

Speeding

CRASH STATISTICS FOR THE YEAR ENDED 31 DECEMBER 2012

Prepared by the Ministry of Transport

CRASH FACTSHEET

November 2013

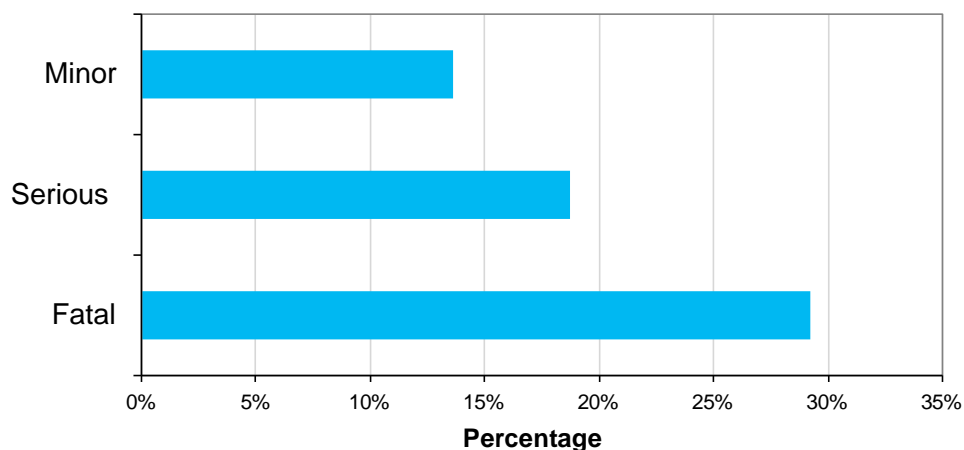
In this fact sheet speeding is defined as ***driving too fast for the conditions***. The faster you go, the more likely you are to crash and the greater your risk of serious injury or death¹. No matter what causes a crash, vehicle speed directly affects the force of impact.

As speed increases, there is an increase in the following factors and, in turn, an associated increase in the risk of crash involvement¹:

- Stopping distance — both the distance travelled during reaction time and the distance travelled after the brakes are applied
- The probability of exceeding the critical speed on a curve
- The chance of other road users misjudging how fast the speeding driver is travelling
- The probability of a rear-end crash if the driver has not accounted for the increased speed by increasing the following distance.

In 2012, speeding was a contributing factor in 68 fatal crashes, 307 serious injury crashes and 1,049 minor injury crashes. These crashes resulted in 85 deaths, 405 serious injuries and 1,493 minor injuries. The total social cost² of crashes involving drivers speeding was about \$637 million, which is approximately 20 percent of the social cost associated with all injury crashes.

Percentage of crashes with driving too fast for the conditions cited as a contributing factor (2010–2012)

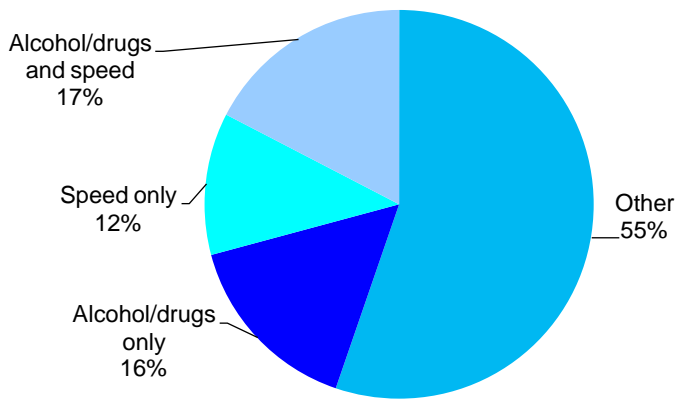


The more serious the crash, the more likely it is that speed was a contributing factor. In New Zealand, for the years 2010 to 2012, driver speed was a factor in 29 percent of fatal crashes, 19 percent of serious injury crashes and 14 percent of minor injury crashes.

¹ Patterson, Frith and Small (2000).

