



**Public Transport**

**New Zealand  
Household Travel  
Survey**

**2011-2014**

**October 2015**



**Ministry of Transport**

TE MANATŪ WAKA

New Zealand Government

## Disclaimer:

All reasonable endeavours are made to ensure the accuracy of the information in this report. However, the information is provided without warranties of any kind including accuracy, completeness, timeliness or fitness for any particular purpose.

The Ministry of Transport excludes liability for any loss, damage or expense, direct or indirect, and however caused, whether through negligence or otherwise, resulting from any person or organisation's use of, or reliance on, the information provided in this report.

Under the terms of the New Zealand Creative Commons Attribution 3.0 (BY) licence, this document, and the information contained within it, can be copied, distributed, adapted and otherwise used provided that –

- ▶ the Ministry of Transport is attributed as the source of the material
- ▶ the material is not misrepresented or distorted through selective use of the material
- ▶ images contained in the material are not copied

The terms of the Ministry's [Copyright and disclaimer](#) apply.

For more information about the background to the survey see the Ministry of Transport website at [www.transport.govt.nz/research/travelsurvey/](http://www.transport.govt.nz/research/travelsurvey/)

Regional breakdowns of some of the data presented here are available from this website.

A number of Transport Indicators also have further information on public transport.

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

## Contents

Disclaimer: .....	2
Key facts .....	4
Overview .....	4
Travel mode share by age group.....	5
Who uses public transport? .....	7
Walking by public transport users.....	9
Household characteristics.....	10
Characteristics of public transport use .....	11
Reasons for travel.....	11
Trends in public transport usage .....	12
Glossary .....	13

## Key facts

- ▶ 34% of people in New Zealand have used local public transport in the last year.
- ▶ 42% of people living in main urban areas have used local public transport in the last year, compared to 16-17% of people in secondary urban areas and rural areas.
- ▶ Nearly two thirds of people in the greater Wellington area have used local public transport in the past year.
- ▶ 13-17 year olds are the most likely to have used public transport in the last year.
- ▶ Over 60 percent of public transport travel is commuting to work or education.
- ▶ Train trips tend to be longer than bus trips.

## Overview

The New Zealand Household Travel Survey is an ongoing survey of household travel conducted for the Ministry of Transport. Each year, people in 4,600<sup>1</sup> 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 **public transport** use. It uses data from 67,956 people in 26,919 households, collected between July 2003 and June 2014, with a particular focus on July 2011–June 2014 (24,851 people in 9,788 households). **Professional driver** trips<sup>2</sup> have been excluded from the analysis.

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 2011–2014 refers to a three year time period (July 2011–June 2014).

---

<sup>1</sup> Prior to July 2008, 2,200 households per year were sampled.

<sup>2</sup> 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.

**Figure 1: Overall share of mode of travel**

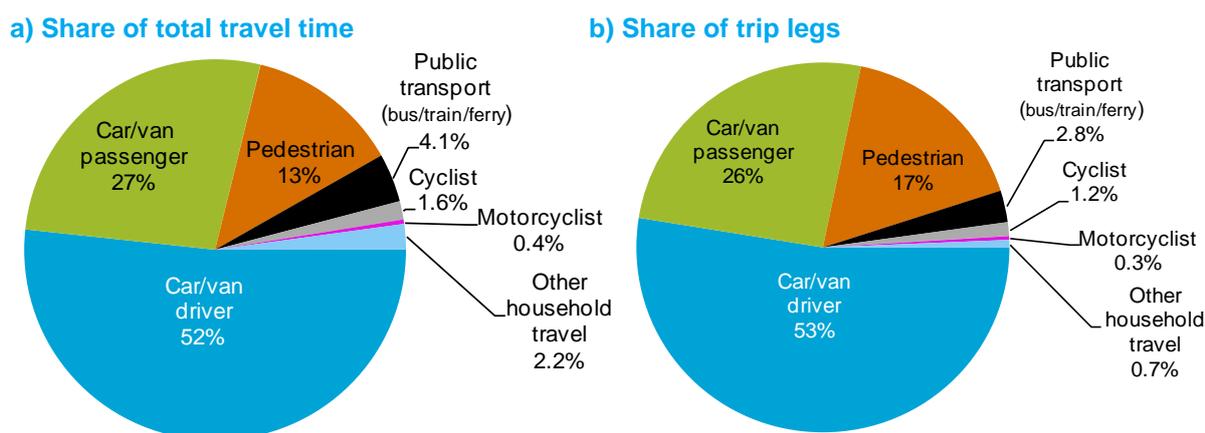


Figure 1 shows each travel mode's share of the total travel time and trip legs travelled. Public transport makes up 4 percent of total time travelled and 3 percent of all trip legs and total distance travelled. Table 1 shows the time, distance and number of trip legs travelled using each major mode of travel.

