



Overseas driver crashes 2017

ISBN: 978-0-478-31000-0

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Enquires relating to crash statistics may be directed to the Ministry of Transport, PO Box 3175, Wellington, or by email on info@transport.govt.nz. For more information about road safety, visit the Ministry of Transport website at www.transport.govt.nz.

A selection of fact sheets is available via the research section of the Ministry of Transport website.

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Overseas licence holders in crashes – Summary statistics

- ▶ In 2016 overseas drivers (those with an overseas drivers licence) were involved in 24 fatal traffic crashes, 114 serious injury crashes and 506 minor injury crashes. In comparison, in total in New Zealand in 2016 there were 286 fatal crashes, 2,099 serious injury crashes and 7,583 minor injury crashes.
- ▶ Over the five years from 2012-2016, 6.2 percent of fatal and injury crashes involved an overseas driver. Over the same period, 4.1 percent of all drivers involved in crashes were overseas drivers¹.

Status of drivers

- ▶ About three-quarters of overseas drivers in crashes (77 percent) were short-term visitors to New Zealand, 13 percent were overseas students and 10 percent were migrants. (Visitor status was not recorded for about 40 percent of overseas drivers).

Regional variation

- ▶ The proportion of crashes involving an overseas driver varies due to regional differences in the size of the visitor and immigrant populations and their driving patterns. In some popular South Island tourist areas, crashes involving an overseas driver made up a quarter or more of all road crashes.

Breakdown by road

- ▶ Over half (59 percent) of overseas driver crashes were on the open road but the pattern varied between visitor types and regions.
- ▶ For the West Coast and Southland regions about 90 percent of the crashes involving an overseas driver were on the open road. The comparable figure for Wellington and Auckland was about a third.
- ▶ The majority (68 percent) of short-term visitor crashes were on the open road, with two thirds of those being on state highways. For new migrants and students the pattern was similar to New Zealand drivers, with about 40 percent of crashes on the open road and less than 15 percent of urban crashes on state highways.

Factors contributing to crashes

- ▶ In about a third of crashes where an overseas driver was at fault², one of the factors that contributed to the crash was the driver failing to adjust to New Zealand rules or conditions. This was 42 percent for fatal crashes. The other factors that contributed to crashes of overseas drivers tended to be the same as those for New Zealanders, such as the driver losing control or failing to give way or stop.
- ▶ Failing to keep left was a contributing factor for 4 percent of New Zealand drivers in crashes. This rose to 8 percent for overseas drivers from countries that drive on the right and 6 percent for overseas drivers from countries that drive on the left. For fatal crashes this rose to 32 percent for overseas drivers and 20 percent for New Zealand drivers.

¹ Unless stated otherwise, statistics refer to the 2012-2016 time period.

² The determination of fault for a crash is based on crash movements and crash cause factors assigned in the Crash Analysis System. It is not based on legal liability or court conviction. See terminology section.

- ▶ For drivers involved in crashes, rental vehicle use was much higher for overseas drivers (36 percent) than for other drivers (1 percent). Overseas drivers made up about two-thirds (66 percent) of rental vehicle drivers in fatal and injury crashes.
- ▶ The use of rental vehicles was not uniform around the country. Rental vehicle drivers made up about three-quarters of overseas drivers in crashes in the West Coast (78 percent) and Southland regions (69 percent). The lowest proportion of overseas drivers involved in crashes in rental vehicles was in Wellington (22 percent), Taranaki (17 percent) and Auckland (9 percent).

Seasonal variation

- ▶ There was a strong seasonal variation in crashes for overseas drivers compared to New Zealand drivers. Half of all visitor crashes occurred in the four months from December to March. This seasonal variation largely aligns with visitor arrival trends, with over half of short-term visitors coming to New Zealand between November and March.

Top six countries

- ▶ The top six countries in terms of the number of overseas drivers involved in crashes were Australia, China, Germany, India, the UK and the USA. Combined, these six countries contributed over half (56 percent) of the overseas drivers in crashes. These countries contributed almost three quarters of the international arrivals in 2016.
- ▶ The relative number of crashes involving drivers from these six countries changed markedly over the last 12 years. In 2016, the largest increase in crashes involving overseas drivers was for China, with Chinese licence holders involved in more crashes than Australian and German licence holders. This was similar to changing trends in visitor arrivals from these countries. The numbers of visitors from China has increased by about 370 percent since 2005.
- ▶ The mix of visitors, students and migrants was quite different for drivers from these six countries, as was the age/sex profile, the use of rental vehicles and the regions and roads they crashed on.

Introduction

In this crash fact sheet we present information on the crash involvement of people driving on an overseas licence and how this has changed over time.

The information here is limited to drivers. Overseas drivers are identified in the NZ Transport Agency's Crash Analysis System (CAS) by their licence status. Visitor status information is not collected for passengers, cyclists, pedestrians or other road users injured in road crashes.

To provide enough crashes for the detailed breakdowns shown in this document, we have combined:

- ▶ crash data for the 5 years, 2012-2016 (unless otherwise stated)
- ▶ all fatal, serious and minor injury crashes (Appendix 1 shows the numbers of fatal, serious and minor injury crashes separately).

Crash data for 2016 was extracted from CAS on 20 June 2017.

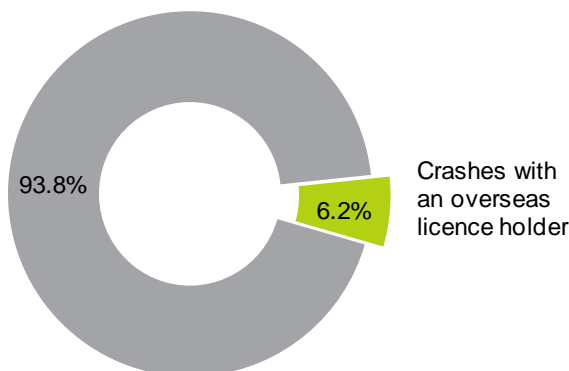
A person can drive on an appropriate overseas licence or international permit for up to 12 months in New Zealand (from when they last entered New Zealand), however they must convert it to a New Zealand licence if they wish to drive after this time. While some information is gathered on whether the driver on an overseas licence is a short-term visitor, student, or migrant, this is not always known.

Overview

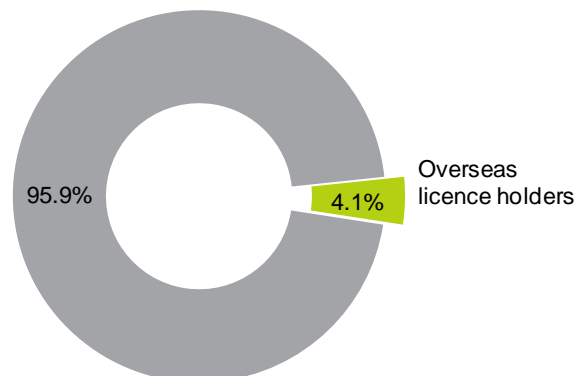
In 2016 overseas drivers (those with an overseas drivers licence) were involved in 24 fatal traffic crashes, 114 serious injury crashes and 506 minor injury crashes. Of these crashes, the overseas driver was at fault³ in 19 of the fatal crashes, 84 of the serious injury crashes and 378 of the minor injury crashes, resulting in 23 deaths, 120 serious injuries and 559 minor injuries.

Over the 5 years, 2012-2016, 6.2 percent of all fatal and injury crashes involved an overseas licence holder. Over the same time period, 4.1 percent of all drivers involved in crashes were overseas licence holders.

Crashes with overseas licence holders as a percentage of all crashes



Overseas licence holders as a percentage of all drivers involved in crashes



³ The determination of fault for a crash is based on crash movements and crash cause factors assigned in the Crash Analysis System. It is not based on legal liability or court conviction. See terminology section.

Time series

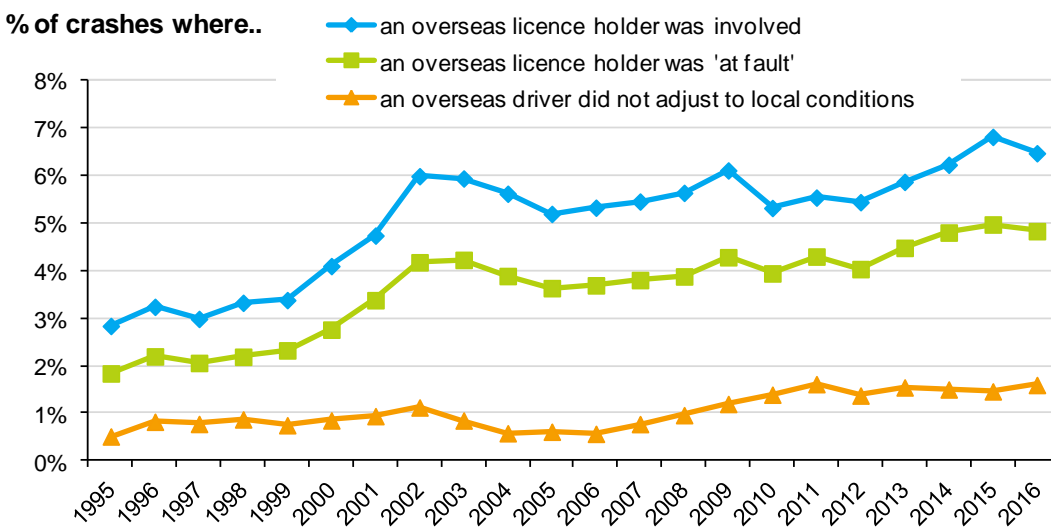
Not all overseas drivers involved in crashes are at fault, and only a minority of those at-fault drivers crashed because they failed to adapt to New Zealand driving conditions (for instance, driving on the wrong side of the road or not understanding give way rules). Most overseas drivers crash for the same reasons as New Zealand drivers.

The three lines in the graphs below show the proportion of crashes where:

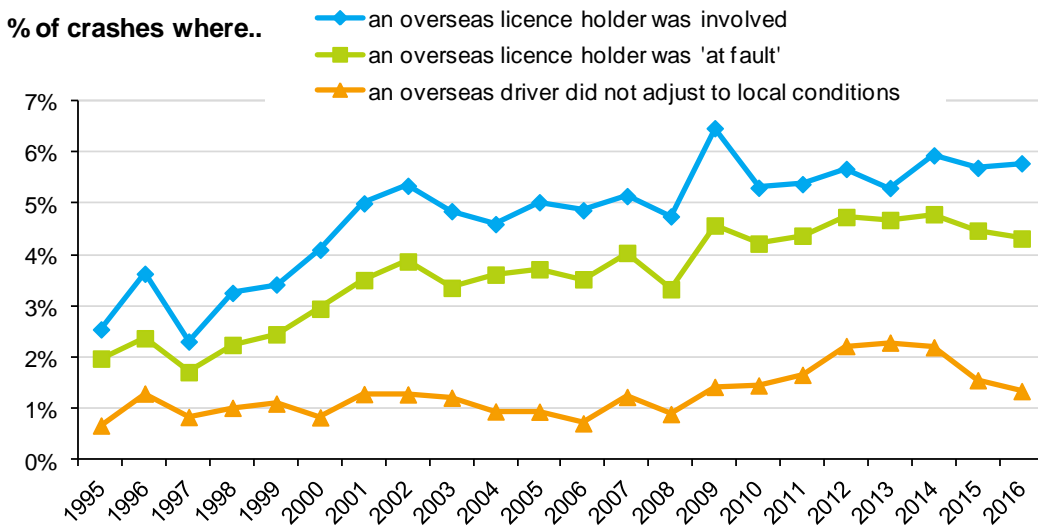
- ▶ an overseas driver was involved
- ▶ an overseas driver was at fault
- ▶ an overseas driver failed to adapt to New Zealand driving conditions.

The top graph includes all fatal, serious and minor injury crashes, while the bottom graph is limited to the smaller number of fatal and serious injury crashes.

Percent of fatal and injury crashes that involve an overseas licence holder



Percent of fatal and serious injury crashes that involve an overseas licence holder



The long-term trends for fatal and serious injury crashes are very similar to the trends for all crashes. The small upturn in 2015 for minor injury crashes (upper graph) was not apparent for fatal and serious injury crashes (lower graph).

Appendix 1 shows the numbers of crashes that involve overseas licence holders, broken down by crash severity.

To provide a large enough number of crashes for the detailed breakdowns shown in the remainder of this document, all fatal, serious and minor injury crashes are used. Fatal and serious injury crashes make up just over one-fifth of these crashes.

Regional variations

While nationally only about 6 percent of crashes involve an overseas driver, at a local level the proportion and scale can vary markedly due to regional differences in the size of the visitor and immigrant populations and their driving patterns. The following table lists the top 20 local bodies, firstly based on the number of crashes involving overseas drivers (left) and then by the proportion of crashes in that region that involve an overseas driver. In the South Island tourist areas, crashes involving an overseas driver are a significant proportion of the crashes, but the largest number of crashes involving overseas drivers is in Auckland, the biggest population centre.

