



Motorcycling

**New Zealand
Household Travel
Survey
2009-2014**
October 2015



Ministry of **Transport**

TE MANATŪ WAKA

New Zealand Government

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

More information on the New Zealand fleet is available from <http://www.transport.govt.nz/research/NewZealandVehicleFleetStatistics/>

A selection of fact sheets is available in the Research area of the Ministry of Transport website.

These include:

Crash facts:

- ▶ Alcohol and drugs
- ▶ Cyclists
- ▶ Diverted attention
- ▶ Fatigue
- ▶ Motorcyclists
- ▶ Overseas drivers
- ▶ Pedestrians
- ▶ Speed
- ▶ Trucks
- ▶ Young drivers

Travel survey:

- ▶ Comparing travel modes
- ▶ Driver travel
- ▶ Risk on the road
 - ▶ Introduction and mode comparison
 - ▶ Drivers and their passengers
 - ▶ Pedestrians, cyclists and motorcyclists
- ▶ Walking
- ▶ Cycling
- ▶ Motorcycling
- ▶ Public transport

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Key facts

- ▶ About 94 thousand people each year motorcycled more than 100km in the previous year.
- ▶ There are more than 5 times as many New Zealand motorcycle licence holders as there are motorcycles in New Zealand.
- ▶ Pillion passenger trips make up about 5 percent of motorcyclist trip legs.
- ▶ 56 percent of motorcycling trip legs are travel to or for work or to school, compared to 30 percent of car driver trip legs for this purpose.
- ▶ Motorcycling for social or recreational reasons makes up 25 percent of the trip legs by those 45 years or over and 54 percent of the distance travelled.
- ▶ Open road motorcycling makes up 81 percent of the distance motorcycled by those 45 years and over, whereas it makes up 60 percent of the distance motorcycled by those 15–29 years old.
- ▶ Over two-thirds (68 percent) of the distance motorcycled by 15–29 year olds is on bikes of less than 600 cc.
- ▶ Nearly half (47 percent) of the distance motorcycled by those 45 years and older is on bikes of more than 1000 cc.
- ▶ The distance motorcycled by those aged 15–29 years has dropped markedly over the last 25 years, whereas the distance motorcycled by those over 45 years old has increased.

Overview

The New Zealand Household Travel Survey is an ongoing survey of household travel conducted for the Ministry of Transport. Each year, people in 4,600¹ 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 motorcyclists. This includes travel on motorcycles, mopeds and scooters. It uses data from 67,956 people in 26,919 households, collected between July 2003 and June 2014, with a particular focus on data from 42,485 people in 16,675 households, collected between July 2009 and June 2014. Non household travel, such as travel by **professional drivers** while working, has been specifically excluded.

Words (other than headings) shown in **blue** are defined in the glossary at the end of the sheet.

As the survey covers periods starting July in a given year and finishing in June the following year, it should be noted that 2009–2014 refers to a five year time period (July 2009–June 2014).

¹ Prior to July 2008, 2,200 households per year were sampled.

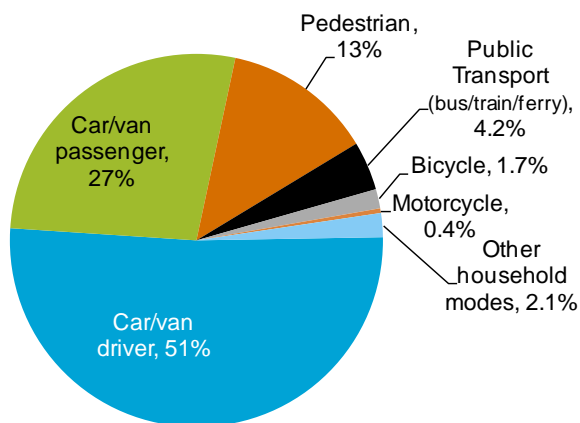
How do people travel?

Figure 1a shows the percentage of total travel time spent driving, as a car passenger, walking, cycling, on public transport or by other means. 'Other' includes aircraft and boat travel and mobility scooters, as well as other modes like horse-riding. (Skateboarders and children in push chairs are included with walkers).

Figure 1b shows each mode's share of **trip legs**. A 'trip leg' refers to a single leg of a journey, between any two stops. For example, driving to a friend's place with a stop at the shop on the way, counts as two trip legs. Similarly, walking to the bus stop, catching a bus to town and walking from the bus stop to work is three trip legs.

