



Driver travel

v3 August 2011

- People in New Zealand aged between 25 and 64 spend two thirds of their total travel time driving.
- On average, men drive just over 12,000 km per driver per year, while women average just over 8,000 km per driver per year.
- Work-related travel accounts for nearly one third of all household driving time and distance.
- Car travel accounts for nearly three quarters of the light vehicle¹ distance driven by households. The remaining quarter is evenly split between vans/utes and SUVs.
- The driver was the sole vehicle occupant in two thirds (66 percent) of **trip legs** in cars, vans and utes.
- The average distance driven on a weekend day is 94 percent of the average weekday distance.
- The amount of driving done by drivers aged over 45 has increased since the late 1980s. Younger drivers drive about the same distance per driver as in 1997/98.

The New Zealand Household Travel Survey is an ongoing survey of household travel conducted for the Ministry of Transport. Each year, people in 4,600² households throughout New Zealand were invited to participate in the survey by recording all their travel over a two-day period. Each person in the household was then interviewed about their travel and was also asked about their alcohol consumption and other travel-related information.

This fact sheet focuses on **drivers** of **light four-wheeled vehicles**, including cars, vans, **utes** and **SUVs**. It uses data from 34,311 people in 13,674 households, collected between July 2003 and June 2010, focussing on July 2007–June 2010 (20,253 people in 7,957 households). **Professional driver trips**³ have been excluded from the analysis.

Words (other than headings) shown in **blue** are defined in the glossary at the end of the sheet. Click on the word or phrase to go directly to the glossary.

As the survey covers periods starting July in a given year and finishing in June the following year, it should be noted that 2007–2010 refers to a three year time period (July 07–June 10).

¹ Excludes motorcycles

² Prior to July 2008, 2,200 households per year were sampled.

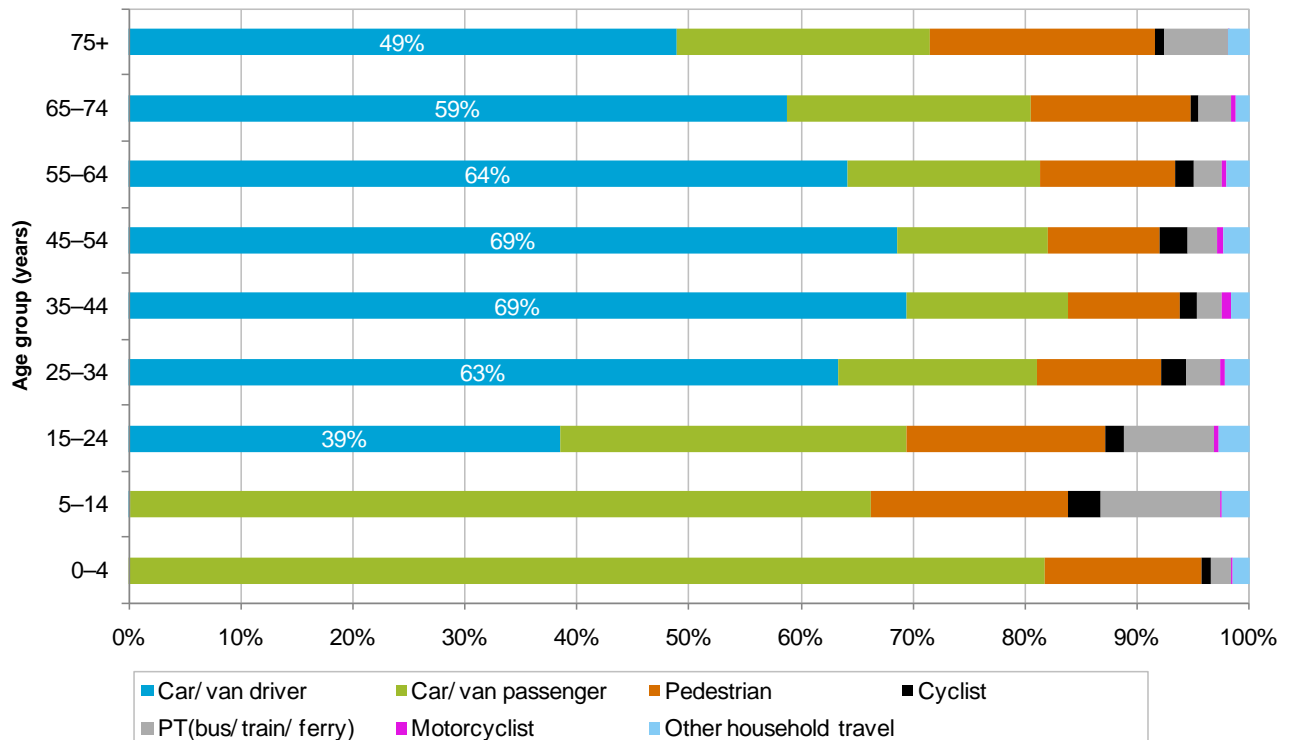
³ Professional driver trips are those done to transport goods or people as a professional eg courier trips, taxi drivers trips, bus driver trips, paper route delivery trips.

How much of our travel is driving?

Driving is the mode of travel most used by people in New Zealand. It accounts for half of all travel time, and around two thirds of all travel time for people aged between 25 and 64. The oldest and youngest adults spend more time than other adults as passengers and walking, but driving still makes up well over one third of these groups' travel time.

Figure 1 shows the percentage of total travel time spent driving or as a passenger in a car, as a motorcyclist, walking, cycling, using public transport or travelling by other means. 'Other' includes driving heavy vehicles, air and boat travel as well as other modes such as horse-riding (skateboarders and users of mobility scooters are included with walkers).

Figure 1: Proportion of total travel time by mode of travel



Who does the driving?

Table 1 and Figure 2 show how males and females of different ages travel. Table 1 shows the total distance driven as household travel, by men and women in each age group. Figure 2 shows the annual average distance driven per driver (that is, it excludes people who never drive at all).