Top 20 local bodies by fatal and injury crashes involving overseas drivers (2012–2016)

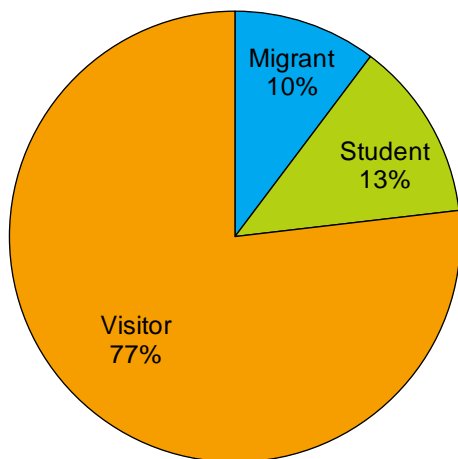
Top 20 by number of crashes involving overseas drivers			Top 20 by proportion of crashes involving overseas drivers		
Local body	Crashes involving overseas drivers	Percentage of crashes that involved an overseas driver	Local body	Crashes involving overseas drivers	Percentage of crashes that involved an overseas driver
Auckland	713	5%	Westland	72	40%
Christchurch	241	6%	Queenstown-Lakes	146	31%
Southland	150	23%	Mackenzie	27	30%
Queenstown-Lakes	146	31%	Southland	150	23%
Far North	90	10%	Kaikoura	20	19%
Dunedin	74	4%	Central Otago	46	17%
Westland	72	40%	Buller	31	15%
Tasman	65	14%	Hurunui	45	15%
Waikato	60	5%	Tasman	65	14%
Waitaki	59	14%	Waitaki	59	14%
Selwyn	56	11%	Thames-Coromandel	48	13%
Rotorua	54	8%	Grey	23	12%
Taupo	53	10%	Waitomo	25	11%
Marlborough	51	10%	Selwyn	56	11%
Thames-Coromandel	48	13%	Marlborough	51	10%
Western Bay Of Plenty	47	8%	Clutha	45	10%
Central Otago	46	17%	Ruapehu	27	10%
Hurunui	45	15%	Ashburton	31	10%
Clutha	45	10%	Far North	90	10%
Hamilton	42	3%	Taupo	53	10%

The South Island has 43 percent of all the crashes that involve overseas drivers. By comparison the South Island has just over a quarter (27 percent) of all New Zealand road crashes.

Types of drivers

How many are tourists?

Note: 42% of overseas licence holders are not categorised on crash forms and are not included on this chart



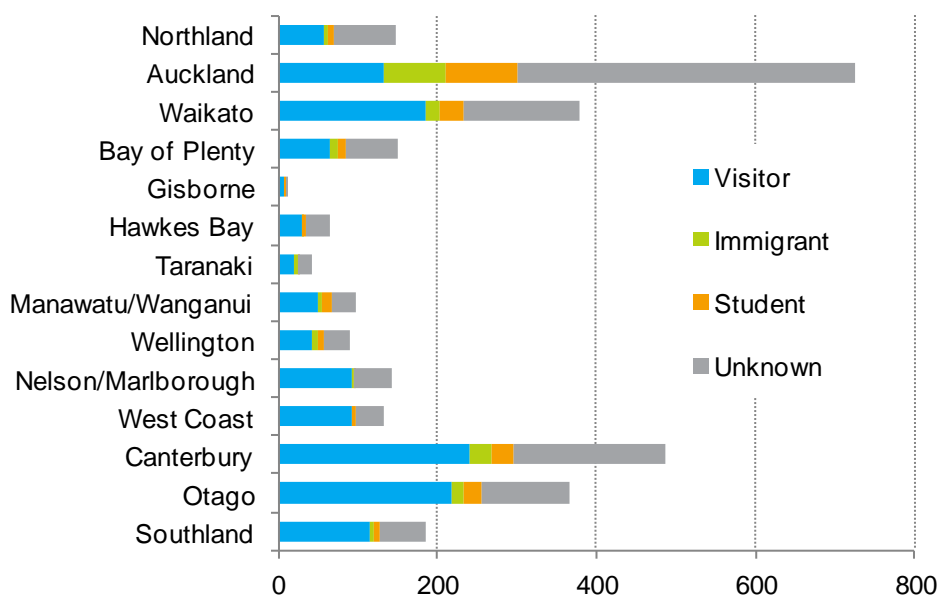
While there is some information on whether overseas licence holders are short-term visitors, students, or migrants, this is not always known.

At a national level, visitor status is not recorded for 42 percent of overseas licence holders in crashes.

For the drivers that have visitor status recorded about three-quarters (77 percent) are short-term visitors to New Zealand, 13 percent are overseas students and 10 percent are migrants.

The following graph shows that, for overseas licence holders involved in crashes, the mix of visitors, students and migrants varies across the country.

Overseas drivers involved in crashes – by region and visitor status



Crash reports from Auckland are least likely to identify whether or not an overseas licence holder is a short-term visitor – for Auckland, visitor status is unknown for 59 percent of overseas licence holders in crashes.

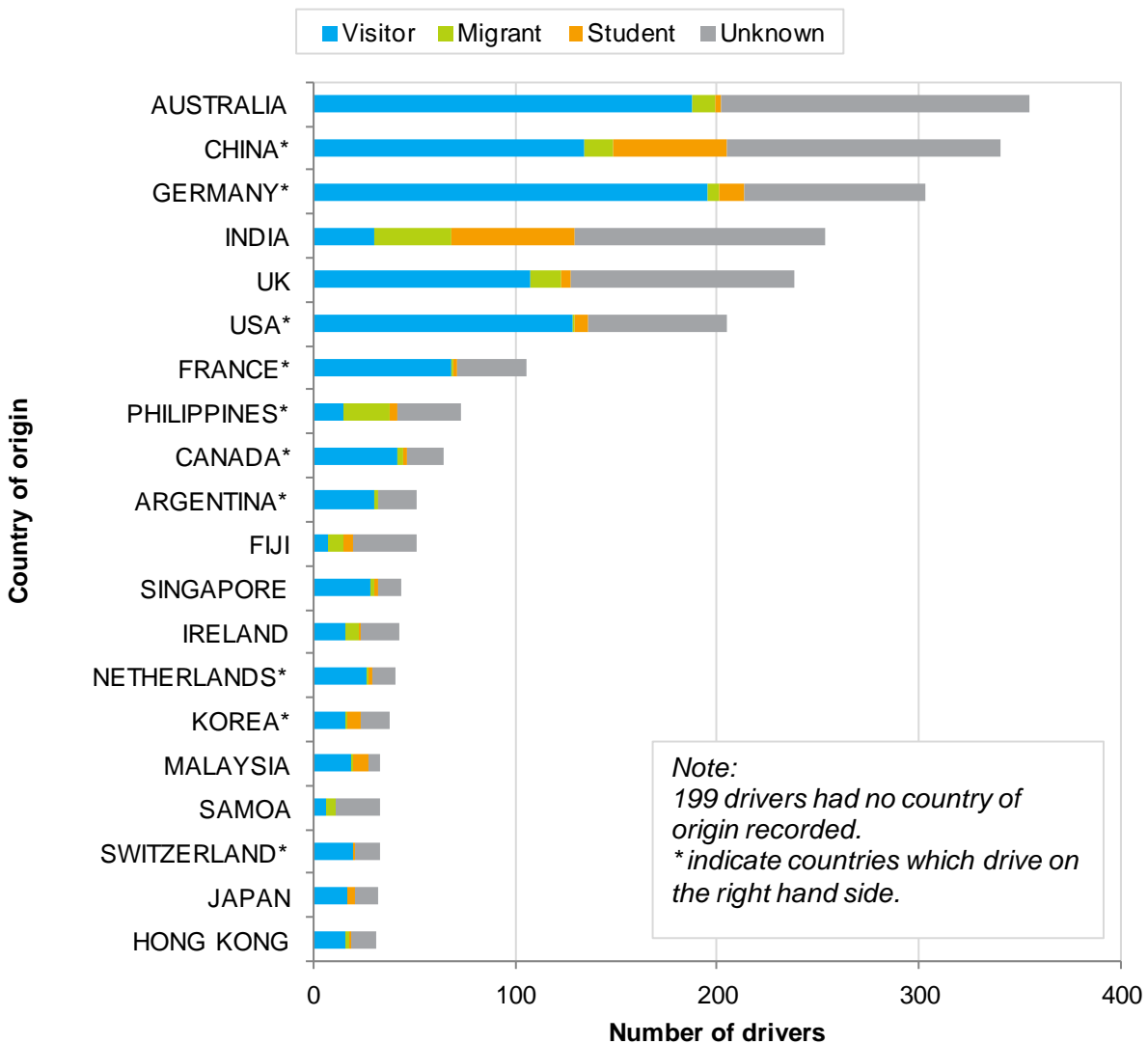
For those overseas licence holders in crashes where the visitor status is recorded:

- ▶ Auckland has the highest proportion of new migrants (25 percent) and also the highest proportion of overseas students (30 percent). Less than half (45 percent) are short-term visitors.

- ▶ The South Island has the highest proportion of short-term visitors (87 percent), ranging from 81 percent in Canterbury to 95 percent on the West Coast. The South Island has 43 percent of all the crashes that involve overseas licence holders and 56 percent of visitor crashes.

The graph below shows the top 20 countries for drivers involved in fatal or injury crashes, and indicates which of these countries drive on the right hand side of the road. Ten of the countries shown drive on the left hand side of the road⁴.

Country of origin of overseas licence holders involved in fatal or injury crashes



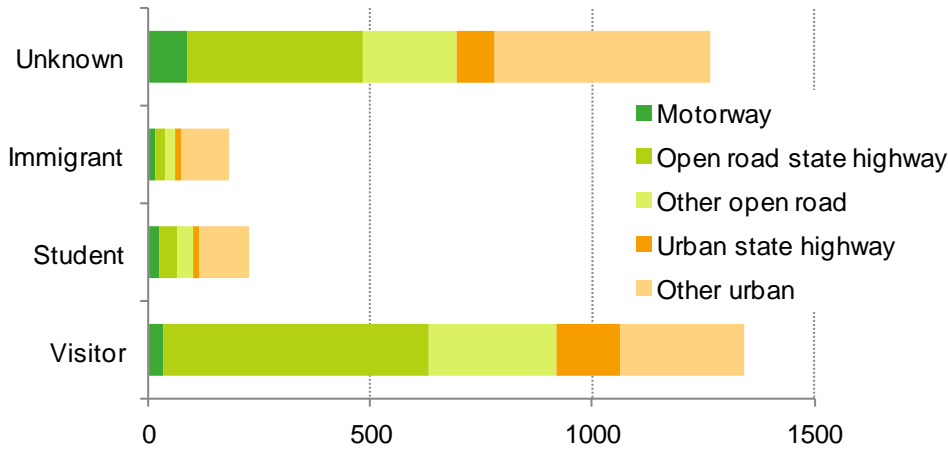
See the 'Selected countries' section for more information about the top 6 countries on this graph. This section shows how the relative contribution of these 6 countries to road crashes has changed over the last few years.

⁴ Samoa changed from driving on the right to driving on the left in 2009.

Road types and types of crashes

Over half (59 percent) of overseas licence holder crashes are on the open road (speed limit 80km/h or higher). The pattern is different for visitors and new migrants. The majority (68 percent) of visitor crashes are on the open road, with two thirds of those being on state highways. For visitors about a third of their urban crashes are on state highways, the major through routes in urban areas. For new migrants and students the pattern is much more similar to New Zealand licence holders with about 40 percent of crashes on the open road and less than 15 percent of urban crashes on state highways.

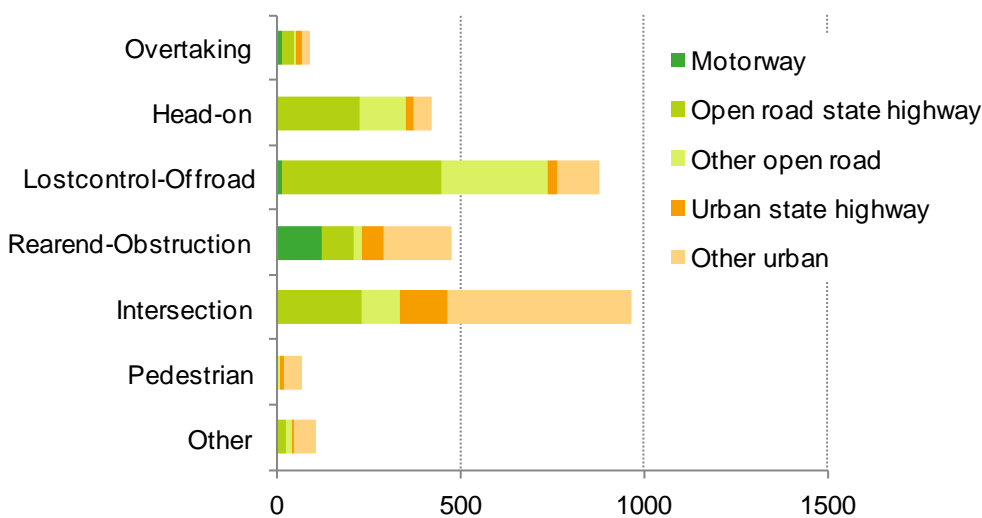
Overseas drivers involved in crashes – by road type and visitor status



The two biggest crash types for overseas licence holders are intersection collisions (32 percent) and single vehicle 'loss of control or run off road' crashes (29 percent). These are followed by 'rear end' or 'collision with obstruction' crashes (16 percent) and head-on crashes (14 percent).

Over 80 percent of single vehicle 'loss of control or run off road' and head-on crashes occur on the open road. About two-thirds of intersection crashes are on urban roads.