**Table 1: Travel mode share of time, distance and trip legs (2011 – 2014)**

Travel mode	Trips in sample	Million hours per year	Million km per year*	Million trip legs per year
<b>Driver</b> (in private car/van)	95,557	820	30,374	3,093
<b>Passenger</b> (in private car/van)	47,718	430	17,104	1,513
Pedestrian	29,874	205	807	987
<b>Public transport</b> (bus/train/ferry)	<b>4,309</b>	<b>66</b>	<b>1,521</b>	<b>163</b>
Bicycle	2,797	25	313	71
Motorcycle	594	6	250	19
Other household modes	1,196	35	528	38
Total	182,045	1,586	50,897	5,885

\*Note: Distance estimates are available for road and rail-based modes only.

Totals may not add exactly due to rounding.

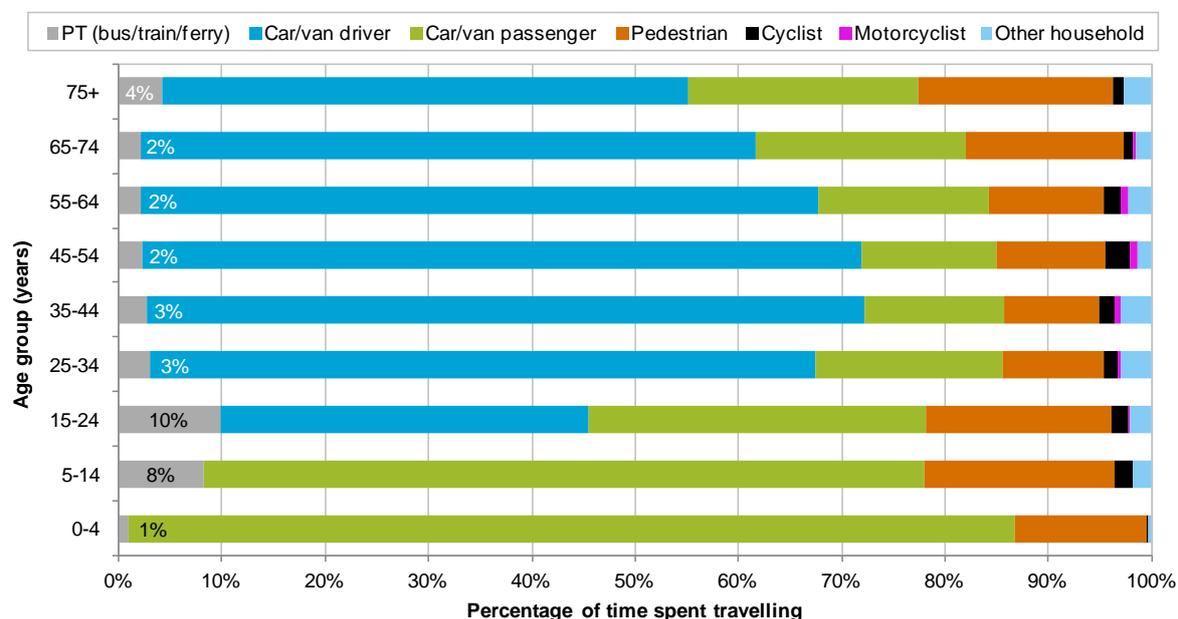
Overall people in New Zealand spend 66 million hours per year using public transport, covering at least 1,521 million km per year (excluding ferry travel), and making 163 million **trip legs** per year.

### Travel mode share by age group

Figure 2 shows travel patterns for various age groups. The greatest use of public transport is by school-aged children and those 15–24 years. Those 5–14 years old spend the greatest percentage of their time travelling by public transport, at 10%. People aged 25–74 were the most car-dependent,

with 3% or less of their total travel time spent on public transport. The travel mode share pattern for distance travelled is similar to that shown here for time travelled.

