contribute an even higher proportion of all trips (10% and 12% respectively).

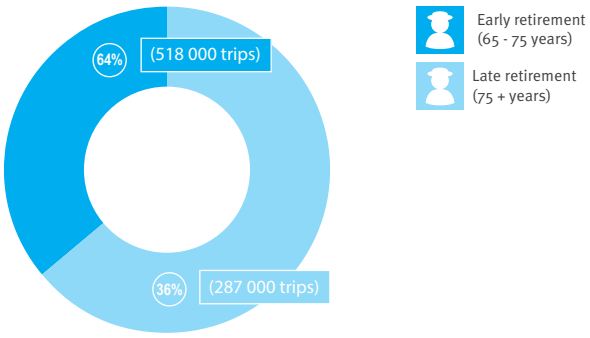
Although over 65's account for 9% of total trips, they account for less kilometres travelled in south-east Queensland (7.5%). Early retirees make up a greater proportion of kilometres travelled than to late retirees.

6.5 million
The number of kilometres travelled by over 65's on a weekday in 2009.

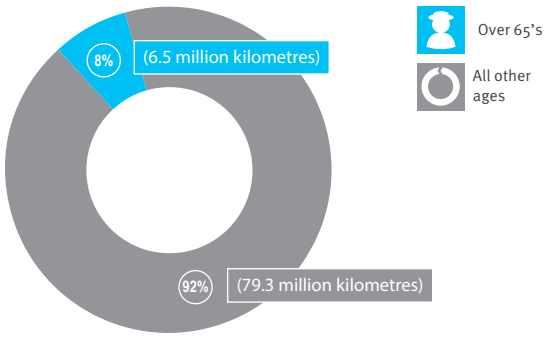
Total daily trips



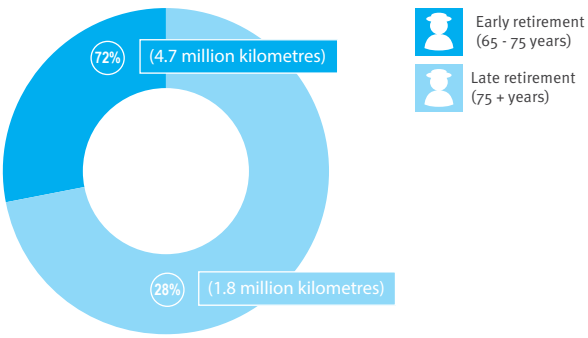
Total daily trips by age



Total daily kilometres (percentages)



Total daily kilometres



Data source: Household Travel Survey 2004 and 2007 combined data, unless otherwise indicated.

Daily travel and purpose of travel | Over 65's

The over 65's group (especially in late retirement) has a significantly lower average daily trip rate than the south-east Queensland average. There is a large difference in trip rates between early and late retirees. Early retirees make on average three trips per day, compared to two trips for late retirees.

As the number of people aged 65 and over grows, overall average daily trip rates are expected to reduce.

Over 65's on the Gold Coast and Sunshine Coast travel more than Brisbane retirees. This mirrors the pattern of the wider population, where coastal residents make more trips on average.

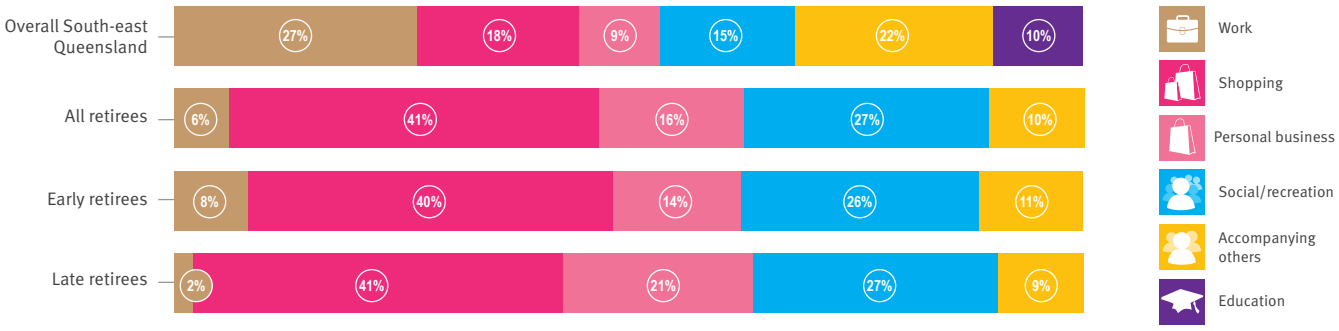
Shopping represents roughly two in five trips for over 65's make, while social trips account for roughly one quarter of their travel. Over 65's travel less for work reasons, education or to accompany others.

Trips per person

Over 65's make on average 2.6 trips per day.

Trips per person - over 65's

Trip purpose - based on trips



›› **Two in five**
trips made by Over 65's are for shopping.

Over 65's travel more for shopping, personal business and recreation.

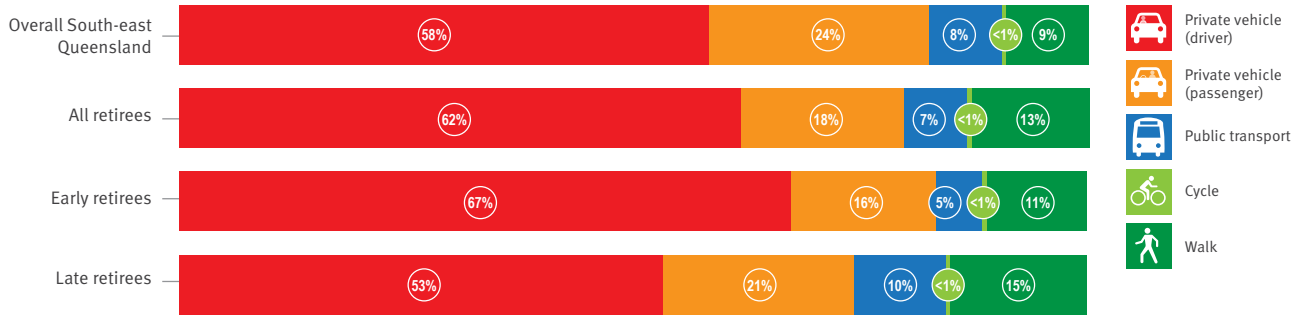
Travel mode | Over 65's

Over 65's have higher walking and vehicle driver mode share than the total population. The higher vehicle driver mode share is driven particularly by early retirees, where two of three trips are made as a vehicle driver.

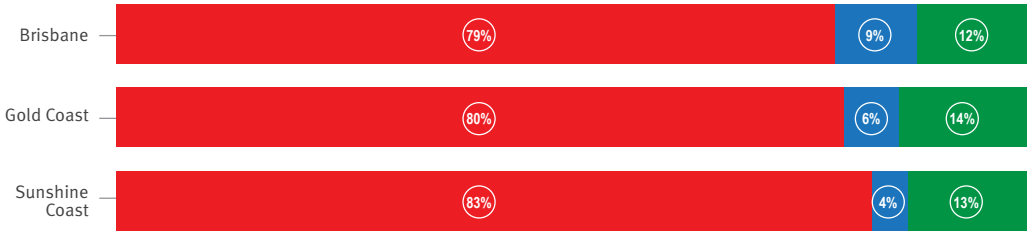
For late retirees, vehicle driver mode share decreases quite significantly to 53% (or one in two trips). Vehicle driver trips are replaced by mostly public transport and active transport modes.

As the population of residents over 65 grows, the result is likely to be lower vehicle driver mode shares, and increasing vehicle passenger, public transport and walking mode shares.

Mode share



Mode share



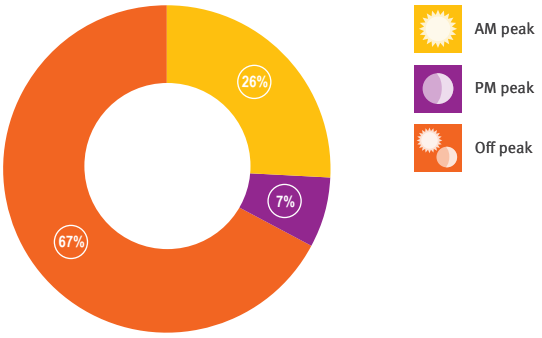
Late retirees travel more via public and active transport

Travel time | **Over 65's**

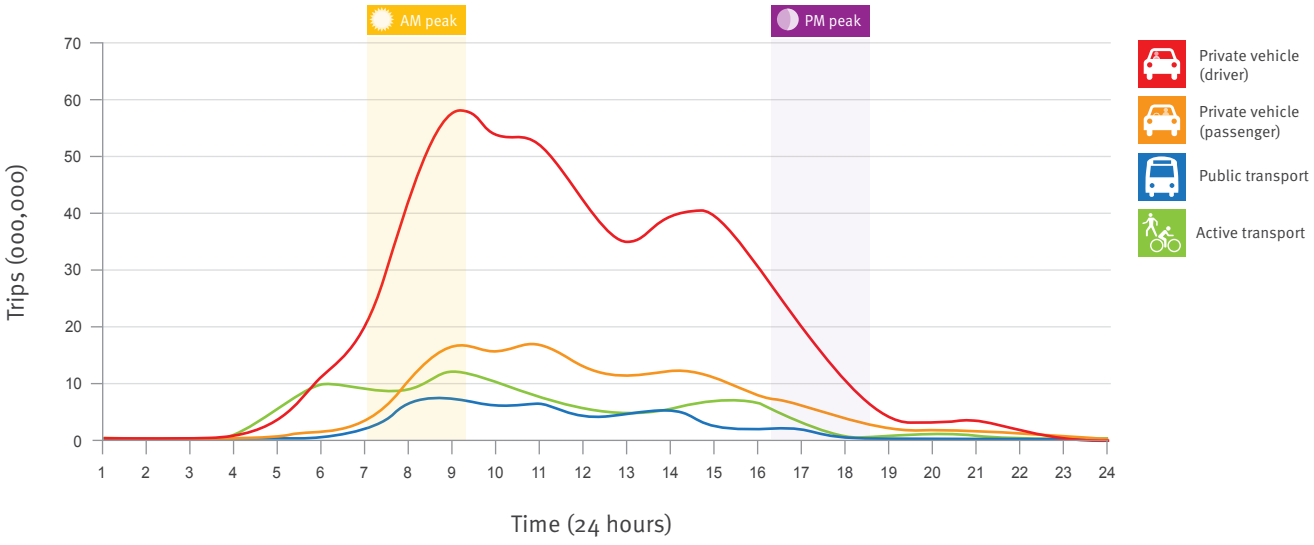
Peak time of travel for over 65's is towards the end of the morning peak at 9am. One quarter of over 65's travel is during the morning peak, typically by vehicle. Their contribution to the afternoon peak is less (7%), with most of their travel dropping off after a 3pm afternoon peak.

Two in three over 65's trips are in the off peak.

Time of trips - over 65's



Time of travel - by modes

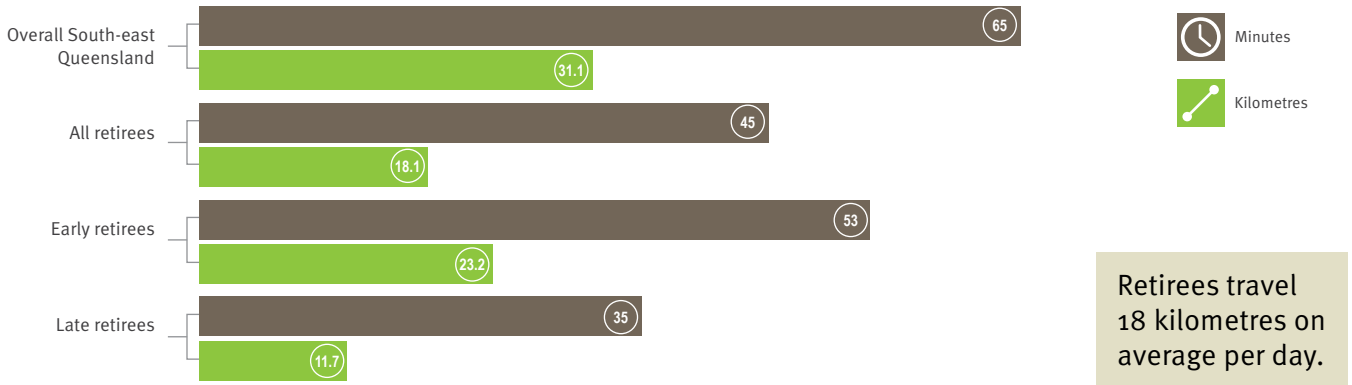


Daily distance and duration | Over 65's

Over 65's travel less distance and duration per day than the average resident. Early retirees travel on average 23 kilometres, compared to 12 kilometres per day for late retirees.

Over 65's travel on average 5 kilometres for shopping and 9 kilometres for social and recreation purposes. An average trip made by over 65's on public transport is 5 kilometres long and takes 25 minutes.

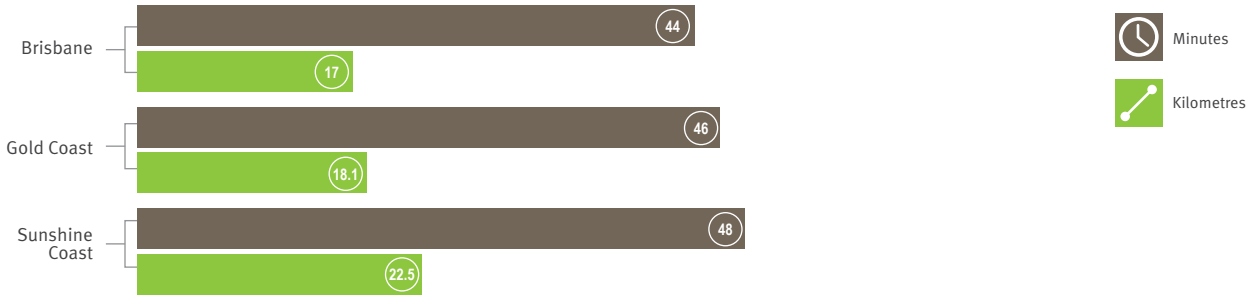
Daily travel distance and duration



* Due to trip weight variation averages of distance and time cannot be used to calculate average speed.

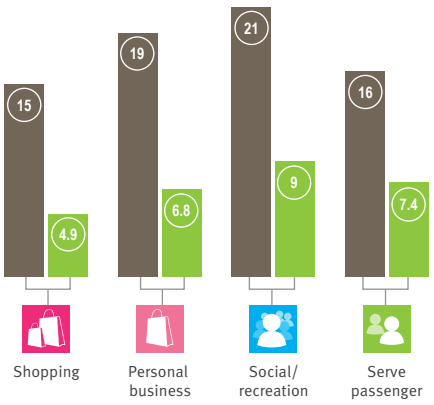
Retirees travel 18 kilometres on average per day.

Daily travel distance and duration - over 65's

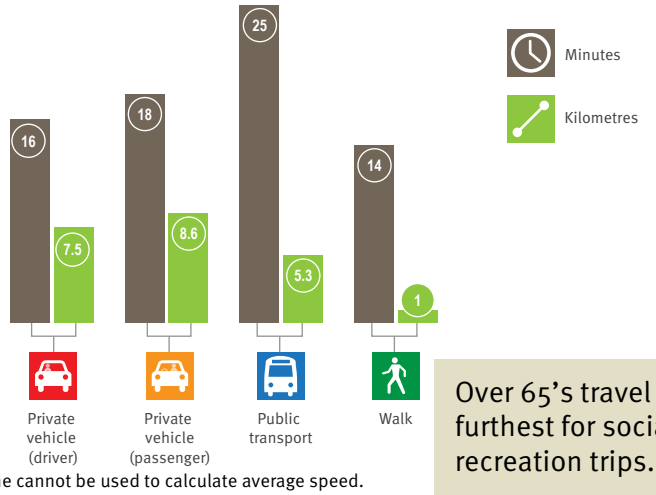


* Due to trip weight variation averages of distance and time cannot be used to calculate average speed.

Daily travel distance and duration by purpose - over 65's



Daily travel distance and duration by mode - over 65's



* Due to trip weight variation averages of distance and time cannot be used to calculate average speed.

Over 65's travel furthest for social/ recreation trips.

Summary | Over 65's

Total travel

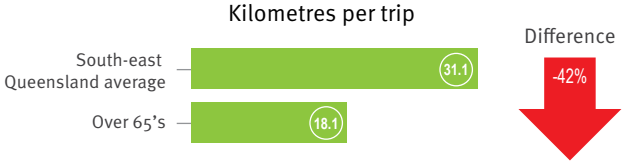
Total trips (millions)

Total kilometres (millions)

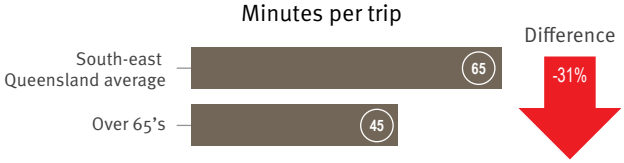
Average travel

Trips per day

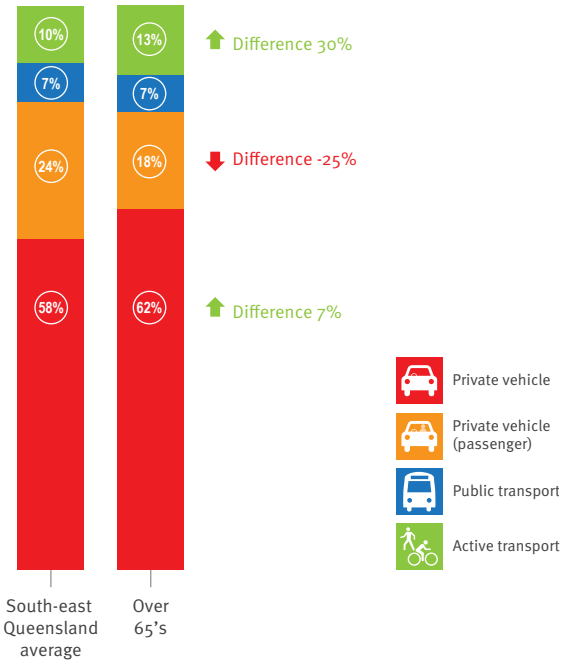
Kilometres per trip



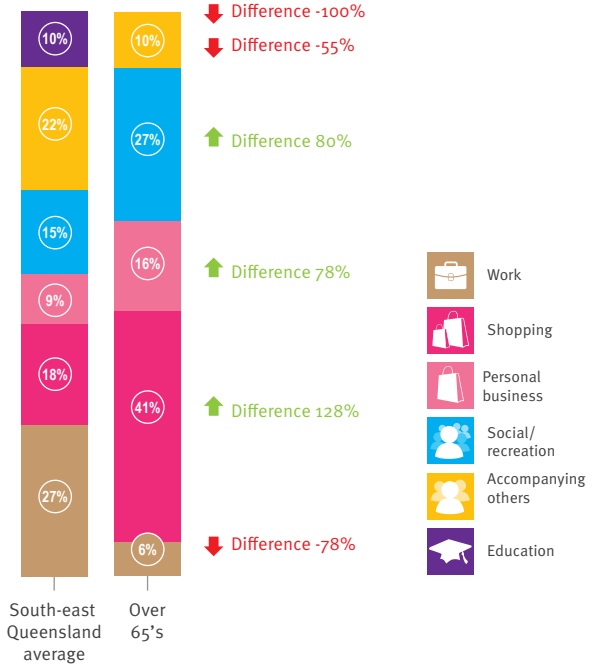
Minutes per trip



Mode share based on trips (percentages)



Purpose of trips based on distance



Data Source: Household Travel Survey 2004 and 2007 – combined data, unless otherwise indicated.