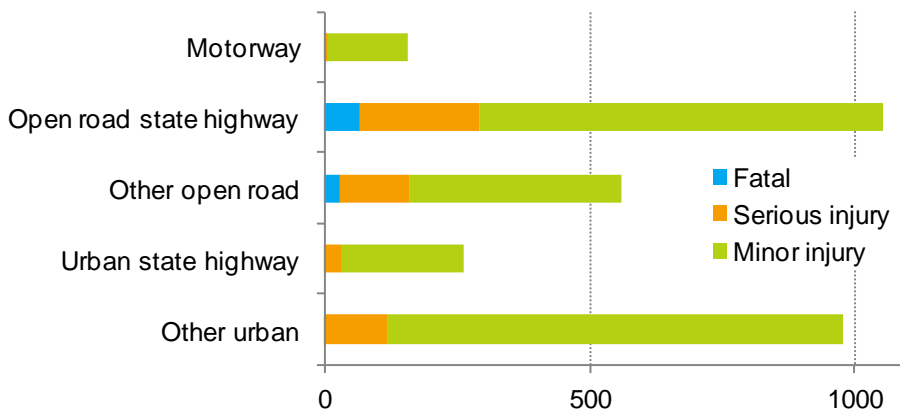
Overseas drivers involved in crashes – by road type and crash type



Crashes that occur in the higher speed environment of the open road are more likely to result in death or serious injury than urban crashes. For overseas drivers over 90 percent of fatal crashes are on the open road; 68 percent on open road state highways and 28 percent on other open roads.

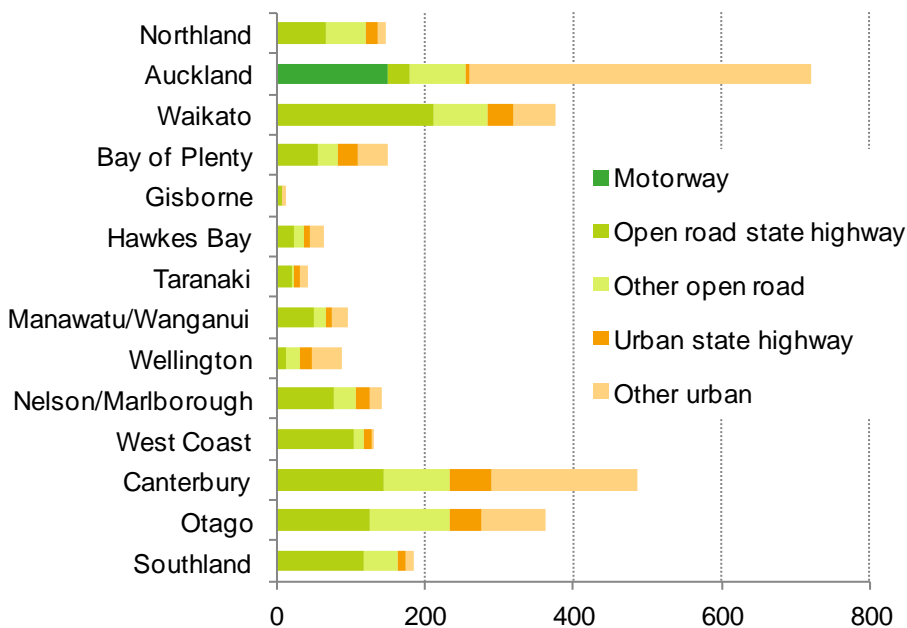
Over two thirds (71 percent) of serious injury crashes and just over a half (55 percent) of minor injury crashes are on the open road.

Overseas drivers involved in crashes – by road type and crash severity



At a national level over half (59 percent) of overseas licence holder crashes are on the open road but the pattern varies markedly between regions. For the West Coast and Southland regions nearly 90 percent of crashes are on the open road. The comparable figure for Wellington and Auckland is about a third.

Overseas drivers involved in crashes – by road type and region



Causes

The table below shows the driver factors that contributed to crashes for at-fault drivers. The numbers for New Zealand drivers are shown for comparison to overseas licence holders. The percentage of at-fault drivers with each contributing factor is shown in the following graph.

Driver factors contributing to crashes for at-fault drivers 2012-2016

Driver factors contributing to the crash	Fatal and injury crashes		Fatal crashes	
	Overseas licence holders	NZ drivers	Overseas licence holders	NZ drivers
Driver lost control	746	11821	21	469
Overseas driver failed to adjust to NZ rules/conditions	682	50	34	2
Failed to give way or stop	630	9959	19	125
Did not see other party	397	7983	8	116
Inattention or attention diverted	351	8931	11	158
Too fast for conditions	321	7215	13	368
Too far left	268	3486	6	112
Driver tired or fell asleep	171	2689	13	161
Failed to keep left	157	1801	26	228
Inexperienced	118	3078	1	75
Following too close	104	3308	0	9
Alcohol/drugs	102	5573	8	367
Misjudged speed, distance etc	78	1518	0	24
Forbidden movements	77	220	7	12
Suddenly braked or turned	75	1212	2	23
Overtaking	34	769	3	48
Incorrect use of vehicle controls	25	681	0	8
Illness/Disability	14	1695	1	69
Wrong lane or turned from wrong position	13	249	0	3
Failed to signal in time	7	84	0	0
Showing off / racing	2	295	0	17
Total number of at-fault drivers in crashes	2208	41323	81	1148
Number from countries that drive on the right	1218		49	

Note: There can be more than one factor for each driver.

About a third of at-fault overseas licence holders failed to adjust to New Zealand rules or conditions. This rises to 42 percent for fatal crashes. 'Failing to adjust' includes such things as driving on the wrong side of the road and not understanding give way rules.

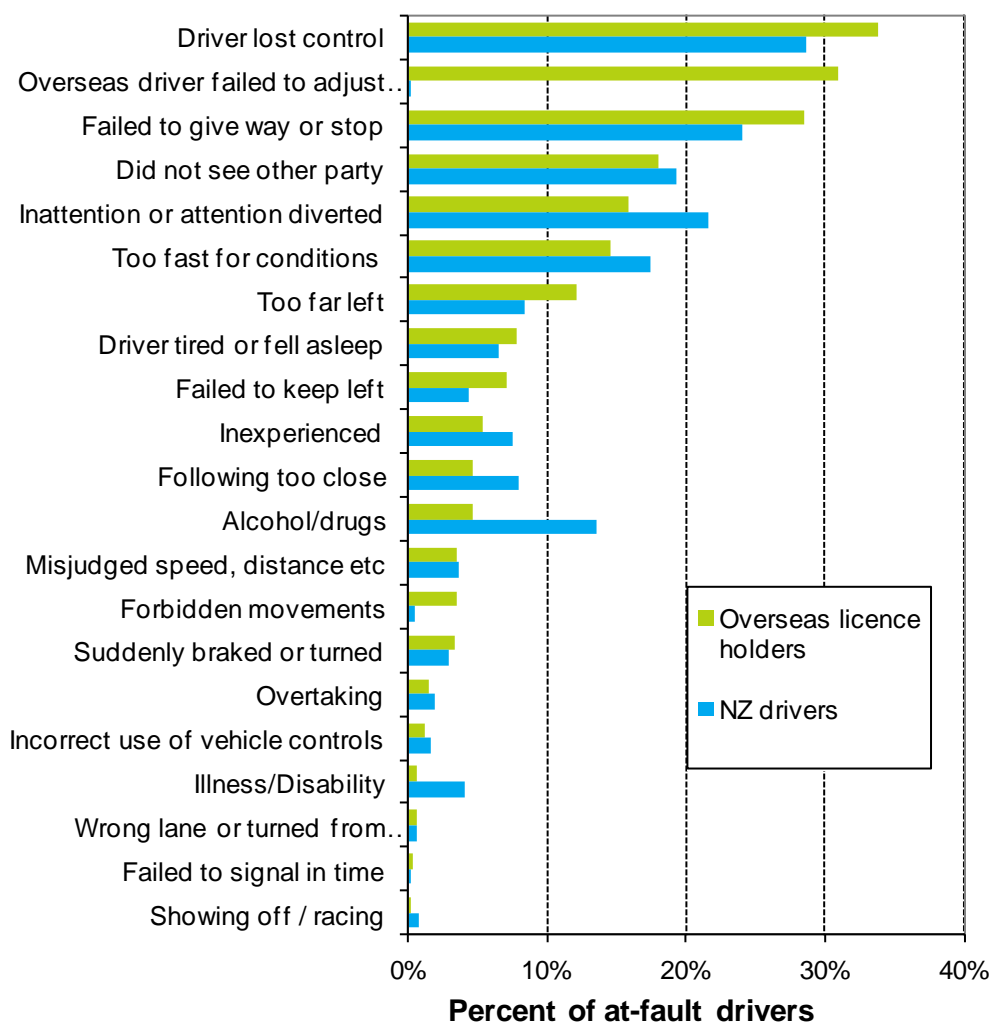
Overseas licence holders (8 percent for drivers from countries that drive on the right and 6 percent for countries that drive on the left) are more likely to fail to keep left than New Zealand drivers (4 percent). For fatal crashes these rise to 32 percent for overseas licence holders and 20 percent for New Zealand drivers.

Just over half (55 percent) the overseas licence holders at-fault in crashes are from countries that drive on the right.

There can be many reasons for being on the wrong side of the road including driving too fast, inattention and fatigue. The number of New Zealand at-fault drivers in crashes who fail to keep left is about 11 times the number of overseas licence holders who fail to keep left.

Another major difference is that overseas licence holders (5 percent) are less likely to be affected by alcohol and drugs than New Zealand drivers (14 percent). For fatal crashes these rise to 10 percent and 32 percent respectively.

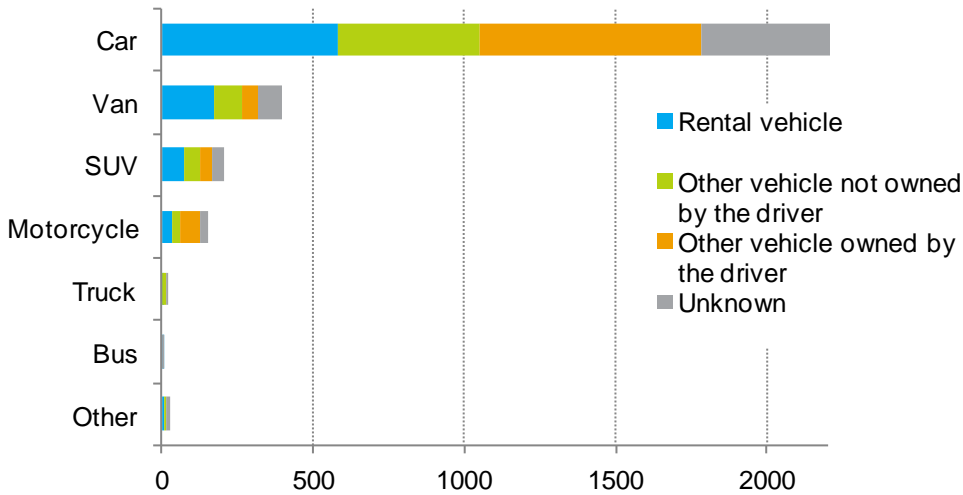
Factors contributing to crashes



Vehicles

Most overseas drivers involved in crashes (73 percent) are driving a car. About 13 percent are driving vans. The ‘Other’ category on the graph below are mainly bigger campervans.

Overseas drivers involved in crashes – rental vehicles by vehicle type



Overall, where the vehicle ownership is recorded on the crash report, just over a third (36 percent) of overseas drivers are driving rental vehicles. This varies by vehicle type. About a third of cars and motorbikes are rentals compared to over a half of vans.

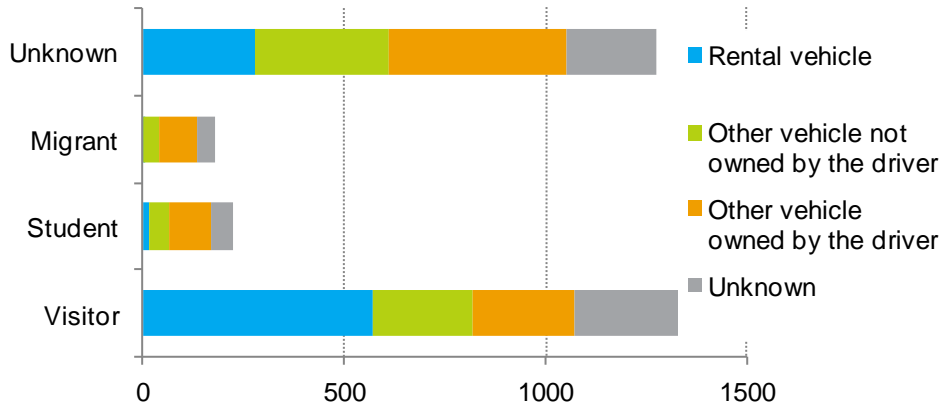
For drivers involved in crashes, rental vehicle use by overseas licence holders (36 percent) is much higher than for other drivers (1 percent). So overseas licence holders make up about two thirds (66 percent) of rental vehicle drivers in fatal and injury crashes.

As can be seen in the table and graph below, visitors are much more likely to be driving rental vehicles (over a half – 54 percent) than students (10 percent) or new migrants (2 percent).