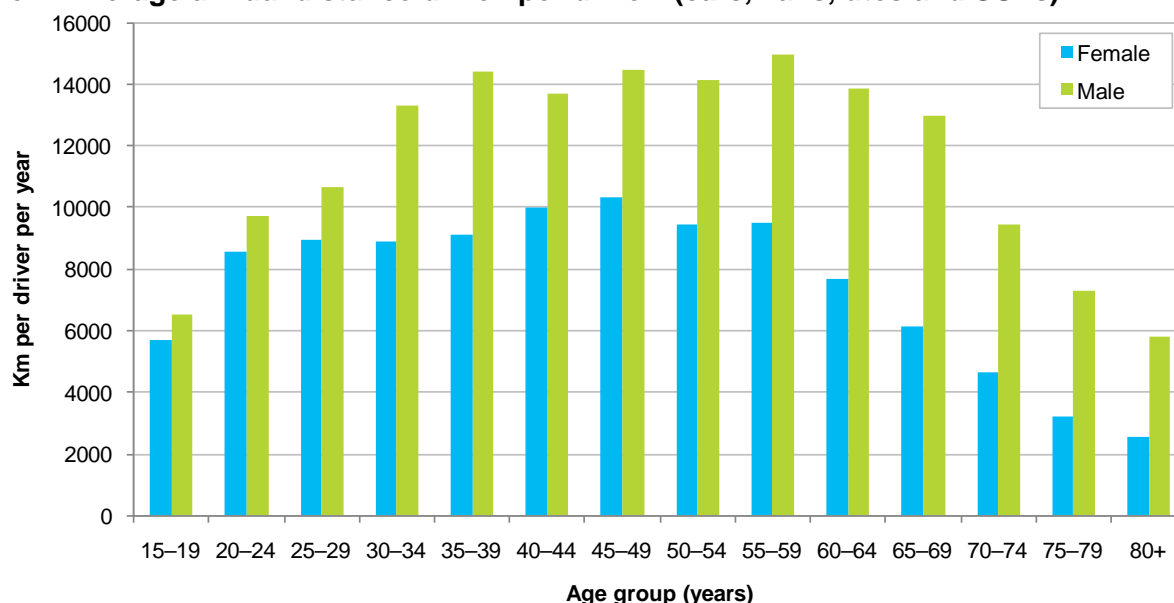
In New Zealand, male drivers do more driving than female drivers. On average, New Zealand men drive just over 12,000 km per driver per year, while women average just over 8,000 km per driver per year.

Approximately 60 percent of the total distance driven by New Zealanders in cars, vans, utes and SUVs, is driven by men.

Older and retired people drive less than those of working age. Distance driven tails off sharply for both men and women after the age of 60.

Table 1. Driver travel in cars, vans, utes and SUVs, by age group and sex

| Age group | Females | | | | | Males | | | | |
|-----------|----------------------|----------------------------|------------------------|---------------------|----------------------------|----------------------|----------------------------|------------------------|---------------------|----------------------------|
| | Sample size (People) | Number of drivers* (1,000) | Million hours per year | Million km per year | Million trip legs per year | Sample size (People) | Number of drivers* (1,000) | Million hours per year | Million km per year | Million trip legs per year |
| 15–19 | 321 | 70 | 13 | 401 | 55 | 415 | 97 | 17 | 630 | 60 |
| 20–24 | 428 | 112 | 27 | 959 | 104 | 458 | 137 | 37 | 1,328 | 129 |
| 25–29 | 474 | 115 | 31 | 1,031 | 125 | 488 | 127 | 39 | 1,360 | 135 |
| 30–34 | 568 | 122 | 33 | 1,082 | 148 | 499 | 120 | 42 | 1,597 | 142 |
| 35–39 | 736 | 147 | 41 | 1,340 | 193 | 644 | 139 | 49 | 2,007 | 160 |
| 40–44 | 760 | 150 | 45 | 1,503 | 212 | 621 | 143 | 53 | 1,951 | 191 |
| 45–49 | 753 | 149 | 46 | 1,540 | 205 | 705 | 145 | 55 | 2,105 | 199 |
| 50–54 | 623 | 120 | 33 | 1,133 | 154 | 670 | 127 | 46 | 1,791 | 172 |
| 55–59 | 503 | 106 | 28 | 1,006 | 112 | 520 | 114 | 42 | 1,709 | 151 |
| 60–64 | 503 | 89 | 20 | 681 | 86 | 468 | 99 | 34 | 1,370 | 124 |
| 65–69 | 370 | 70 | 13 | 430 | 67 | 399 | 75 | 24 | 978 | 84 |
| 70–74 | 253 | 48 | 8 | 224 | 36 | 288 | 54 | 13 | 512 | 54 |
| 75–79 | 220 | 35 | 4 | 113 | 24 | 238 | 40 | 9 | 292 | 40 |
| 80+ | 186 | 46 | 5 | 115 | 27 | 231 | 42 | 8 | 245 | 36 |
| Total | 6,698 | 1,379 | 346 | 11,560 | 1,549 | 6,644 | 1,460 | 467 | 17,873 | 1,674 |

Figure 2: Average annual distance driven per driver⁴ (cars, vans, utes and SUVs)

Trends in distance driven

The Household Travel Survey indicates that household travel in cars, vans, utes and SUVs increased during the 1990s, but has flattened out since the 2004–07 survey – the year by year changes since 2003–06 are not statistically significant.

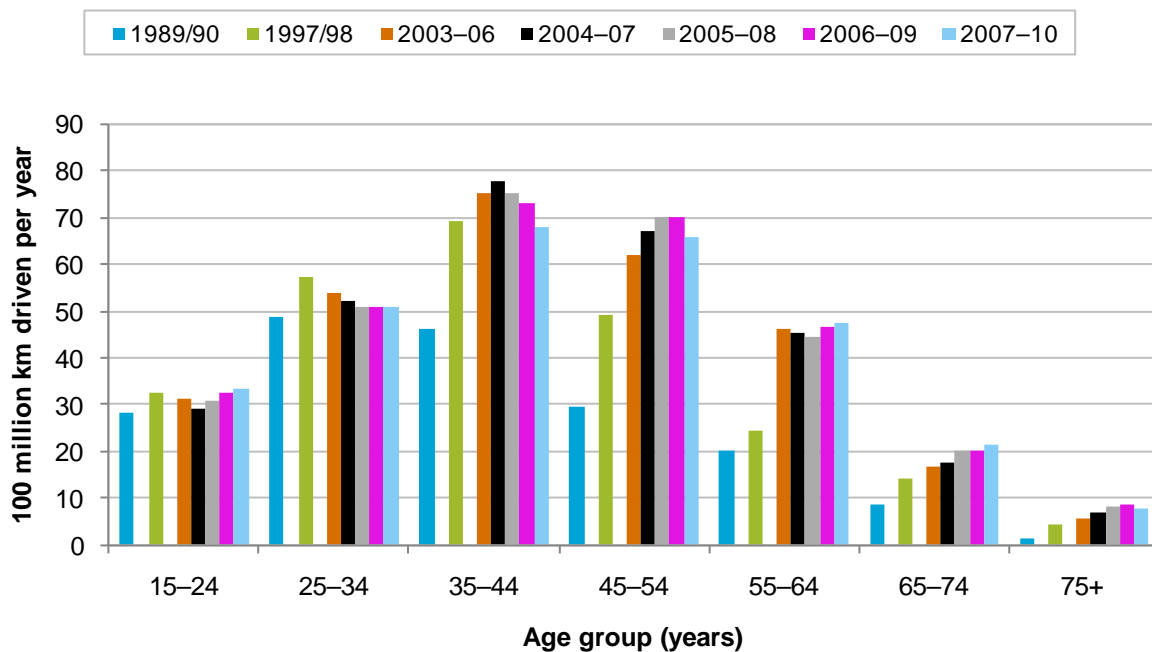
Table 2 and Figure 3 show the annual distance driven in cars, vans, utes and SUVs.

⁴ “Driver” is defined as someone who reported having driven 100 km or more in the previous year.