Tertiary Travel

52%

The proportion of trips to tertiary education made via public transport.

17 km

The average distance of a trip from home to university.

1 third

The proportion of tertiary trips made during peak times.

Mode share | **Tertiary students**

This chapter contains a brief summary of the travel behaviour of tertiary students. The data was collected through a specific Tertiary Student Travel Survey with students from south-east Queensland university campuses including The Queensland University of Technology (Gardens Point and Kelvin Grove campuses), Griffith University (Nathan and Gold Coast campuses), the University of Queensland (St Lucia campus) and the University of Sunshine Coast.

Tertiary students display a more favourable modal split towards public and active transport, in comparison to the rest of south-east Queensland. Roughly half of all tertiary education trips are made by public transport.

Tertiary students show a greater dependency on private vehicles for non-education trips, with public transport mode share dropping sharply from 52% for education trips to 21%. However, public transport mode share of 21% for tertiary students is still significantly higher than that of all south-east Queensland residents. This suggests that tertiary students rely more on public transport for travel beyond just education trips.

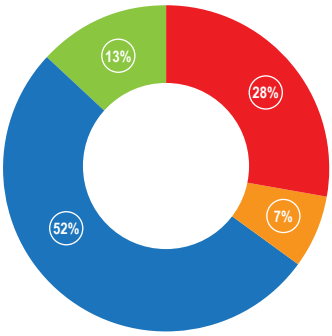
This suggests that while students may have access to car travel, which they use for non-education trips, they still choose public transport or active transport as the preferred mode for education trips.

Active transport mode share, to universities, remains fairly consistent for both education (at 13%) and non-education trips (at 16%).

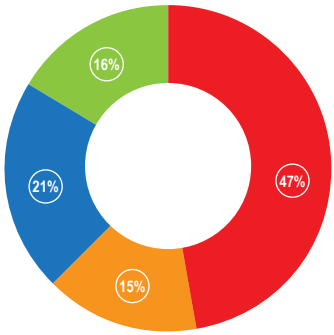
University students display a high use of active transport for non education travel.

Half of all education trips to university are via public transport.

Mode share for education trips to university



Mode share for non-education trips



Data source: Tertiary Students Travel Survey 2008, which had 2724 respondents.

The Department of Transport and Main Roads conducted the first Tertiary Student Travel Survey in 2008 to improve data quality on the travel behaviour of tertiary students. In the broader household travel surveys conducted regularly by the department, low response rates for this demographic group made it difficult to analyse tertiary student travel.

The Tertiary Student Travel Survey was sent to a range of universities across south-east Queensland. The following university campuses provided data of a volume and quality to be included in the study.

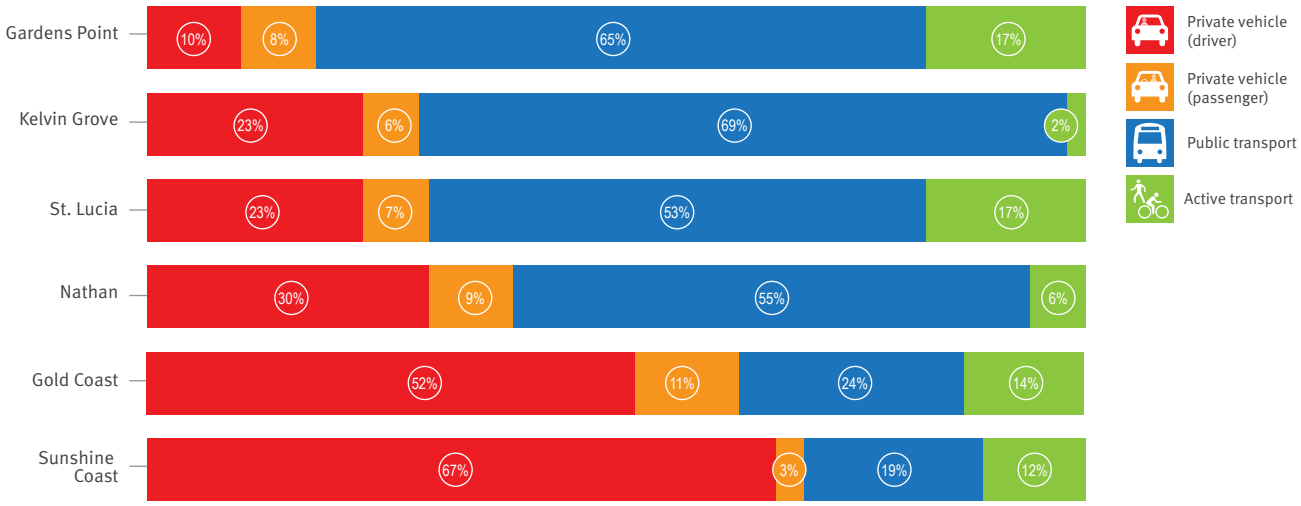
- UQ St Lucia and Herston: 1 540 respondents
- QUT Gardens Point: 463 respondents
- QUT Kelvin Grove: 173 respondents
- Griffith University Nathan: 281 respondents
- Griffith University Gold Coast: 198 respondents
- University of Sunshine Coast: 69 respondents

Mode share by university | **Tertiary students**

Public transport mode share for tertiary education trips are particularly strong for the inner-city university campuses, while the coastal campuses have a higher vehicle mode share.

The role of active transport in education trips is often more pronounced in suburban university campuses such as St Lucia, with a mode share of 17%, and the Gold Coast with a mode share of 14%. One of the highest active transport mode shares is at the inner-city campus of QUT Gardens Point, with a mode share of 17%, equal with St Lucia. This may possibly reflect the tendency of out-of-home students to live on or near campus.

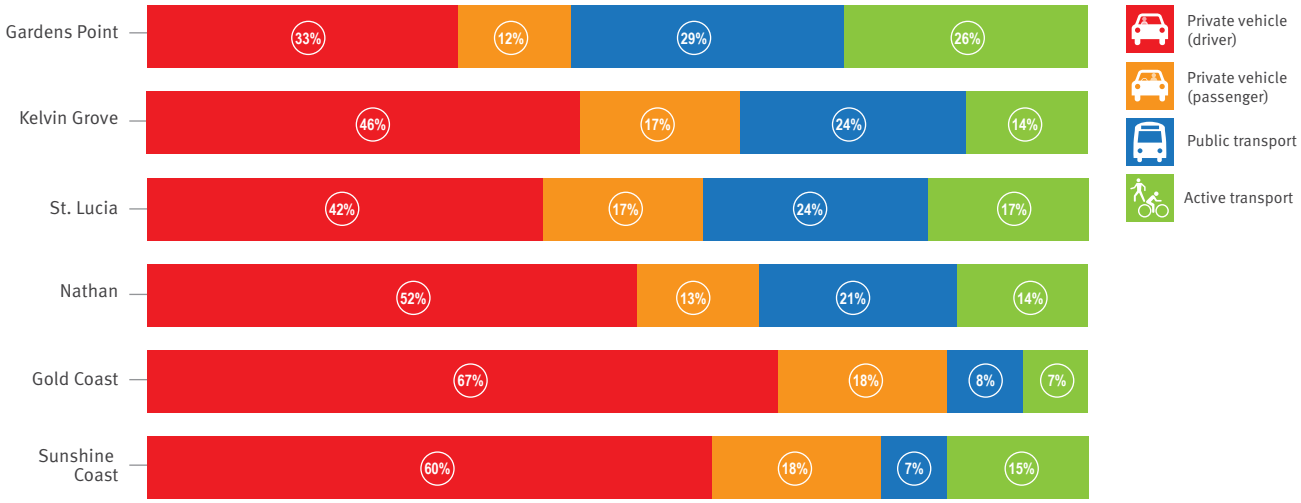
Mode share for education trips to university



Most inner-city university campuses have higher public transport mode shares and lower vehicle mode shares compared to suburban universities.

There is generally a much lower public transport mode share to universities for non-education trips (e.g., trips made to the university for work).

Mode share for education trips to university



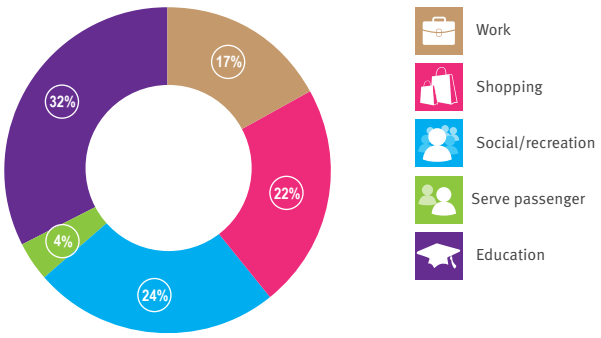
Time of travel | **Tertiary students**

One third of tertiary student travel is for education purposes, while social/recreation and shopping trips account for almost half of tertiary student travel. One quarter of tertiary student travel is for social and recreation purposes, which peak between 6.30pm and 7.30pm.

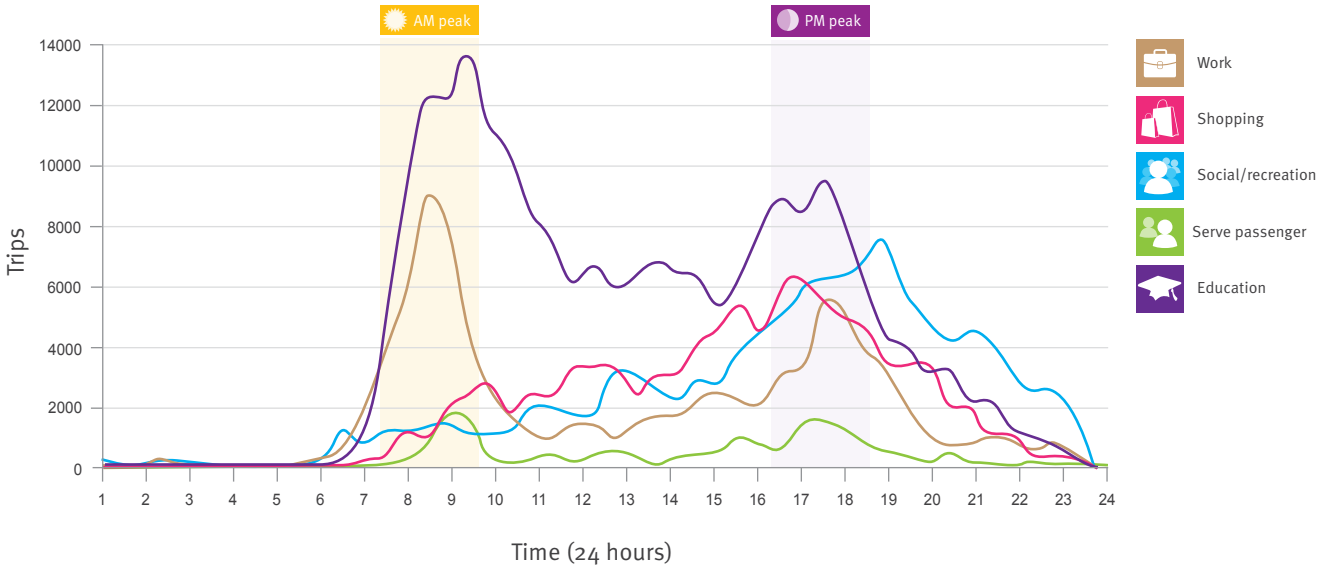
After an initial peak at 9am the number of tertiary students travelling for education purposes decreases, with a second peak at 4.30pm and 5.30pm. This may be due to post-graduate students travelling to university for evening classes after work, as well as students leaving campus at the end of the day.

Most tertiary student travel, excluding university and work trips, occurs in the late afternoon/early evening.

Tertiary trips by purpose



Travel time by trip purpose



University departure and arrival time | **Tertiary students**

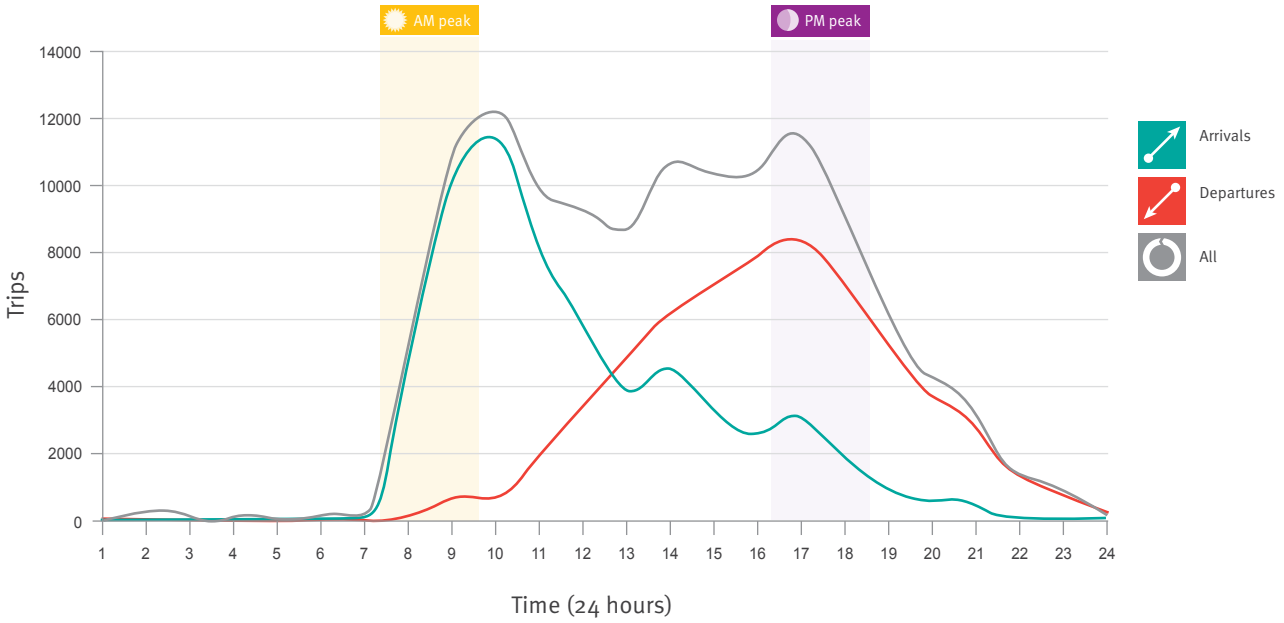
While university travel is more evenly distributed throughout the day than work travel, about 30% of tertiary travel still occurs in peak traffic periods.

Arrivals peak between 8am and 9am, while students leaving the universities are spread across the early evening. Departure times peak at 4pm, with a large proportion of travel between peak periods.

There are a significant number of trips to universities in the early evening, around 4pm and 6pm, presumably for the start of evening classes.

Almost one-third of tertiary travel occurs during peak traffic periods.

Peak university arrival and departure time



Trip distance and duration | **Tertiary students**

In terms of distance and duration tertiary students travel further (an average of 16kilometres) and longer (an average of 43minutes) for education compared to other trip purposes. Around half of all tertiary education trips are more than 10kilometres.

Tertiary students travel longer distances and spend more time travelling than the average commuter.

Trip distance and duration

* Due to trip weight variation averages of distance and time cannot be used to calculate average speed.

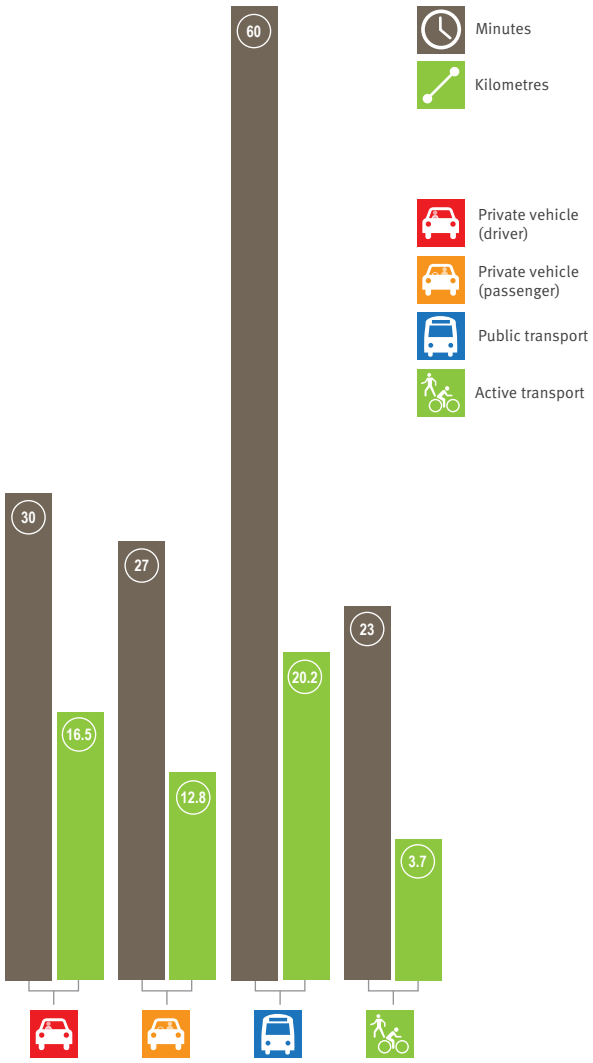
Trip length by purpose

Trip distance and duration by mode | Tertiary students

Tertiary students generally have high trip durations for travelling to campus across all travel modes. Students travel longer distances and spend more time travelling to universities on public transport, compared to other modes.

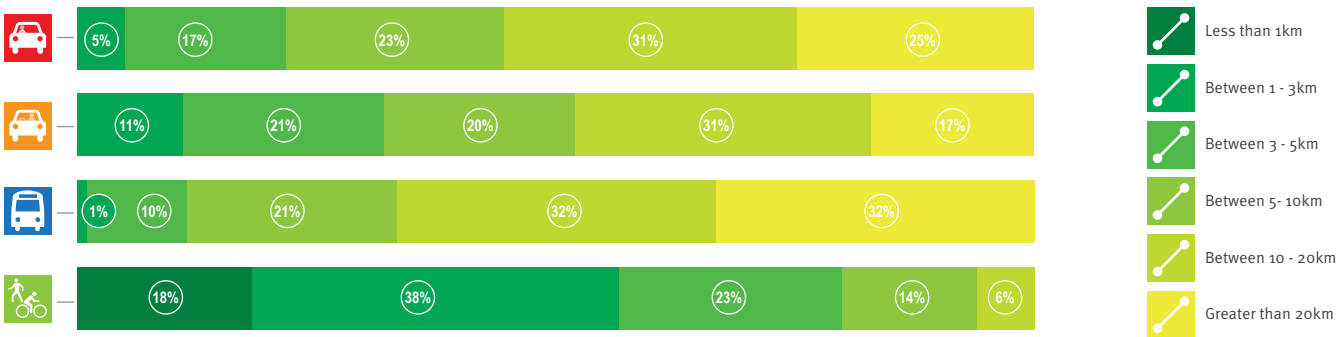
Although public transport trips are marginally longer in distance than vehicle driver trips, they are twice the duration.