Vehicle ownership

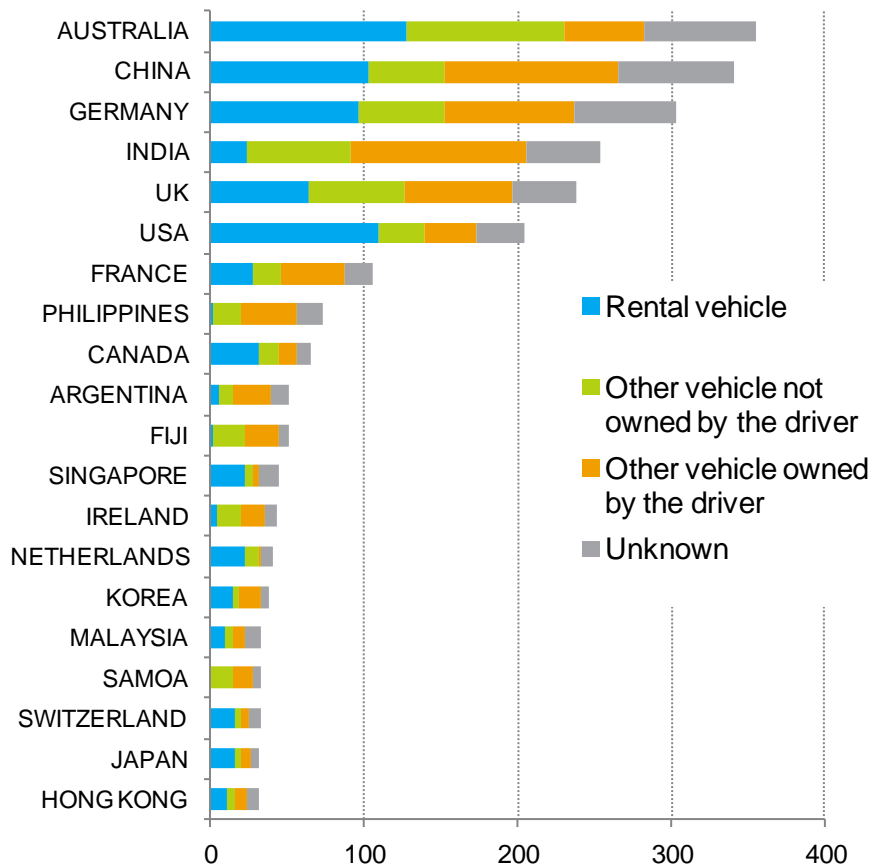
Type of overseas licence holder	Vehicle ownership (from Crash Analysis System)					Rental as a percent of known ownership
	Rental vehicle	Other vehicle not owned by the driver	Other vehicle owned by the driver	Unknown	Total	
Unknown	281	330	441	225	1277	27%
Migrant	3	40	92	45	180	2%
Student	17	50	103	56	226	10%
Visitor	573	246	251	278	1348	54%
Total	874	666	887	604	3031	36%

Overseas drivers involved in crashes – rental vehicles by visitor status



Rental vehicle use varies markedly by country of origin. For the six countries with the greatest number of drivers in crashes, the percentage of drivers in rental vehicles ranges from 12 percent, for drivers from India, to 64 percent, for drivers from the USA.

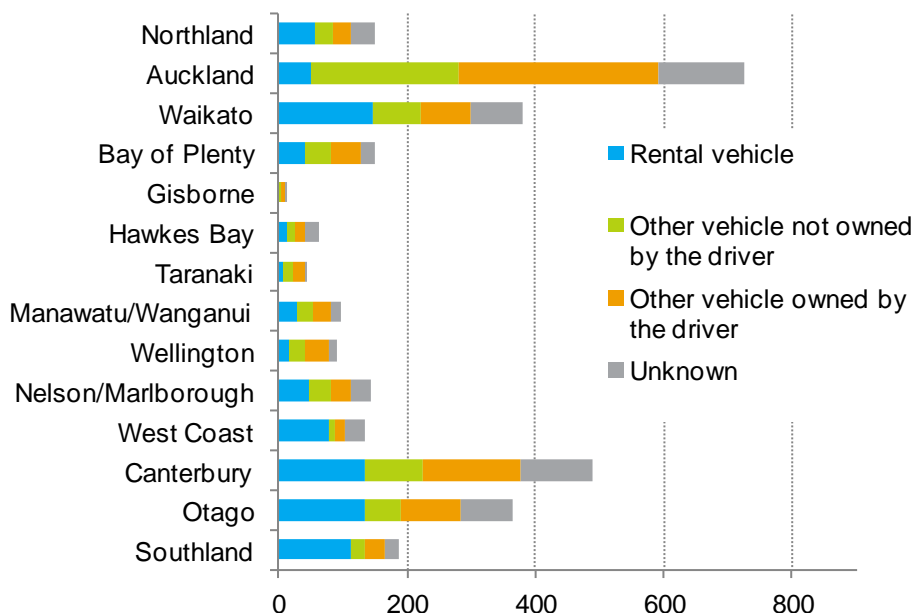
Overseas drivers involved in crashes – rental vehicles by country of origin



The use of rental vehicles is not uniform around the country. Over half (58 percent) of the overseas drivers that crash in rental vehicles are in the South Island.

Rental vehicle drivers make up about three-quarters of overseas licence holders in crashes in the West Coast (78 percent) and Southland regions (69 percent). The lowest proportion of overseas drivers in rental vehicles is in Wellington (22 percent), Taranaki (17 percent) and Auckland (9 percent).

Overseas drivers involved in crashes – rental vehicles by region



For overseas drivers, most rental vehicle crashes are on open road state highways (56 percent) and other open roads (21 percent). A further 10 percent occur on the urban sections of state highways that pass through built-up areas.

Half the overseas drivers that crash on state highways or other open roads are in rental vehicles. This compares to only 13 percent on motorways and other (non-state highway) urban roads.

Time of day

The following table and graph show the spread of crashes across the hours of the day for both New Zealand drivers and overseas licence holders.

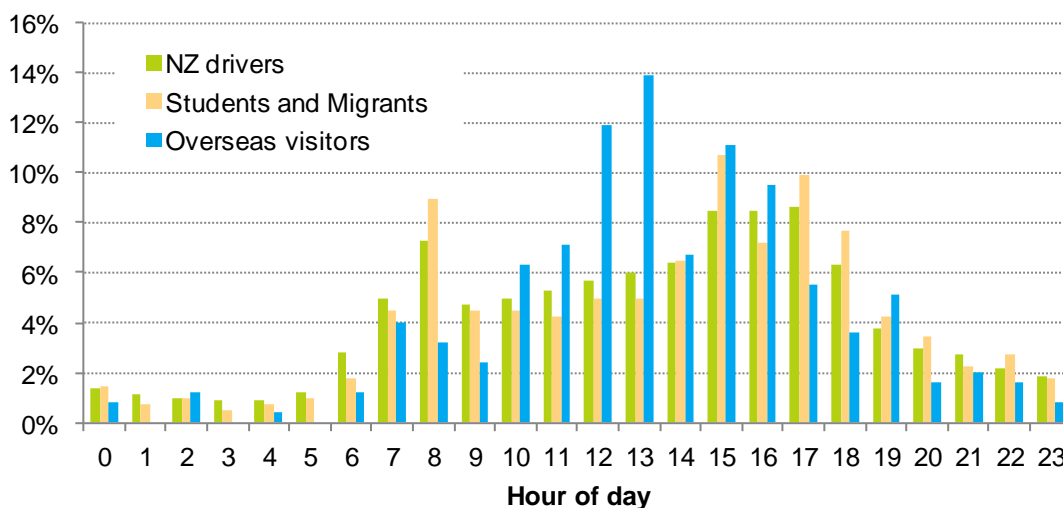
Crashes by time of day.

	Percent of all drivers in crashes				Percent of weekend crashes that are at night
	Day (0600-1759)	Evening (1800-2159)	Night (2200-0559)	Weekend	
NZ drivers	73%	16%	11%	30%	20%
Overseas drivers					
Visitors	79%	16%	4%	31%	7%
Students and migrants	72%	17%	10%	31%	21%

For visitors, 79 percent of crashes are during the day (6am to 6 pm) and only 4 percent are late night (10pm to 6am). This compares to 73 percent during the day and 11 percent at night for New Zealand drivers. For overseas students and new migrants 10 percent are at night.

The proportion of crashes that occur during the weekend (Friday evening to early morning Monday) is similar (about 30 percent) for all groups. The proportion of weekend crashes that occur late night is much lower for visitors (7 percent) than for students/migrants (21 percent) and New Zealand drivers (20 percent).

Time of day for overseas licence holder crashes

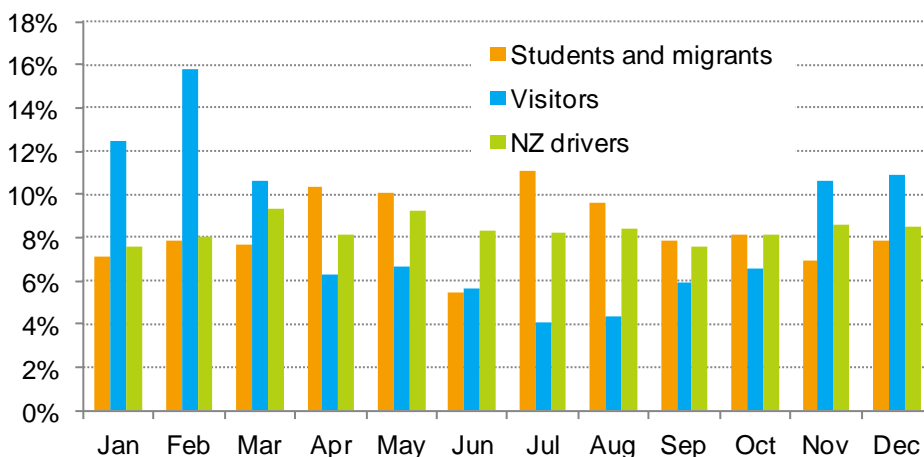


For visitors the number of crashes peaks in early to mid-afternoon. For overseas students and new migrants the pattern is more similar to New Zealand drivers with morning and afternoon commuter peaks.

Seasonal variation

There is a much stronger seasonal variation in crashes for overseas licence holders than for New Zealand drivers. This is particularly so for short-term visitors who have about twice as many crashes in the 3 months January to March as in the 3 months May to July. Half of all visitor crashes occur in the 4 months from December to March.

Crashes by month

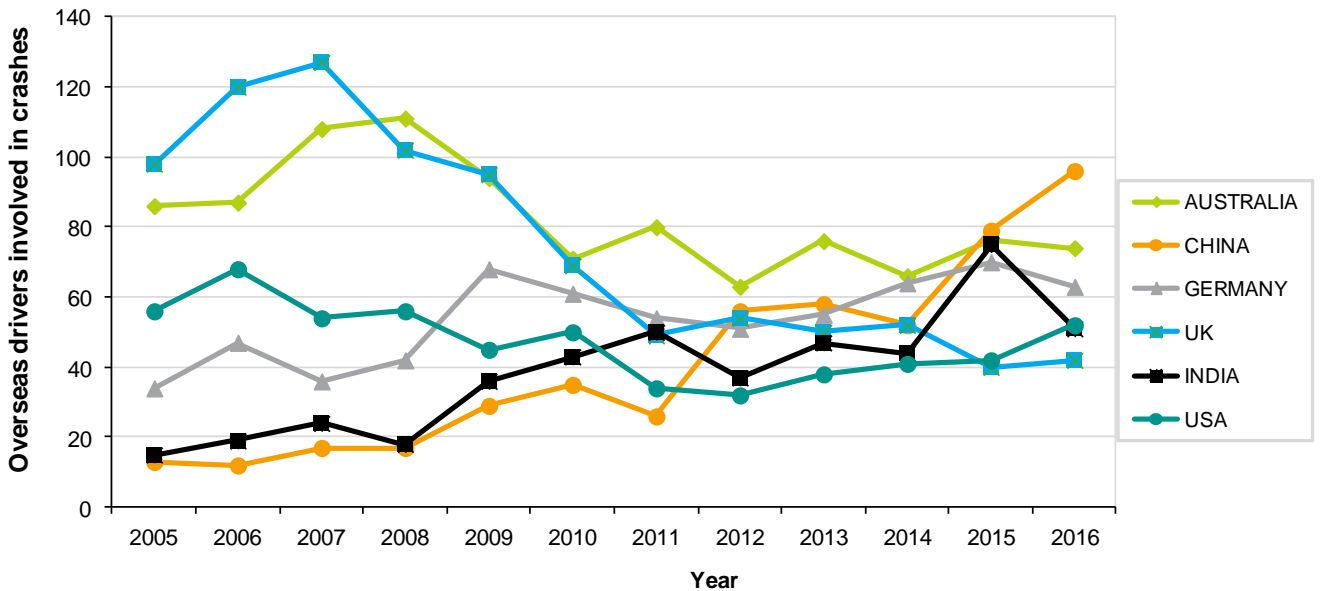


Selected countries

This section looks in more detail at the top 6 countries, each of which contribute more than 5 percent of the overseas drivers involved in crashes (2012-2016). Combined, these 6 countries contribute over half (56 percent) of the overseas drivers in crashes.

The graph below shows the number of drivers involved in crashes each year from 2005, the first year for which information on country of origin for overseas licence holders in crashes is available.

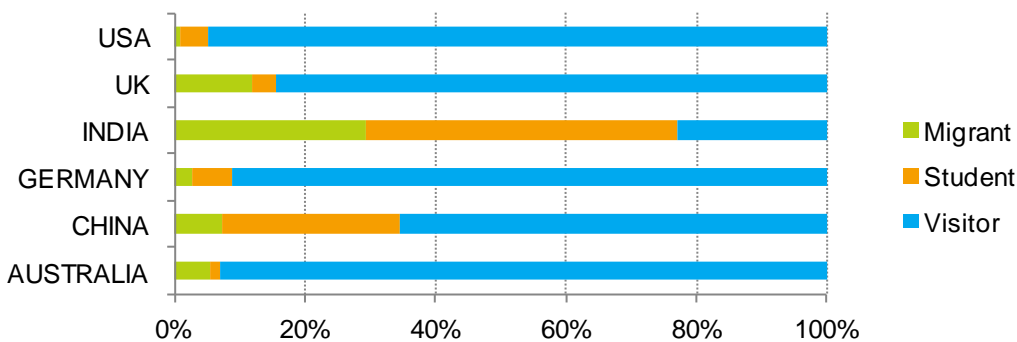
Overseas licence holders involved in crashes – selected countries



The relative importance of the selected countries has changed markedly over the last 12 years. For example, while the number of drivers from the UK has more than halved, the number from China has increased to about 7 times what it was in 2005. In the last year, the biggest increase was for China, with Chinese licence holders now involved in more crashes than Australian and German licence holders.