Figure 1: Overall mode share (2009–14)

a) Share of total travel time



b) Share of trip legs

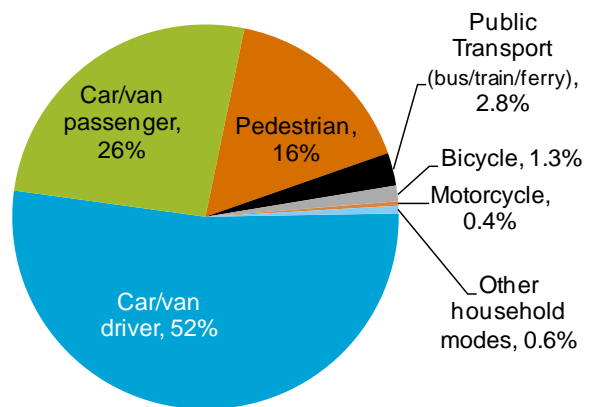


Table 1 shows each travel mode's share of the total travel time, trip legs and distance travelled where known. For the purposes of this fact sheet, 'public transport' has been defined to be bus/train/ferry travel of trip legs of less than 60 km or 1 hour. Trips over this length/duration by bus/train/ferry are not included as local public transport and fall under 'other household modes'.

Table 1: Mode share of time, distance and trip legs (2009–2014)

Travel mode	Trips in sample	Million hours per year	Million km per year	Million trip legs per year
Driver (in private car/van)	166,630	811	29,668	3,121
Passenger (in private car/van)	84,828	432	16,969	1,552
Pedestrian	51,794	205	806	977
Public transport (bus/train/ferry)	7,729	67	1,522*	164
Bicycle	4,859	26	323	78
Motorcycle	1,089	6	268	22
Other household modes	2,057	33	494 [†]	38
Total	318,986	1,581	50,052	5,952

Note: *Distances unavailable for ferry trips.

[†]Distances not available for all trips.

Who uses motorcycles?

The following table shows the number of motorcycle licence holders² as at 1 July 2014, and the number of motorcycles and mopeds licensed primarily for on road use and not covered by an exemption or restoration licence³.

Table 2: Motorcycle licence holders and motorcycles in New Zealand

Licence Class	Licence holders	Type	Motorcycles
Learner	64,226	Motorcycles	67,152
Restricted	15,921	Mopeds	23,072
Full	407,472	Total	90,224
Total	487,619		

This indicates there are more than 5 times as many motorcycle licence holders as there are motorcycles in New Zealand.

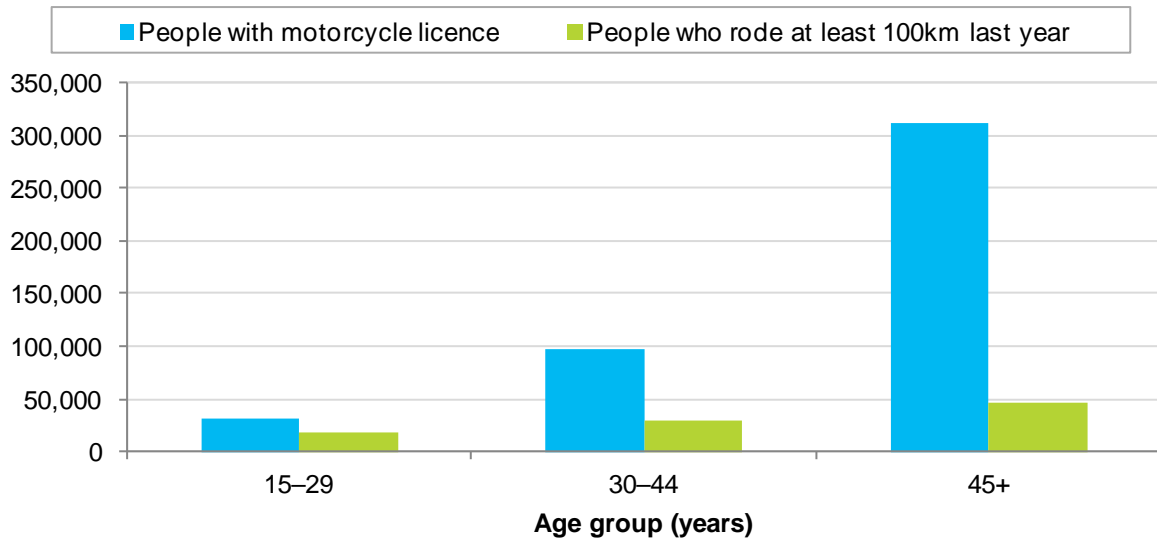
The two-day sampling period of the survey means that someone may ride a motorcycle reasonably regularly, but not do so in the sampled period. To identify motorcycle riders, people were asked if they had ridden more than 100km in the past year. About 94,000 people each year motorcycled more than 100km in the previous year.

² National Register of Driver Licences (maintained by NZ Transport Agency).