Distance by mode - direct campus commute



* Due to trip weight variation averages of distance and

Distance by mode - education trips

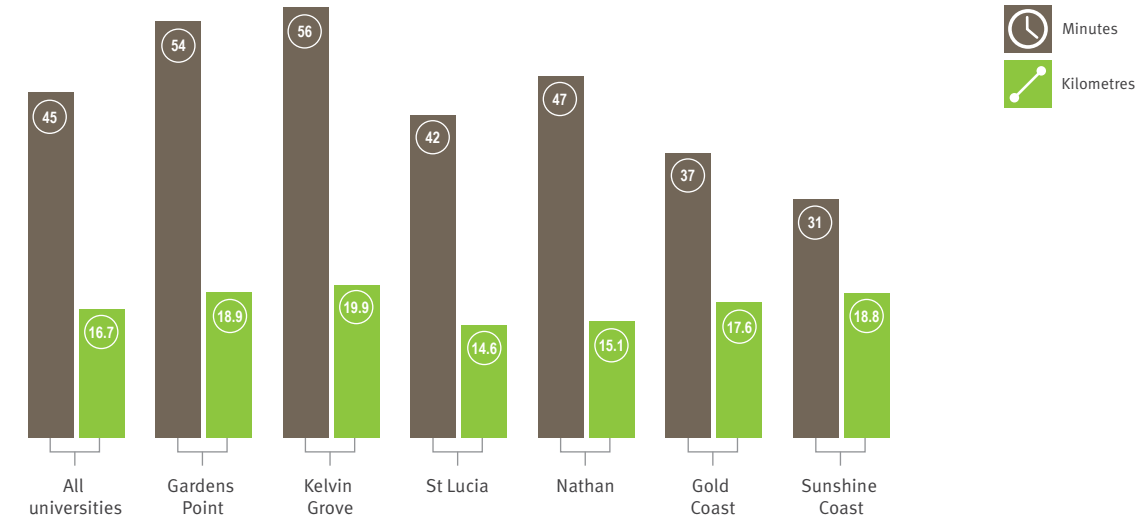


Distance to university campuses | **Tertiary students**

Students attending inner city university campuses, have longer average trip distances compared to those attending suburban universities. This is due to the low amount of trips that are less than 3 kilometres; trips less than 3 kilometres amount to 4% and 5% for Gardens Point and Kelvin Grove campuses respectively.

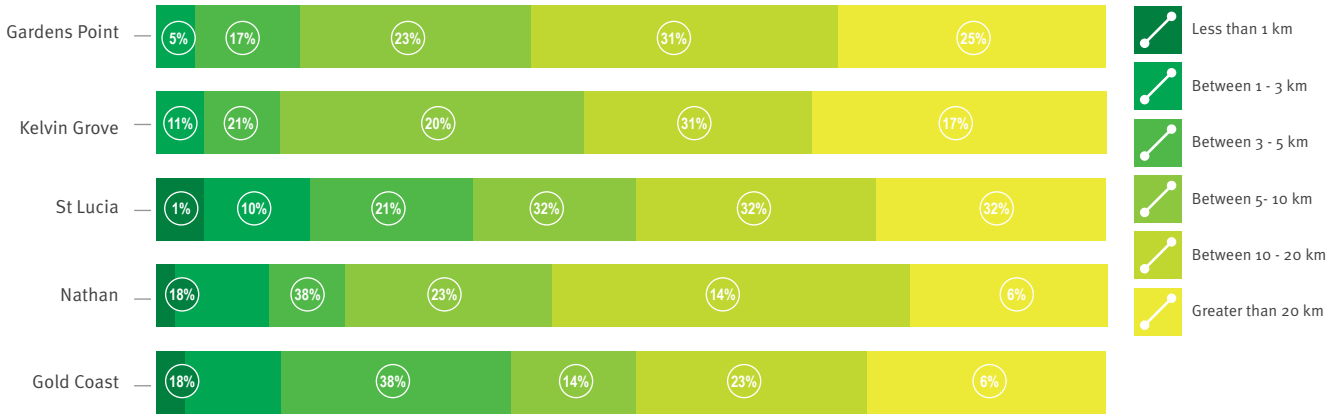
Nathan has a lower average trip distance compared to other university campuses. This is driven by a lower proportion of trips in the 20 kilometres and over range. Around one quarter of students at all university campuses travel further than 20 kilometres to get to university .

Distance and time by mode - direct campus commute



* Due to trip weight variation averages of distance and time cannot be used to calculate average speed.

Direct campus commute from home



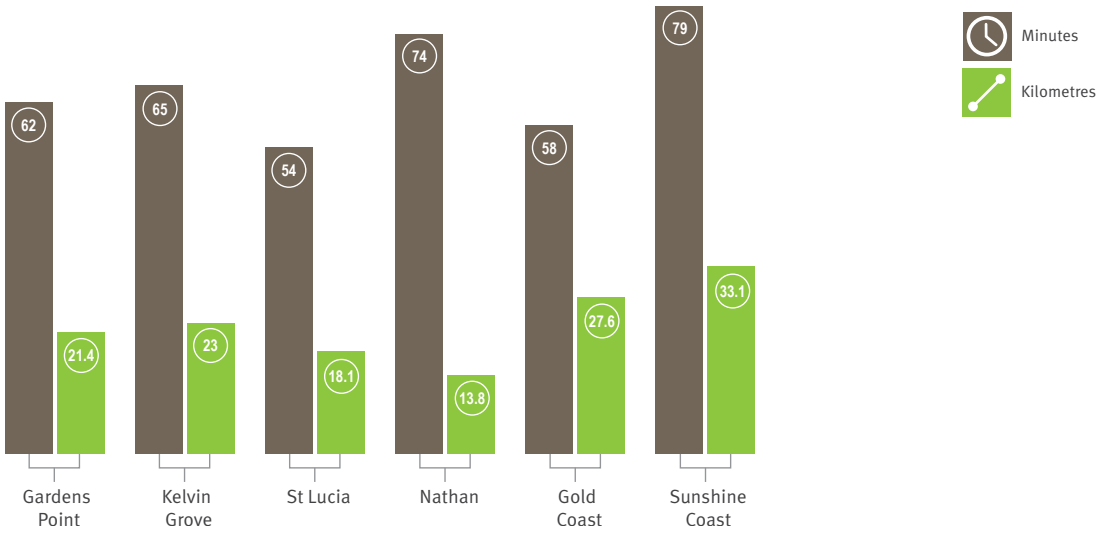
Distance to university campuses | Tertiary students

Gold Coast has a relatively low public transport travel time given the distance travelled, while Nathan has longer public transport travel times compared to the distance travelled.

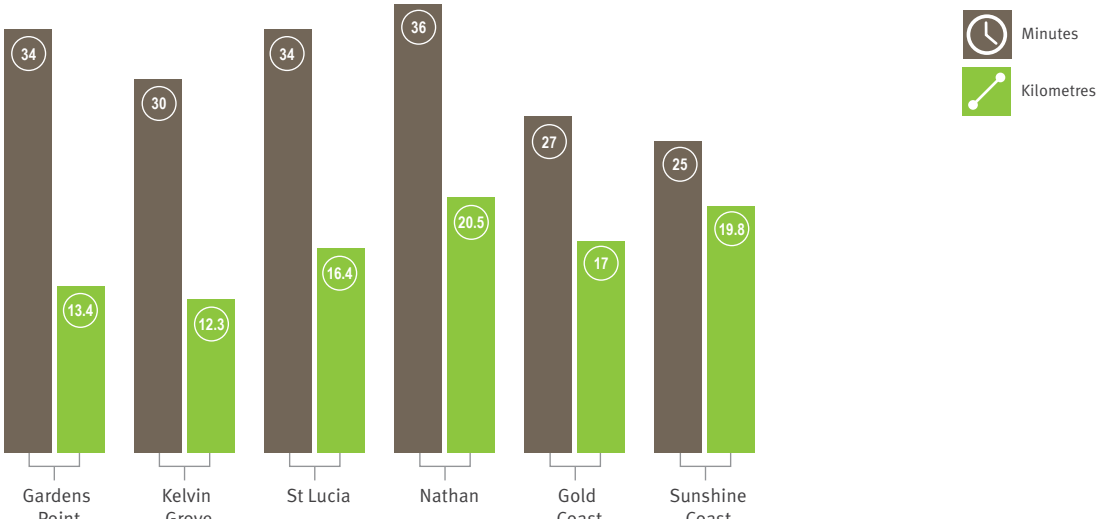
The ratio for vehicle driver distance and time at QUT suggests traffic congestion around the CBD results in the slower average speeds (24 km/h and 25 km/h for vehicle driver travel for Gardens Point and Kelvin Grove respectively). The average speed is 47 km/h for vehicle driver travel for the university of the Sunshine Coast.

Inner CBD traffic congestion decreases the speed of vehicle driver travel.

Distance and time for public transport trips - direct campus commute

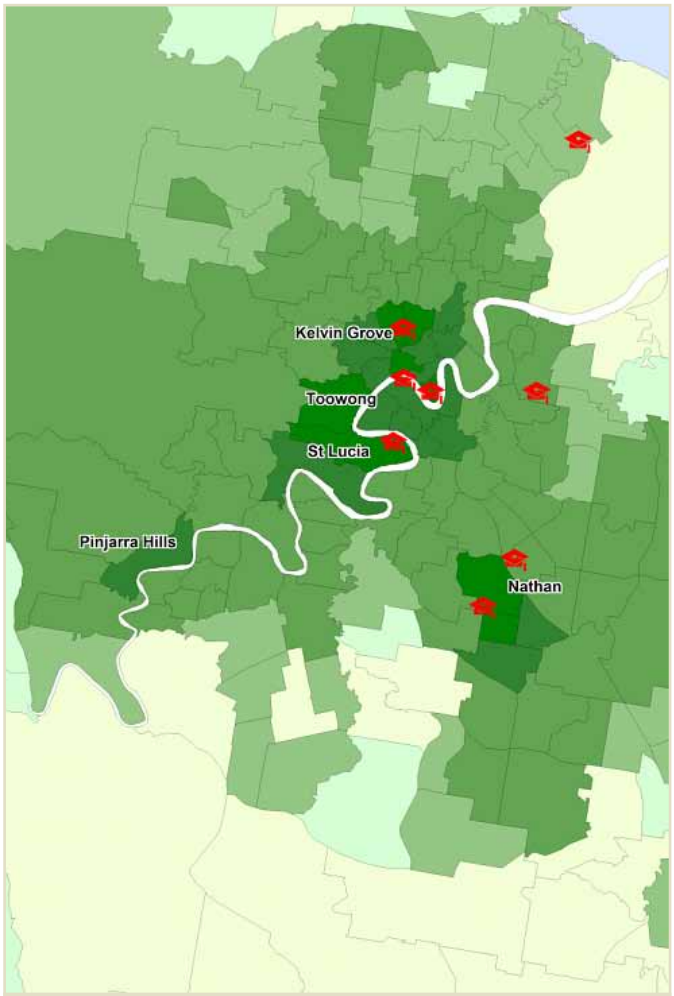


Distance and time for vehicle driver trips - direct campus commute

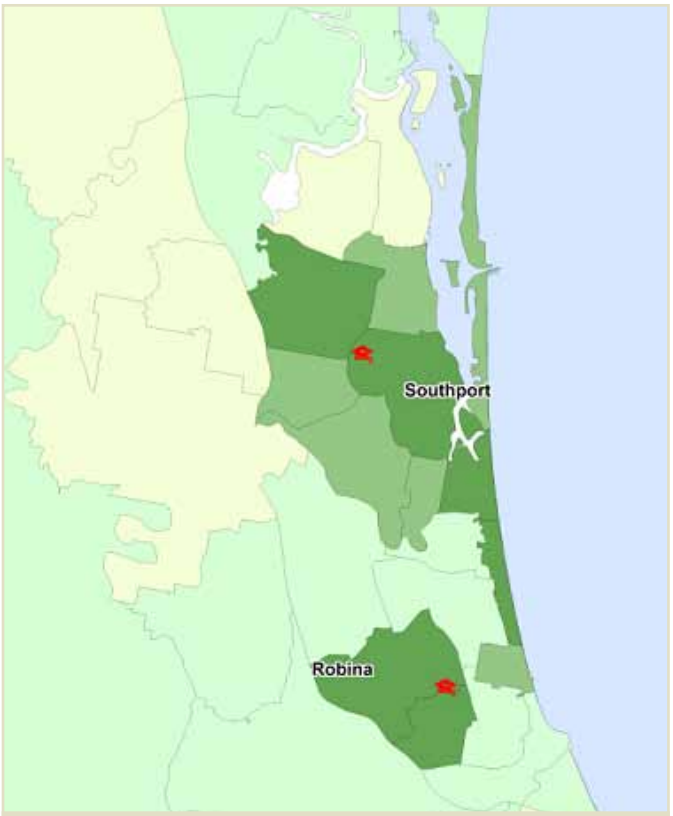


Where students live | **Tertiary students**

In 2000, 64% of tertiary students lived at home, up from 52% in 1984. While two out of three tertiary students lived at home, it was not always conveniently located close to their university. Students live over a fairly wide distribution.



Brisbane – all tertiary students



Gold Coast – all tertiary students

Sunshine Coast – all tertiary students

Spatial distribution of students
(proportion of all residents) ABS 2006

- Over 20%
- 10 to 20%
- 5 to 10%
- 3.5 to 5%
- 2.5 to 3.5 %
- 0 to 2.5%

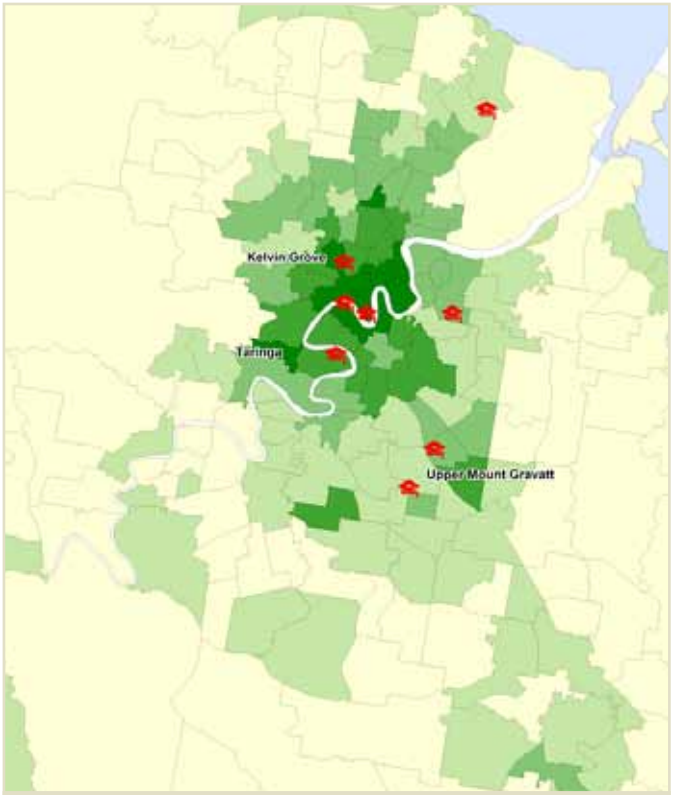
Major university campuses

Where students live | Tertiary students

These maps show the proportion of all students living in non-family homes compared to all students. The concentration of non-family student households around the Brisbane CBD and near coastal campuses suggests that when people do move out, they favour residences near university. Statistical analysis suggests that many of the core 'student suburbs' in south-east Queensland have high populations of international students. One in five (20%) university students are internationals and therefore do not live at home with their family.

Darker green reflects more non-family student homes.

When students move out of home they favour residences near campus.



Brisbane – % of students in non-family homes

Gold Coast – % of students in non-family homes

Sunshine Coast – % of students in non-family homes

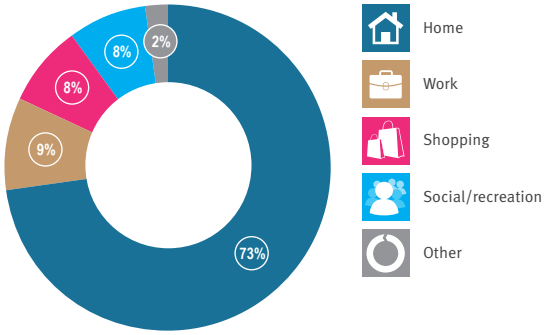
Key

- 28 to 36%
- 21 to 28%
- 14 to 21%
- 7 to 14%
- 0 to 7%
- Major university campuses

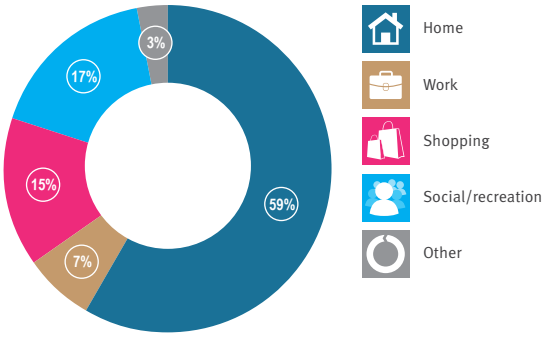
Trip chaining | **Tertiary students**

As a proportion of all trips, more students commute directly to university from home (73%), than to home from university (59%). This suggests students hold back discretionary trip-chain purposes until after their major non-discretionary travel purpose (attending university).

Destination prior to university



Destination after university



Visitor Travel

1% - 3%

The estimated proportion that visitors contribute to AM peak hour vehicle travel during peak holiday season.

2 in 5

The proportion of all visitor trips made via walking on the Sunshine Coast.

1 in 4

The proportion of 'Tourist Activity' visitor trips made via public transport on the Gold Coast.

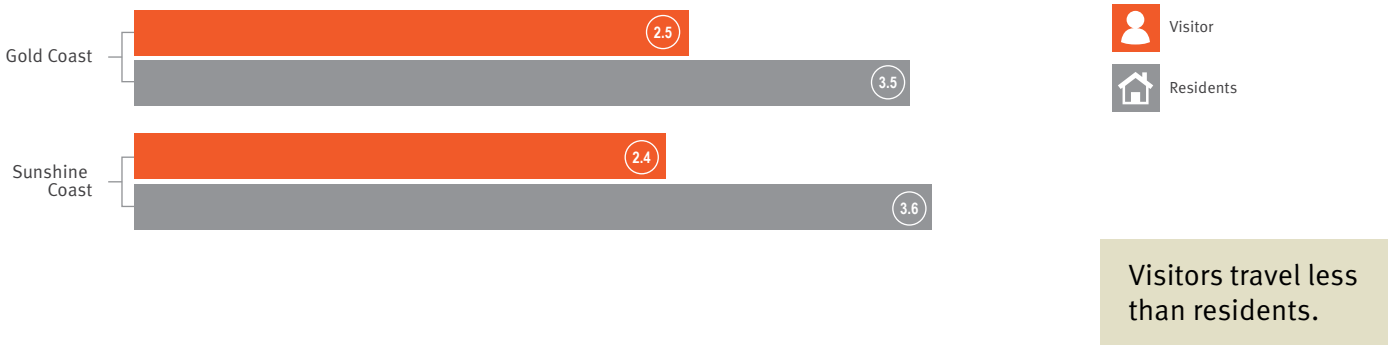
Trips on average | **Visitor travel**

This chapter contains a brief summary of the travel behaviour of visitors to the Gold Coast and Sunshine Coast. The data was collected through specific Visitor Travel Surveys which collected information about overnight visitor groups to each region during the off-peak winter tourism season.

Tourism Queensland estimated that there were 10.6 million visitors (including day visitors) and 23.9 million night visitors to the Gold Coast region in 2007. Tourism Queensland estimated that there were 8 million visitors (including day visitors) and 13.3 million night visitors to the Sunshine Coast region in 2007.

Visitors tend to have a lower than average trip rate than residents. On the Gold Coast, visitors averaged 2.5 trips per day compared to residents at 3.5 trips per day in 2007. On the Sunshine Coast, visitors averaged 2.4 trips per day compared to residents at 3.6 trips per day in 2007. Considering the facilities offered within accommodation establishments, it is not surprising that a high proportion of visitors (18% on the Gold Coast and 26% on the Sunshine Coast) did not travel on their survey day.

Number of trips on average



Visitors travel less than residents.

Data source:

Gold Coast Visitor Travel Survey 2007, which had 3 075 respondents

Sunshine Coast Visitor Travel Survey 2008, which had 2 553 respondents

Methodological considerations:

The data was collected during winter months, and does not include information from day visitors, nor visitors staying in private dwellings.

