

stats.

Road crash data from the LTSA

Fatal crashes slashed by targeted road engineering

A long-running targeted programme that uses low-cost road engineering solutions has slashed fatal crashes in half and reduced serious injury crashes by more than one-third over 2,400 sites around New Zealand.

The latest data from the Joint Crash Reduction Programme shows a 49 percent drop in fatal crashes and a 38 percent drop in serious injury crashes at 2,487 black spots where low-cost treatments have been carried out to improve safety.

How the crash reduction programme works

The crash reduction programme was established in 1985 to implement a continuous programme of systematic investigation of all roads in New Zealand. The programme is a partnership between local authorities, Transit New Zealand and the Land Transport Safety Authority (LTSA). It uses the LTSA crash analysis system (CAS) to identify black spots or areas where a large number of crashes have occurred. Once likely crash causes have been determined from the data, a road safety team visits to examine road conditions. Engineering works or treatments are then put in place.

Many different treatments can be used including street lighting improvement, either along a route or at an intersection, simple improvement to signs and markings, and widening or sealing of road shoulders and flush medians (white diagonal lines painted on the road).

A computerised crash reduction monitoring system compares crash data from five years before the treatments were installed and five years afterwards. It also takes into account general changes in traffic growth and road safety trends across the local region. This analysis helps determine the level of improvement attributable to the treatments and provides useful information to improve the efficiency and effectiveness of the programme.

Substantial reductions in crashes

The first graph on the next page shows a 43 percent reduction in crashes at open road sites that are part of the crash reduction programme and a 30 percent reduction at urban sites. Open road crashes are more likely than urban crashes to involve serious or fatal injuries because of higher speeds in that environment.

Urban and open road black spots are divided into three types of sites – route, intersection and non-intersection.* Substantial reductions in injury crashes have been achieved at each. The greatest percentage reduction (60 percent) was at non-intersection sites followed by a 42 percent drop at intersection sites and a 27 percent reduction at route sites.

Overall, loss of control on bends, overtaking, merging and head-on crashes showed the biggest percentage reduction at sites that are part of the crash reduction programme (see the second graph overleaf). Crashes where a driver lost control on a bend dropped by 42 percent, while overtaking, head-on and merging crashes achieved a similar percentage decrease (45, 44 and 43 percent respectively).

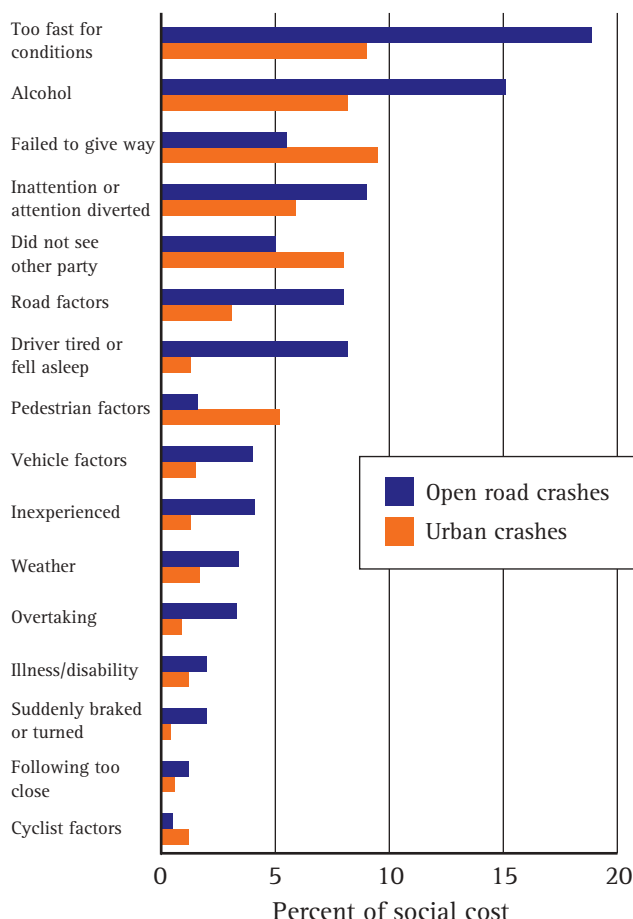
The overall results of the latest crash reduction study will soon be available at www.ltsa.govt.nz/roads

*Route sites are long stretches of road. Non-intersection sites are smaller areas, such as a pedestrian crossing outside a school or a bend in the road.

Road fatalities

Deaths to 30 June 2004	213
Deaths to 30 June 2003	231
Fatal crashes to 30 June 2004	187
Fatal crashes to 30 June 2003	201
Deaths for 12 months to 30 June 2004	443