The mix of visitors, students and migrants is quite different for these countries. For the USA, Germany and Australia over 90 percent are visitors while for India, the number of visitors and migrants are about equal and nearly half are students. These results should be treated as indicative as the percentage of drivers with no visitor status recorded on the crash report varies from 29 percent to about a half (see the table below).

Visitor status (where status is recorded)

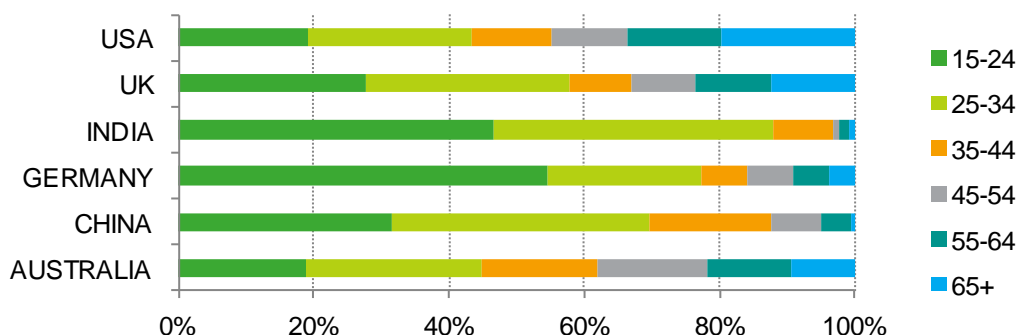


Overseas drivers in crashes by visitor status 2012-2016

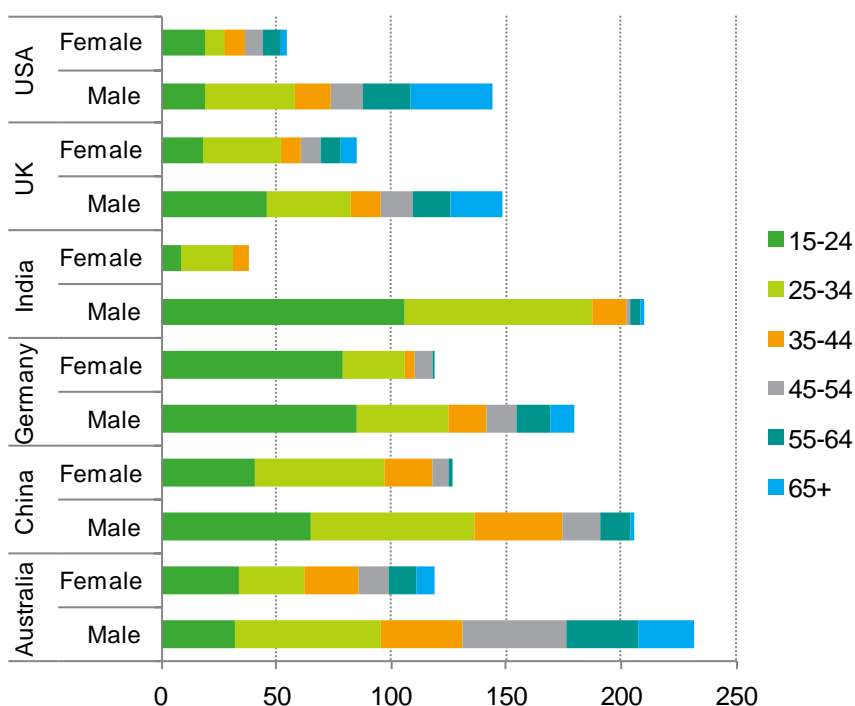
Country	Visitor status					% with unknown status
	Unknown	Migrant	Student	Visitor	Total	
Australia	153	11	3	188	355	43%
China	136	15	56	134	341	40%
Germany	89	6	13	195	303	29%
India	124	38	62	30	254	49%
UK	110	15	5	108	238	46%
USA	69	1	6	129	205	34%

There are also marked differences in the age profiles for drivers from these 6 countries. For India, with the biggest proportion of students, nearly half (47 percent) are under 25 years old. For India, nearly 90 percent are under 35 years old. German licence holders in crashes are also young, over half (54 percent) are under 25 and over three-quarters are under 35. For the other countries there is a more even spread across age groups.

Age profile of overseas drivers in crashes



Age and sex of overseas drivers in crashes



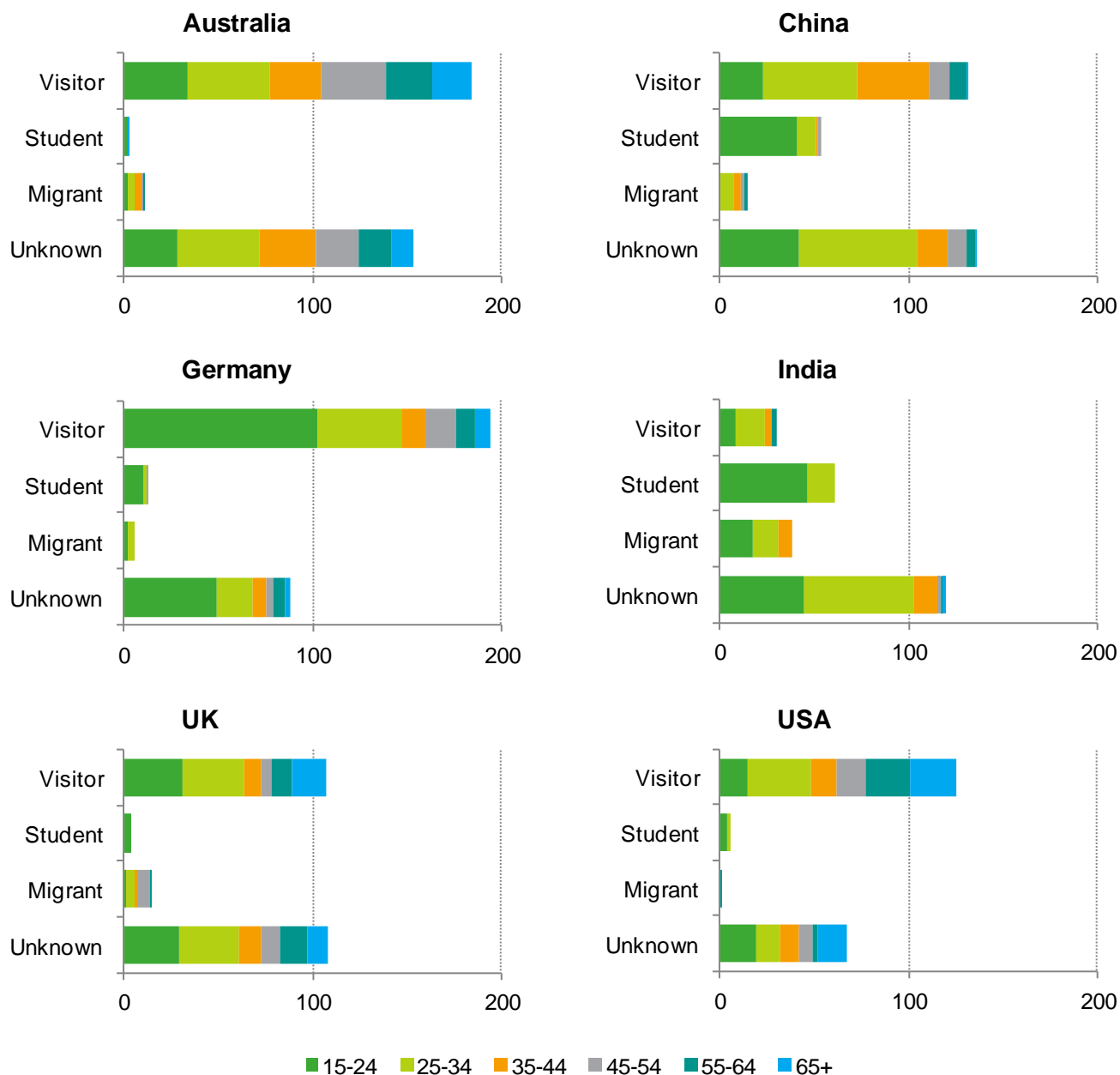
There are also marked differences in the male/female breakdown for drivers from these 6 countries.

The percentage of drivers that are female ranges from 15 percent for India to 40 percent for Germany. For other countries the percentages are; USA 28 percent, Australia 34 percent, UK 36 percent and China 38 percent.

Generally, the percentage of female drivers reduces with age. About half of the under 25 year old drivers from Germany (48 percent), the USA (50 percent) and Australia (52 percent) are female.

The following graphs show the age profiles broken down by visitor status.

Age profile by visitor status



Germany has the highest proportion of visitors (53 percent) under 25 years old. About three-quarters (76 percent) of German visitors are under 35.

India also has a high proportion of visitors (80 percent) under 35 years old. About two-thirds of those are over 25.

For both the UK (60 percent) and China (55 percent), over half the visitors in crashes are under 35.

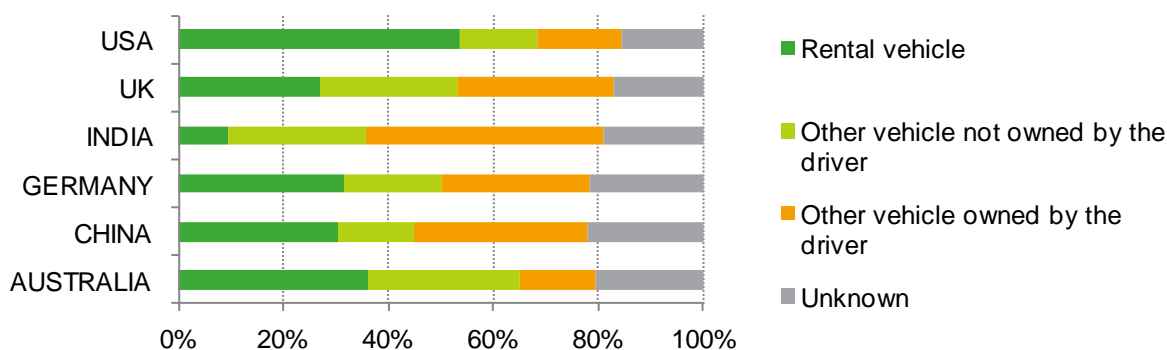
For Australia and the USA there is a more even spread of visitor numbers across all age groups, with about 40 percent or less under 35.

The table and graph below show that vehicle ownership and rental vehicle use varies markedly by country.

Vehicle ownership for overseas licence holders in crashes

Country	Vehicle ownership (from Crash Analysis System)					Rental as a percent of known ownership
	Rental vehicle	Other vehicle not owned by the driver	Other vehicle owned by the driver	Unknown	Total	
Australia	128	103	51	73	355	45%
China	103	50	113	75	341	39%
Germany	96	56	85	66	303	41%
India	24	67	115	48	254	12%
UK	64	63	70	41	238	32%
USA	110	30	33	32	205	64%

Vehicle ownership for drivers in crashes



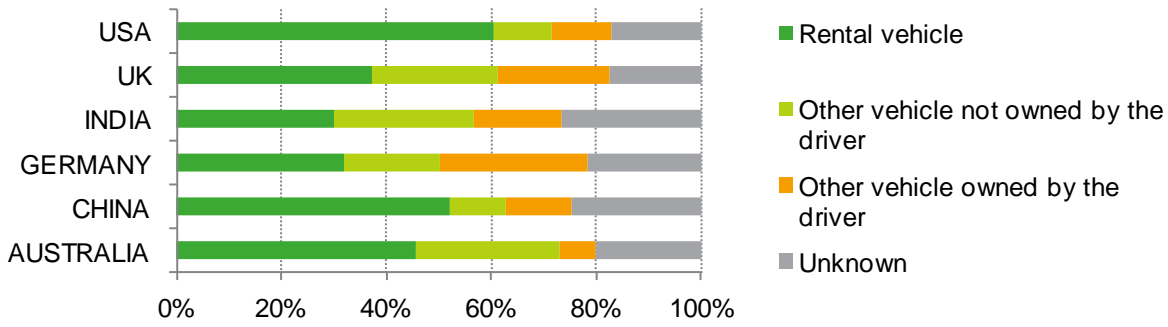
Based on the vehicles where ownership is recorded, drivers from the USA (64 percent) and Australia (45 percent) are much more likely to be driving a rental vehicle than drivers from the UK (32 percent) or India (12 percent). China (42 percent) and India (56 percent) have the highest proportion driving their own vehicle.

In an earlier section we saw that visitors are more likely than migrants or students to be driving rental vehicles. The following graph shows vehicle ownership for overseas licence holders who are identified as visitors. The variation between countries is not as great as when migrants and students were included.

Based on the vehicles where ownership is recorded; rental vehicle use ranges from nearly three-quarters for visitors from the USA (73 percent) down to less than half for visitors from the UK (45 percent), India (41 percent) and Germany (41 percent).

There are further differences between age groups within each country group. One example is for young German drivers. About half the German visitors in crashes are under 25 and only 15 percent of those are driving rental vehicles. Most are driving vehicles owned by the driver (55 percent) or some other private owner (29 percent), possibly another occupant of the vehicle.