Table 2: Annual distance driven in light 4-wheeled vehicles, by year

| Age group | 100 million km per year driven in cars, vans, utes and SUVs | | | | | | |
|-----------|---|---------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| | 1989/90 | 1997/98 | 2003–06 (annual average) | 2004–07 (annual average) | 2005–08 (annual average) | 2006–09 (annual average) | 2007–10 (annual average) |
| 15–24 | 28 | 33 | 31 | 29 | 31 | 33 | 33 |
| 25–34 | 49 | 57 | 54 | 52 | 51 | 51 | 51 |
| 35–44 | 46 | 69 | 75 | 78 | 75 | 73 | 68 |
| 45–54 | 30 | 49 | 62 | 67 | 70 | 70 | 66 |
| 55–64 | 20 | 24 | 46 | 46 | 44 | 46 | 48 |
| 65–74 | 9 | 14 | 17 | 18 | 20 | 20 | 21 |
| 75+ | 2 | 4 | 6 | 7 | 8 | 9 | 8 |
| Total | 183 | 251 | 291 | 296 | 300 | 302 | 294 |

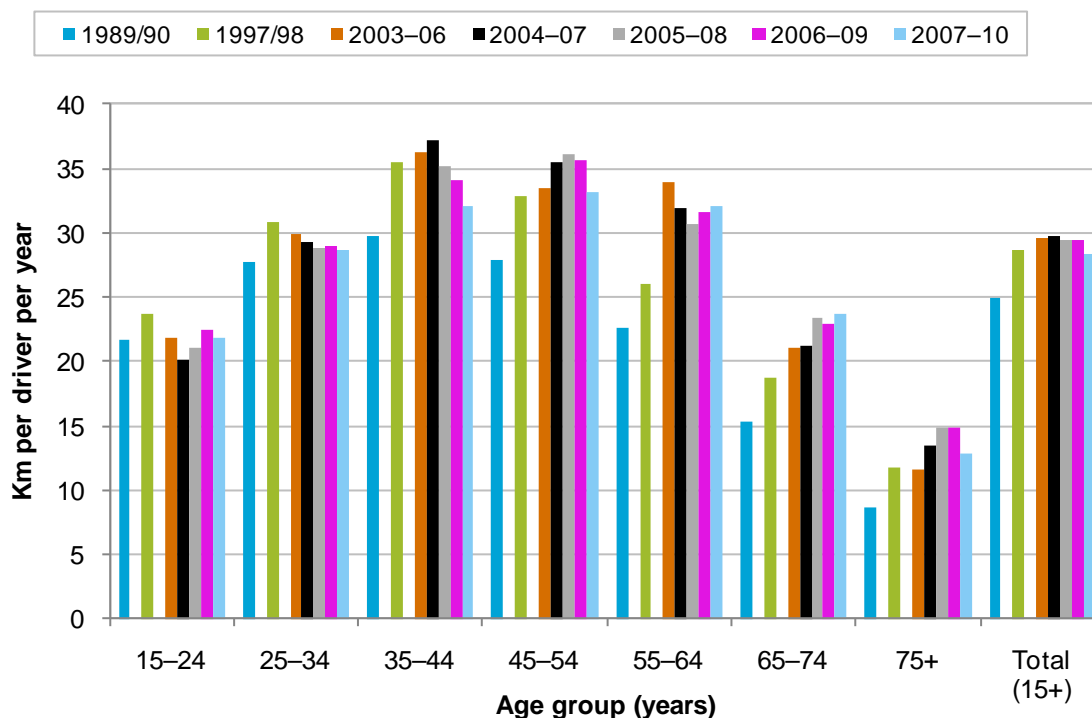
Figure 3: Distance driven in cars, vans, utes and SUVs



Note: this graph visually compresses the time interval between 1989/90, 1997/98 and 2003-06.

Trends in distance driven per driver

Figure 4 shows the average distance driven per driver in each group. The amount of driving done by drivers aged under thirty-five has changed little over the last 20 years, while drivers over 45 years old have increased their driving by between 20 and 50 percent.

Figure 4: Distance driven per driver⁵ (cars, vans, utes and SUVs)

Note: this graph visually compresses the time interval between 1989/90, 1997/98 and 2003-06.

Where do people drive to?

People answering the survey were asked what they did at the end of each trip leg, and their responses were grouped into broad categories.

Table 3. Driver travel by destination type

| Reason for stopping at this destination | Trip legs in sample | Million hours per year | Million km per year | Million trip legs per year |
|---|---------------------|------------------------|---------------------|----------------------------|
| Work – travel to main job | 8,688 | 94 | 3,428 | 346 |
| Work – travel on employers' business (includes self-employed) | 5,593 | 70 | 2,699 | 227 |
| Work – travel to other job | 352 | 3 | 105 | 12 |
| Social activity or entertainment | 8,312 | 97 | 4,003 | 324 |
| Recreational | 3,279 | 37 | 1,492 | 127 |
| Shopping | 12,717 | 97 | 3,137 | 490 |
| Personal business/social welfare | 5,117 | 46 | 1,531 | 210 |
| Accompany or transport someone else | 7,927 | 58 | 1,902 | 286 |
| Change to another mode of transport | 1,292 | 12 | 442 | 48 |
| Education | 633 | 7 | 230 | 26 |
| Medical/dental | 767 | 8 | 262 | 29 |
| Returning home | 27,963 | 276 | 9,787 | 1,086 |
| Total (excluding home) | 54,677 | 529 | 19,231 | 2,126 |
| Total | 82,975 | 813 | 29,434 | 3,223 |

⁵ Driver is defined as someone who reported driving 100km or more in the previous year.

Table 3 shows time and distance spent travelling to each of the destination types. As Table 3 shows, about one third of trip legs ended at home. The original purpose of these trip legs is reflected in the destination of the previous trip leg (or legs), so trip legs ending at home have been excluded from the percentages below. The proportion of time and distance spent on travel to each type of destination (excluding home) is shown in Figure 5.