**Figure 2: Proportion of total travel time by mode of travel**



**Table 2: Public transport travel per person per year by age (2011 – 2014).**

Age	Time per person (hours per person per year)	Distance per person (km per person per year)
0 – 4	2 h 17 m	41
5 – 14	23 h 21 m	515
15 – 24	35 h 12 m	795
25 – 34	11 h 37 m	264
35 – 44	11 h 18 m	277
45 – 54	9 h 50 m	248
55 – 64	8 h 26 m	235
65 – 74	6 h 52 m	160
75 +	8 h 40 m	188
Total	14 h 41 m	341

Table 2 shows public transport use per head of population by age group. 5–14 year olds and 15–24 year olds spend more time on public transport and travel further than any other age group. They spend more than twice as much time and travel more than twice as far as those of other ages on average. However even 15–24 year olds spend on average only 40 minutes per week travelling by public transport.

## Who uses public transport?

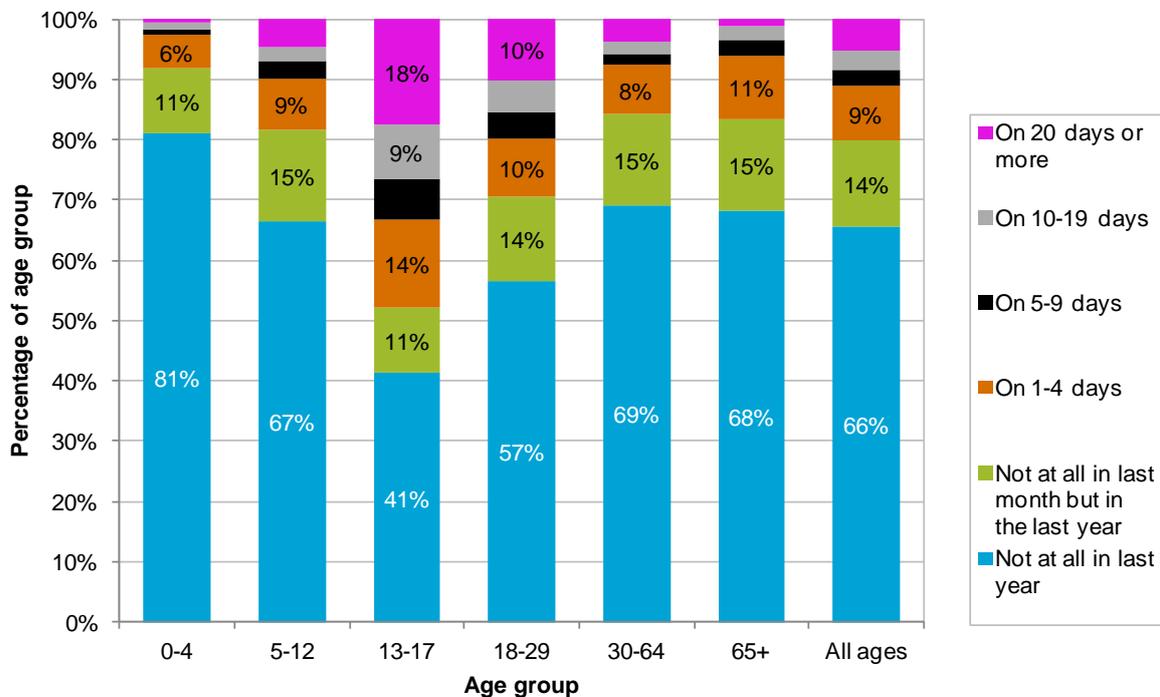
The two-day sampling period of the survey means that someone may use public transport regularly, but not do so in the sampled period. People were also asked if they had used public transport to travel in their local area at all in the past year. If they had, they were then asked how often they had used it in the last month. Table 3 shows the results.

**Table 3: Public transport usage in the past year**

	Sample size	Population in category <sup>3</sup>	Percentage
Not at all in last year	17,032	2,922,600	66%
Not at all in last month but in the last year	3,534	635,200	14%
On 1 – 4 days	2,080	404,500	9%
On 5 – 9 days	610	122,600	3%
On 10 – 19 days	655	138,300	3%
On 20 days or more	940	236,200	5%
<b>Total</b>	<b>24,851</b>	<b>4,459,300</b>	<b>100%</b>

Two thirds (66 percent) said that they hadn't used public transport in their local area in the past year. 14 percent had used it in the last year, but not in the last month and 20 percent had used it in the last month.