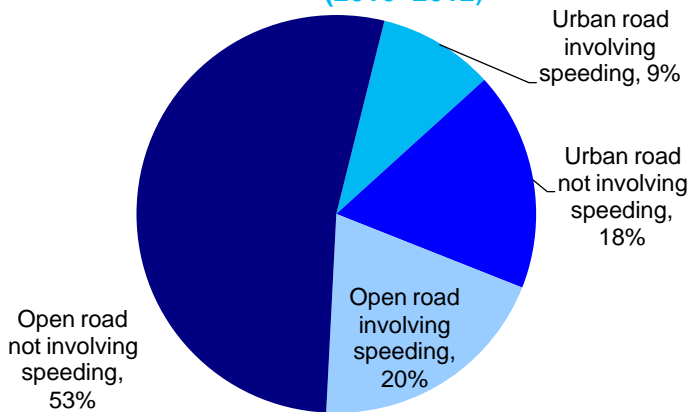
² Definitions for fatal, serious and minor injuries and social cost are in [Terminology](#) at the end of the fact sheet.

Speed and alcohol/drugs in fatal crashes (2010–2012)



As shown in the graph, the combination of speeding and alcohol/drugs contributed to 17 percent of fatal crashes. Speeding alone contributed to 12 percent, and alcohol/drugs alone to 16 percent, of fatal crashes. So speeding and/or alcohol/drugs are contributing factors in 45 percent of all fatal crashes.

Speeding in fatal crashes by road type (2010–2012)



Twenty percent of all fatal crashes are open road crashes that involve speeding as a contributing factor. A further 9 percent are urban crashes in which speeding is a contributing factor.

Speeding was a contributing factor in 35 percent of urban fatal crashes and 27 percent of open road fatal crashes.

Percentages may not add to 100 percent due to rounding.

Who dies?

For every 100 drivers or riders who died in road crashes in which speeding was a contributing factor, 54 of their passengers and another 15 road users died with them.

Deaths in crashes in which speeding was a contributing factor (2010–2012)				
Age	Speed-involved drivers	Passengers with speed-involved drivers	Other road users	Percentage of all deaths
0-14	2	11	1	33%
15-19	24	29	1	47%
20-24	45	21	2	49%
25-29	20	11	1	40%
30-39	33	9	2	40%
40-49	30	9	4	33%
50-59	14	3	5	20%
60+	9	3	11	10%
Total	177	96	27	31%

Time series

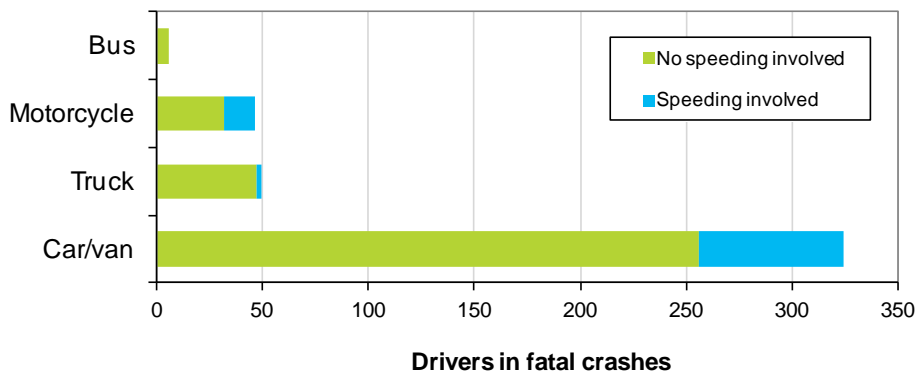
Crashes and casualties with speeding as a contributing factor