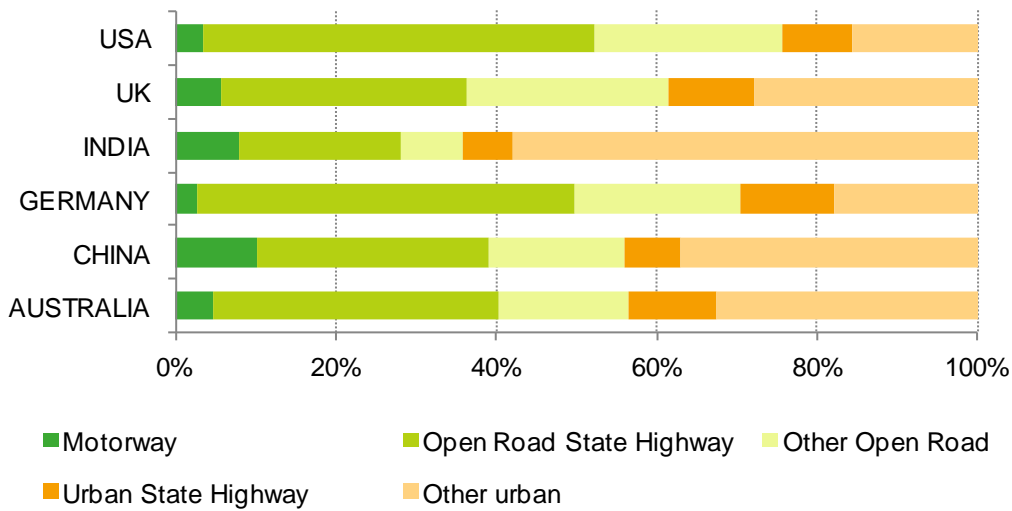
Vehicle ownership for 'visitors' in crashes



As can be seen in the graphs on the following page there is a large variation in the regional spread of crashes for drivers from the selected countries. The graphs show visitors and other overseas drivers separately. Drivers with unknown visitor status are included in the other category, along with students and migrants.

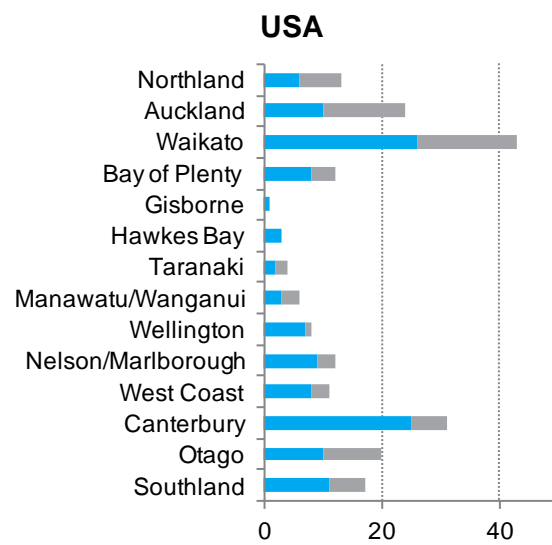
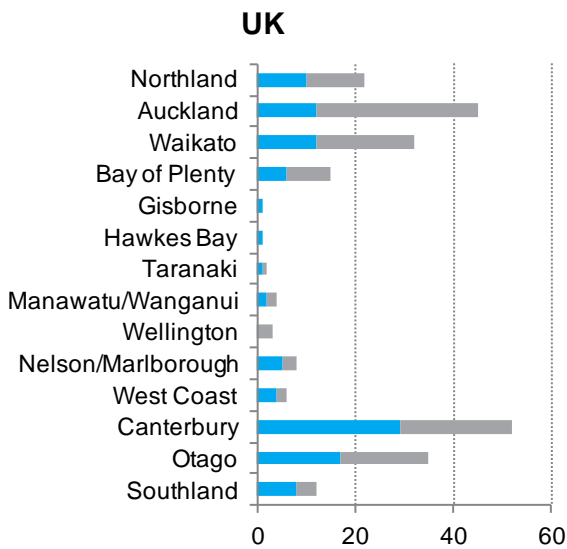
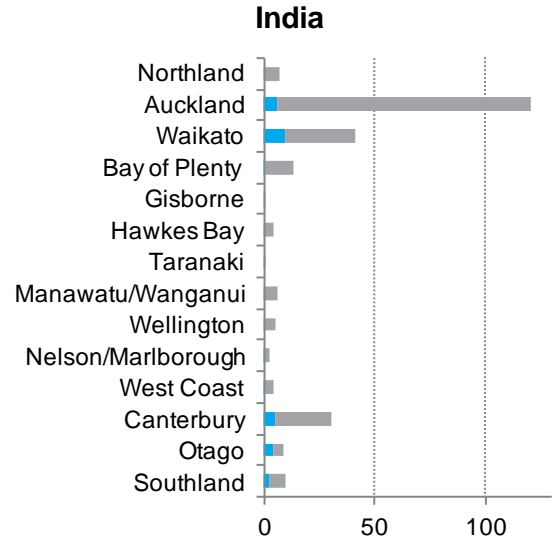
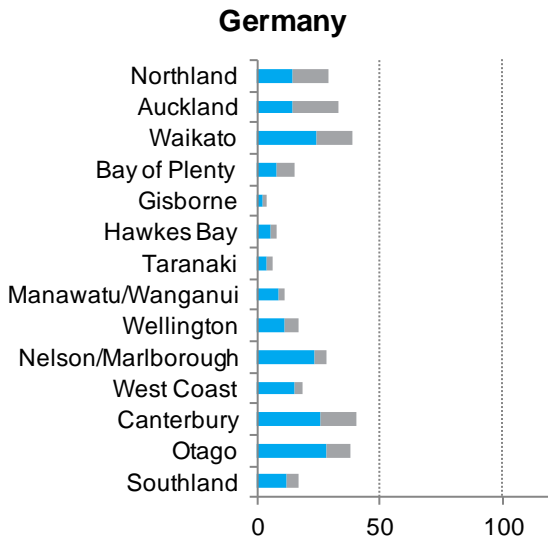
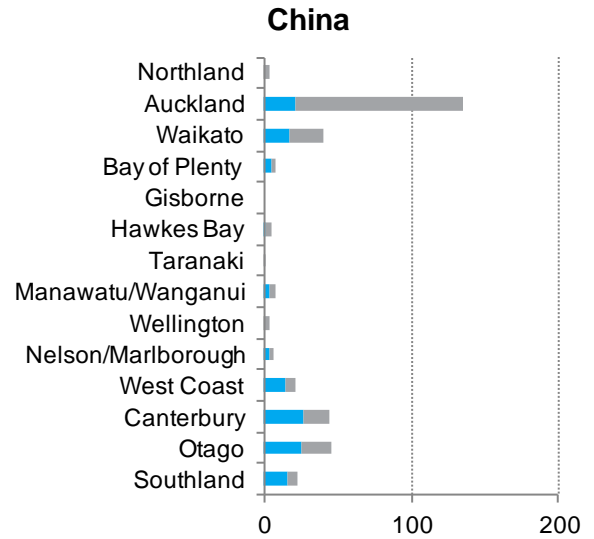
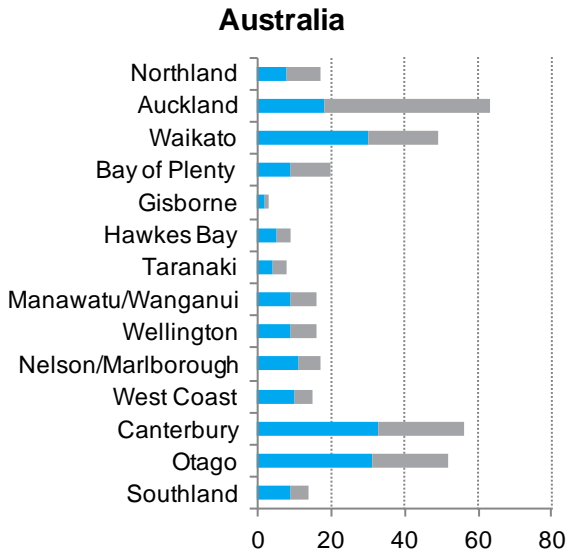
The different mixes of visitor status and regional spread of crashes mean that the mix of road types for crashes varies between the selected countries.

Overseas drivers involved in crashes – percent by road type (selected countries)



Well over half of crashes for drivers from the USA (72 percent), Germany (68 percent) and the UK (55 percent) occur on the open road, excluding motorways. This compares to 46 percent for drivers from China and 28 percent of drivers from India. Under 20 percent of crashes for USA and German licence holders occur on urban roads not on the state-highway system compared to 58 percent for Indian licence holders.

Regional spread of crashes for selected countries



■ Visitor ■ Other overseas

Note: different axes used for the country graphs to best display regional profiles.
 Drivers with unknown visitor status are included in the other category, along with students and migrants

Appendix 1

The tables in this appendix show time series of the numbers of:

- ▶ **crashes** involving overseas drivers
- ▶ **casualties** in those crashes
- ▶ overseas **drivers** in crashes.

Each table is broken down by crash severity.

In each case there are also separate tables for crashes where:

- ▶ an overseas driver was involved
- ▶ an overseas driver was at fault
- ▶ an overseas driver failed to adjust to NZ driving laws or conditions

Example

The following contrived example illustrates some of these categories:

Crash severity	Overseas drivers involved	Other drivers involved	Deaths	Description
Fatal	2 – not at fault	1 at fault	1	Crash 1 involved 3 vehicles, 2 driven by overseas drivers and 1 by a local driver. The local driver was at fault. One passenger with the local driver died.
Fatal	1 – at fault – and failed to adjust to NZ conditions	1 not at fault	2	Crash 2 involved 2 vehicles, 1 driven by an overseas driver from a country that drives on the right. He was on the wrong side of the road. Both drivers died in the head-on collision.
Fatal	1 – at fault	None	2	Crash 3 was a single vehicle crash in which the overseas driver was travelling too fast and went off the road. Both occupants of the car died.
Fatal X17	none	24	30	There were 17 other crashes that did not involve an overseas driver. 24 drivers were involved in these crashes and 30 people died.

Crashes: There were 20 fatal crashes.

- ▶ 3 (15 percent) where an overseas driver was involved
- ▶ 2 (10 percent) where an overseas driver was at fault
- ▶ 1 (5 percent) where an overseas driver failed to adjust to NZ conditions

Casualties: There were 35 deaths.

- ▶ 5 (14.3 percent) in crashes where an overseas driver was involved
- ▶ 4 (11.4 percent) in crashes where an overseas driver was at fault
- ▶ 2 (5.7 percent) in crashes where an overseas driver failed to adjust to NZ conditions

Drivers: There were 30 drivers involved in these crashes.

- ▶ 4 (13.3 percent) were overseas drivers
- ▶ 2 (6.7 percent) were overseas drivers who were at fault
- ▶ 1 (3.3 percent) was an overseas driver who failed to adjust to NZ conditions

Crashes involving overseas drivers, by crash severity

Year	Fatal crashes		Serious injury crashes		Minor injury crashes	
	Crashes	% of crashes	Crashes	% of crashes	Crashes	% of crashes
1995	20	4.0%	56	2.3%	271	2.9%
1996	18	3.9%	83	3.6%	241	3.1%
1997	19	4.1%	39	1.9%	226	3.2%
1998	14	3.2%	63	3.3%	216	3.3%
1999	17	3.9%	64	3.3%	207	3.4%
2000	20	5.2%	69	3.9%	233	4.1%
2001	16	4.1%	101	5.2%	305	4.6%
2002	14	3.8%	120	5.6%	478	6.2%
2003	21	5.2%	99	4.8%	515	6.3%
2004	22	5.9%	90	4.4%	476	5.9%
2005	14	4.1%	109	5.2%	443	5.2%
2006	18	5.1%	105	4.8%	484	5.4%
2007	17	4.5%	113	5.3%	531	5.5%
2008	17	5.1%	100	4.7%	544	5.9%
2009	21	6.2%	129	6.5%	533	6.0%
2010	18	5.3%	99	5.3%	463	5.3%
2011	15	5.8%	92	5.3%	438	5.6%
2012	20	7.5%	95	5.4%	411	5.4%
2013	11	4.6%	91	5.4%	452	6.0%
2014	19	7.1%	100	5.8%	436	6.3%
2015	19	6.5%	102	5.6%	545	7.1%
2016	24	8.4%	114	5.4%	506	6.7%

Crashes where an overseas driver was at fault, by crash severity

Year	Fatal crashes		Serious injury crashes		Minor injury crashes	
	Crashes	% of crashes	Crashes	% of crashes	Crashes	% of crashes
1995	12	2.4%	47	1.9%	166	1.8%
1996	13	2.8%	53	2.3%	166	2.1%
1997	16	3.4%	27	1.3%	153	2.2%
1998	10	2.3%	43	2.2%	140	2.2%
1999	13	3.0%	45	2.3%	140	2.3%
2000	14	3.7%	50	2.8%	153	2.7%
2001	12	3.0%	70	3.6%	219	3.3%
2002	11	3.0%	86	4.0%	330	4.3%
2003	10	2.5%	73	3.5%	369	4.5%
2004	17	4.5%	71	3.4%	319	4.0%
2005	10	2.9%	81	3.8%	305	3.6%
2006	17	4.9%	72	3.3%	332	3.7%
2007	16	4.3%	86	4.0%	359	3.7%
2008	12	3.6%	70	3.3%	373	4.0%
2009	14	4.2%	92	4.6%	373	4.2%
2010	12	3.6%	81	4.3%	337	3.9%
2011	14	5.4%	73	4.2%	336	4.3%
2012	18	6.7%	78	4.4%	294	3.8%
2013	11	4.6%	79	4.7%	333	4.4%
2014	17	6.4%	79	4.5%	332	4.8%
2015	16	5.5%	79	4.3%	391	5.1%
2016	19	6.6%	84	4.0%	378	5.0%