**Figure 3: Public transport usage in the past year by age group**



<sup>3</sup> May not exactly add to Total due to rounding.

Figure 3 shows public transport use in the last year by age group. 13–17 year olds (i.e. those of secondary school age) were most likely to have used public transport in the last month (48 percent), followed by those 18–29 years old (30 percent). 18 percent of 13–17 year olds had used public transport on 20 days or more in the last month, implying it was used regularly on weekdays. Women were slightly more likely to have used public transport in the last year (37 percent of women, compared to 32 percent of men). Otherwise, there is little difference in the patterns of frequency of usage.

Table 4 shows the difference in public transport use between major urban areas and smaller towns and rural areas. The differences will reflect the relative availability of public transport and the convenience of public transport us over other modes of travel.

**Table 4: Public transport usage in the past year by residential area type**

	% of population			
	Main Urban Area	Secondary Urban Area	Rural	Total
<i>People sampled</i>	17,273	1,705	5,873	24,851
Used public transport...				
Not at all in last year	58%	83%	84%	66%
Not at all in last month but in the last year	17%	9%	8%	14%
On 1 – 4 days	11%	5%	4%	9%
On 5 – 9 days	3%	2%	1%	3%
On 10 – 19 days	4%	1%	1%	3%
On 20 days or more	7%	1%	2%	5%
Total	100%	100%	100%	100%

42 percent of those in **main urban areas** (30,000 people or more) used local public transport in the past year, whereas only 16 percent of those in rural areas used it. Usage in secondary urban areas is closer to that observed in rural areas than in main urban areas.

**Table 5: Public transport usage in the past year by urban area**

	Urban area					
	Auckland	Hamilton	Wellington (including Kapiti)	Christchurch	Dunedin	National
<i>People sampled</i>	4,892	1,213	1,864	3,697	959	24,851
Used public transport...						
Not at all in last year	52%	71%	34%	63%	61%	66%
Not at all in last month but in the last year	17%	13%	25%	17%	18%	14%
On 1 – 4 days	12%	9%	19%	10%	11%	9%
On 5 – 9 days	4%	3%	5%	3%	4%	3%
On 10 – 19 days	4%	2%	7%	4%	4%	3%
On 20 days or more	10%	2%	10%	3%	2%	5%
Total	100%	100%	100%	100%	100%	100%

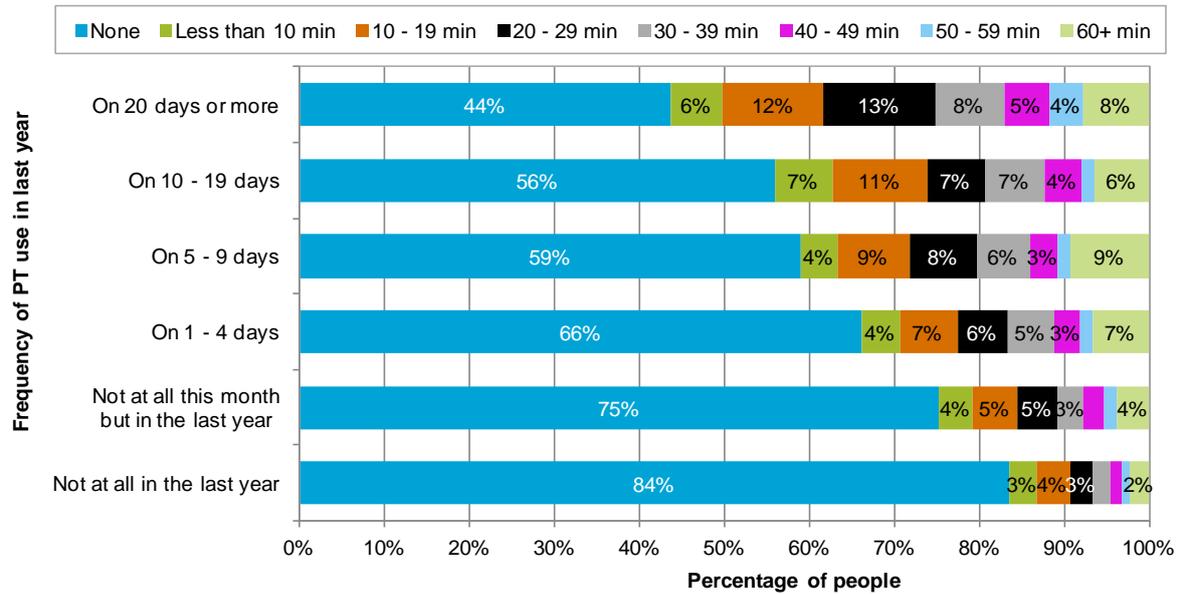
People from the greater Wellington area were most likely to have used public transport, with two thirds of them having used it in the past year (Table 5). Of the five main centres, people from Hamilton were least likely to have used public transport in the last year (29 percent in the last year).