Year	Crashes involving speed				Casualties from crashes involving speed			
	Fatal		Injury		Deaths		Injuries	
	Number	% of all fatal crashes	Number	% of all injury crashes	Number	% of all deaths	Number	% of all injuries
1986	192	29%	2024	16%	224	29%	3544	19%
1987	251	37%	2253	18%	292	37%	3904	21%
1988	231	37%	2204	19%	267	37%	3650	21%
1989	257	40%	2146	19%	311	41%	3624	22%
1990	224	35%	2041	17%	265	36%	3422	19%
1991	190	34%	2108	18%	225	35%	3383	20%
1992	195	36%	1918	17%	241	37%	3164	20%
1993	192	37%	1712	16%	228	38%	2801	19%
1994	191	39%	1816	16%	228	39%	2982	18%
1995	182	36%	1827	16%	221	38%	2988	18%
1996	153	34%	1684	17%	177	34%	2806	19%
1997	137	29%	1461	16%	162	30%	2508	19%
1998	140	32%	1415	17%	162	32%	2427	20%
1999	124	29%	1180	15%	153	30%	2095	18%
2000	87	23%	1122	15%	102	22%	1923	18%
2001	123	31%	1298	15%	141	31%	2197	18%
2002	108	30%	1431	15%	126	31%	2339	17%
2003	140	35%	1644	16%	167	36%	2601	18%
2004	138	37%	1632	16%	172	39%	2624	19%
2005	112	33%	1700	16%	130	32%	2670	19%
2006	107	31%	1734	16%	126	32%	2746	18%
2007	116	31%	1905	16%	132	31%	2949	18%
2008	110	33%	1726	15%	126	34%	2629	17%
2009	100	30%	1635	15%	113	29%	2461	17%
2010	108	32%	1500	14%	131	35%	2293	16%
2011	75	29%	1422	15%	83	29%	2117	17%
2012	68	26%	1356	15%	85	28%	1898	16%

Note: The police Traffic Crash Report form was modified in 2001. The speeding ('too fast for conditions') data since this change are not strictly comparable to earlier data.

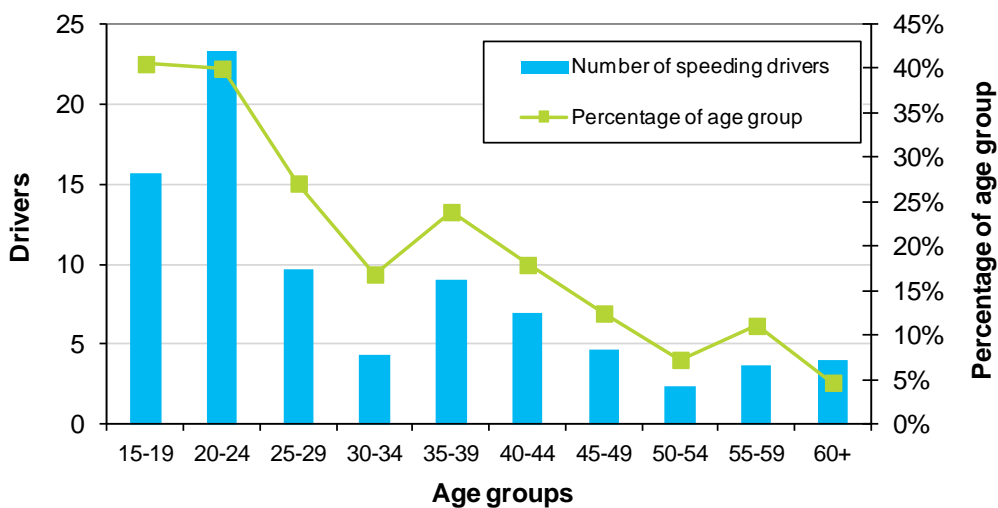
Drivers involved in fatal crashes

Drivers involved in fatal crashes by vehicle type
(annual average 2010–2012)



From 2010 to 2012, speeding was a contributing factor in fatal crashes for 21 percent of car and van drivers, 31 percent of motorcyclists and 5 percent of truck drivers. No bus or taxi drivers were involved in fatal crashes that had speeding as a contributing factor.

Speeding drivers in fatal crashes by age group
(annual average 2010–2012)