³ Motor vehicle register, NZ Transport Agency

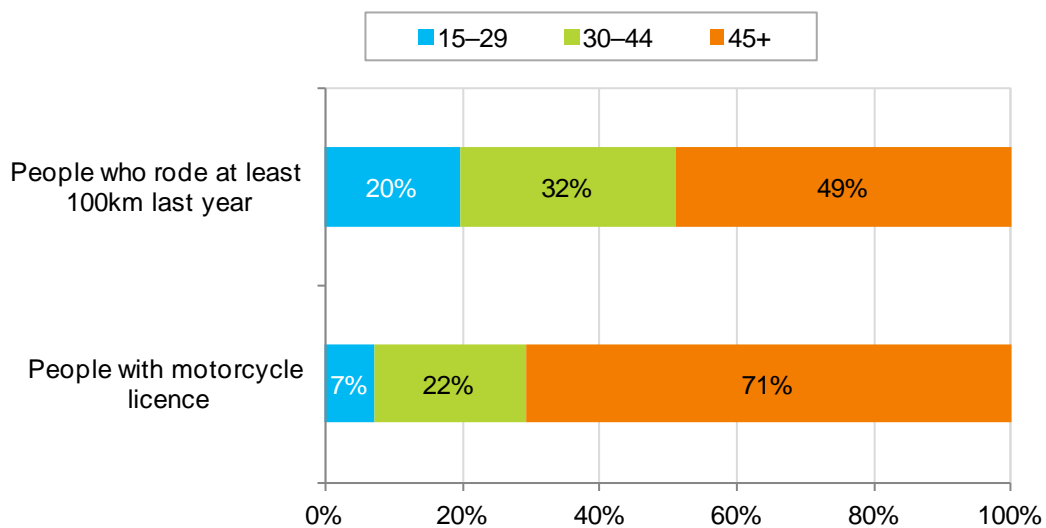
Figure 2 shows the number of people with a motorcycle licence and the number of people who rode more than 100km in the previous year.

Figure 2: Licensed motorcyclists and people who rode last year (2009–2014)



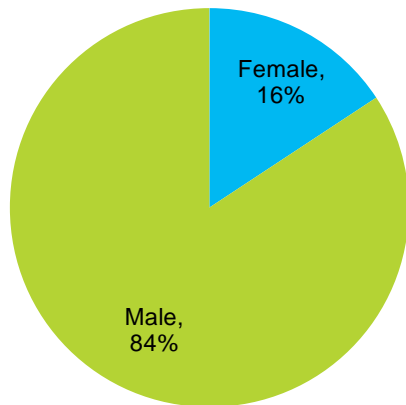
In percentage terms, 15 – 29 year olds make up 7 percent of the population with motorcycle licences, but 20 percent of those who have motorcycled in the last year, whereas those aged 45 years or more make up 71 percent of licence holders but 49 percent of those who have motorcycled in the last year (Figure 3).

Figure 3: Percentage of licensed motorcyclists and people who rode last year (2009–2014)



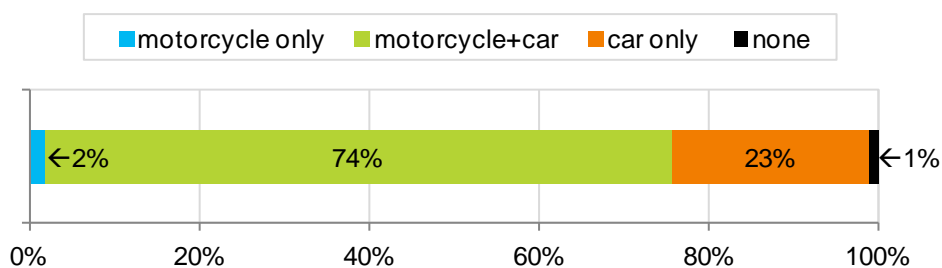
Of those who reported that they motorcycled more than 100km in the previous year, 16 percent were female and 84 percent male.

Figure 4: People who rode last year (2009–2014)



75 percent of those who reported riding more than 100 km in the last year held a current motorcycle licence when surveyed. A further 23 percent held a current car licence but no motorcyclist licence, making it legal to ride only if the vehicle was classed as a moped (maximum speed not exceeding 50km/h). Only about 2 percent had a motorcycle licence but no car licence. 1 percent had no current car or motorcycle licence (Figure 5).