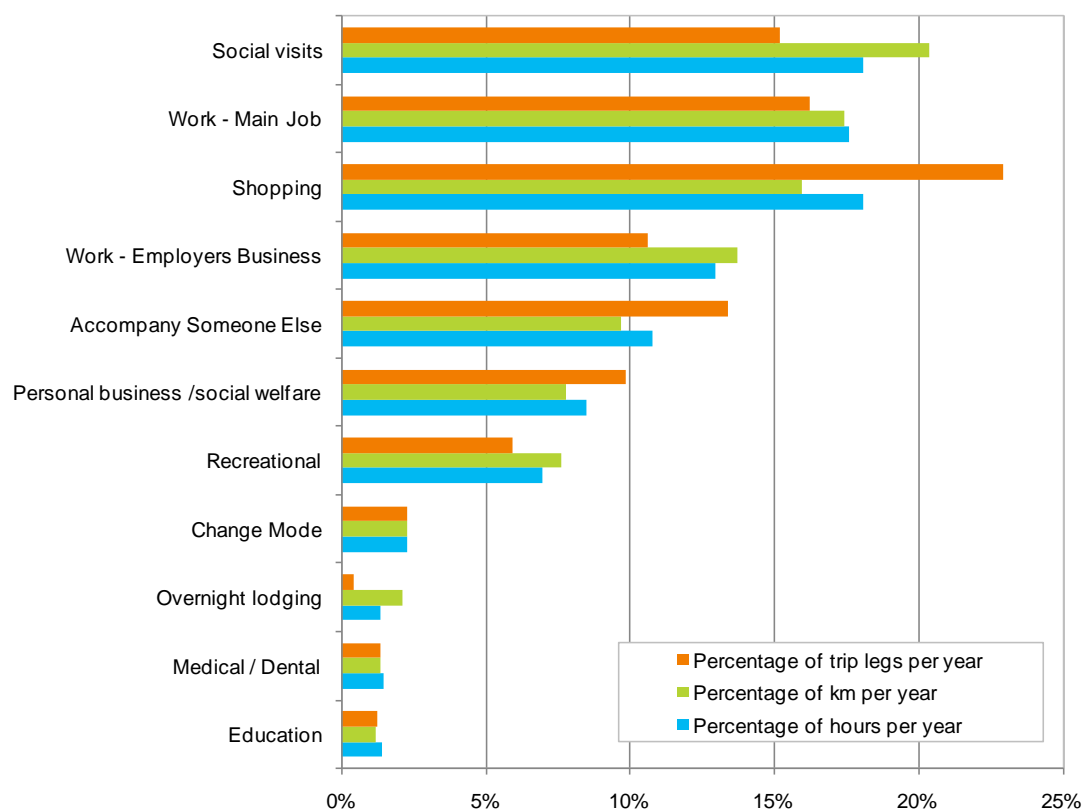
Work-related travel (travel to main job or other jobs and travel on employers business) accounts for nearly one third of all household driving time and distance. Much of this is commuting to and from work. Travel during work time on business makes up about 13 percent of household driving. This includes going to meetings as well as travel from job to job by tradespeople or other mobile workers.

Social and **recreational** destinations together make up about a quarter of household driving. This includes holidays, visits to friends and family, eating out, cultural and religious activities, pre-school education and sports-related destinations as well as ‘just going for a drive’.

Over a quarter of distance driven and over a third of all trip legs are for **shopping** and **personal business** (such as banking, getting a haircut, returning a video and other non-shopping ‘errands’).

A further 10 percent of driver travel is to collect or drop off other people (called **accompany or transport someone** else⁶ on the graph below). Personal travel to school or university, to the doctor or dentist, or to connect with another mode of transport, makes up only a small percentage of total driver travel.

Figure 5. Percentage of all driver travel (excluding the return-to-home trip leg), by destination type



⁶ Parents driving children to school is recorded under ‘Accompany or transport someone’.

Table 4 shows how far people of various ages drove to each destination type. The pattern reflects changes in work and education patterns throughout life. An increase in the travel to transport others is evident in the 30–59 age group, when people are most likely to have dependent children or teenagers needing transport. This trend is also evident when the distance travelled per driver per week is examined (Figure 6).

Table 4: Driver destination types by age group

| Million km per year Purpose/ destination | Age group | | | | All ages |
|---|-----------|---------|------------------|---------|-----------|
| | 15–29 | 30–44 | 45–59 | 60+ | |
| Work & work-related | 1,054 | 2,251 | 2,214 | 713 | 6,232 |
| Social/recreational | 1,345 | 1,510 | 1,517 | 1,123 | 5,495 |
| Shopping/personal business/medical | 708 | 1,490 | 1,609 | 1,122 | 4,930 |
| Accompany/ transport someone else | 291 | 856 | 528 | 227 | 1,902 |
| Change mode | 90 | 112 | 155 | 85 | 442 |
| Education | 134 | 53 | Sample too small | 13 | 230 |
| Returning home | 2,087 | 3,207 | 3,228 | 1,676 | 10,199 |
| Total (including unknown purpose) | 5,710 | 9,480 | 9,284 | 4,959 | 29,433 |
| Drivers in age group | 657,826 | 821,256 | 761,823 | 597,914 | 2,838,819 |