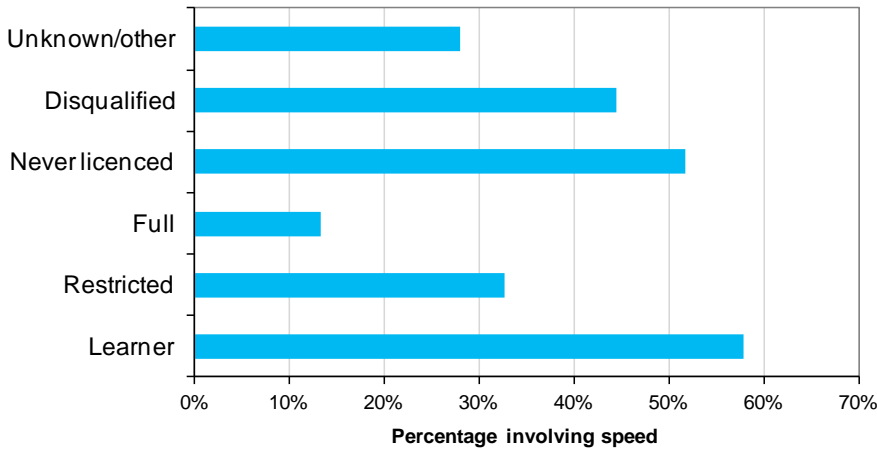


Speeding drivers in fatal crashes (2010–2012)						
Age	Males		Females		Total	
	Number	%	Number	%	Number	%
15-19	43	45%	4	19%	47	41%
20-24	56	42%	14	33%	70	40%
25-29	27	33%	2	8%	29	27%
30-34	12	20%	1	6%	13	17%
35-39	24	26%	2	11%	27	23%
40-44	18	19%	3	13%	21	18%
45-49	13	14%	1	5%	14	13%
50-54	7	10%	0	0%	7	7%
55-59	9	12%	2	9%	11	11%
60+	10	5%	2	3%	12	5%
Total	222	22%	32	11%	256	20%

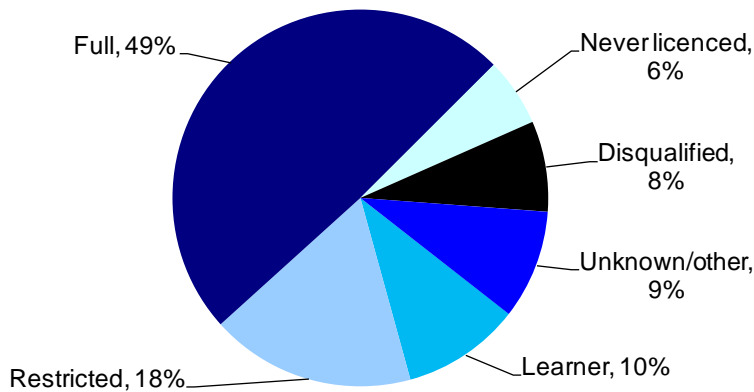
Note: Rows and columns do not add up to the totals because the age or sex of some drivers was not recorded.

The 15-19 and 20-24 year age groups had the greatest number of drivers in fatal crashes involving speeding. In these age groups, about 40 percent of the drivers in fatal crashes had speed involvement. Males have a higher proportion of involvement in speed-related crashes.

Speeding drivers in fatal crashes: percentage of each licence type (2010–2012)



Licence status of speeding drivers in fatal crashes (2010–2012)

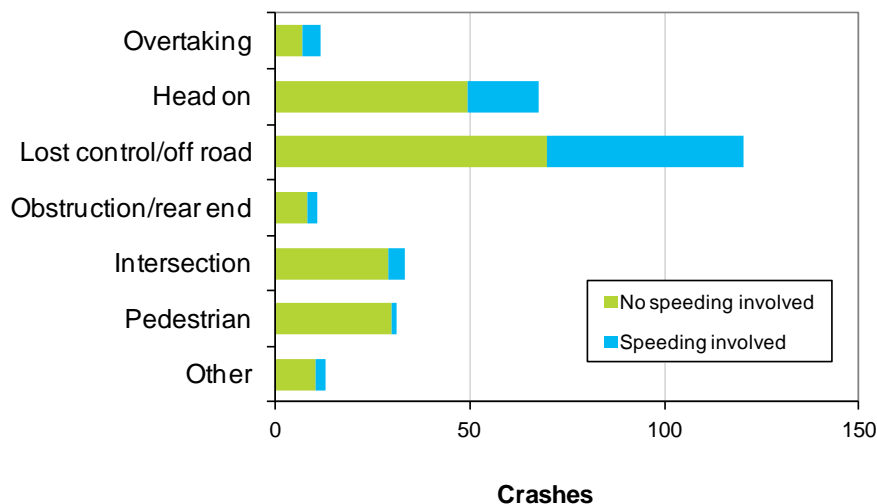


Disqualified and never licenced drivers in fatal crashes are much more likely to be speeding (44 percent and 52 percent, respectively) than drivers with a full licence (13 percent). Drivers with restricted or learner licences are more likely to be in speed-involved fatal crashes than those with full licences. However, this group falls into the younger age categories where speeding is a big contributor to fatal crashes, and this accounts for some of the difference. Together, disqualified and never licenced drivers comprise 14 percent of all drivers in speed-related fatal crashes.