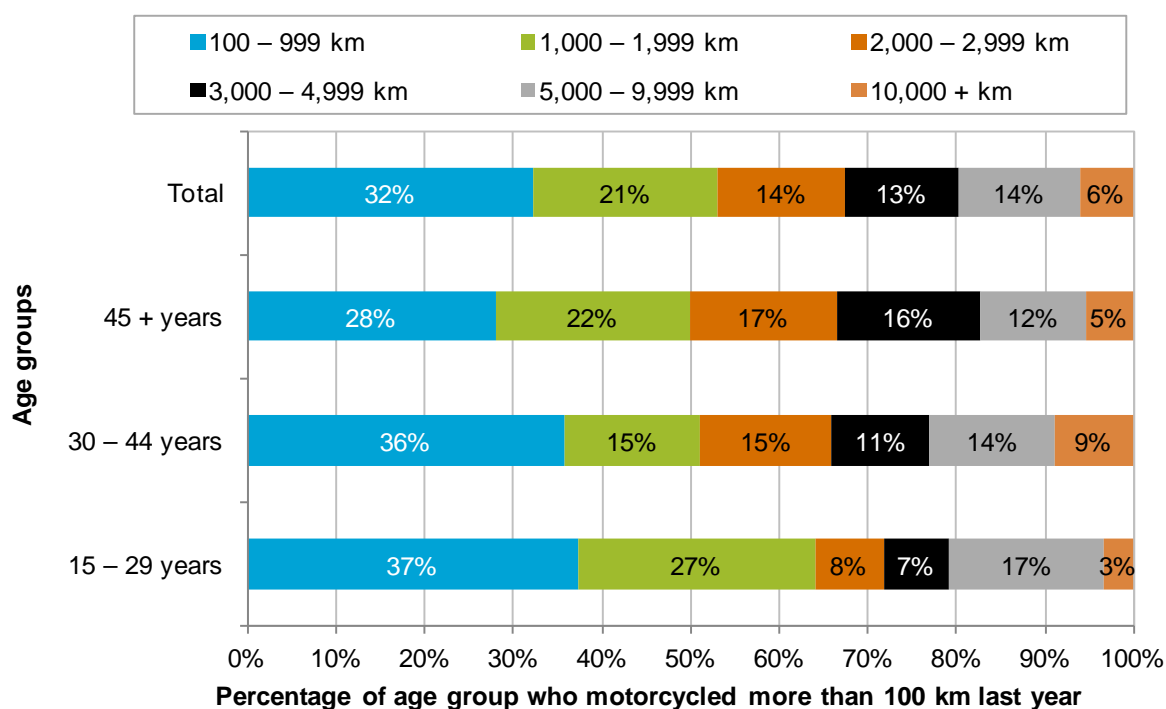
Figure 5: People who rode last year by licence type (2009–2014)



As part of the survey, all people over 15 years old were asked how much motorcycling they had done in the last year. Most people (97 percent) responded that they had travelled less than 100km on a motorcycle in the last year.

Of those who motorcycled more than 100km in the last year, only 32 percent motorcycled less than 1,000km (Figure 6) and 6 percent reported motorcycling more than 10,000km in the last year. 30–44 years olds are most likely to have motorcycled the furthest of the 3 age groups. Nearly a quarter (23 percent) reported motorcycling more than 5000km in the previous year.

Figure 6: Previous years' motorcycling experience (self reported) by age group (2009–2014)



How much do motorcyclists travel?

Table 3 shows the trip legs, time and distance travelled per year by motorcyclists aged 15 years and over. Pillion passenger trips are included in the table. For those 15 years and over, about 3 percent of trip legs, 7 percent of time and 9 percent of the distance travelled is by pillion passengers.

About a third (31 percent) of pillion passenger trip legs are by children under 15 years. These trip legs are not included in table 3. Overall, about 5 percent of trip legs are by pillion passengers.

Table 3: Travel by motorcycle riders per year (2009–2014)

Age	Trips in sample	People who rode a motorcycle within the travel days	Million hours per year	Million km per year	Million trip legs per year	Mean distance per trip leg (km)
15 – 29 years	184	41	1.1	34	4.0	8.5
30 – 44 years	338	79	1.7	70	7.1	9.8
45 + years	546	122	3.4	159	10.2	15.5
Total	1,068	242	6.3	263	21.3	12.3

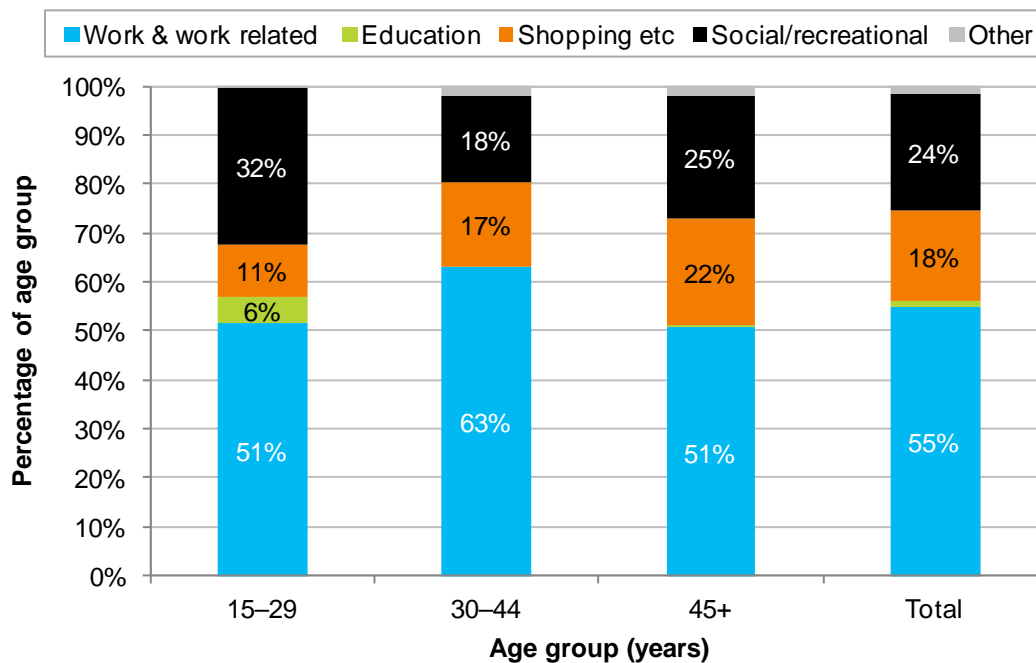
NB: Small sample sizes mean there are large uncertainties associated with these values.