Figure 6: Driver destination type, by age group

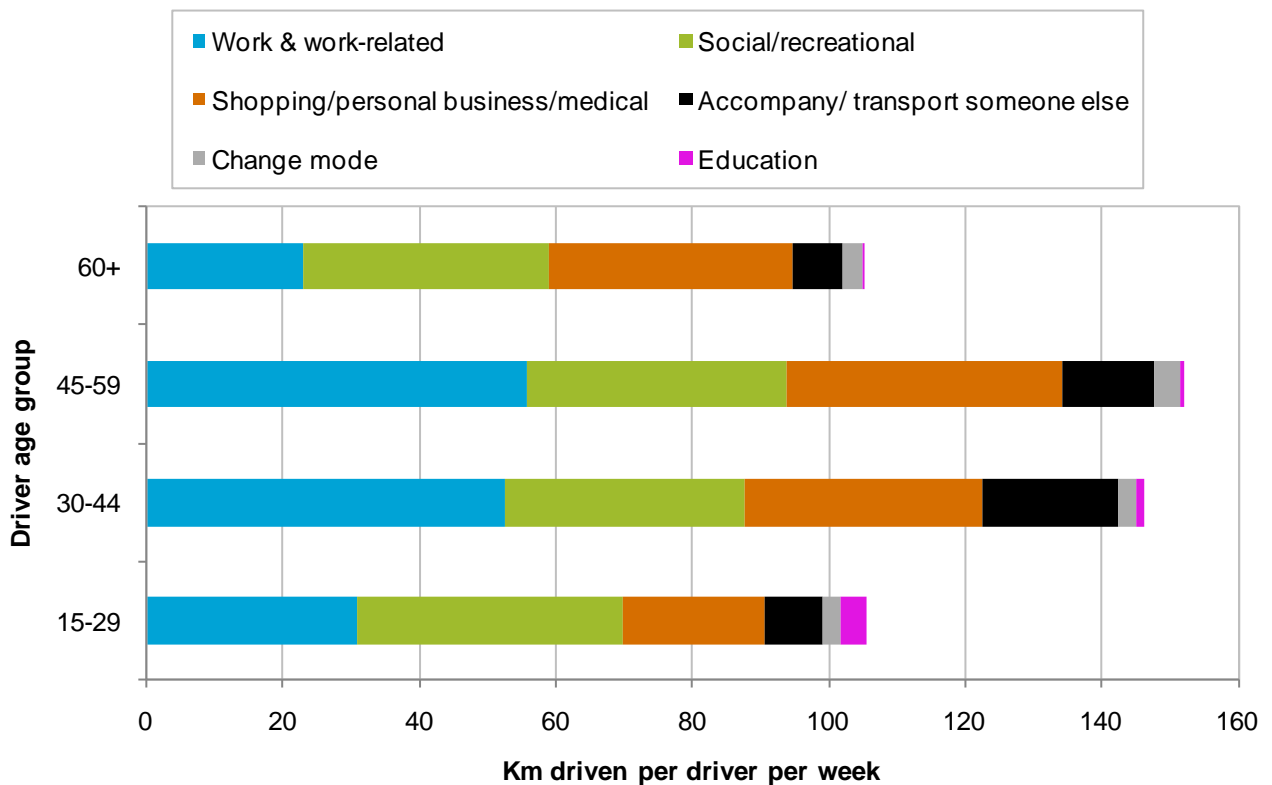
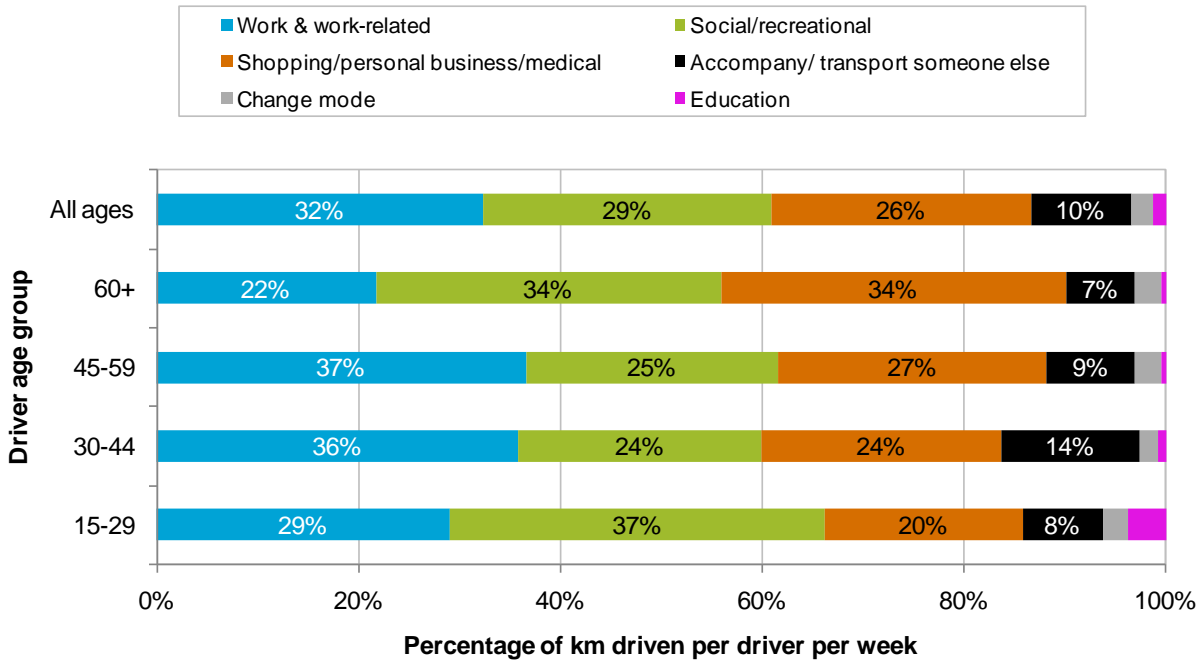


Figure 7: Driver destination type by percentage of travel and age group

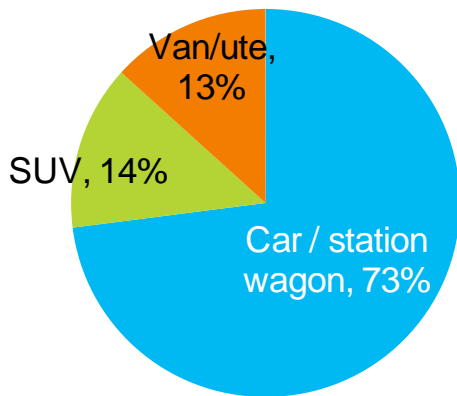


Vehicle types

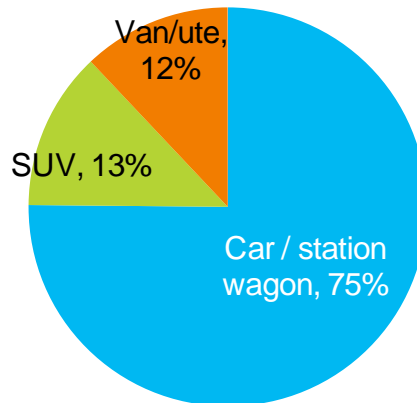
Cars and station wagons are still the main vehicle of choice for New Zealand households. Car travel accounts for about three-quarters of the light vehicle distance driven by **light 4-wheeled vehicles** (see Figure 7). The remaining quarter is evenly split between vans/utes and **SUVs**. Time spent driving shows a similar pattern. This has not changed between 2003 and 2010.

Figure 8: Travel in light 4-wheeled vehicles

a) Distance driven



b) Time spent driving



The current survey distinguishes SUVs from cars and vans. (In the 1989/90 and 1997/98 surveys, any SUV type vehicles were described as cars, or, occasionally, as vans or utes). This enables us to compare the usage patterns of cars, vans and SUVs. Table 6 shows the total household distance driven per year in each type of light vehicle, by age group and sex. Cars and station wagons are the most-used vehicle for household travel, by drivers of all ages.

Table 5: Million km driven per year in light 4 wheeled vehicles, by sex, age and light vehicle type

| Age group of driver | Million km per year | | | | | | | |
|---------------------|---------------------|---------------------|-------|---------|---------------------|---------------------|-------|------------------|
| | Males | | | | Females | | | |
| | Trip legs in sample | Car / station wagon | SUV | Van/ute | Trip legs in sample | Car / station wagon | SUV | Van/ute |
| 15–24 | 7,274 | 1,613 | 100 | 245 | 3,632 | 1,271 | 56 | 34 |
| 25–39 | 22,467 | 3,208 | 694 | 1,062 | 12,181 | 2,769 | 403 | 281 |
| 40–54 | 30,183 | 3,490 | 1,146 | 1,211 | 15,717 | 3,341 | 593 | 242 |
| 55–69 | 16,728 | 2,657 | 786 | 613 | 7,432 | 1,846 | 203 | 67 |
| 70+ | 6,315 | 846 | 56 | 146 | 2,542 | 435 | 14 | Sample too small |
| Grand Total | 82,967 | 11,814 | 2,782 | 3,277 | 41,504 | 9,662 | 1,270 | 628 |

Table 7 shows the contribution of each age/sex group to the total distance driven by car, and to the total distance driven by SUV. Men account for over two thirds of the distance driven in SUVs, but the car distance is more evenly split between men and women, with women driving 45 percent of the car distance. The age pattern is also noticeably different for SUVs compared to cars. Over 40 percent of the total SUV distance was driven by people aged 40–54, while only 32 percent of car driving is by people aged 40–54. Similarly, people aged 25–54 drove 70 percent of the total distance driven in SUVs, but only 60 percent of the total car distance.