Note: Unknown/other includes drivers with an expired, unknown or wrong licence class. Disqualified includes drivers who have been forbidden to drive.

Types of crash

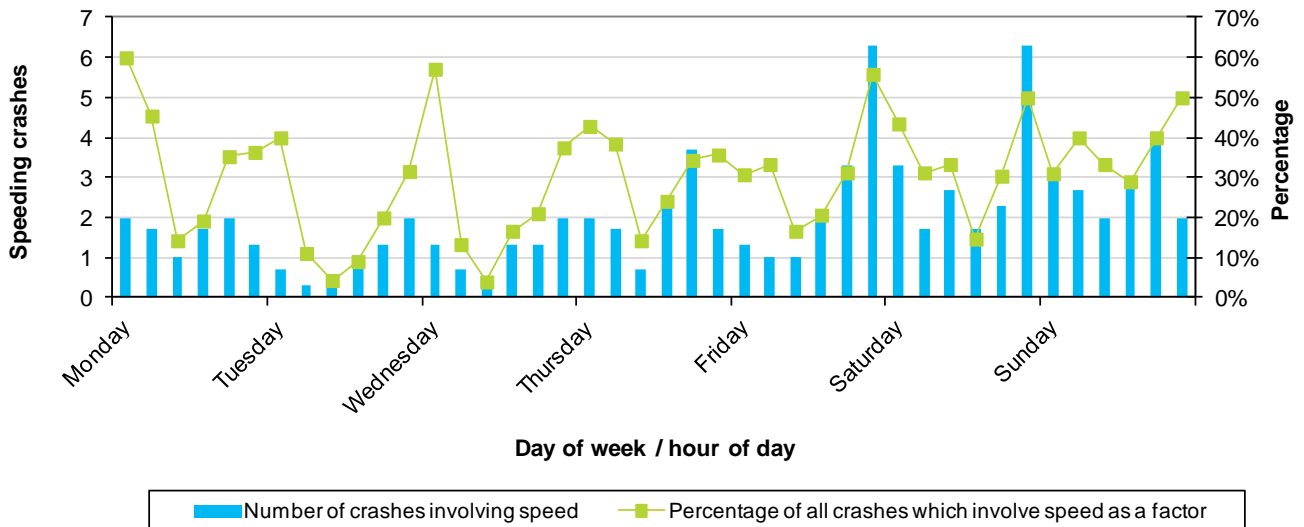
Types of fatal crashes where speeding was a factor (annual average 2010–2012)



Loss of control and head-on crashes are the most common types of fatal crash involving speeding. Over four-fifths of the fatal crashes in which speed was a factor fall into these categories.

When do crashes involving speeding occur?

Fatal crashes with drivers speeding as a factor by time of day and day of week
(annual average 2010–2012)



Note: The week is divided into 4-hour blocks, beginning 0000–0359 Monday, with days labelled at 0000 hours.

Fatal crashes involving speeding by time of day and day of week (2010–2012)						
Day	Day (0600–1759)		Evening (1800–2159)		Night (2200–0559)	
	Number	%	Number	%	Number	%
Monday	15	23%	5	38%	4	33%
Tuesday	9	11%	4	25%	7	32%
Wednesday	9	14%	4	24%	12	46%
Thursday	16	24%	9	38%	8	36%
Friday	14	20%	17	47%	20	49%
Saturday	17	22%	13	46%	27	41%
Sunday	22	30%	12	60%	8	47%
Total	102	20%	64	42%	86	42%

Note: On the day shown, night begins at 2200 and finishes the following day at 0559.