While the Visitor Travel Survey did not gather data on the travel behaviour of day visitors, Tourism Queensland estimates that day visitors made up 60% of all visitors to the Gold Coast and Sunshine Coast in 2007, 95% of whom arrived by car. This is a considerable demand upon the road network that has not been captured in the Visitor Travel Survey.

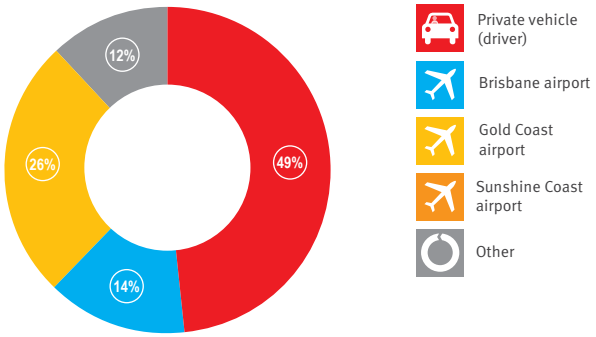
Accomodation location | **Visitor travel**

Private vehicle is the primary mode of arrival to coastal areas by visitors.

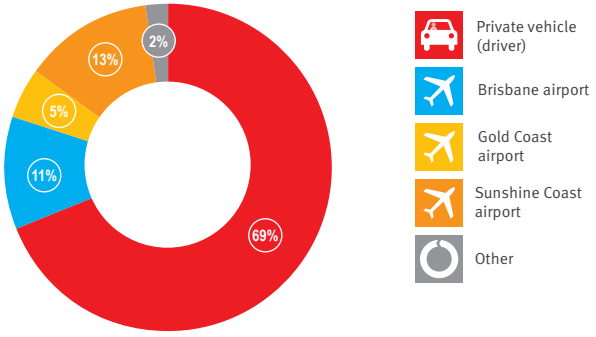
Of those arriving by modes other than private vehicle, 14% (Gold Coast) and 19% (Sunshine Coast) hire a vehicle upon arrival. This results in 63% of Gold Coast visitors and 88% of Sunshine Coast visitors in total having the ability to access activities by car.

The following maps show the concentration of origins and destinations for visitors to the coastal areas. As expected, the majority of Gold Coast visitors are destined for the coastal strip, with the highest proportion in the Surfers Paradise region.

Mode of arrival - Gold Coast

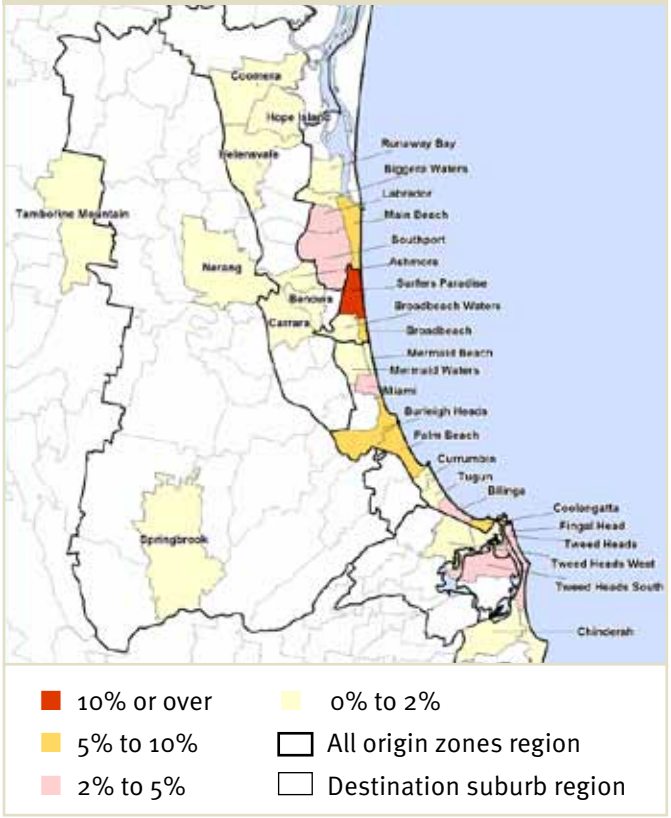


Mode of arrival - Sunshine Coast



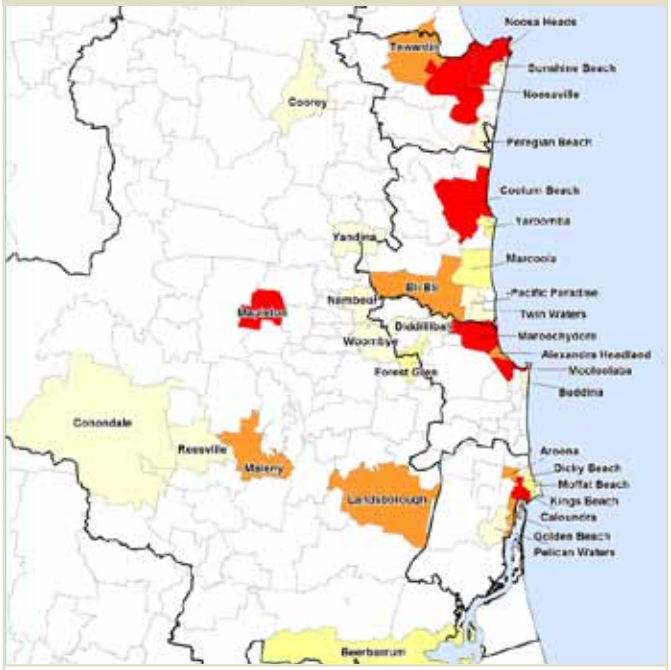
One half of Gold Coast visitors and two thirds of Sunshine Coast visitors arrive by private vehicle.

Gold Coast



10% or over
5% to 10%
2% to 5%
0% to 2%
All origin zones region
Destination suburb region

Sunshine Coast



5% or over
2% to 5%
1% to 2%
0% to 1%
All origin zones region
Destination suburb region

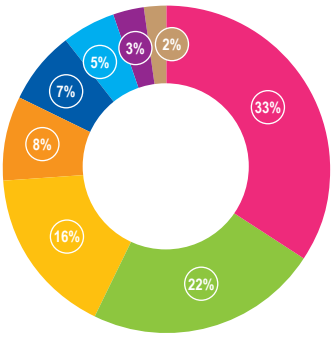
Purpose and mode of travel | **Visitor travel**

The most common trips made by visitors are for shopping, sightseeing and eating/drinking. It should be noted that the low proportion of beach and water activity trips is likely to be the result of having conducted the survey during the off-peak season.

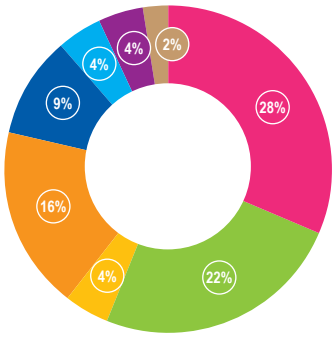
Gold Coast visitors undertake more 'tourist activity' trips than Sunshine Coast visitors, whereas Sunshine Coast residents undertake more sightseeing trips.

Majority of visitor trips are to shop, eat or drink.

Trip purpose - based on trips Gold Coast



Trip purpose - based on trips Sunshine Coast



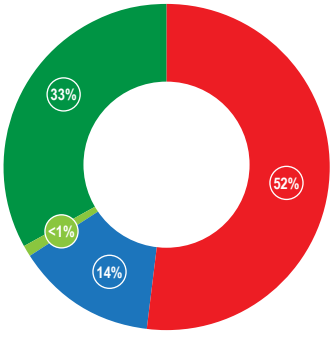
Vehicle is the most used travel mode by visitors, with roughly half of all trips by visitors made via car.

Visitors on the Gold Coast and Sunshine Coast are frequently choosing to walk to access their activities with 33% and 39% walking mode share respectively. Even those who have access to a vehicle (27% on the Gold Coast and 34% on the Sunshine Coast) still frequently choose to walk to their activities.

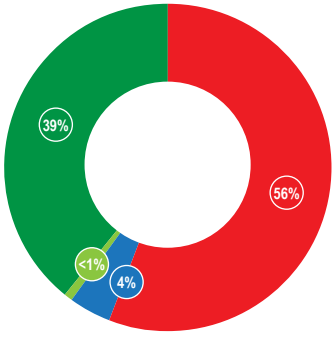
Within the Gold Coast, public transport is well patronised with a mode share of 14% of trips, however visitors' public transport mode share on the Sunshine Coast is only 4% – the Gold Coast's larger public transport patronage rate may be due to public transport commutes to the theme parks on the Gold Coast.

Roughly half of all trips made by visitors are made by car.

Mode share - Gold Coast



Mode share - Sunshine Coast



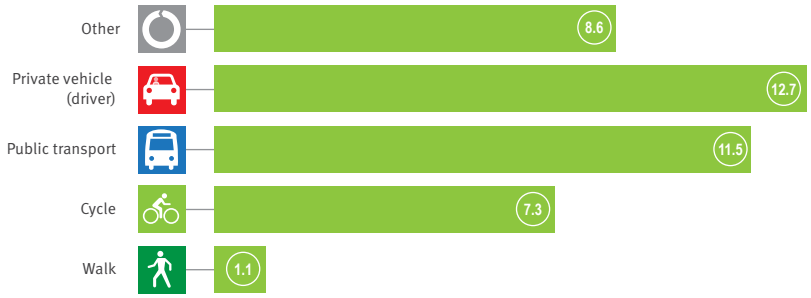
Trip distance | **Visitor travel**

The average trip made by visitors is 8.6 kilometres on the Gold Coast and 9.1 kilometres on the Sunshine Coast. Vehicle and public transport trips share similar average trip lengths. Walk trips are on average one kilometre.

Tourist activities generate the longest distance of travel, at 17 kilometres and 23 kilometres for Gold Coast and Sunshine Coast respectively.

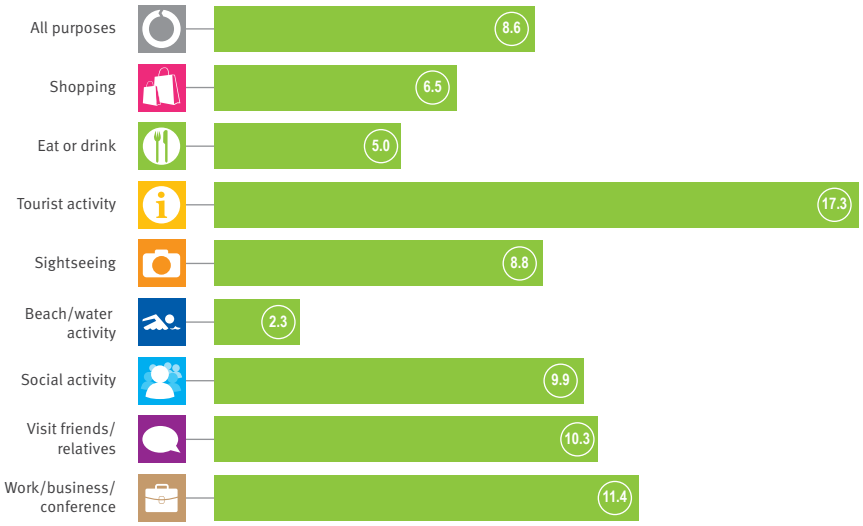
Shopping and eating or drinking, the two largest trip purposes, are generally undertaken in relatively closer proximity to accommodation.

Distance (kilometres) by mode - Gold Coast



Visitors walking trips are one kilometre on average.

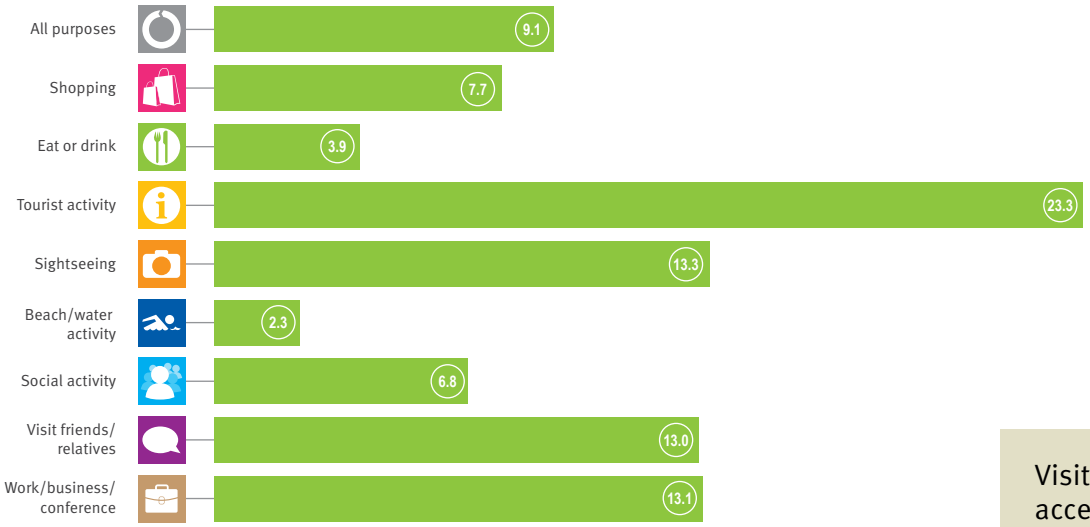
Distance (kilometres) by purpose - Gold Coast



Trip purpose by mode | **Visitor travel**

Distance (kilometres) by mode - Sunshine Coast

Distance (kilometres) by purpose - Sunshine Coast



Visitors travel furthest to access tourist activities.

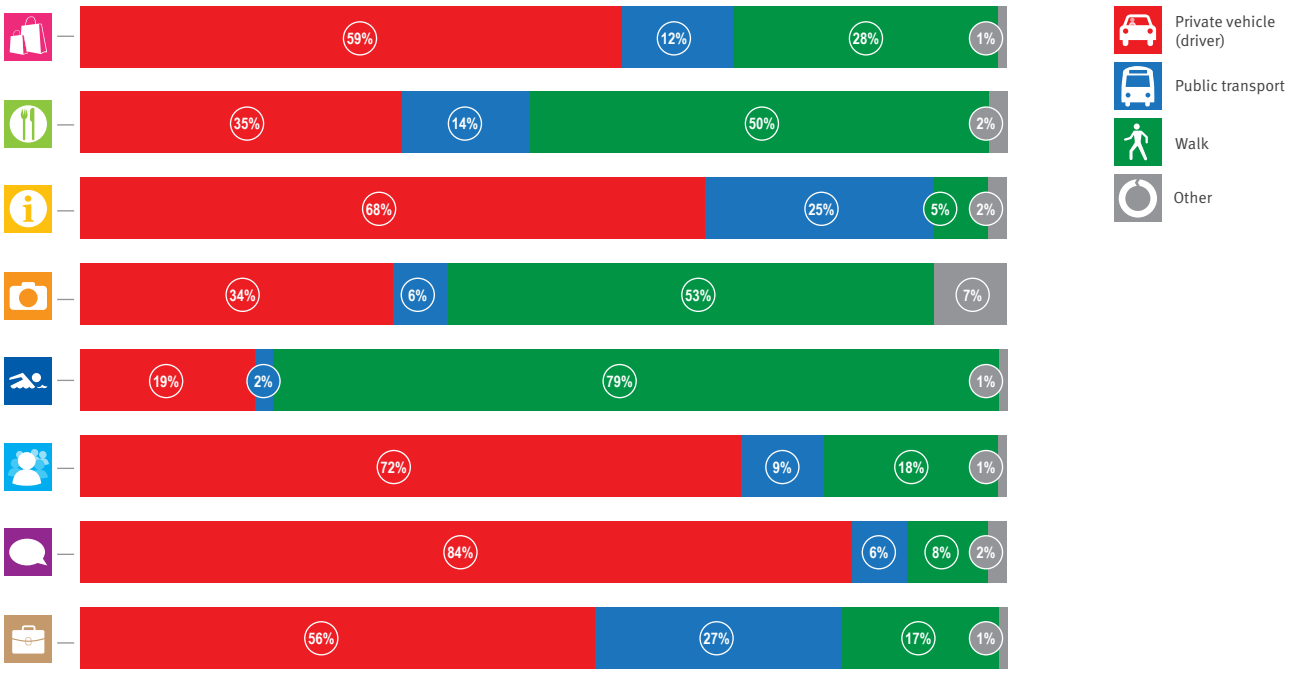
Trip purpose by mode | **Visitor travel**

Trip purposes with the highest proportion of active transport use are eating or drinking and beach/water activities. These trip purposes have shorter average distances, indicating that proximity encourages active transport use.

Sightseeing, although having a longer average trip distance, attracts a higher walking mode share due to the nature of the trip purpose.

On the Gold Coast, one in four tourist activity trips are made by public transport even though they have the longest trip distance. However, they still generate high levels of private vehicle use. There is substantial difference between the coasts in mode split for tourist activity trips. The Gold Coast has a far larger public transport patronage rate, which may be due to public transport commutes to the theme parks on the Gold Coast.

Trips purpose by mode - Gold Coast



One in four Gold Coast visitors access tourist activities via public transport.

Trip purpose by mode | **Visitor travel**

For most trip purposes, visitor travel is still highly dependent on private vehicles, which is disappointing considering the connectivity of public transport to shopping precincts and tourist activity parks. This indicates some other factor at play to discourage use of the existing public transport.

On the Sunshine Coast, three in five trips that visitors make to eat or drink are walked.

Trips purpose by mode - Sunshine Coast

Travel time | **Visitor travel**

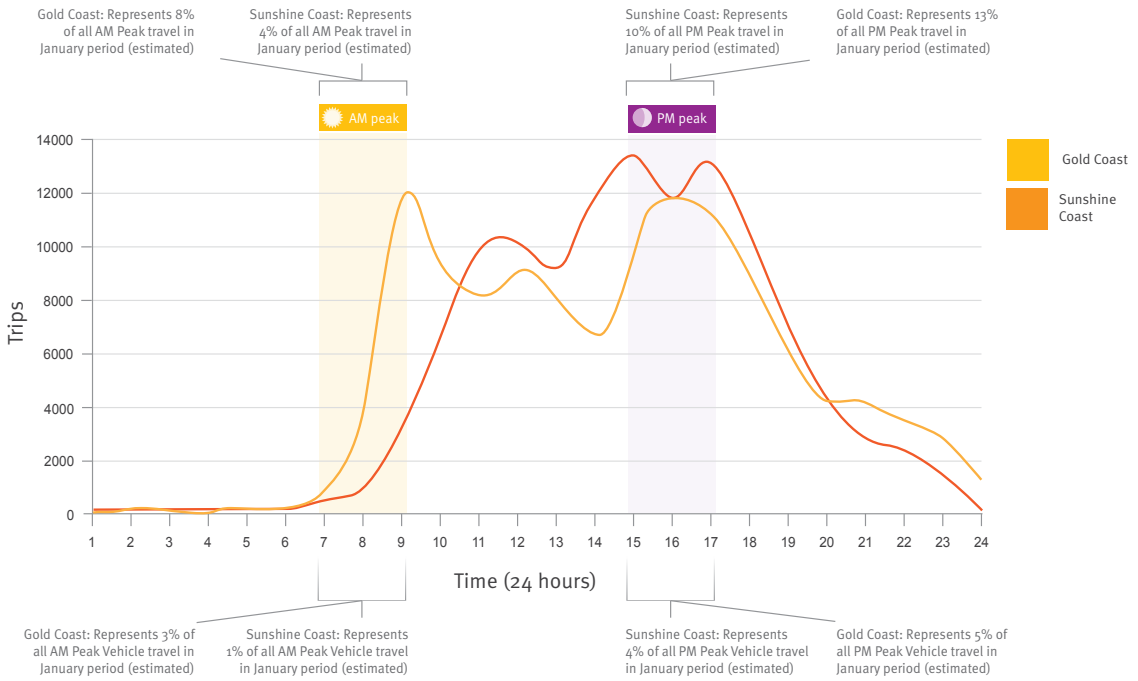
On the Gold Coast, visitor travel produces two peak trip start times. The first is between 8:30am and 9:30am and the second is between 3pm and 4pm. This pattern follows results gained from the Gold Coast Household Travel survey, which shows peak trip times occurring between 7:00am and 9:00am and 2:30pm and 4:30pm.