Table 6: Comparison of age and sex of car and SUV drivers

| Age group of driver | % total car/ station wagon distance driven by... | | | % total SUV distance driven by... | | | Drivers in sample |
|---------------------|--|---------|-------|-----------------------------------|---------|-------|-------------------|
| | Males | Females | Total | Males | Females | Total | |
| 15–24 | 8 | 6 | 13 | 2 | 1 | 4 | 7,274 |
| 25–39 | 15 | 13 | 28 | 17 | 10 | 27 | 22,467 |
| 40–54 | 16 | 16 | 32 | 28 | 15 | 43 | 30,183 |
| 55–69 | 12 | 9 | 21 | 19 | 5 | 24 | 16,728 |
| 70+ | 4 | 2 | 6 | 1 | 0 | 2 | 6,315 |
| Total | 55 | 45 | 100 | 69 | 31 | 100 | 82,967 |

Vehicle occupancy

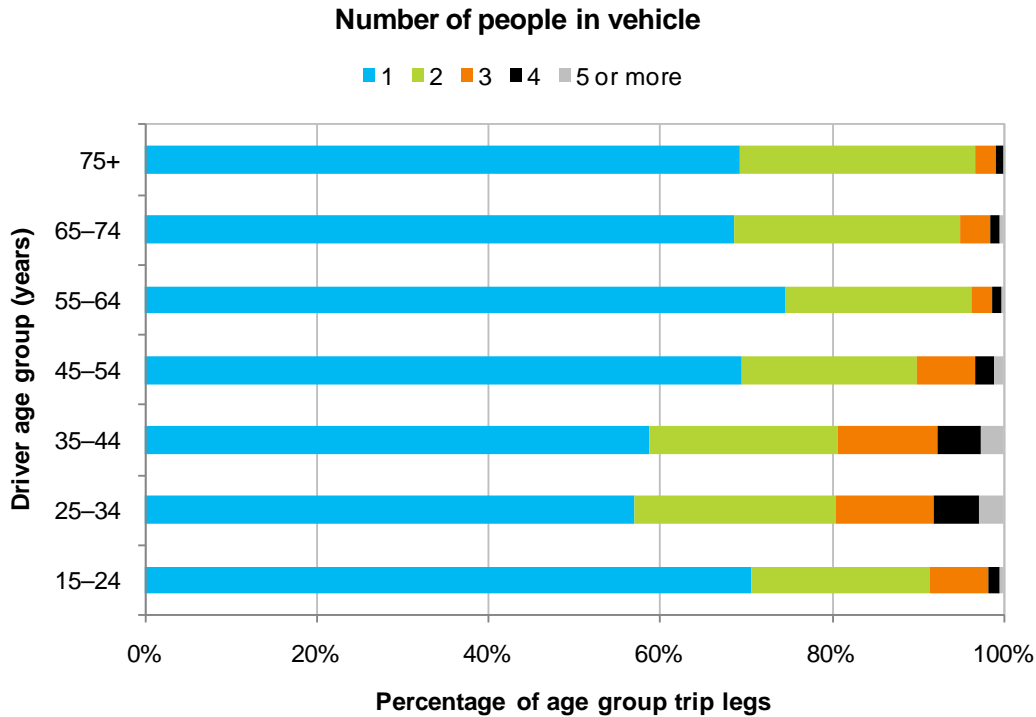
The driver is the only person in the vehicle for a large proportion of travel in New Zealand.

The driver was the sole vehicle occupant in two-thirds of trip legs (66 percent) in cars, vans and utes (see Figure 9). In one fifth (22 percent) of trip legs, one passenger was carried (in addition to the driver). One in eight trip legs (12 percent) involved two or more passengers.

There was a slight tendency to carry more passengers on longer journeys. The driver was the only vehicle occupant for 61 percent of the total distance driven and, for 14 percent of total distance, two or more passengers were carried.

Mean vehicle occupancy was 1.54 people per trip leg, or 1.63 people per distance driven.

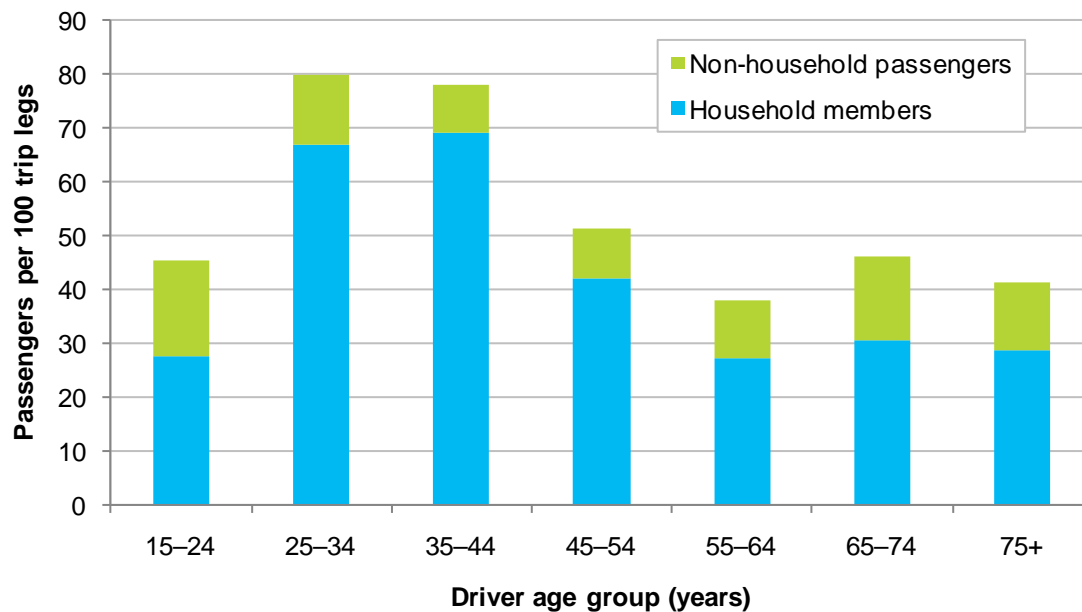
Figure 10: Percentage of age group trip legs, by number of people in vehicle (including driver)



Who are the passengers?

Most of the time, passengers are from the same household as the driver (family or flatmates). Young drivers carry the largest proportion of non-household passengers (see Figure 11). For drivers aged 25–34, about 13 passengers in every 100 trip legs are from outside the household, while for drivers aged 15–24, the equivalent figure is 18 passengers in every 100 trip legs, or nearly 40 percent of all passengers carried by this group.