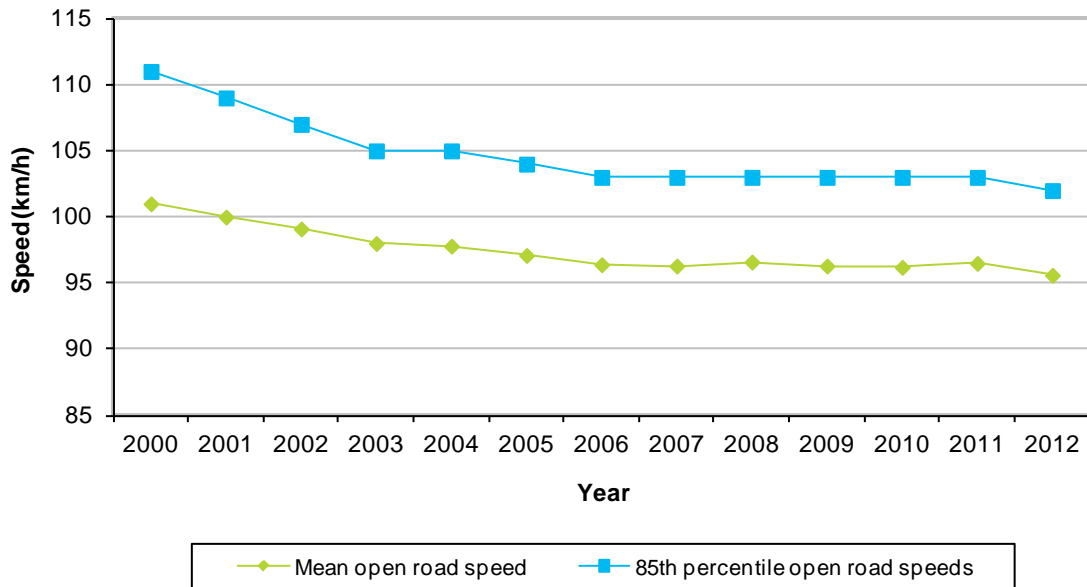
Safety belts

Drivers in speed-related crashes are less likely to wear safety belts than drivers in crashes in which speed is not a factor. Between 2010 and 2012, at least 27 percent of the car and van drivers who died in speed-related crashes were not restrained at the time of the crash. This compares with 17 percent for drivers in fatal crashes that did not involve speed. Restraint use was not recorded for about 18 percent of driver deaths, so the level of restraint use could be even lower than indicated.

Mean speeds

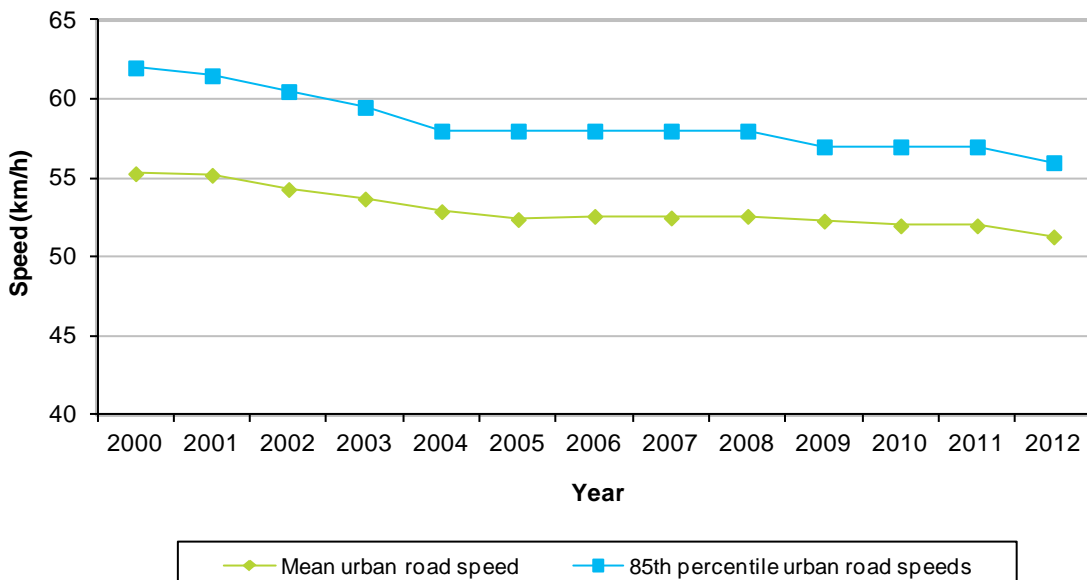
The following graphs show the results of surveys that monitor speeds of unimpeded vehicles in both 100km/h speed limit areas and urban 50km/h areas³. Monitoring the speeds of unimpeded vehicles measures driver choice of speed. This measure provides information on the effectiveness of speed management measures and information for developing safety policies.