Riders aged 45 years and over motorcycle the most, in terms of trip legs, distance and time spent motorcycling. Their average trips are longer, with a mean distance per trip leg of 15.5 km and duration of 20 minutes.

Where do motorcyclists ride to?

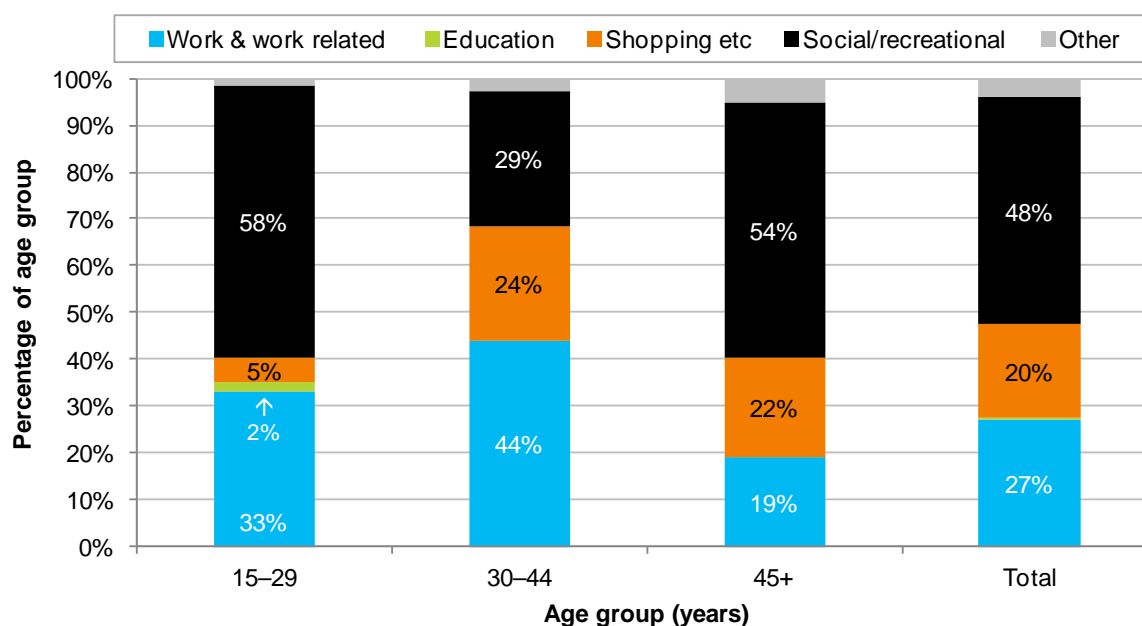
People travel for a range of reasons at different points in their lives, but 56 percent of motorcycling trip legs (excluding those home) are to or for work or education. This is a much higher fraction for this purpose than car driver trip legs (about 30 percent). Figure 7 and Figure 8 show the trip leg purposes given for the available motorcycle trips.

Figure 7: Percentage of trip legs by purpose and age group (2009–2014).



From Figure 7, the majority of trip legs (excluding those returning home and professional driver/rider trips) are for travel to work or for work related activities. Travel to or for work makes up 51–63 percent of trip legs. Shopping/personal business/medical and social/recreational are next most common reasons for motorcycling, with the amounts varying between age group. Education accounts for 6 percent of motorcycle trips for those aged 15–29 years old.

Figure 8: Percentage of distance motorcycled by purpose and age (2009–2014).



Looking at the distance motorcycled by the trip purpose (Figure 8, again excluding travel home and professional driver trips) gives a different picture. While travel to or for work makes up over half (55 percent) of all trip legs, it is only just over a quarter (27 percent) of the distance travelled. Travel for social/recreational reasons is about a quarter (24 percent) of trip legs but nearly a half (48 percent) of distance travelled. There are similar patterns across all age groups, showing that trips for social/recreational reasons are, on average, much longer than trips to or for work.