Visitors in both coastal areas have a significantly smaller private vehicle mode share than residents. Although visitors still make more than half of their trips via car, they have somewhat less impact on total road demand. During the peak holiday period, visitors represent an estimated 3% and 1% of all drivers on the Gold Coast and Sunshine Coast respectively during the morning peak period. During the peak holiday period in the afternoon, visitor drivers make up 5% (Gold Coast) and 4% (Sunshine Coast) of all drivers.

In contrast, the majority of visitor trips on the Sunshine Coast start between 10am and 5pm, with two afternoon peaks of 3pm and 5pm. This visitor travel pattern differs from that of Sunshine Coast residents whose peak travel periods occur at 8:00am and 3:00pm, with another smaller peak at 5:30pm. The results of the sample data indicate that the impact of visitor travel on the travel patterns of Sunshine Coast residents would be minimal, especially during the morning peak period.

During peak periods visitors represent between 1% and 3% of vehicle travel on the AM peak.

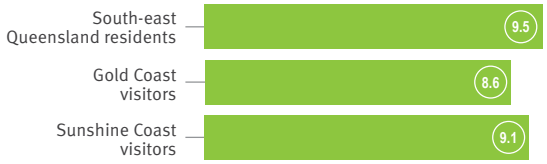
Time of travel - Gold Coast and Sunshine Coast



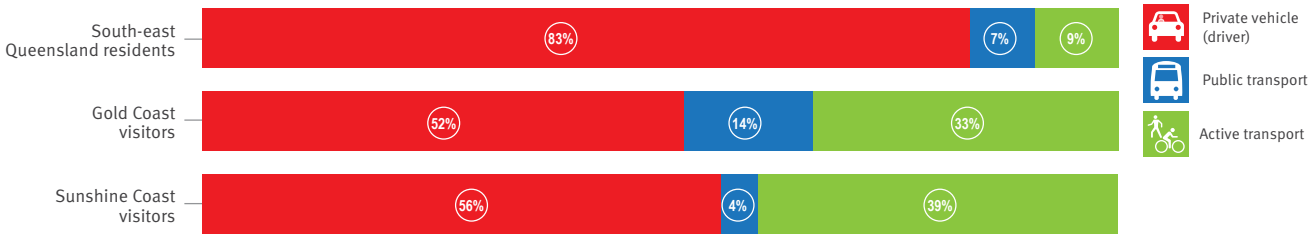
Summary | Visitor travel

Trips per day

kilometres per day



Mode share



Data source:

Gold Coast Visitor Travel Survey 2007, which had 3075 respondents

Sunshine Coast Visitor Travel Survey 2008, which had 2553 respondents

Methodological considerations:

The data was collected during winter months. It does not include information from day visitors and visitors staying in private dwellings.

While the Visitor Travel Survey did not gather data on the travel behaviour of day visitors, Tourism Queensland estimates that day visitors made up 60% of all visitors to the Gold Coast and Sunshine Coast in 2007-95% of whom arrived by car. This is a considerable demand upon the road network that has not been captured in the Visitor Travel Survey.

Weekend Travel

1/4

The proportion of total trips that the weekend accounts for.

1.2 million

The reduction in number of trips travelled on a weekend day compared to a weekday.

12%

The increase in vehicle passenger mode share on the weekend compared to a weekday.

Total weekly travel | **Weekend travel**

In total, 45.2 million trips are made during the week (Monday to Friday) and 15.6 million trips are made on the weekend. This shows that weekend trips account for roughly one quarter of all trips made during the whole week.

Weekends account for a slightly greater proportion of kilometres travelled when compared to trips. Of the 429 million kilometres travelled in a week, 29% are travelled on the weekend.

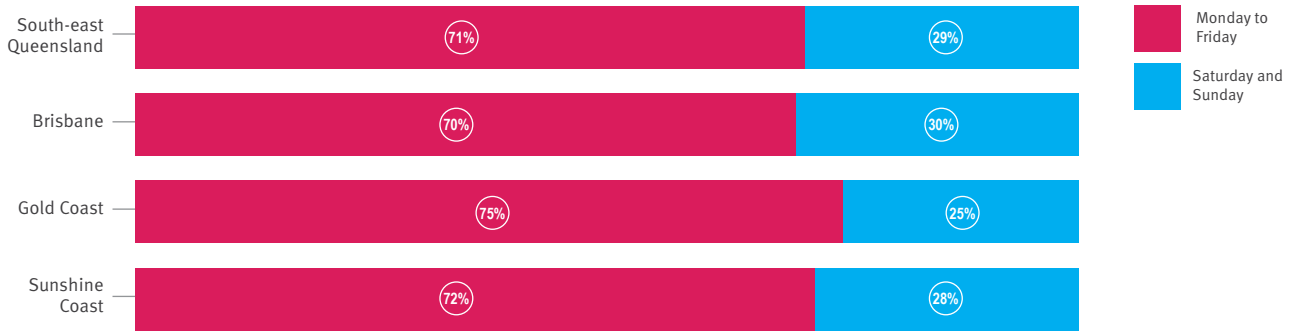
The weekend accounts for one quarter of trips during the whole week, and 29% of kilometres travelled

Number of trips on average (millions)

Total number of kilometres (millions)

Proportion of trips

Proportion of total kilometres



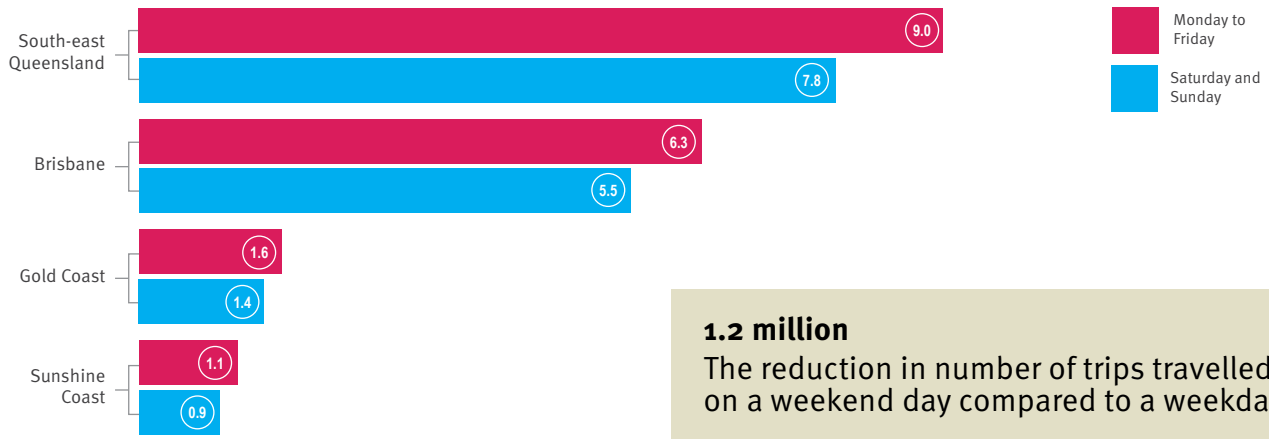
Total daily travel | **Weekend travel**

On a weekend, 1.2 million fewer trips are made per day when compared to a weekday. In total there are 7.8 million trips per day on the weekend, compared to 9.0 million trips per day on the weekday.

However, the total distance (84 million kilometres) travelled per day on the weekend is roughly equal to that on a weekday. This indicates that people travel a further distance for a day on the weekend, although there are fewer trips.

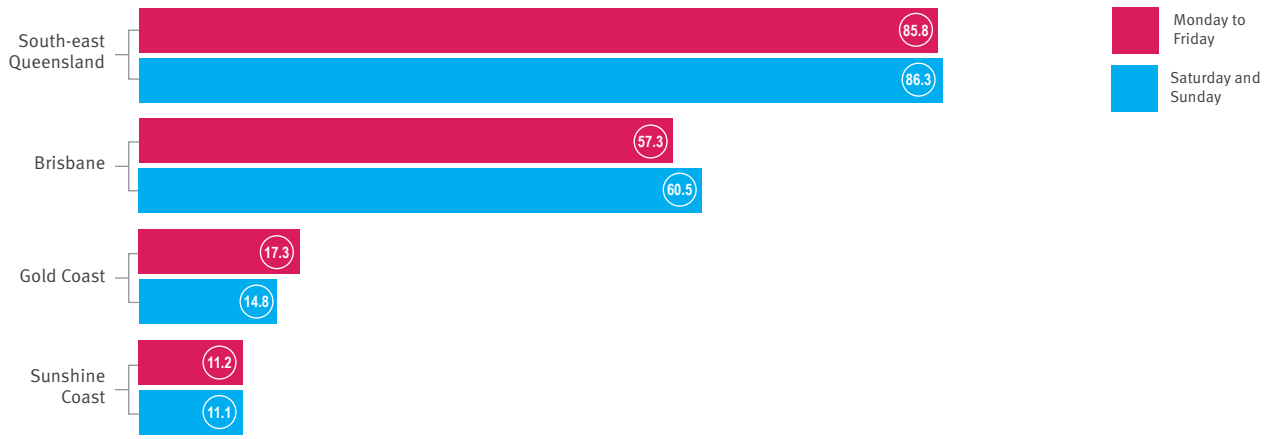
Travel on a weekend day is roughly equal to a weekday in terms of kilometres travelled.

Daily total number of trips (millions)



1.2 million
The reduction in number of trips travelled on a weekend day compared to a weekday.

Daily total kilometres travelled (millions)



Daily travel | **Weekend travel**

On average, people make 2.8 trips on a weekend day (Saturday or Sunday), with an average distance of 11 kilometres. Compared to a weekday, people make slightly fewer trips but travel a further distance per trip. The duration of an average trip remains consistent.

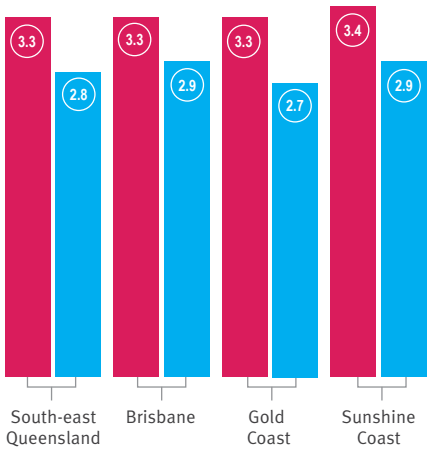
During the weekend around one in four people (18%) don't make any trips, compared to one in five (28%) on weekdays. The increase in average trip distance on average on the weekend primarily is driven by an increase in trips of over 20 kilometres for weekend travel. For the weekend, 14% of trips are more than 20 kilometres compared to 11% on a weekday.

It is likely that long trips of more than 50 kilometres are responsible for the increase in average trip distance on the weekend, rather than more trips of shorter distance.

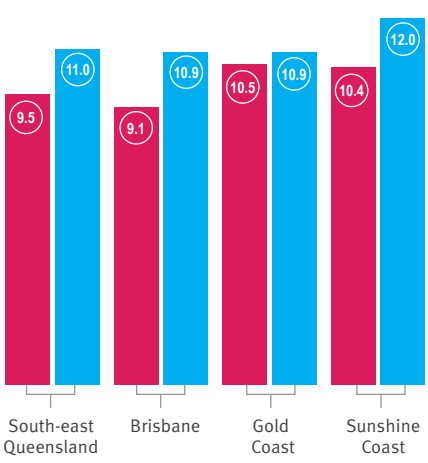
Compared to other regions, people on the Gold Coast make the lowest average number of trips on the weekend.

The increase in the distance from a weekday to weekend trip is less on the Gold Coast, with trip lengths remaining consistent. This could be because the Gold Coast is more compact than Brisbane and Sunshine Coast.

Number of trips on average

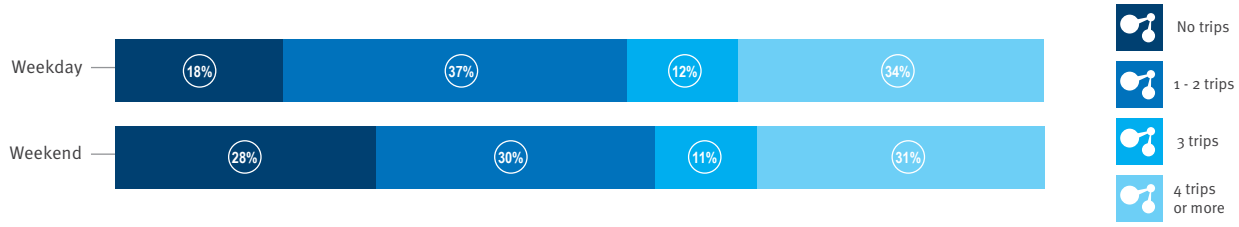


Distance on average (kilometres)

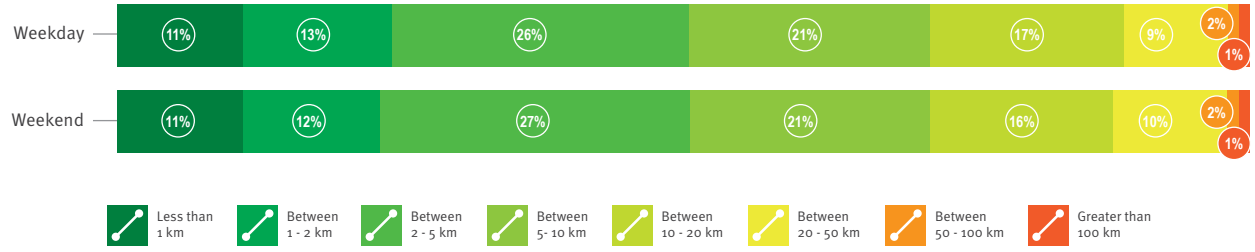


Lower trip rates on the weekend are due to a higher proportion of people making no trips.

Number of trips



Distance travelled



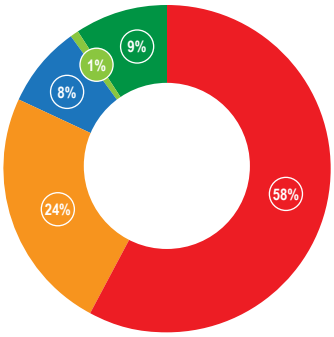
Mode share | **Weekend travel**

On the weekend, there is a lower share of vehicle driver trips and public transport trips. These trips are replaced by a greater proportion of vehicle passenger trips. So although there is a greater proportion of trips in vehicles in total (88% compared to 82% on a weekday), a larger proportion are shared vehicles.

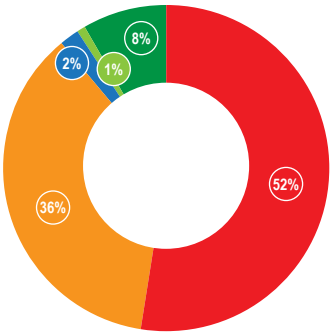
There is only a small proportion of public transport trips on the weekend, while the proportion of active transport trips remains stable.

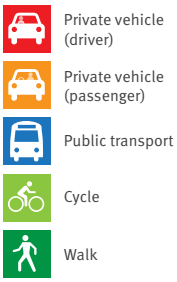
12%
The increase in vehicle passenger mode share on the weekend.

Mode share - based on trips
Weekday

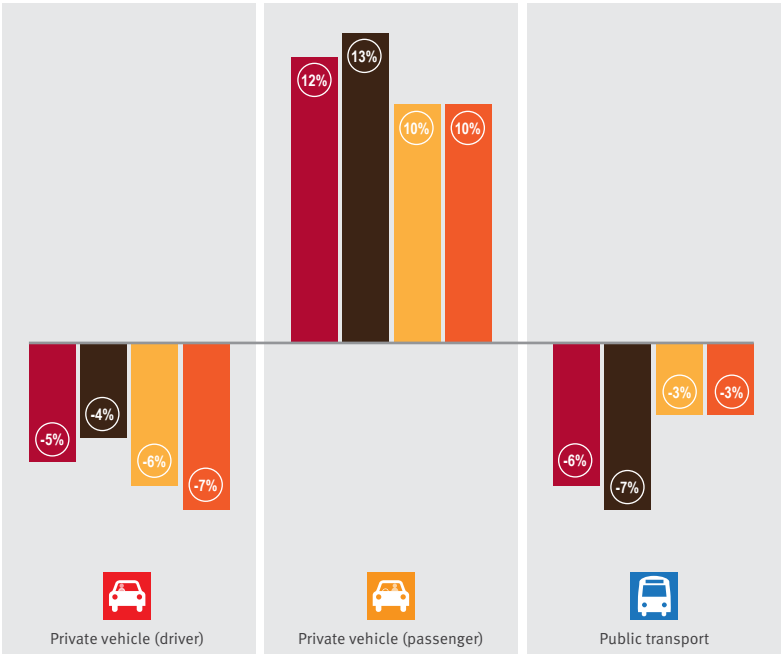


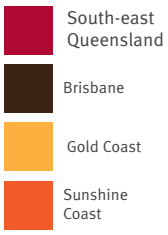
Mode share - based on trips
Weekend





Change in mode from weekday to weekend



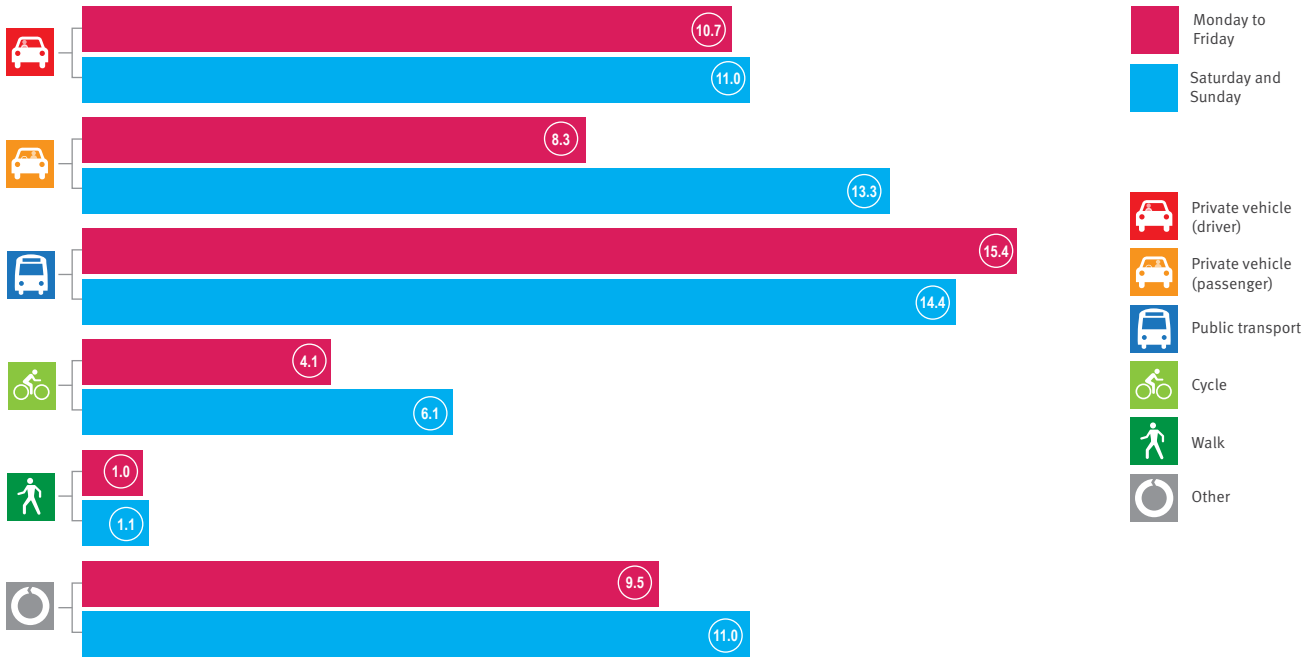


Public transport mode share drops dramatically on a weekend.