### **Walking by public transport users**

If we look at how much time people spent walking as a function of their public transport use (Figure 4), those who used public transport most often (on 20 days or more in the last month) were most likely to report some time walking per day (56%). 12% of the regular public transport users walked for 10–19 minutes per day, 13% 20–29 minutes per day and 8% walked for over an hour a day. Of those who had not used public transport in the last year, 84% reported no walking on New Zealand roads on a surveyed day.

This correlation may reflect a conscious choice on the part of users, because walking is often necessary to access public transport, or both could result from lack of access to a vehicle.

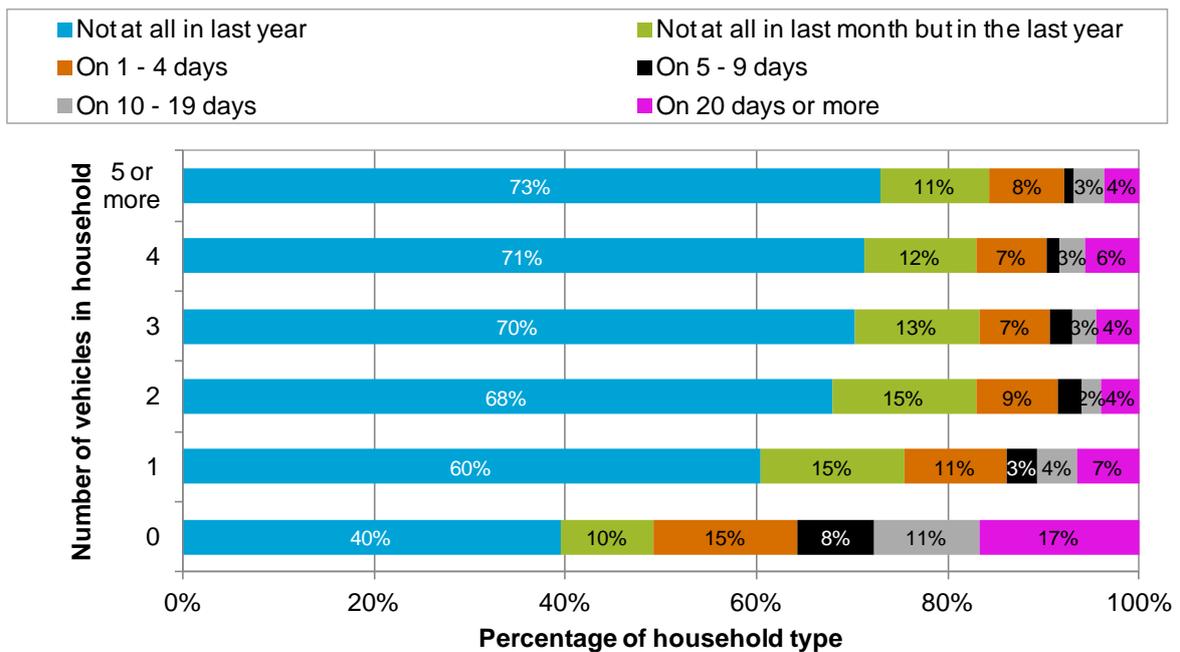
**Figure 4: Time spent walking per day by frequency of public transport use (2011 – 2014).**



**Household characteristics**

Comparing public transport use with the number of motor vehicles in the household (Figure 5), 60% of people in households with no vehicle used public transport in the last year. For households with two or more cars, this drops to 32% of people or less using it in the last year.