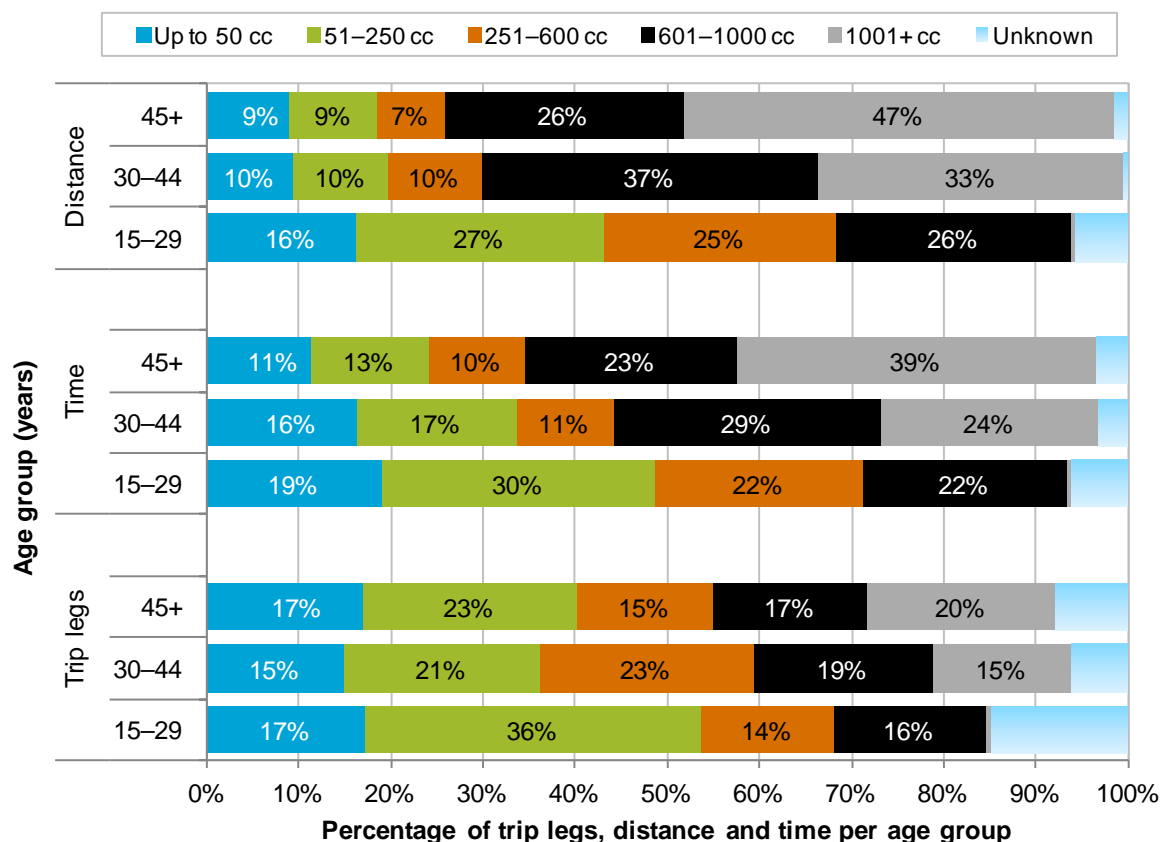
What types of motorcycles are ridden?

As stated in the introduction, the definition of motorcycling used here includes motorcycles, mopeds and scooters. We can get some idea of the power of the vehicle involved based on the vehicle **cc rating**.

The higher powered machines (more than 600 cc) are used for approximately 32 percent of the trip legs and for about 52 percent of the time travelled, but cover over 66 percent of the distance motorcycled. Conversely, the lower powered vehicles are used for shorter, slower trip legs.

Travel on motorcycles of different engine sizes by different age groups (Figure 9) shows those under 30 years old have the lowest proportion of travel on higher powered vehicles.

Figure 9: Percentage of trip legs, distance and time per age group by vehicle cc rating (2009–2014)