Mode share | **Weekend travel**

On the weekend, the distance that people travel across different modes does not change significantly, with the exception of vehicle passengers travelling greater distances on average. Bicycle trips are of a further distance on the weekend, which is likely to be due to longer recreational trips.

Distance (kilometres) of trips



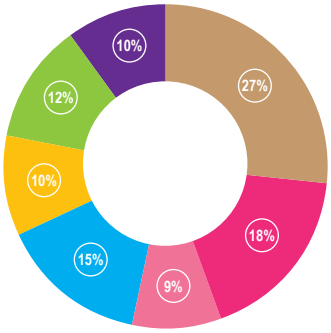
Trip purpose and travel distance | **Weekend travel**

The reasons people travel on the weekend is different to weekdays. The proportion of work trips and education trips decreases on the weekend, while shopping and social/recreation trips increase.

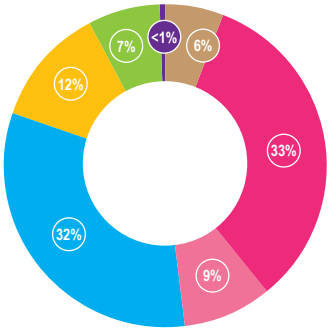
One third of weekend trips are to shop and one third are for recreation.

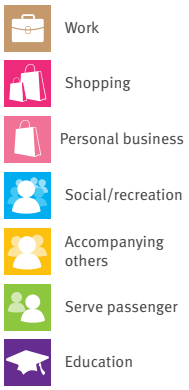
On the weekend, people travel further for all trip purposes, particularly for social/ recreation trips.

Trip purpose - based on trips
Weekday

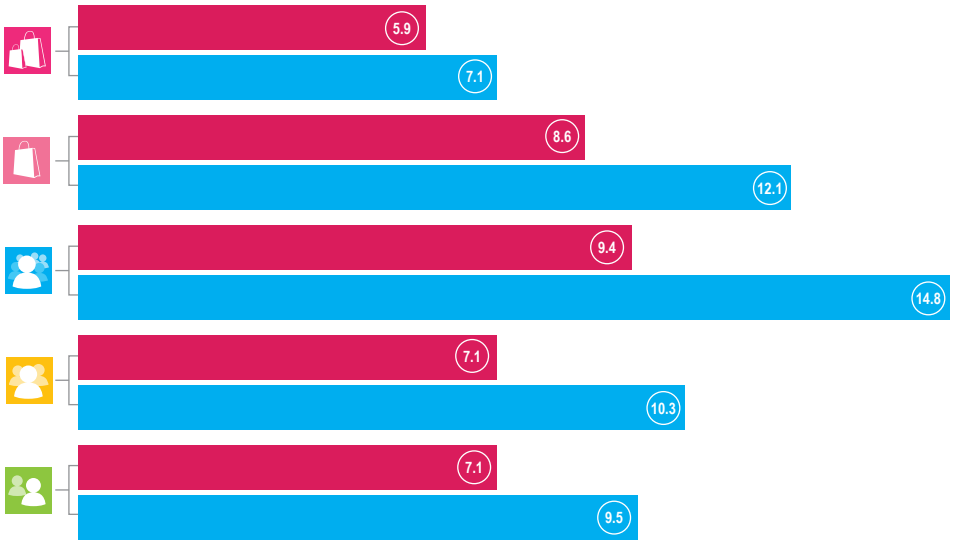


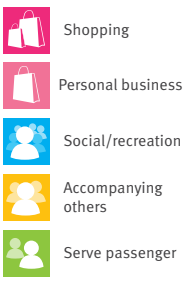
Trip purpose - based on trips
Weekend





Distance (kilometres) of trips





Vehicle kilometres travelled | **Weekend travel**

The total kilometres travelled on the weekend are roughly equivalent to that of a weekday at 86 million kilometres. However, when looking at car travel only, there are 10.7 million less vehicle kilometres travelled on a weekend day. This is because a greater proportion of travel on the weekend is as vehicle passengers.

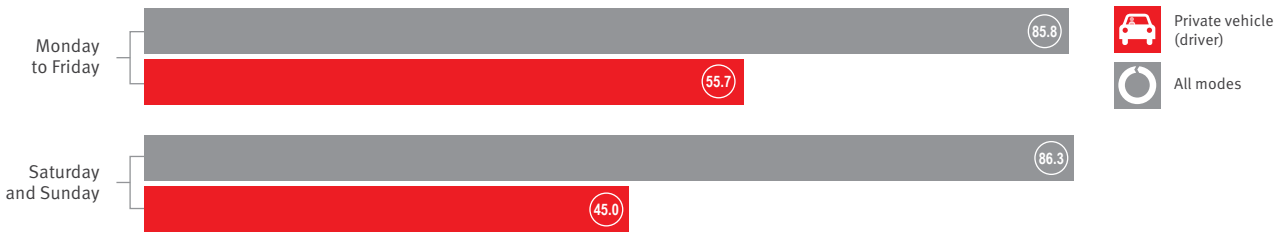
In total, there are 90 million vehicle kilometres travelled on the weekend compared to 278 million vehicle kilometres travelled during the week. Across all modes, weekend travel makes up 28% of kilometres travelled. However when looking at car travel only, the weekend contribution to the total weekly vehicle kilometres travelled is lower at 24%. This could be the result of higher rates of car pooling on the weekend.

Although total kilometres on the weekend is roughly equal to the weekday, car kilometres travelled on the weekend reduces.

One in four of all car kilometres travelled, are travelled on the weekend.

10.2 million less vehicle kilometres are travelled on a weekend day compared to a weekday.

Total kilometres (millions) travelled per day - South-eat Queensland



Total kilometres (millions) - all modes

Total kilometres (millions) - private vehicle (driver) only

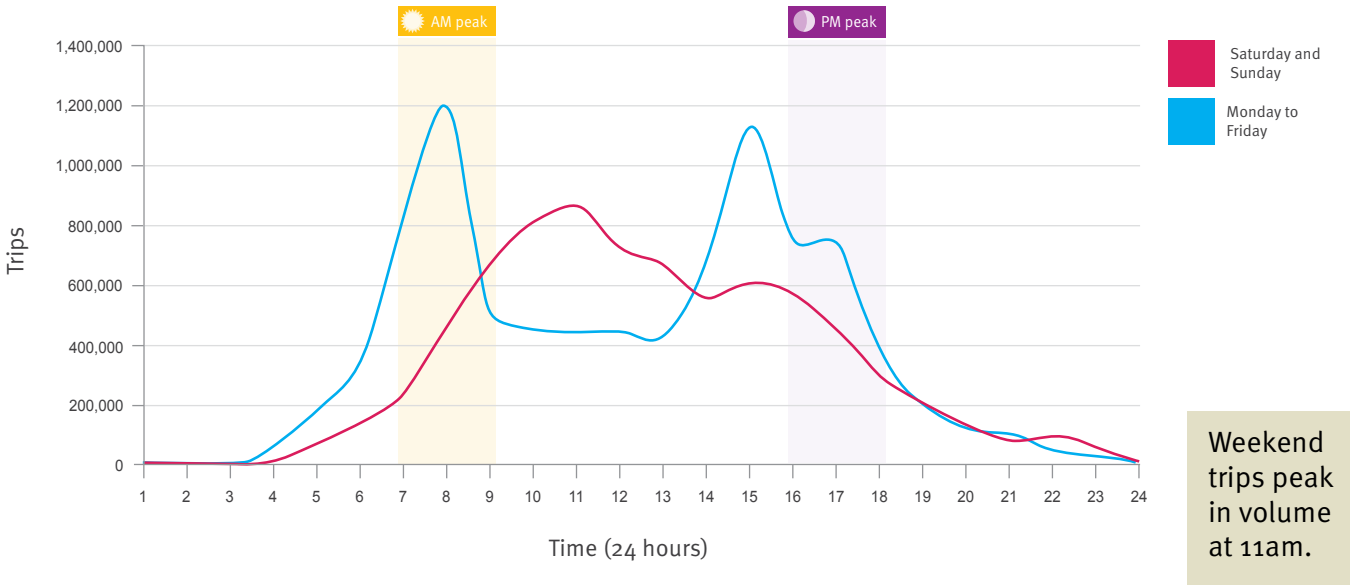
Private vehicle car use on the weekend contributes 24% to the total vehicle kilometres travelled for the whole week.

Time of travel | **Weekend travel**

Weekend travel does not have the same concentrated peaks as weekday travel. Weekend travel is more graduated over the day, starting later in the morning, with the peak occurring just before midday and another smaller peak at 3pm.

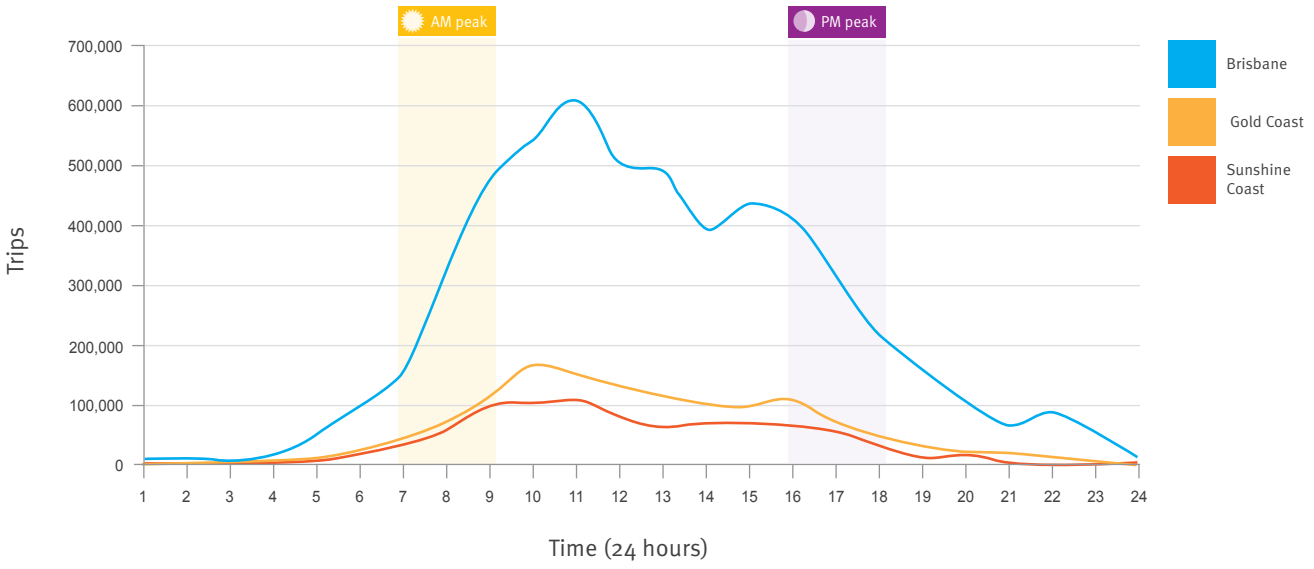
Weekend travel across all regions follows fairly similar patterns, with the greatest volume in the late morning. The Gold Coast peak is slightly earlier than for Brisbane and the Sunshine Coast.

Time of travel (all modes)



Weekend trips peak in volume at 11am.

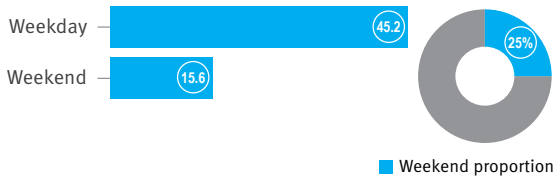
Time of travel (all modes)



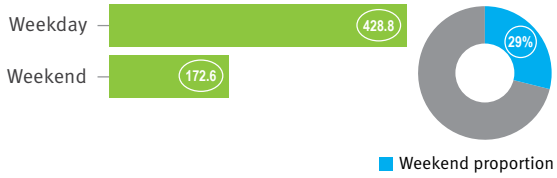
Summary | **Weekend travel**

Total travel

Total trips (millions)



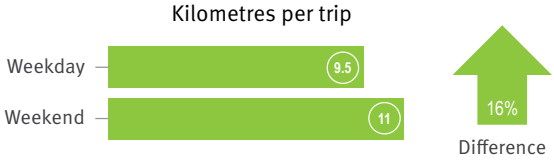
Total kilometres (millions)



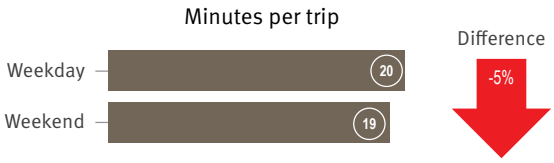
Average travel

Trips per day

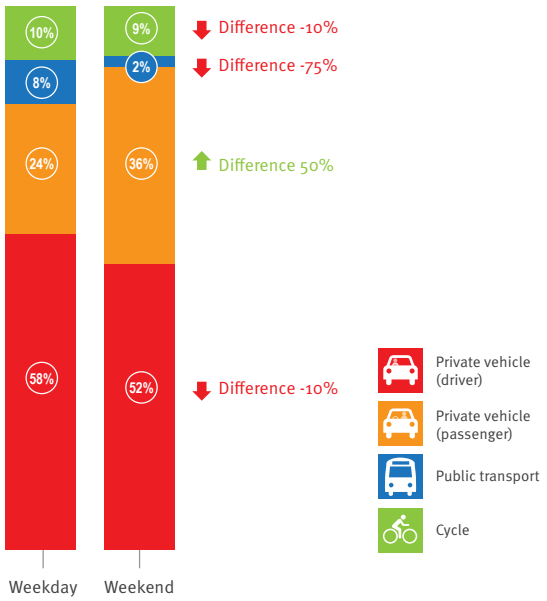
Kilometres per trip



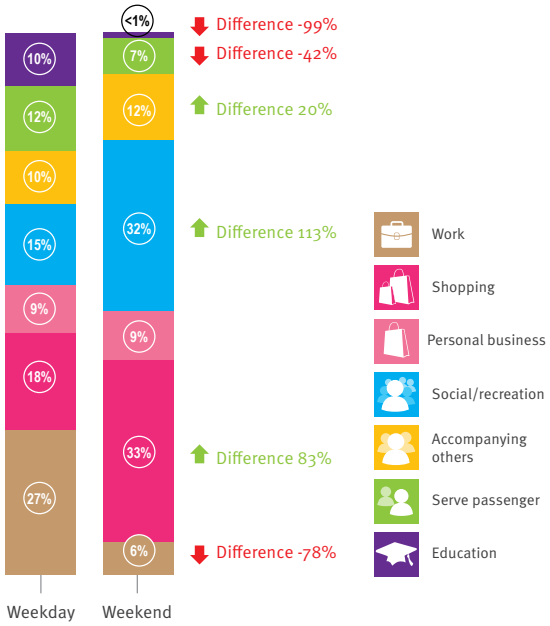
Minutes per trip



Mode share – based on trips



Purpose of trips – based on trips



Data Source: Household Travel Survey 2009

Public Transport Travel

8%

The mode share for public transport in south-east Queensland.

1 in 2

The proportion of Brisbane train users who walk to the train station.

10 mins

The average time spent travelling to a public transport stop in Brisbane.

Total travel | **Public transport travel**

This chapter contains a summary of public transport use in south-east Queensland based on analysis of data from household travel surveys conducted between 1992 and 2009.

To improve reliability of estimates related to specific public transport modes, data from 2004 and 2007 have been combined and benchmarked to 2007 population levels.

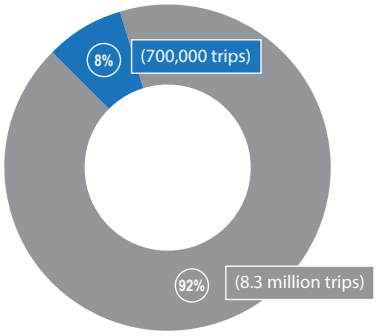
Please note that school bus services are included as public transport in this chapter and regional analyses are based on place of residence not the location of trips.

In terms of total trips in south-east Queensland, bus trips make up three of five public transport trips, while train trips account for almost two in five public transport trips.

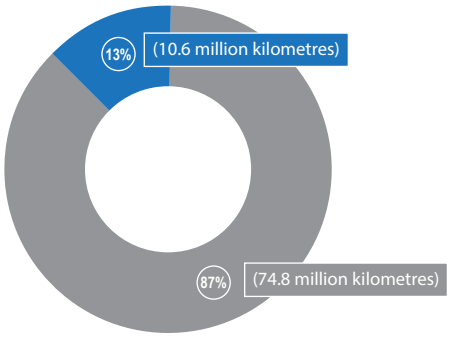
More trips are made by bus but more kilometres are travelled by train because trains are generally used for longer trips.

Train accounts for 2 in 5 public transport trips, but three in five public transport kilometres travelled.

Total trips in South-east Queensland 2009

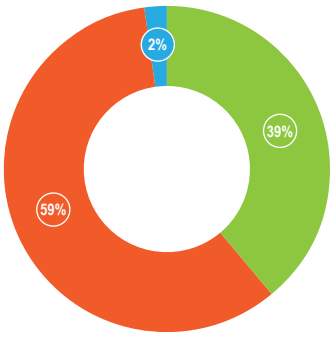


Total kilometres in South-east Queensland 2009

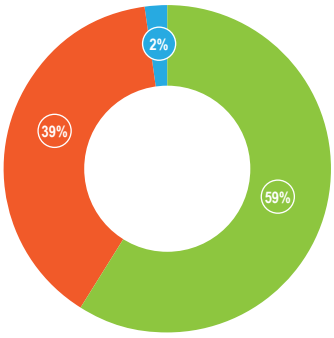


Public transport services 8% of all trips in south-east Queensland.

Total trips in 2009



Total kilometres in 2009



Data source: Combined data from 2004 and 2007 Household Travel Surveys has been used in this chapter unless otherwise indicated. A combined dataset was used in order to ensure a robust sample size to allow analysis between different regions and public transport modes.

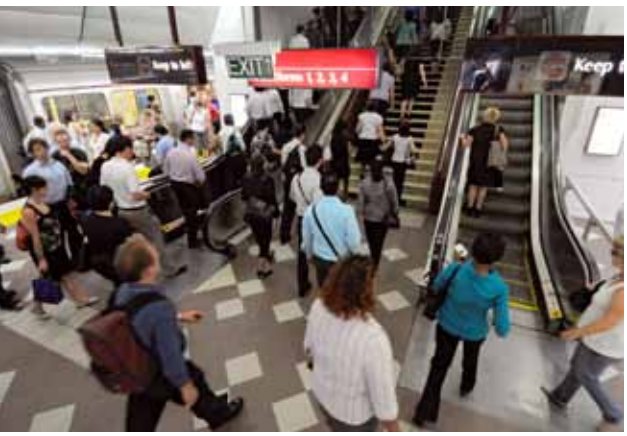
Total travel | **Public transport travel**

The majority of public transport trips in south-east Queensland are made by Brisbane residents. While representing 70% of south-east Queensland's population, Brisbane accounts for 84% of all public transport trips – both coastal regions demonstrate a greater proportion of public transport use when considered in terms of kilometres travelled compared to trips travelled. This indicates that public transport trips on the coasts are longer distances on average.

Both coastal regions have a greater proportion of kilometres travelled than trips travelled.