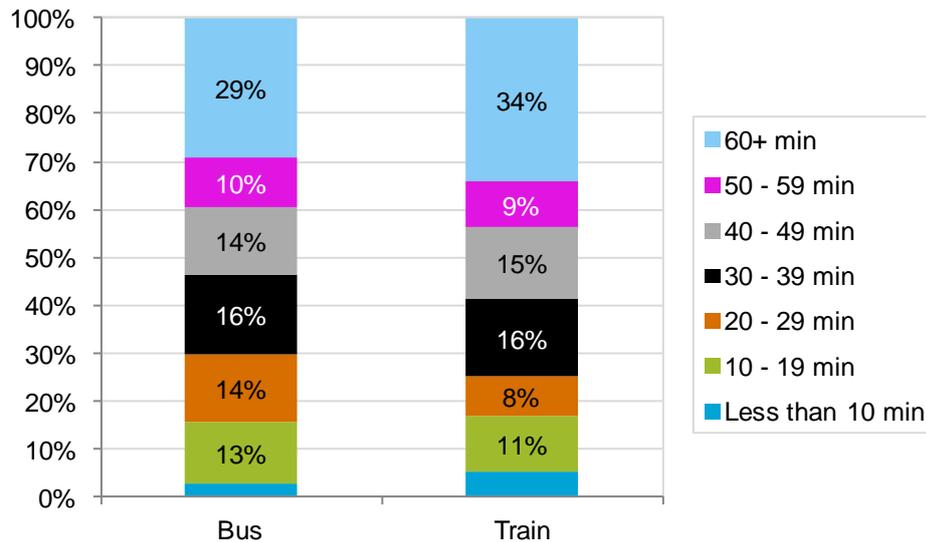
**Figure 5: Frequency of public transport use by number of vehicles in household (2011 – 2014).**



## Characteristics of public transport use

Train travel tends to be longer, with a median trip leg duration of 25 minutes covering approximately 16 kilometres, compared to the bus median trip leg duration of 20 minutes but covering only 5.9 kilometres.

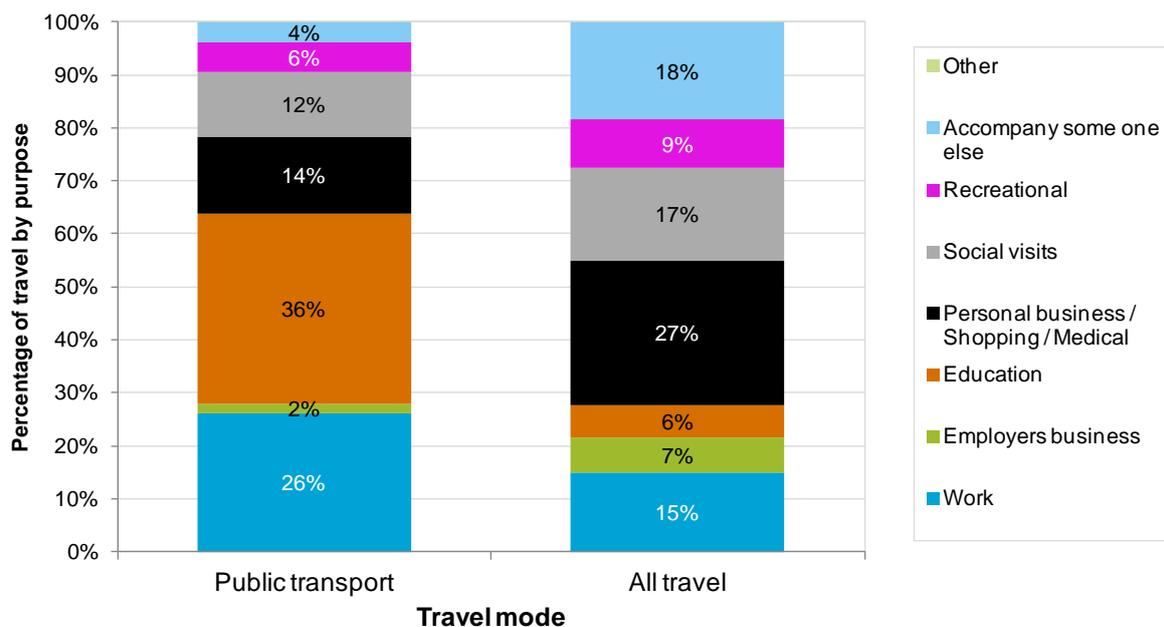
**Figure 6: Time spent travelling by public transport per day (2011 – 2014).**



## Reasons for travel

People's **purpose/destination** for travelling when using public transport follows a quite different pattern compared to their reasons for travelling in general (Figure 7).