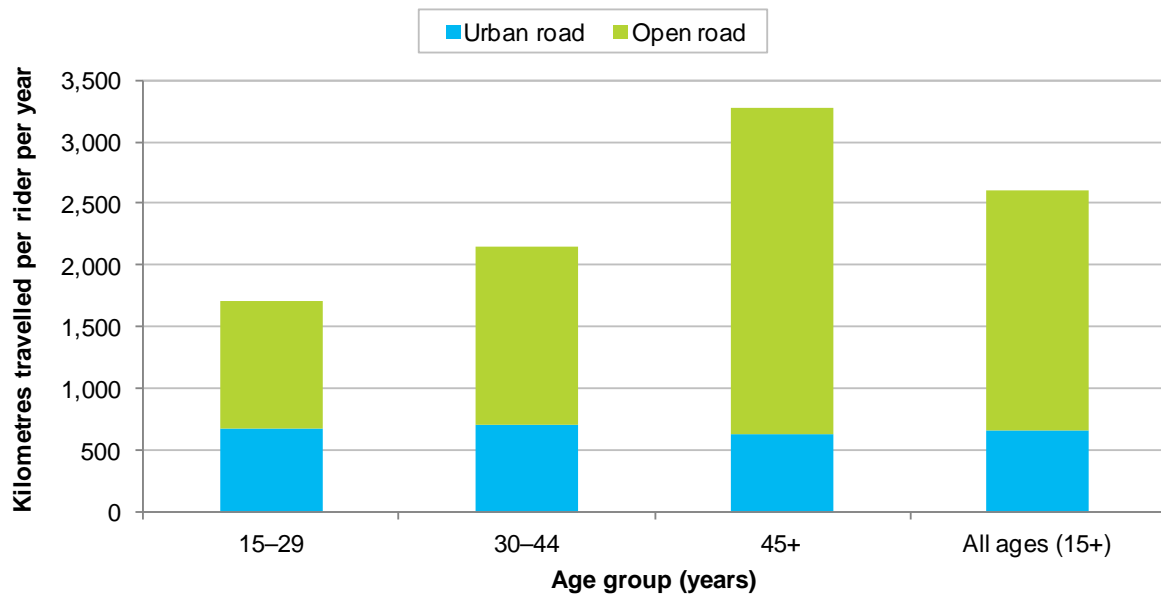


For those motorcyclists 45 years and over, while only 20 percent of trip legs are on high powered motorcycles (1001+ cc), these trip legs cover 47 percent of the distance travelled.

Open road/urban road

On average between 2009 and 2014, motorcyclists travelled about 63 million km per year on urban roads (speed limit of 70km/hr or less) and 184 million km per year on open roads (speed limit of over 70km/hr).

Figure 10: Distance travelled per rider* per year by age group and road type (2009–2014).



* Riders defined to be those who have motorcycled more than 100km in the past year.

From Figure 10, those aged 45 years and older travel furthest per rider per year, with the largest amount of travel on the open road. For this age group, 81 percent of their travel is on the open road. This correlates with the greater mean trip distances and durations observed in this age group earlier (Table 3). In contrast, 15–29 year olds do the smallest amount of motorcycling per rider per year and around 40 percent is on urban roads.

Figure 11: Motorcyclist distance travelled per year by road type and engine cc (2009–2014).

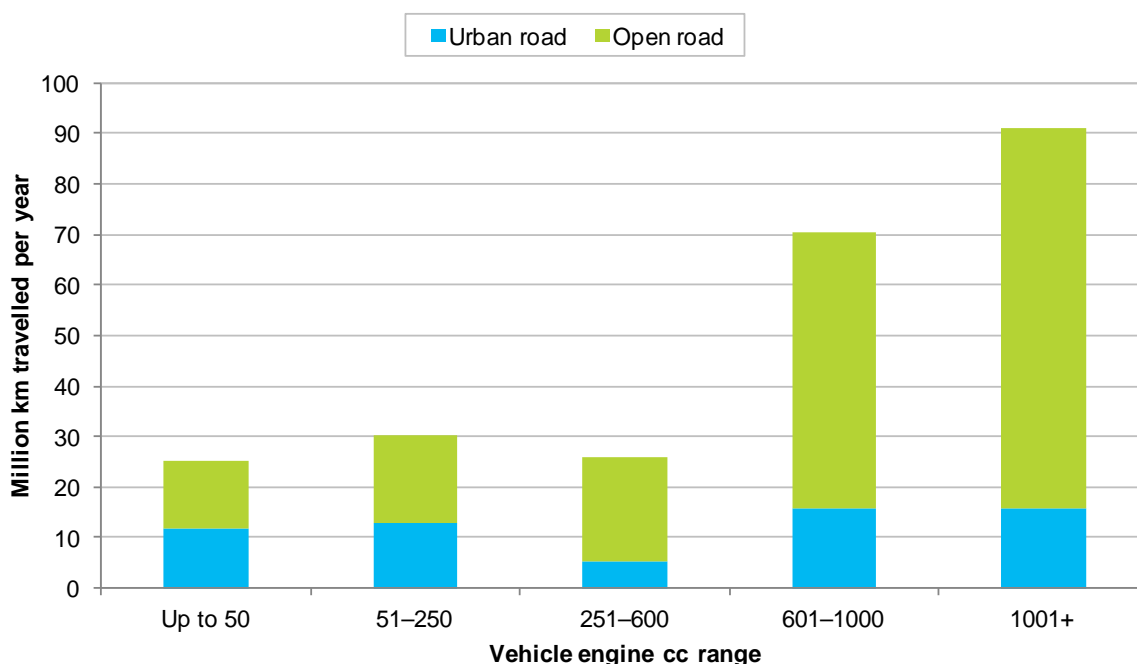


Figure 11 shows that motorcycles with smaller engines are less likely to be used on the open road than those with bigger, more powerful engines. For motorcycles with engines over 600cc around 80 percent of the distance they travel is on the open road. This compares to only 56 percent for motorcycles with engines 250cc or smaller.