Daily total trips by mode (2009)

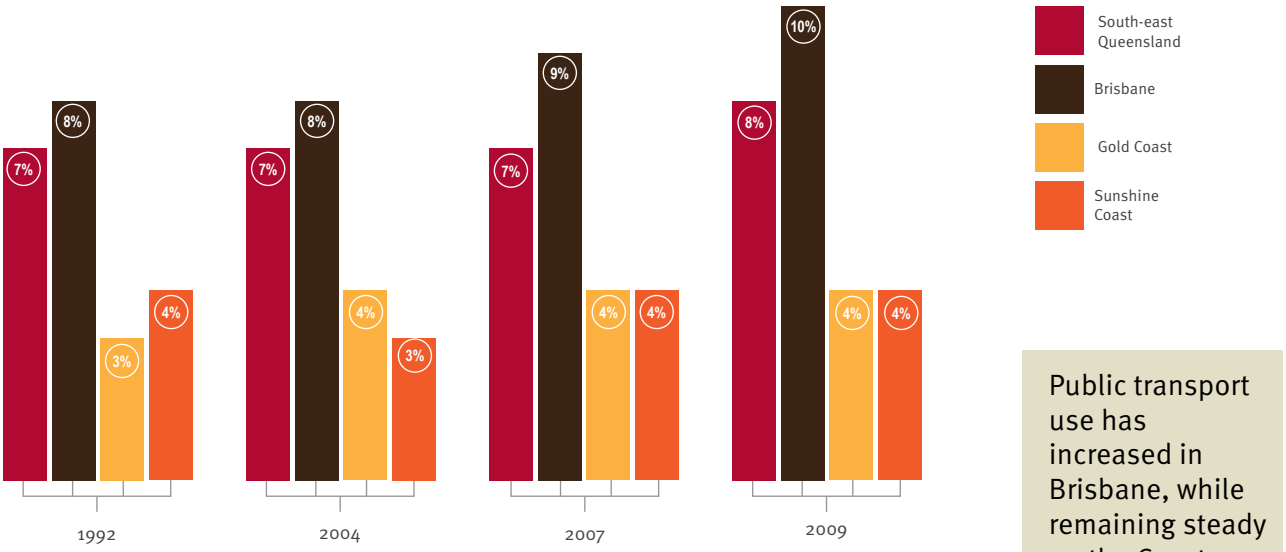
Daily total kilometres by mode (2009)



Mode share | **Public transport travel**

The proportion of trips made by Brisbane residents on public transport was more than double that of each of the coastal areas in 2009. Public transport mode share has been steadily increasing in Brisbane but has remained fairly static on the Gold Coast and Sunshine Coast.

Mode share



Public transport use has increased in Brisbane, while remaining steady on the Coasts.

While public transport mode share in Brisbane has increased by only a few percentage points since 2004, there has been a 20% increase in total public transport trips. This growth in public transport trips is double the growth in population over the same period.

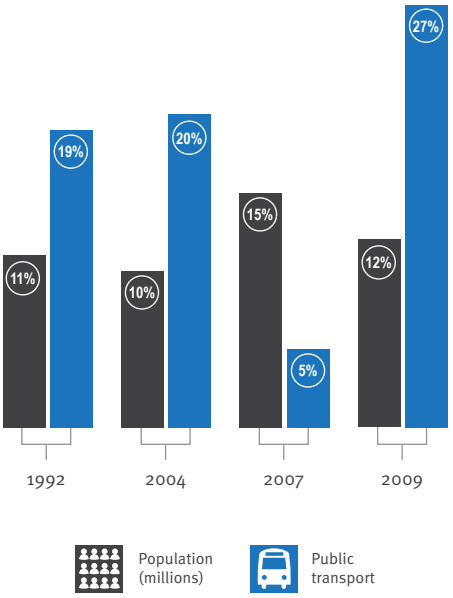
There are several factors likely to be contributing to the increase in public transport mode share in Brisbane. These include infrastructure improvements such as busways and rail duplication, service improvements such as more high-frequency bus routes both in the inner city and to key destinations and suburbs, and new ticketing arrangements such as integrated ticketing and GoCard.

Campaigns such as TravelSmart have increased awareness about alternatives to car travel. Public transport use to the inner city is encouraged by increases in parking costs in the CBD area.

On the Gold Coast, growth in public transport trips has been below the growth in the population.

On the Sunshine Coast, mode share has only increased by 1% since 2004. However, because it has started at a low base, this small increase represents a growth of 27% in public transport trips.

Growth in population* and public transport trips from 2004 to 2009



*Note: 2004 to 2009 population are estimated resident population in private dwellings

Trip purpose | Public transport travel

Education and work are the main purposes for using public transport, accounting for two thirds of public transport trips made by Brisbane residents. Social and shopping trips make up one in five public transport trips.

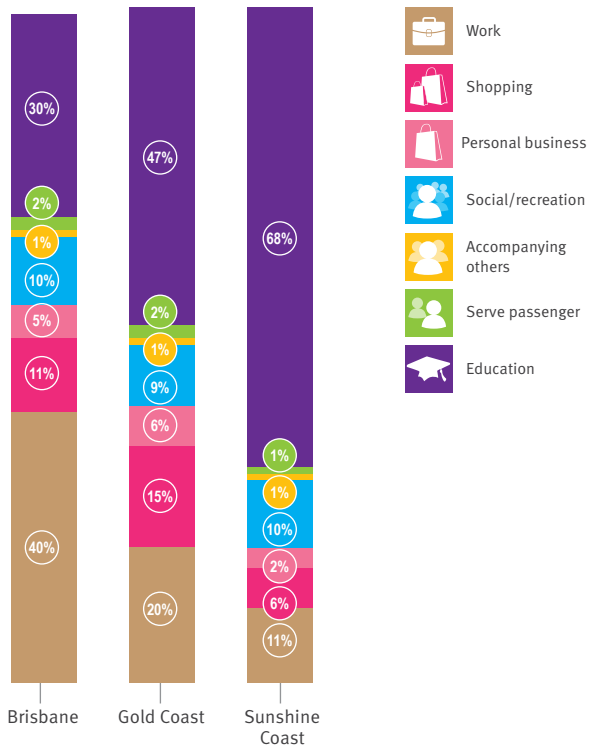
While travel to and from education is a major reason for using public transport in all three regions, it is the greatest reason for public transport use on the Sunshine Coast. While nearly two in five public transport trips made by Brisbane residents are for work, only one in five public transport trips by Gold Coast residents and one in ten trips by Sunshine Coast residents are for work purposes.

Train travel has a higher proportion of work purpose trips than buses. More than half of the train kilometres travelled across all regions are for work purposes. On the Sunshine Coast, almost one in five train trips are for social/recreation purposes.

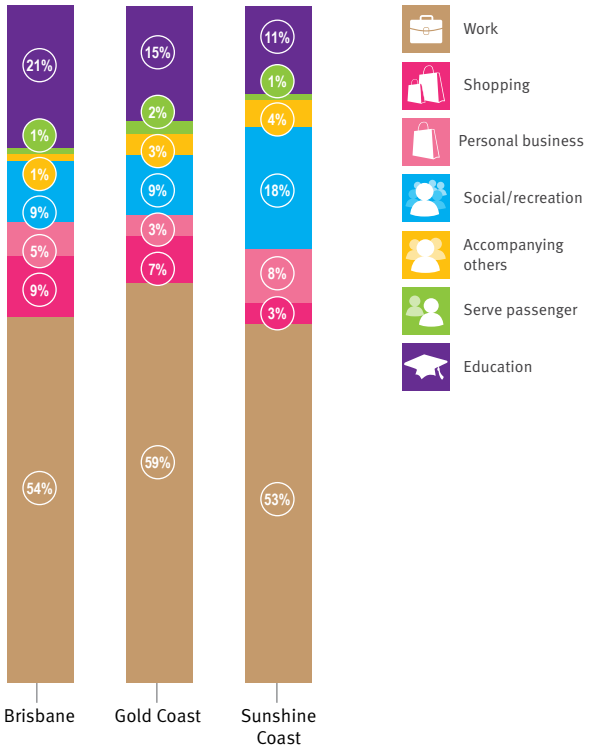
Bus is much more likely to be used for education purposes, especially on the coasts. In Brisbane, the bus is used much more for work purposes than on the coasts, with one in three bus trips for work.

Public transport is mainly used for education trips on the coasts, while direct work commuting is the largest component of Brisbane public transport trips.

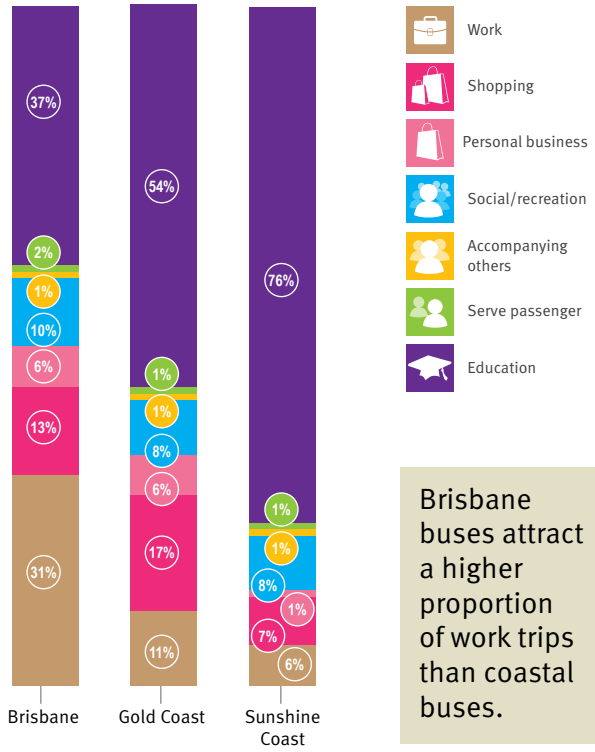
Trip purpose - based on trips



Train trip purpose - based on trips



Bus trip purpose - based on trips



Brisbane buses attract a higher proportion of work trips than coastal buses.

Trip distance and duration | **Public transport travel**

The average duration of public transport trips has decreased from 54 minutes in 1992 to 49 minutes in 2009. The average trip distance has remained relatively steady, which suggests public transport travel has become more efficient overall.

Trains are clearly used for longer trips with the average train trip almost 25 kilometres in distance compared with 11 kilometres for bus. When comparing origin to destination travel speeds, train trips are faster at around 23 kilometres per hour, while both bus and ferry trips are between 14 and 15 kilometre per hour.

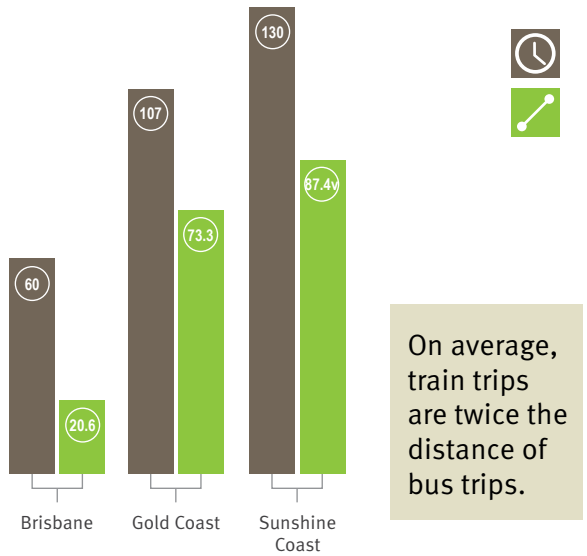
Train trips made by coastal residents are generally much longer in distance and time than Brisbane. This is because many train trips made by coastal residents are to or from Brisbane.

Trains travel the highest average kilometres along coastal areas, while buses travel the highest average kilometres in Brisbane.

Trip distance and duration - public transport trips

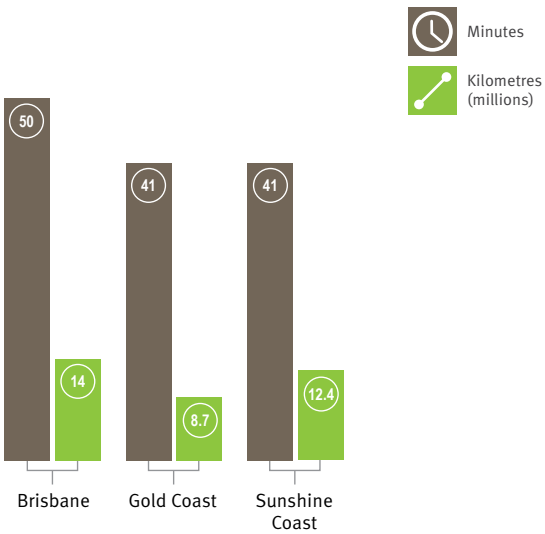
Trip distance and duration by mode

Average train trip



On average, train trips are twice the distance of bus trips.

Average bus trip

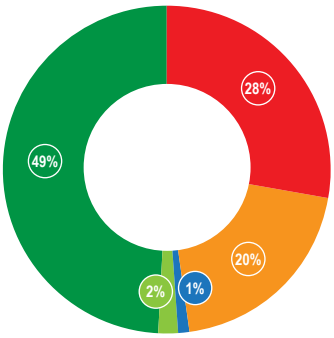


Mode of travel to public transport from home | **Public transport travel**

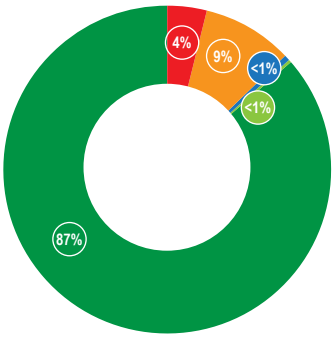
Almost nine in ten bus travellers walk to the bus stop, compared to half of train travellers. Slightly more than one quarter of train travellers drive to the train station. This pattern of behaviour may be the result of park'n'ride facilities being more readily available at train stations or the fact that people have a generally closer proximity to a bus stop, given their less sparse distribution across south-east Queensland (compared to train stations).

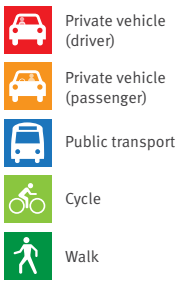
Nine in ten bus travellers walk to the bus stop compared to five in ten train travellers.

Mode of travel to train station - based on trips

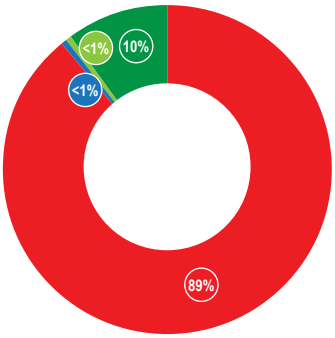


Mode of travel to bus stop - based on trips

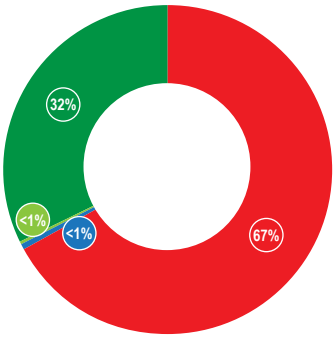




Mode of travel to train station - based on distance



Mode of travel to bus stop - based on distance

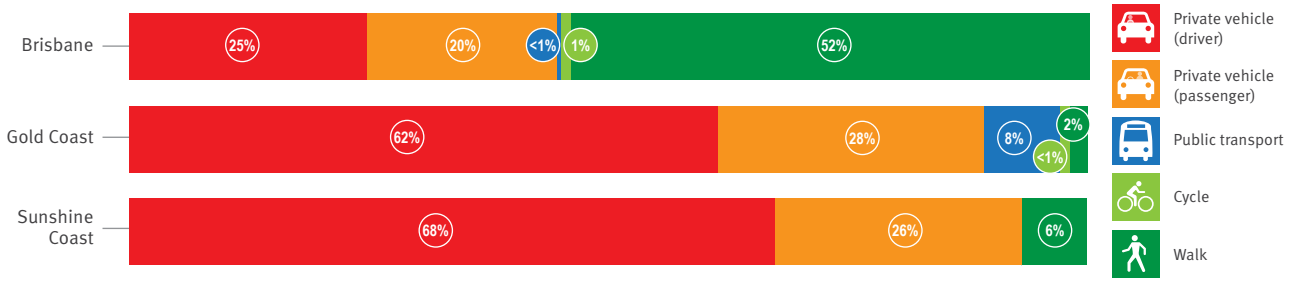


Mode of travel to public transport from home | **Public transport travel**

Brisbane residents are much more likely to access a train station by walking, but mode travel to a bus stop is fairly similar across the three south-east Queensland regions. The Gold Coast has the highest proportion of people accessing bus stops by walking.

Around half of Brisbane residents access a train station via walking, while the remainder drive or are dropped off.

Mode of travel to train station - based on trips



Mode of travel to bus stop - based on trips

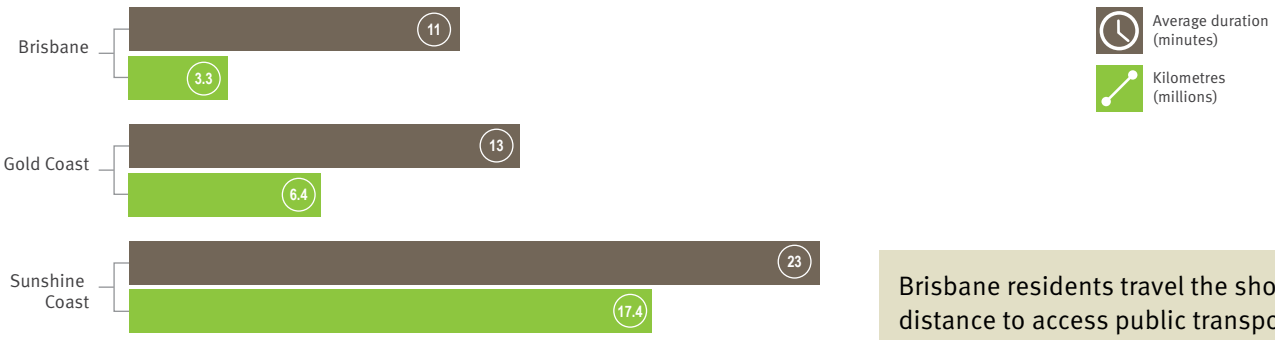
Travel to public transport | **Public transport travel**

On average, south-east Queensland residents take 10 minutes to travel to a public transport stop.

Coastal regions have greater average distances to access public transport, although this distance travelled takes slightly less time than in Brisbane. This is because cars are used more often to access the train in coastal areas.

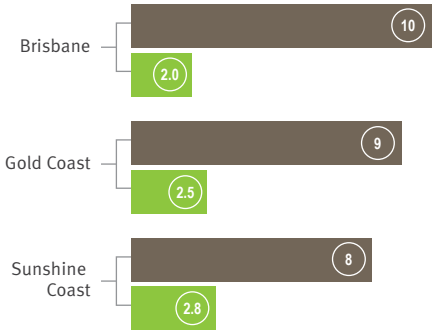
Coastal residents travel a greater distance and longer duration to access a train station, especially on the Sunshine Coast. Overall people travel longer distances to train stations than bus stops. This could be due to a number of factors such as stronger attraction of users to the train (i.e. larger geographic catchment) than the bus, more park'n'ride facilities at train stations facilitating longer travel distances to the station (by car) or that there are more bus stops than train stations throughout south-east Queensland so people are likely to live closer to a bus stop than a train station.

Average trip distance and duration travelled to train station

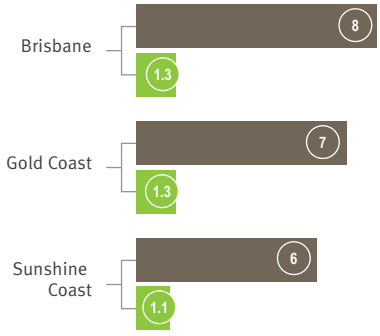


Brisbane residents travel the shortest distance to access public transport – 2 kilometres on average.