**Figure 7: Percentage of travel by purpose**



Excluding travel home, 62 percent of travel by public transport is commuting to education or work: 36 percent to get to a place of education and 26 percent to get to work. This compares to 6 percent for education and 15 percent to get to work for all travel.

This reflects the age group breakdown, with those of secondary school age being most likely to have used public transport (Figure 3).

### Trends in public transport usage

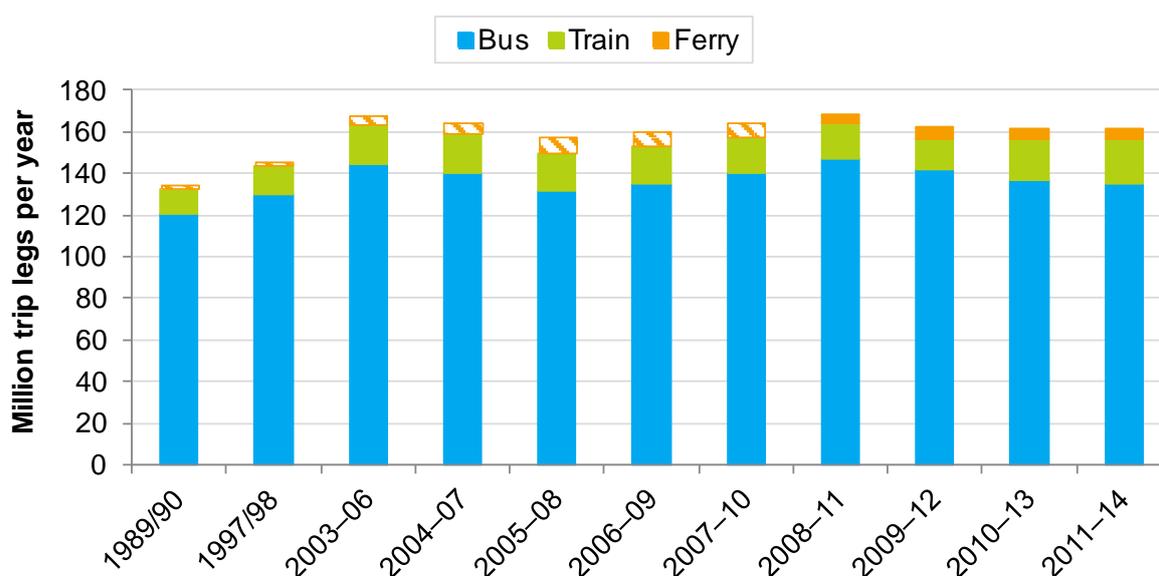
Public transport usage over time is shown in Table 6 and Figure 8. Over the last few years, there has been a small drop in bus usage and a small increase in train usage resulting in total public transport usage remaining static.

**Table 6: Million public transport trip legs per year (ages 5+)**

Million trip legs per year	1989 / 90	1997 / 98	2003 -06	2004 -07	2005 -08	2006 -09	2007 -10	2008 -11	2009 -12	2010 -13	2011 -14
Public transport											
- bus	121	130	144	140	132	135	140	147	142	137	136
- train	12	14	19	19	18	18	18	17	15	19	21
- ferry	*	*	*	*	*	*	*	4	5	6	5
Total Public Transport	135	146	168	165	158	160	164	168	162	162	161

\*sample too small

**Figure 8: Public transport trips**



Note: bars are shaded where sample sizes are too small for good estimates

## **Glossary**

<b>Driver</b>	In this fact sheet includes all drivers of private light 4 wheeled vehicles such as cars, utes, vans, SUVs.
<b>Light four-wheeled vehicle</b>	Includes cars, vans, utes and SUVs. Excludes trucks, trailers, motorcycles, buses and tractors. Taxis are also excluded.
<b>Passenger</b>	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.
<b>Professional driver</b>	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.
<b>Public transport (PT)</b>	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'.
<b>SUV</b>	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.
<b>Travel</b>	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.
<b>Travel mode</b>	The method of travel. Includes vehicle driver, vehicle passenger, pedestrian, cyclist, motorcycle rider or passenger, bus or train passenger, ferry or aeroplane passenger.
<b>Trip distance</b>	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.
<b>Trip leg</b>	A single leg of a journey, with no stops or changes in travel mode. For

**Trip purposes / destinations**

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.

**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.