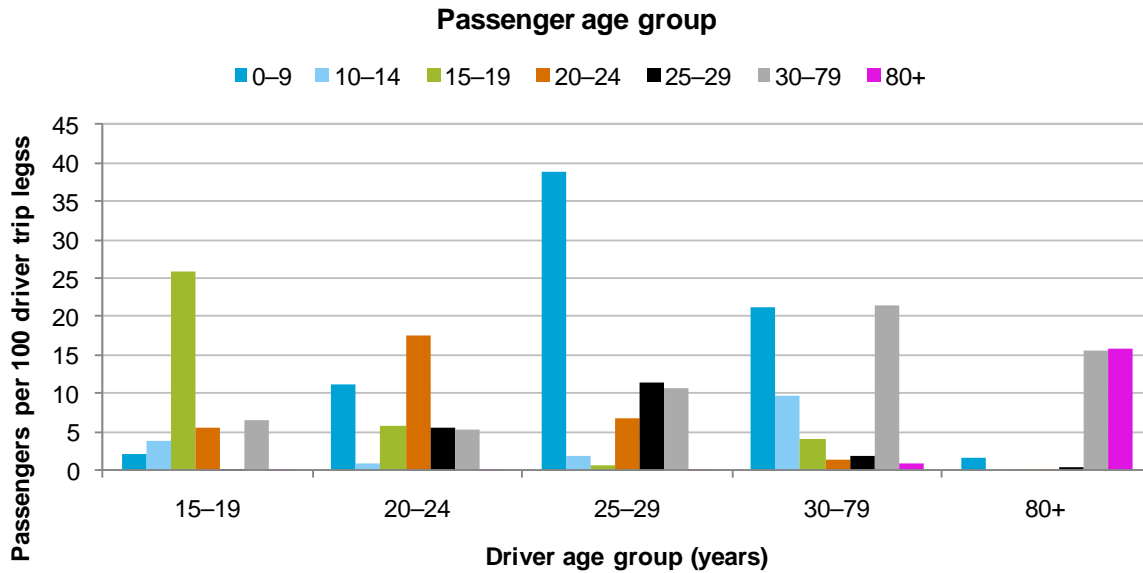
Figure 11. Household and non-household passengers



Drivers were also asked the age and sex of each passenger in their vehicle. Passenger age categories on the survey form were chosen primarily to enable a closer look at who young drivers carry as passengers.

Figure 12 shows marked differences between the passenger profiles of the youngest group of drivers and those in their twenties. Passengers of drivers aged 15–19 are most often friends of the same age (about 26 per 100 driver trip legs). ‘Mates’ of the same age are also the most common passengers for drivers aged 20–24, but for this group younger children also make up a significant proportion of passengers.

Figure 12: Passengers in each age group by age of driver, per 100 driver trip legs



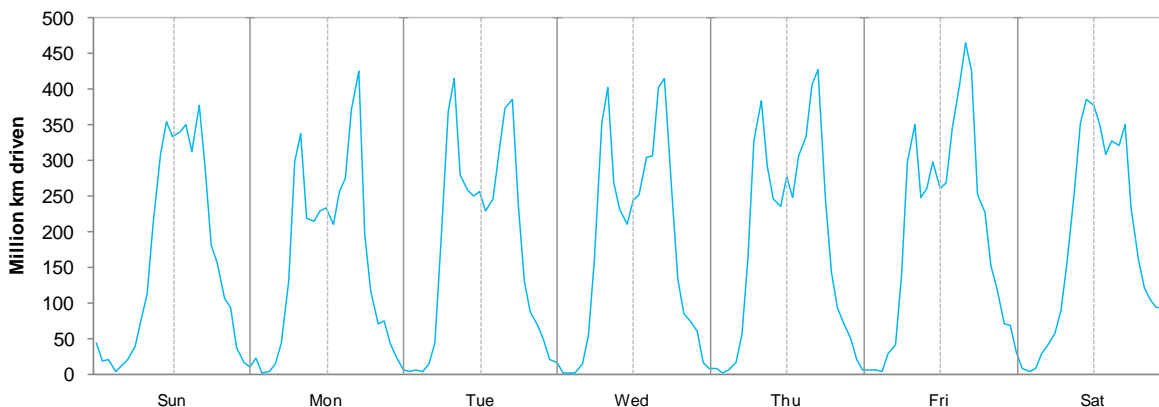
When do people drive?

The departure and arrival times of each trip leg were recorded. The distance falling into each hourly band can be calculated (assuming a fairly constant speed over the whole trip leg). Results are shown in Figure 13. The solid vertical lines represent midnight and the dotted ones midday.

Although sample sizes for each individual hour are fairly small, the weekday morning and afternoon peaks can be clearly seen, as can the increase in traffic late on Friday and Saturday nights compared with the same times on other days.

The average distance driven on a weekend day is 94 percent of the average weekday distance.

Figure 13: Distance driven by day and time



Solid lines indicate midnight; dotted lines indicate midday

Lifetime driving experience

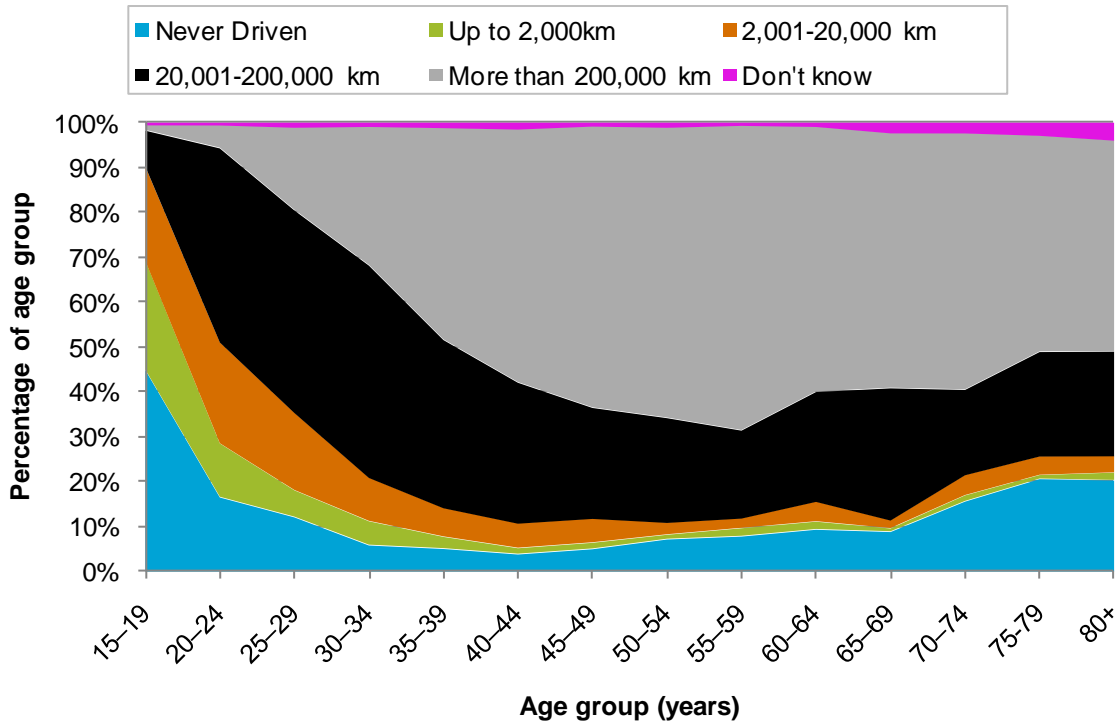
Survey participants were asked to estimate their total lifetime driving experience, choosing from a list of categories. Figure 14 shows the results by five-year age group. Men of all ages reported more

driving experience than women of the same age. Ninety-four per cent of men aged 25 and over reported that they had driven at least 20,000 km in their lives so far, compared with 82 percent of women in the same age group.