Average trip distance and duration travelled to public transport stop from home



Average trip distance and duration travelled to bus stop



The average trip distance to a bus stop is slightly more than 1 kilometre.

Wait time | Public transport travel

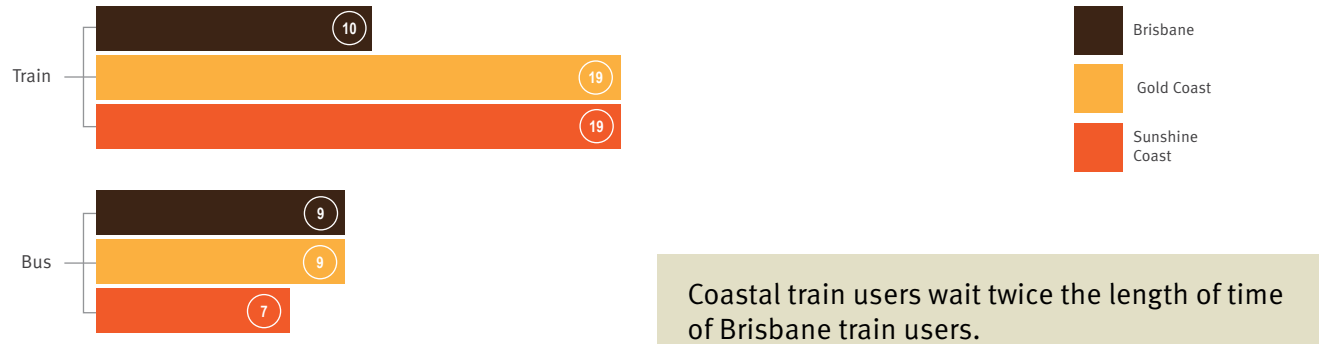
The average wait time for public transport in Brisbane is roughly 10 minutes for both trains and buses. On the coast, train users wait twice as long for a train than in Brisbane.

The average wait time for buses is under 10 minutes.

Public transport users wait for roughly equivalent lengths of time for public transport for work commute, education or shopping trips.

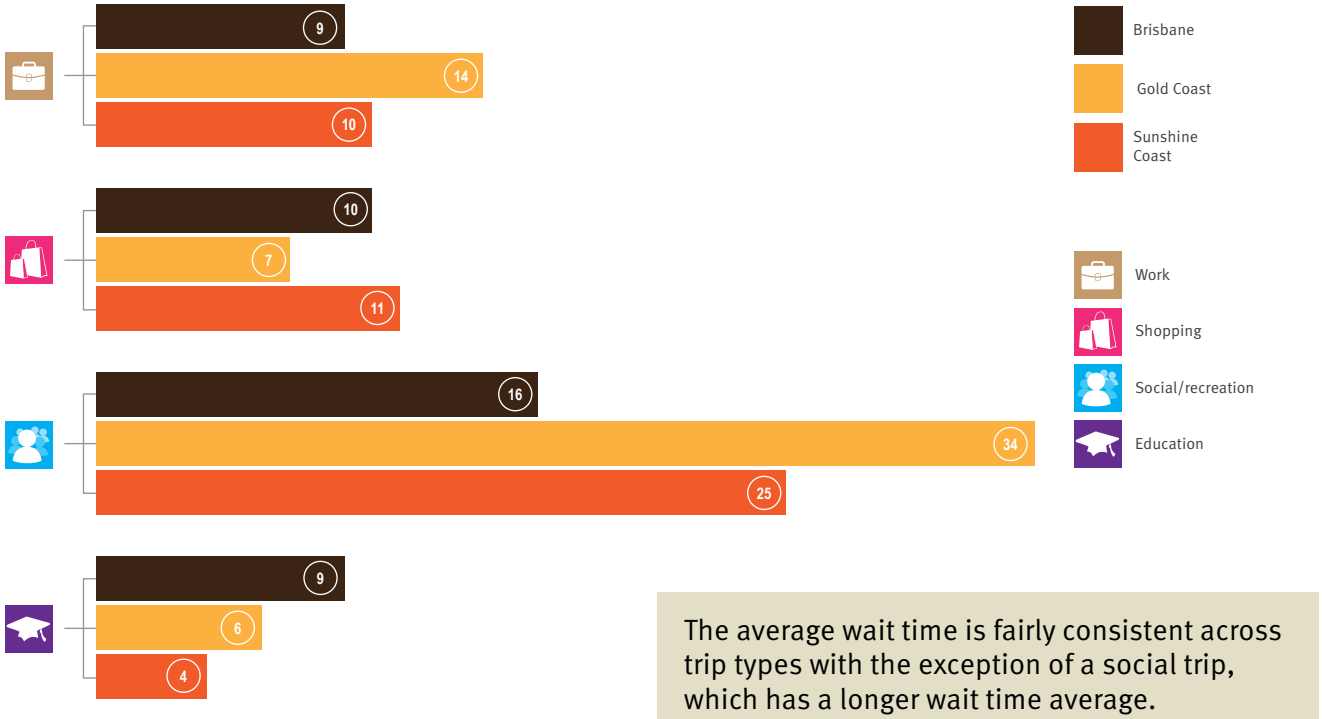
It appears that public transport users wait longer for social/recreation public transport trips than other key purposes, particularly on the Gold Coast and Sunshine Coast. This could be because social/recreation trips occur outside of peak times when services are less frequent.

Average wait time (minutes) by mode



Coastal train users wait twice the length of time of Brisbane train users.

Average wait time (minutes) by purpose



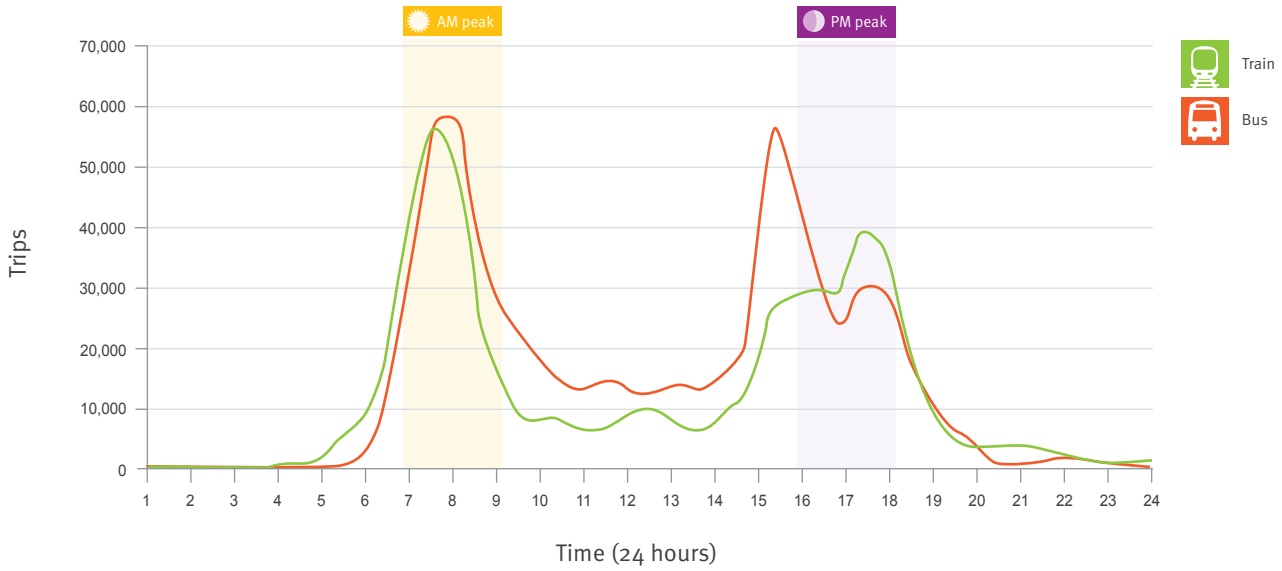
The average wait time is fairly consistent across trip types with the exception of a social trip, which has a longer wait time average.

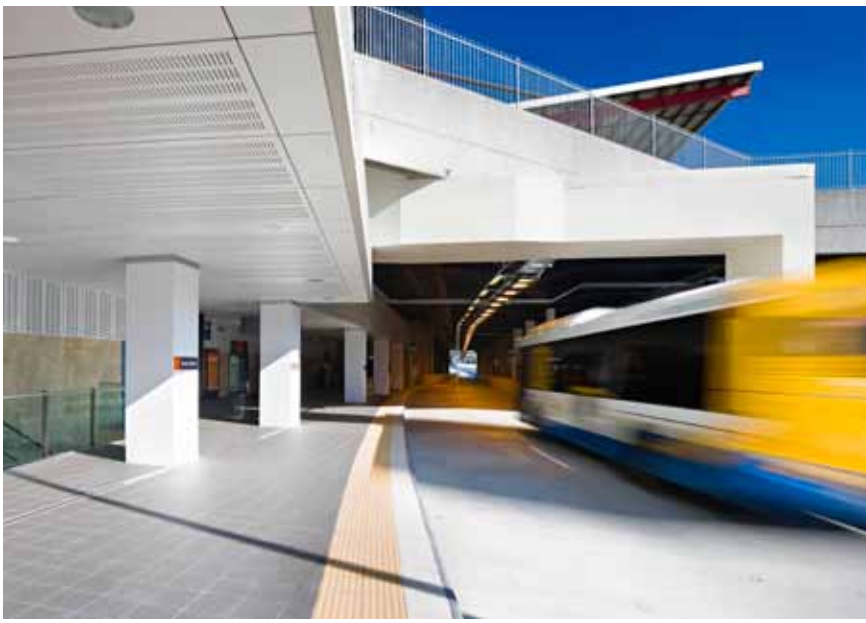
Time of travel | **Public transport travel**

Both buses and trains share similar volumes of peak travel in the AM peak, while train trip volumes reduce further than bus travel during the off-peak period. The peak in bus travel at 3pm would reflect dedicated school bus routes.

Train travel in Brisbane in the afternoon has a less pronounced peak than in the morning. There is a wider distribution of trips from 3pm through to 6pm.

Time of public transport travel - Brisbane

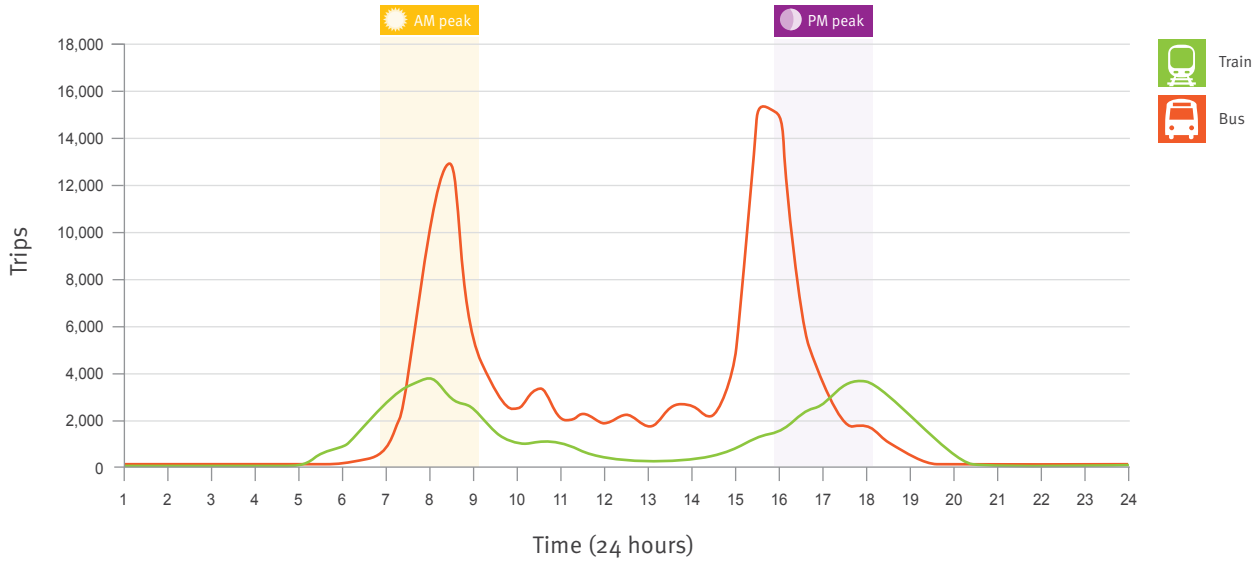




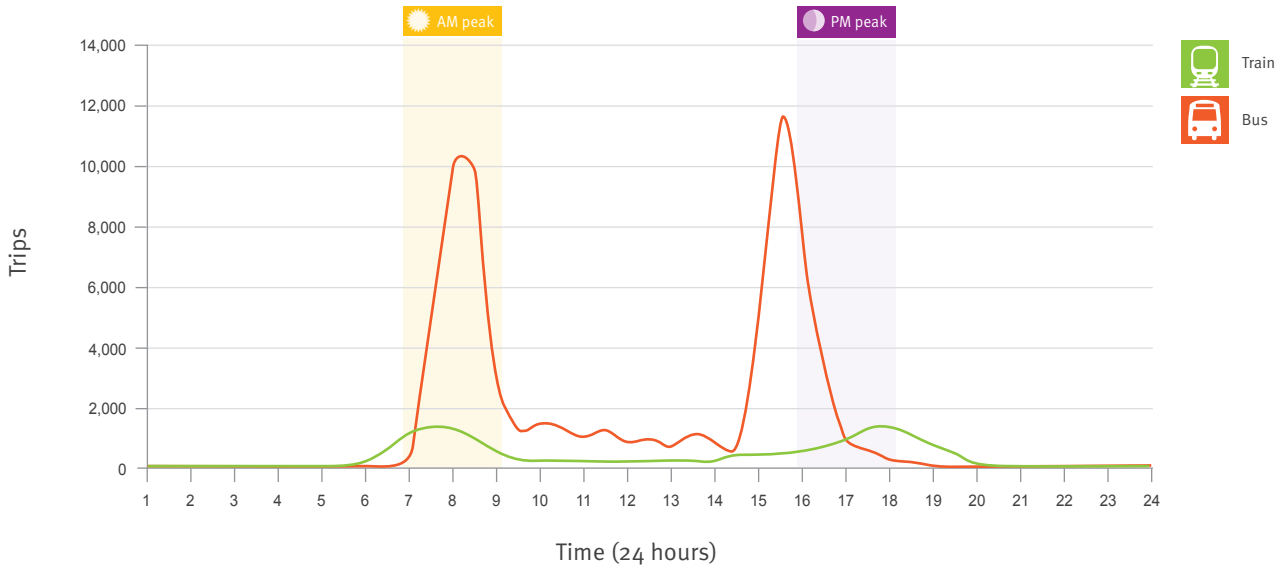
Time of travel | **Public transport travel**

Coastal bus trips have two significant peaks in the morning and afternoon – for travelling to and from school. Volumes during the afternoon peak are higher than in the morning.

Time of public transport travel - Gold Coast



Time of public transport travel - SunshineCoast



Profile of public transport users | Public transport travel

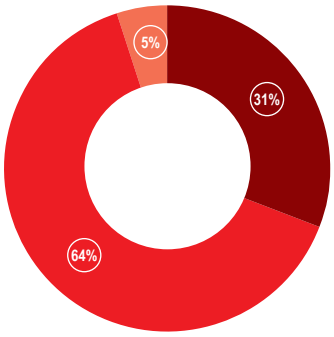
Brisbane has a higher proportion of public transport users between 19 and 64, while the Coastal areas attract more under 18s and 65+ aged travellers.

As reflected in the purposes for public transport trips, Brisbane has a much higher proportion of patronage by full time workers while public transport on the Gold Coast and Sunshine Coast serves a high proportion of school children.

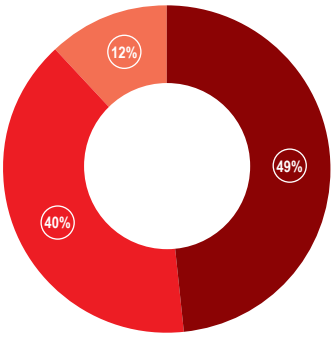
Two in five Brisbane public transport patrons are full time workers.

Two in three public transport users in Brisbane are of working age (64%) compared to 40% on the Gold Coast.

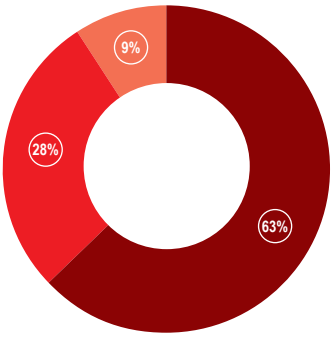
Age of public transport users - Brisbane

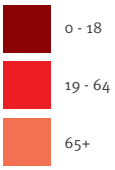


Age of public transport users - Gold Coast

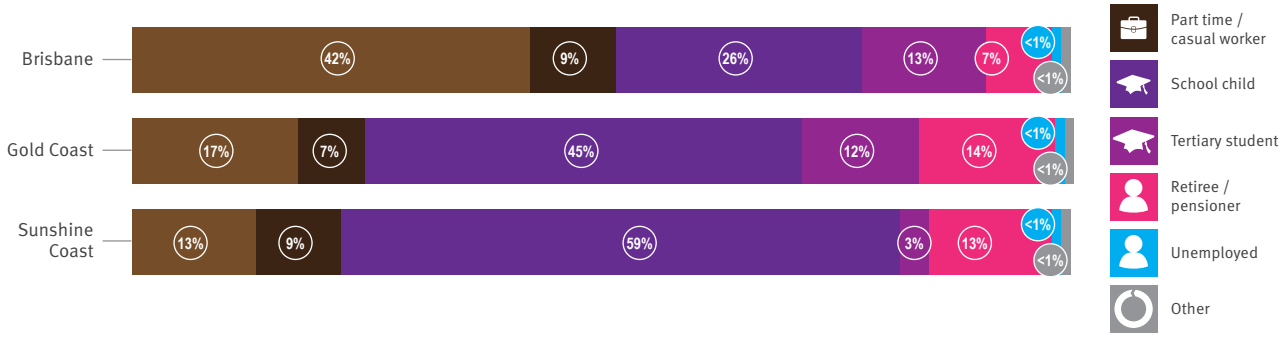


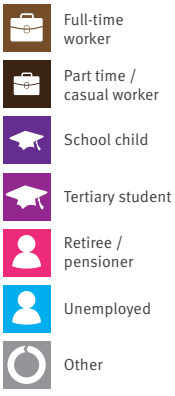
Age of public transport users - Sunshine Coast





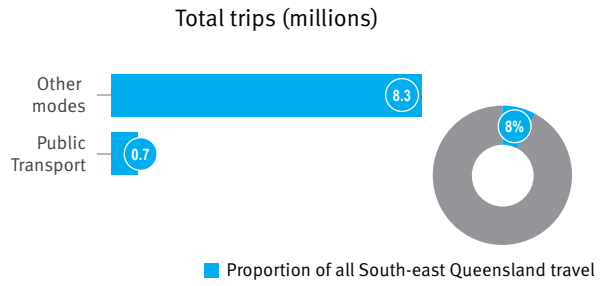
Status of public transport users

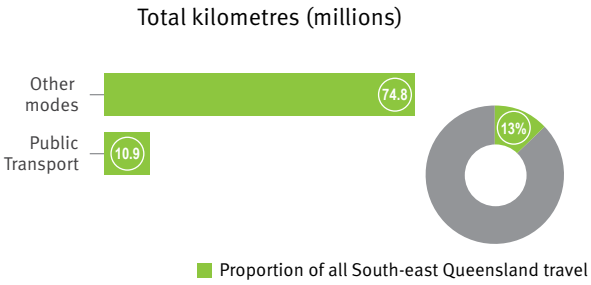




Summary | Public transport travel

Total travel





Average travel