Crashes where an overseas driver failed to adjust to NZ conditions, by crash severity

Year	Fatal crashes		Serious injury crashes		Minor injury crashes	
	Crashes	% of crashes	Crashes	% of crashes	Crashes	% of crashes
1995	9	1.8%	11	0.4%	43	0.5%
1996	10	2.2%	26	1.1%	51	0.7%
1997	10	2.1%	11	0.5%	53	0.8%
1998	6	1.4%	18	0.9%	53	0.8%
1999	4	0.9%	22	1.1%	38	0.6%
2000	7	1.8%	11	0.6%	49	0.9%
2001	3	0.8%	27	1.4%	54	0.8%
2002	6	1.6%	26	1.2%	83	1.1%
2003	5	1.2%	25	1.2%	61	0.7%
2004	5	1.3%	18	0.9%	38	0.5%
2005	5	1.5%	18	0.9%	44	0.5%
2006	4	1.1%	14	0.6%	47	0.5%
2007	6	1.6%	25	1.2%	63	0.7%
2008	1	0.3%	21	1.0%	91	1.0%
2009	6	1.8%	27	1.4%	101	1.1%
2010	7	2.1%	25	1.3%	120	1.4%
2011	6	2.3%	27	1.6%	126	1.6%
2012	9	3.4%	36	2.0%	88	1.1%
2013	7	2.9%	37	2.2%	102	1.4%
2014	7	2.6%	37	2.1%	90	1.3%
2015	6	2.1%	27	1.5%	110	1.4%
2016	5	1.7%	27	1.3%	127	1.7%

Overseas drivers involved in crashes, by crash severity

Year	Drivers in					
	Fatal crashes		Serious injury crashes		Minor injury crashes	
	Drivers	% of drivers	Drivers	% of drivers	Drivers	% of drivers
1995	20	2.6%	56	1.5%	273	1.8%
1996	18	2.7%	84	2.4%	244	2.0%
1997	19	2.7%	40	1.3%	230	2.0%
1998	14	2.0%	64	2.2%	218	2.1%
1999	17	2.5%	67	2.3%	210	2.1%
2000	20	3.3%	71	2.7%	231	2.6%
2001	16	2.7%	103	3.6%	315	3.1%
2002	15	2.7%	126	4.0%	495	4.0%
2003	23	3.7%	102	3.4%	526	4.0%
2004	24	4.1%	93	3.1%	480	3.7%
2005	14	2.6%	117	3.8%	449	3.3%
2006	18	3.3%	109	3.4%	493	3.5%
2007	19	3.4%	119	3.8%	541	3.5%
2008	17	3.6%	104	3.5%	555	3.7%
2009	21	4.1%	137	4.7%	542	3.8%
2010	20	4.0%	101	3.8%	484	3.5%
2011	15	3.9%	94	3.8%	448	3.6%
2012	22	5.5%	100	4.1%	419	3.5%
2013	11	2.9%	92	3.9%	461	3.9%
2014	19	4.8%	107	4.3%	441	4.1%
2015	20	4.5%	107	4.0%	565	4.6%
2016	24	5.2%	117	3.9%	526	4.4%

Overseas drivers at fault in crashes, by crash severity

Year	Drivers in					
	Fatal crashes		Serious injury crashes		Minor injury crashes	
	Drivers	% of drivers	Drivers	% of drivers	Drivers	% of drivers
1995	12	1.5%	47	1.3%	166	1.1%
1996	13	1.9%	53	1.5%	166	1.3%
1997	16	2.2%	27	0.9%	153	1.4%
1998	10	1.5%	43	1.5%	139	1.4%
1999	13	1.9%	45	1.6%	140	1.4%
2000	14	2.3%	50	1.9%	152	1.7%
2001	12	2.0%	70	2.5%	219	2.1%
2002	11	2.0%	85	2.7%	330	2.7%
2003	10	1.6%	73	2.4%	369	2.8%
2004	17	2.9%	71	2.4%	319	2.5%
2005	10	1.9%	81	2.6%	303	2.2%
2006	17	3.1%	72	2.2%	331	2.3%
2007	16	2.9%	85	2.7%	359	2.3%
2008	12	2.5%	70	2.3%	372	2.5%
2009	14	2.8%	92	3.2%	373	2.6%
2010	12	2.4%	81	3.1%	337	2.5%
2011	14	3.6%	73	3.0%	336	2.7%
2012	18	4.5%	78	3.2%	294	2.5%
2013	11	2.9%	79	3.4%	333	2.8%
2014	17	4.3%	79	3.2%	332	3.1%
2015	16	3.6%	79	3.0%	391	3.2%
2016	19	4.1%	84	2.8%	378	3.1%

Overseas drivers who failed to adjust to NZ conditions, by crash severity

Year	Drivers in					
	Fatal crashes		Serious injury crashes		Minor injury crashes	
	Drivers	% of drivers	Drivers	% of drivers	Drivers	% of drivers
1995	9	1.2%	11	0.3%	43	0.3%
1996	10	1.5%	26	0.8%	51	0.4%
1997	10	1.4%	11	0.4%	54	0.5%
1998	6	0.9%	18	0.6%	52	0.5%
1999	4	0.6%	23	0.8%	38	0.4%
2000	7	1.2%	11	0.4%	49	0.6%
2001	3	0.5%	27	1.0%	54	0.5%
2002	7	1.3%	26	0.8%	83	0.7%
2003	5	0.8%	25	0.8%	61	0.5%
2004	5	0.9%	18	0.6%	38	0.3%
2005	5	0.9%	18	0.6%	44	0.3%
2006	4	0.7%	14	0.4%	47	0.3%
2007	6	1.1%	25	0.8%	63	0.4%
2008	1	0.2%	21	0.7%	92	0.6%
2009	6	1.2%	27	0.9%	101	0.7%
2010	7	1.4%	25	0.9%	120	0.9%
2011	6	1.6%	28	1.1%	126	1.0%
2012	9	2.2%	36	1.5%	88	0.7%
2013	7	1.9%	37	1.6%	102	0.9%
2014	7	1.8%	37	1.5%	90	0.8%
2015	6	1.4%	27	1.0%	111	0.9%
2016	5	1.1%	27	0.9%	127	1.1%

Deaths and injuries in crashes involving overseas drivers, by injury severity

Year	Deaths		Serious Injuries		Minor injuries	
	Number	% of deaths	Number	% of serious	Number	% of minor
1995	27	4.6%	77	2.4%	444	3.2%
1996	19	3.7%	114	3.9%	432	3.6%
1997	26	4.8%	71	2.7%	402	3.7%
1998	20	4.0%	92	3.8%	401	4.0%
1999	24	4.7%	105	4.3%	395	4.1%
2000	23	5.0%	108	4.7%	445	5.1%
2001	23	5.1%	146	5.9%	563	5.6%
2002	19	4.7%	181	6.9%	784	6.9%
2003	23	5.0%	148	5.7%	842	7.1%
2004	28	6.4%	130	5.1%	775	6.7%
2005	14	3.5%	153	5.9%	746	6.2%
2006	21	5.3%	151	5.6%	787	6.2%
2007	21	5.0%	158	5.9%	865	6.4%
2008	18	4.9%	141	5.5%	855	6.7%
2009	24	6.3%	194	7.9%	876	7.2%
2010	20	5.3%	144	6.3%	731	6.2%
2011	17	6.0%	124	6.0%	676	6.4%
2012	30	9.7%	137	6.5%	625	6.2%
2013	13	5.1%	121	6.0%	668	6.7%
2014	27	9.2%	149	7.2%	701	7.6%
2015	22	6.9%	145	6.7%	869	8.5%
2016	29	8.8%	158	6.3%	751	7.5%

Deaths and injuries in crashes where an overseas driver was at fault, by injury severity

Year	Deaths		Serious Injuries		Minor injuries	
	Number	% of deaths	Number	% of serious	Number	% of minor
1995	16	2.7%	60	1.9%	281	2.0%
1996	14	2.7%	79	2.7%	296	2.5%
1997	21	3.9%	51	1.9%	282	2.6%
1998	15	3.0%	61	2.5%	272	2.7%
1999	15	2.9%	76	3.1%	274	2.8%
2000	15	3.2%	77	3.4%	303	3.5%
2001	17	3.7%	103	4.2%	405	4.1%
2002	15	3.7%	136	5.2%	542	4.8%
2003	12	2.6%	99	3.8%	606	5.1%
2004	23	5.3%	103	4.1%	511	4.4%
2005	10	2.5%	112	4.3%	511	4.2%
2006	20	5.1%	101	3.8%	548	4.3%
2007	20	4.8%	122	4.5%	605	4.5%
2008	13	3.6%	102	4.0%	596	4.7%
2009	16	4.2%	140	5.7%	603	4.9%
2010	14	3.7%	120	5.2%	543	4.6%
2011	16	5.6%	102	4.9%	531	5.0%
2012	28	9.1%	114	5.4%	454	4.5%
2013	13	5.1%	107	5.3%	517	5.2%
2014	25	8.5%	122	5.9%	552	6.0%
2015	19	6.0%	113	5.2%	617	6.1%
2016	23	7.0%	120	4.8%	559	5.6%

Deaths and injuries in crashes where an overseas driver failed to adjust to NZ conditions, by injury severity

Year	Deaths		Serious Injuries		Minor injuries	
	Number	% of deaths	Number	% of serious	Number	% of minor
1995	11	1.9%	15	0.5%	86	0.6%
1996	11	2.1%	48	1.6%	103	0.9%
1997	13	2.4%	26	1.0%	119	1.1%
1998	9	1.8%	25	1.0%	117	1.2%
1999	4	0.8%	43	1.7%	102	1.1%
2000	7	1.5%	20	0.9%	110	1.3%
2001	3	0.7%	46	1.9%	115	1.2%
2002	7	1.7%	49	1.9%	160	1.4%
2003	7	1.5%	38	1.5%	122	1.0%
2004	7	1.6%	37	1.5%	86	0.7%
2005	5	1.2%	26	1.0%	101	0.8%
2006	4	1.0%	23	0.9%	77	0.6%
2007	7	1.7%	37	1.4%	143	1.1%
2008	1	0.3%	31	1.2%	164	1.3%
2009	8	2.1%	48	2.0%	187	1.5%
2010	7	1.9%	38	1.7%	201	1.7%
2011	7	2.5%	44	2.1%	213	2.0%
2012	15	4.9%	58	2.8%	170	1.7%
2013	9	3.6%	56	2.8%	179	1.8%
2014	10	3.4%	65	3.1%	188	2.0%
2015	9	2.8%	43	2.0%	187	1.8%
2016	6	1.8%	38	1.5%	189	1.9%

Fatal and injury crashes

Year	Overseas licence holders involved in crashes		Crashes that involve an overseas licence holder	% of crashes where...		
	Number	% of all drivers		an overseas licence holder was involved	an overseas licence holder was 'at fault'	an overseas driver did not adjust to local conditions
1995	349	1.8%	347	2.8%	1.8%	0.5%
1996	346	2.1%	342	3.2%	2.2%	0.8%
1997	289	1.9%	284	3.0%	2.1%	0.8%
1998	296	2.1%	293	3.3%	2.2%	0.9%
1999	294	2.2%	288	3.4%	2.3%	0.8%
2000	322	2.7%	322	4.1%	2.8%	0.9%
2001	434	3.2%	422	4.7%	3.4%	0.9%
2002	636	3.9%	612	6.0%	4.2%	1.1%
2003	651	3.9%	635	5.9%	4.2%	0.8%
2004	597	3.6%	588	5.6%	3.9%	0.6%
2005	580	3.4%	566	5.2%	3.6%	0.6%
2006	620	3.5%	607	5.3%	3.7%	0.6%
2007	679	3.5%	661	5.4%	3.8%	0.8%
2008	676	3.7%	661	5.6%	3.9%	1.0%
2009	700	4.0%	683	6.1%	4.3%	1.2%
2010	605	3.6%	580	5.3%	3.9%	1.4%
2011	557	3.7%	545	5.5%	4.3%	1.6%
2012	541	3.7%	526	5.4%	4.0%	1.4%
2013	564	3.9%	554	5.9%	4.5%	1.5%
2014	567	4.2%	555	6.2%	4.8%	1.5%
2015	692	4.5%	666	6.8%	5.0%	1.5%
2016	667	4.3%	644	6.5%	4.8%	1.6%

Terminology

Fatal injuries: injuries that result in death within 30 days of the crash.

Serious injuries: fractures, concussions, internal injuries, crushings, severe cuts and lacerations, severe general shock necessitating medical treatment and any other injury involving removal to and detention in hospital.

Minor injuries: injuries of a minor nature such as sprains and bruises.

Crash severity: is defined by the most severe injury in the crash.

Overseas driver: a driver in a crash who was driving on an overseas licence.

At-fault: The behaviour of several drivers may contribute to a crash, but only one driver is assigned the **primary responsibility**. This driver is called the at-fault driver. The determination of primary responsibility is based on crash movements and crash cause factors assigned in the Crash Analysis System. It is not based on legal liability or court conviction. Fault/responsibility here only considers driver and rider factors contributing to the crash. There may also be road or system factors that contributed to the crash.

‘Failed to adapt to New Zealand driving conditions’: This factor is used when the fact that an overseas driver failed to adapt to New Zealand driving conditions contributed to the crash. This includes drivers who were not used to our driving conditions or who didn’t understand or remember NZ road rules – for example, drivers from countries that drive on the right, driving on the wrong side of the road, or not understanding give way rules.