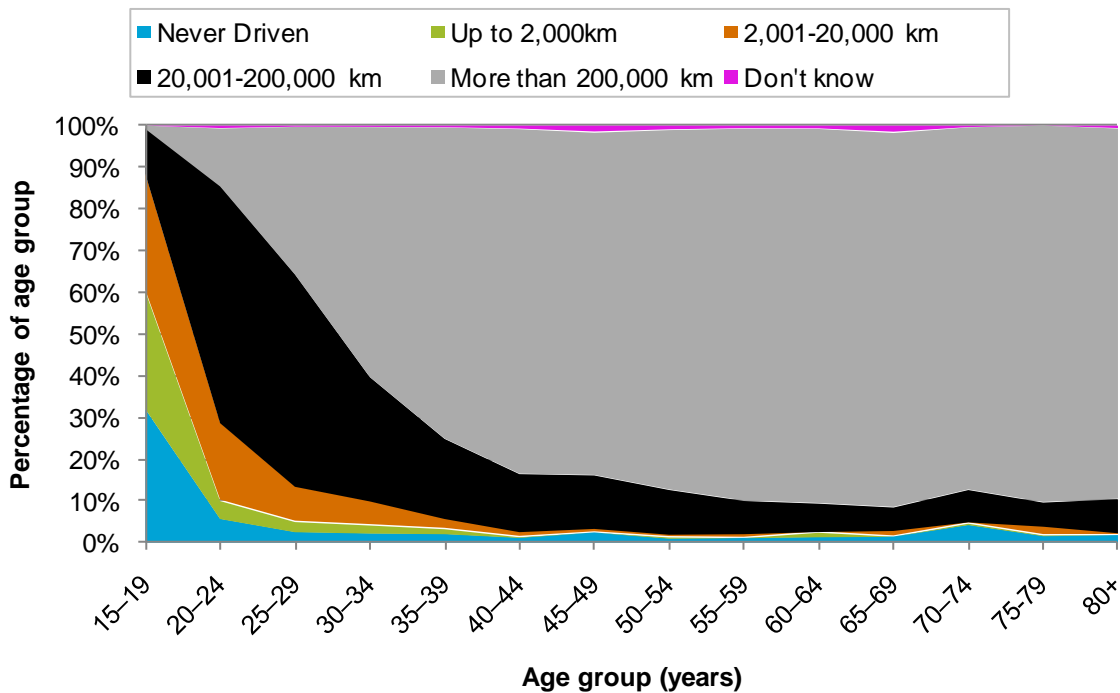
More women than men were non-drivers; 16 percent of women aged 65 and over had never driven, compared with only 2 percent of men in this age group.

Figure 14: Lifetime driving experience, by current age

a) Females



b) Males



Glossary

| | |
|-----------------------------------|---|
| Driver | In this fact sheet includes all drivers of private light 4 wheeled vehicles such as cars, utes, vans, SUVs |
| Light four-wheeled vehicle | Includes cars, vans, utes and SUVs. Excludes trucks, trailers, motorcycles, buses and tractors. Taxis are also excluded. |
| Passenger | Passenger in a private vehicle (car, van, ute, SUV, truck). Passengers in buses, trains and taxis are coded under those categories. Aircraft and boat passengers are included in the 'Other' category |
| Professional driver | Someone who is employed to transport goods or people, including couriers, truck drivers, bus and taxi drivers. Trips by professional drivers in the course of their work are excluded. Other travel by professional drivers (including travel from home to work) is included. If a person drives a lot for work, but this is not the primary purpose of the job (for example, a plumber, real estate agent, district nurse), then all trips by this person are recorded |
| Public transport (PT) | Passenger in local bus, train or ferry. Distances are currently only available for bus and train trips. Local bus, train trips have been defined to be 60 km or less, local ferry 1hr or less. Bus/train/ferry trips of longer than this distance/duration have been coded to 'other household travel'. |
| SUV | Sports utility vehicle. Used in this report to refer to light passenger vehicle with high wheel base and distinctive body shape. Normally, but not always, four wheel drive. |
| Travel | Includes all on-road travel by any mode; any walk which involves crossing a road or walking for 100 metres or more along a public footpath or road; cycling on a public road or footpath; some air and sea travel. Excludes off-road activities such as tramping, mountain biking, walking around the mall or around the farm |
| Travel mode | The method of travel. Includes vehicle driver, vehicle passenger, pedestrian, cyclist, motorcycle rider or passenger, bus or train passenger, ferry or aeroplane passenger |
| Trip distance | For road-based trips, distances are calculated by measuring the distance from the start address along the roads to the finish address. If an unusual route was used, the interviewer records an intermediate point to indicate the route; otherwise, the journey is assumed to follow the quickest available route. |
| Trip leg | A single leg of a journey, with no stops or changes in travel mode. For example, driving from home to work with a stop at a shop, is two trip legs; one ending at the shop and one ending at work. This does not include trips where people walk less than 100 metres without crossing a road, trips on private property that start and end at the same place without crossing a road, and off-road round trips. |

| | |
|-------------------------------------|---|
| Trip purposes / destinations | <p>Return home includes any trip to the home address or any trip returning to the place they are going to spend the night</p> <p>Work includes travel to main place of work and travel to any other jobs</p> <p>Employer's business: includes work-related travel other than to and from work (for example, travelling to meetings or clients)</p> <p>Education is for travel by students only and includes institutions such as primary and secondary schools, and universities. It does not include preschool education such as kindergarten, Play centre, crèche, kōhanga reo etc which are included under <i>social visit/entertainment</i>, as per the Statistics NZ Time Use Survey of 1998/1999</p> <p>Shopping is entering any premises that sells goods or hires them for money. A purchase need not be made</p> <p>Social visit/entertainment includes entertainment in a public or private place for example, eating out at a restaurant or food court, picnics</p> <p>Recreational includes active or passive participation in sporting activities and travel for which the main goal is exercise</p> <p>Personal business includes stops made to transact personal business where no goods were involved. This includes stops made for medical or dental needs and for dealing with government agencies involved with social welfare</p> <p>Accompany or transport someone covers when the reason of the travel is to go somewhere for someone else's purpose</p> <p>Change mode of travel covers when the purpose of the stop was only to change to another mode of transport</p> |
| Ute | Utility vehicle; a light flatbed truck weighing up to 3.5 tonnes. Typically based on a car or van model with a front cab and a flatbed instead of rear seats or luggage space. |
| Walk | Includes walkers, joggers, users of mobility scooters and children on tricycles. |

For more information about the background to the survey see www.transport.govt.nz/research/TravelSurvey/
 For more information about road safety, see the Ministry of Transport website at www.transport.govt.nz