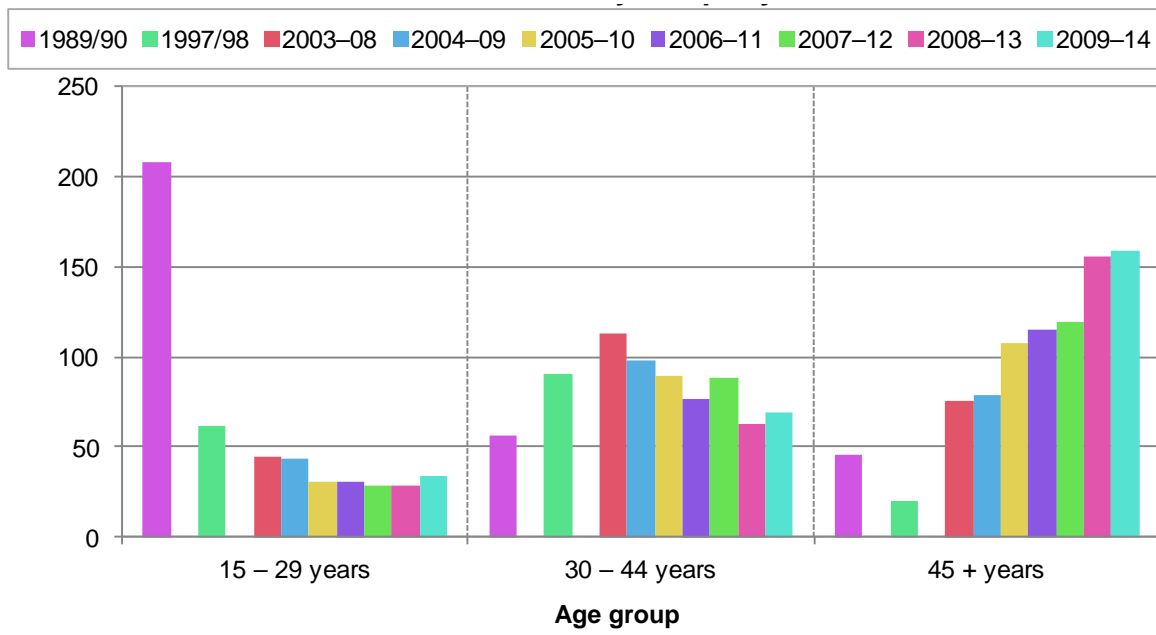
Trends in motorcycling

There was a large drop in motorcycling between 1989/90 and 1997/98, particularly in the 15–29 year age group. The 15–29 and 30–44 year age groups have continued the downward trend but there has been an increase in the amount of motorcycling by the 45+ age group.

Table 4 Million km motorcycled per year

Age group (years)	1989 /90	1997 /98	2003 -08	2004 -09	2005 -10	2006 -11	2007 -12	2008 -13	2009 -14
15–29	208.1	61.3	44.2	43.9	30.4	30.7	29.1	28.2	33.9
30–44	56.2	91.0	112.8	97.6	89.3	77.1	88.4	63.1	69.6
45+	45.4	20.6	75.8	78.6	107.2	114.6	119.0	155.7	159.0
Total	309.7	172.9	232.8	220.1	226.9	222.4	236.6	247.0	262.6

Figure 12: Million km motorcycled per year



Note: this graph visually compresses the time interval between 1989/90, 1997/98 and 2003-08.

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

Trip purposes / destinations

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.

Return home includes any trip to the home address or any trip returning to the place they are going to spend the night.

Work includes travel to main place of work and travel to any other jobs.

Employer's business: includes work-related travel other than to and from work (for example, travelling to meetings or clients).

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 *social visit/entertainment*, as per the Statistics NZ Time Use Surveys of 1998/1999 and 2009/2010.

Shopping is entering any premises that sells goods or hires them for money. A purchase need not be made.

Social visit/entertainment includes entertainment in a public or private place for example, eating out at a restaurant or food court, picnics.

Recreational includes active or passive participation in sporting activities and travel for which the main goal is exercise.

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.

Accompany or transport someone covers when the reason of the travel is to go somewhere for someone else's purpose.

Change mode of travel covers when the purpose of the stop was only to change to another mode of transport.

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.