Urban and Open road: Here these are defined based on speed limit rather than land use. Urban is all roads with a speed limit of 70km/h or less. All other roads are labelled as open road.

Appendix 2: Visitor numbers for context

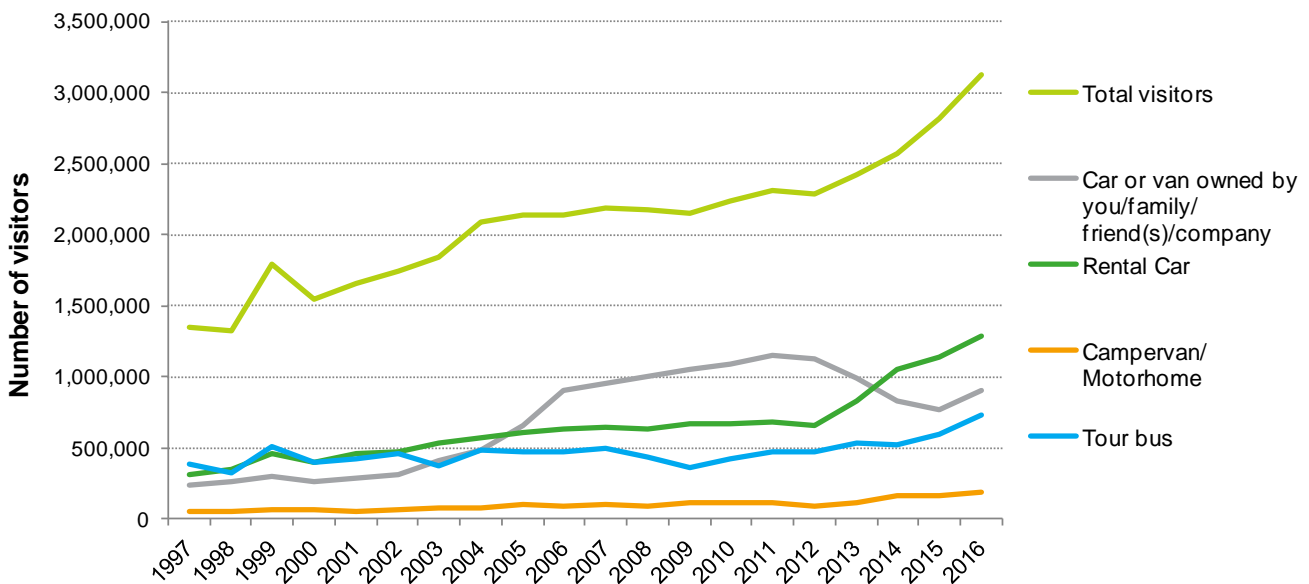
There is no rigorous measure of the amount of driving done by overseas licence holders. This would require good measures of the travel done by short-term visitors, migrants and students, who were using rental vehicles, vehicles owned by the overseas licence holder or vehicles owned by New Zealand friends and relatives.

Without a good measure of distance travelled there can be no direct comparison of risk for different groups of overseas licence holders.

While there is no direct measure of the change in the amount of driving done by overseas licence holders, changes in international visitor numbers provide some context for the marked changes in the numbers of overseas licence holders in crashes.

The following graph shows an increase in international visitor numbers through the early 2000s, including an increase in the number who said they had travelled by rental or privately owned vehicles. These numbers do not include migrants. The number of visitors has increased quite sharply again over the last 4 years.

International visitor numbers and travel mode

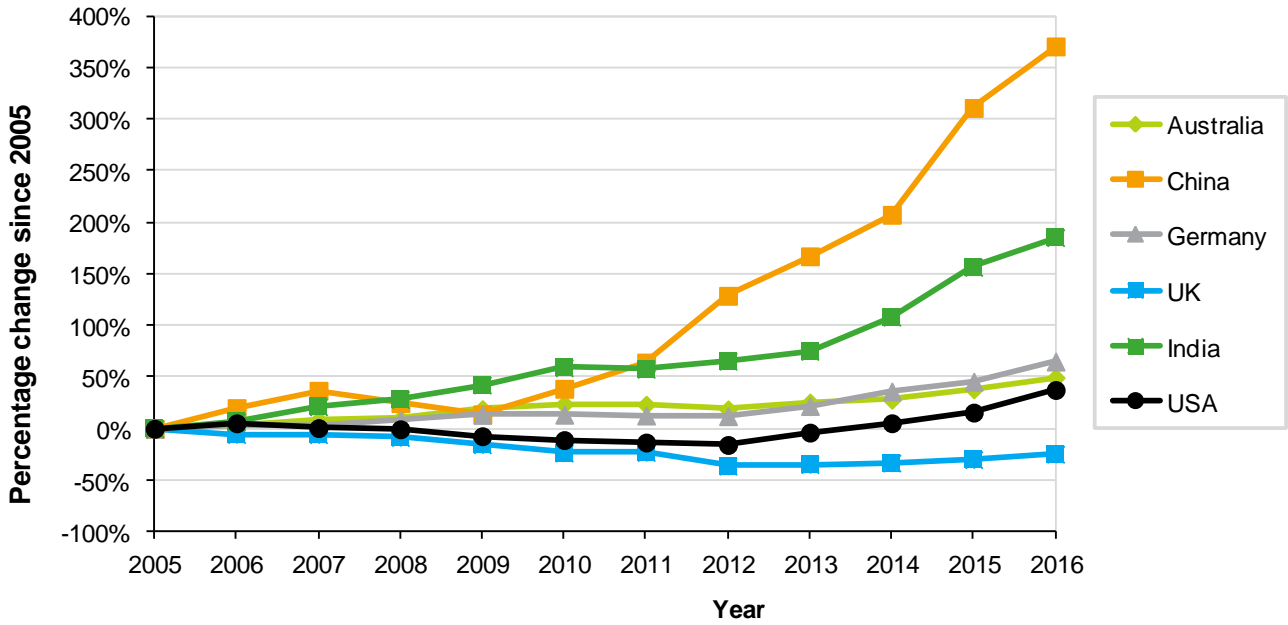


(Source: NZ.Stat, International visitor survey - survey of visitors aged 15 years and over)

The following graph shows the percentage change in short term visitors for the 6 countries discussed in the crash data. The numbers of visitors from China and India have increased by about 370 percent and 185 percent respectively, since 2005. Over the same period the number of visitors from the UK has dropped by 25 percent.

While this is not a direct measure of the change in the amount of driving done by visitors from these countries, and does not include migrants, it does provide some context for the marked change in the relative contribution of these countries to the numbers of overseas licence holders in crashes. For example, while the number of crash involved drivers from the UK has more than halved, the number from China has increased to about 7 times what it was in 2005.

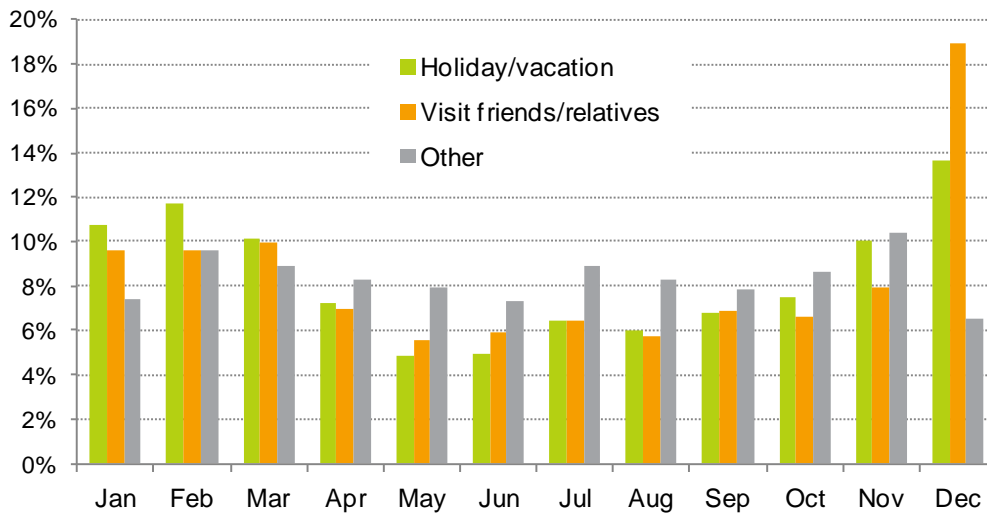
Short-term visitors – selected countries – percentage change



(Source: International Travel and Migration data, Short-term Overseas Visitor Arrivals.⁵)

There is a large seasonal variation in short-term visitor arrival numbers, especially for those who are on holiday/vacation. This broadly matches the seasonal variation in crashes. There is a big spike in the numbers visiting friends and family in December. There is less variation for those travelling for business or conferences.

Overseas visitor arrivals by month and purpose (2016)



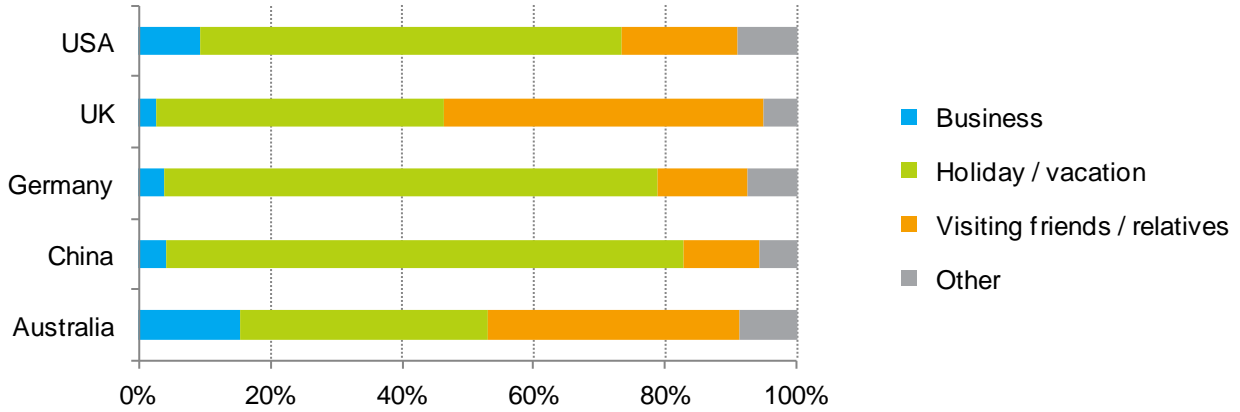
(Source: International Travel and Migration data, Short-term Overseas Visitor Arrivals.)

⁵ Access to the data was provided by Statistics New Zealand under conditions designed to give effect to the security provisions of the Statistics Act 1975

The following graphs show that visitors from different countries come for different reasons and use a different mix of transport options while here.

German and Chinese visitors are most likely to be here on holiday (about three-quarters), while for visitors from Australia and the UK there are as many here to visit friends and relatives as there are on holiday.

Trip purpose for overseas visitors (2016)

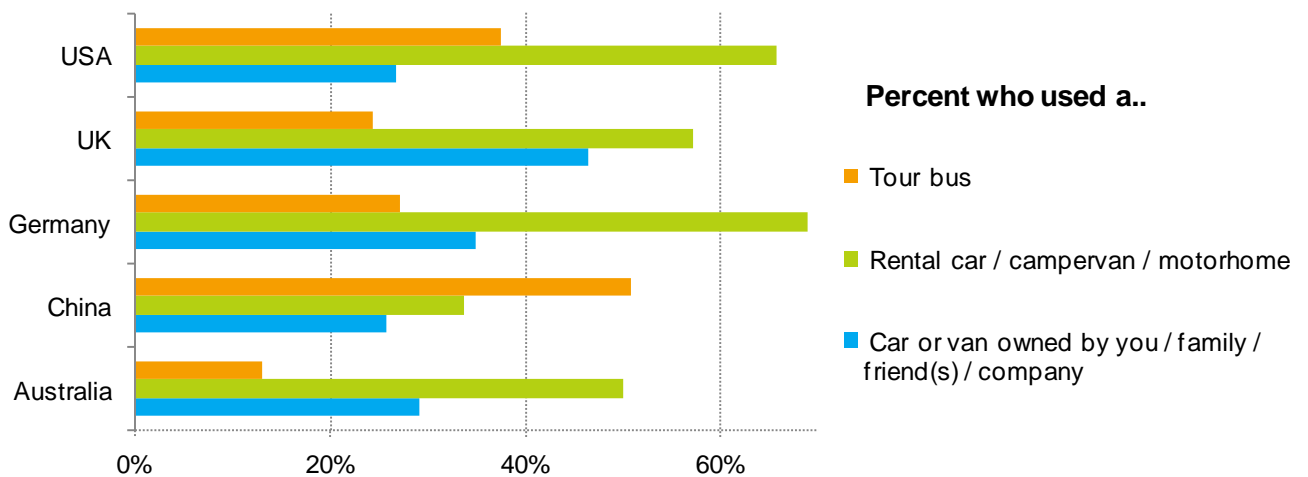


(Source: NZ.Stat, International visitor survey - survey of visitors aged 15 years and over)

Over 60 percent of German and United States visitors used a rental vehicle while in New Zealand. Over 40 percent of those from the UK travelled in a privately owned car or van. Visitors from China are most likely to have included a bus tour in their travels.

Again this gives no indication of the amount of driving done in each mode by different groups, but it does illustrate that visitor numbers alone are not a good measure of the amount of driving done by visitors from different countries.

Transport mode for overseas visitors (2016)



(Source: NZ.Stat, International visitor survey - survey of visitors aged 15 years and over

Note: respondents can select multiple modes of travel.)