Open road speed (2000–2012)



Note: 85th percentile speed means 15 percent of the vehicles surveyed were travelling faster than this speed.

Urban road speed (2000–2012)



Note: 85th percentile speed means 15 percent of the vehicles surveyed were travelling faster than this speed.

³ This is where vehicles are unimpeded by the presence of other vehicles (that is, there is at least 4 seconds headway between the measured vehicle and the vehicle in front of it) or by environmental features such as traffic lights, intersections, hills, corners or road works.

The recent history of speed-related legislation

- In 1967, driving at an 'unreasonably slow speed' became a traffic offence.
- In 1971, the Speeding Infringement System was introduced.
- On 4 December 1973, the maximum open road speed limit was reduced from 55mph to 50mph (80km/h) as part of fuel conservation measures.
- In 1975, speed limit and road signs were changed over to the metric system.
- On 1 July 1985, the open road speed limit was increased from 80km/h to 100km/h for all vehicles except heavy motor vehicles, articulated vehicles and vehicles towing trailers.
- In 1989, a new schedule of infringement fees was introduced, including increased fees for speeding infringements.
- In October 1993, speed cameras were introduced.
- On 1 March 1999, a new provision of the Land Transport Act came into force allowing roadside suspension for driving at 50km/h or more above the posted speed limit.
- In 2001, the Land Transport (Road Safety Enforcement) Amendment Act 2001 removed legal impediments to the operation of urban speed cameras.
- In 2003, the Land Transport (Unauthorised Street and Drag Racing) Amendment Act created offences for street racing, wheel spinning and pouring slippery substances on the road to allow wheel spinning. Offenders can have their vehicles impounded for 28 days.
- On 25 February 2003, the Setting of Speed Limits Rule was signed, which set out the procedures for road controlling authorities to set enforceable speed limits.
- On 3 May 2004, the open road speed limit for all heavy vehicles was standardised at 90 km/h (except school buses, which remains at 80km/h). The speed limit for light vehicles towing trailers was also increased to 90 km/h.
- On 16 January 2006, a new provision of the Land Transport Act came into force allowing roadside licence suspension for driving at 40km/h or more above the posted speed limit.
- *Enforcement tolerance: Beginning Queen's Birthday holiday weekend 2010, police have publicised a 4km/h tolerance for speed enforcement over holiday weekends.*

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.

Social cost: a measure of the total cost of road crashes to the nation. It includes: loss of life and life quality; loss of productivity; and medical, legal, court, and property damage costs.

Casualty: person who sustained fatal, serious or minor injuries.

Additional Information

For further information on crash statistics see *Motor Vehicle Crashes in New Zealand*, the annual statistical statement produced by the Ministry of Transport. This publication is available online at www.transport.govt.nz.

Enquires relating to crash statistics may be directed to the Ministry of Transport, PO Box 3175, Wellington, or by email at 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. These include:

Crash facts:

- Alcohol and drugs
- Cyclists
- Diverted attention
- Fatigue
- Motorcyclists
- 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

References:

Archer, J., Fotheringham, N., Symmons, M. and Corben B. (2008) *The Impact of Lowered Speed Limits in Urban and Metropolitan Areas* Monash University Accident Research Centre report 276.

Patterson, T.L., Frith, W.J., and Small, M.W. (2000) *Down with Speed: A review of the literature, and the impact of speed on New Zealanders* Accident Compensation Corporation and Land Transport Safety Authority. Wellington. www.transport.govt.nz/research/Documents/ACC672-Down-with-speed.pdf

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