Factors contributing to crashes measured by social cost*

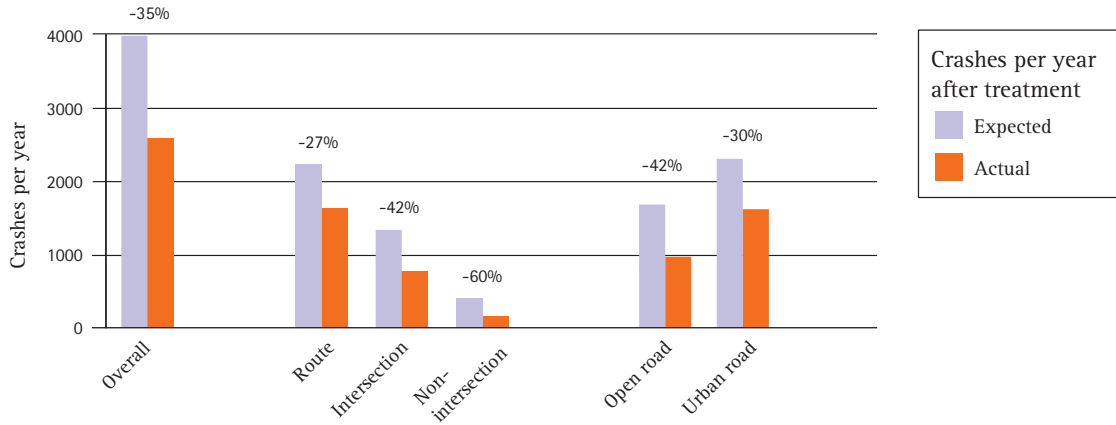


Note: Figures are based on the 12 months to December 2003. Since there can be several contributing factors to a single crash, the figures represented by this graph add up to more than 100%.

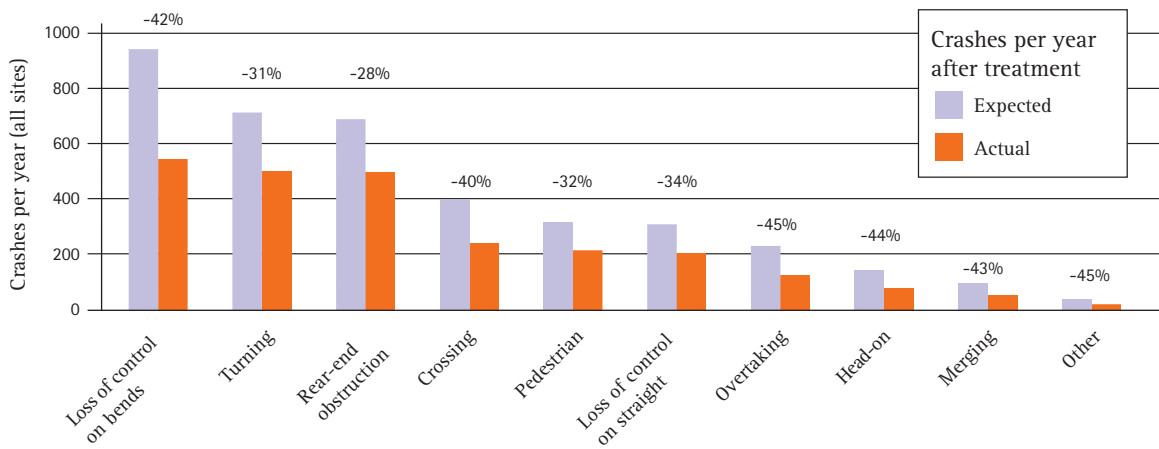
*Social cost calculations include loss of life or life quality, loss of output due to injuries, medical and rehabilitation costs, legal and court costs and property damage.



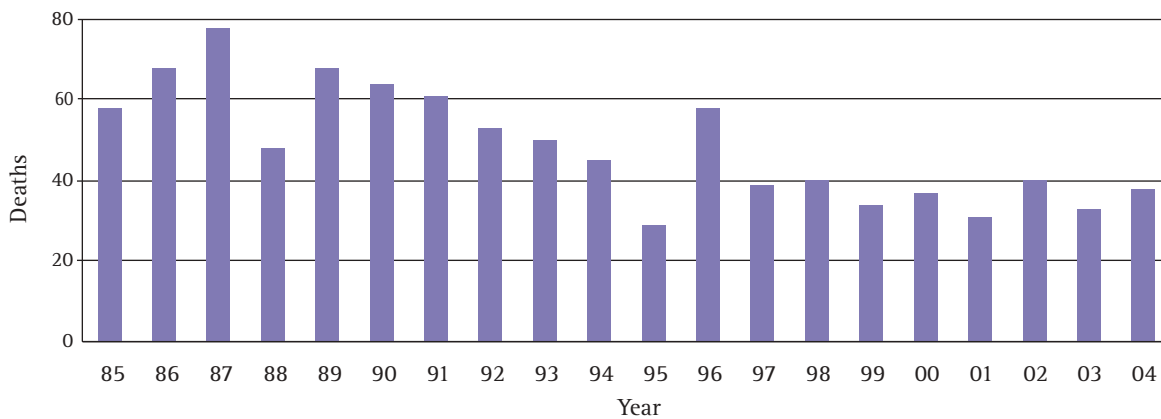
Site type



Crash type



June road deaths



June statistics 2004

- Thirty-eight people died on New Zealand roads in June. This is five more than the number of deaths for June 2003 and is three more than the June average for the last five years.
- So far this year 213 people have died on New Zealand roads. This is 18 fewer than at the same time last year.
- In the 12 months to the end of June 2004, 443 people were killed on New Zealand roads. This is 27 more than the 12 month toll at the end of June 2003.
- During June, 17 of the deaths were car or van drivers, nine were car or van passengers, four were motorcyclists, four were pedestrians, two were truck occupants and two were cyclists.
- Twenty-eight of the 38 killed were in open road crashes. Twelve deaths were in single vehicle crashes in which a driver lost control of the vehicle or ran off the road. Eleven of those were on the open road. Nine deaths occurred in head-on crashes. Eight of those were on the open road. Seven deaths were in intersection crashes.
- Of the 28 vehicle occupants killed at least six were not restrained at the time of the crash. The Police officers who attended the crashes estimated that at least two of those killed would have been saved if they had been wearing their safety belt.

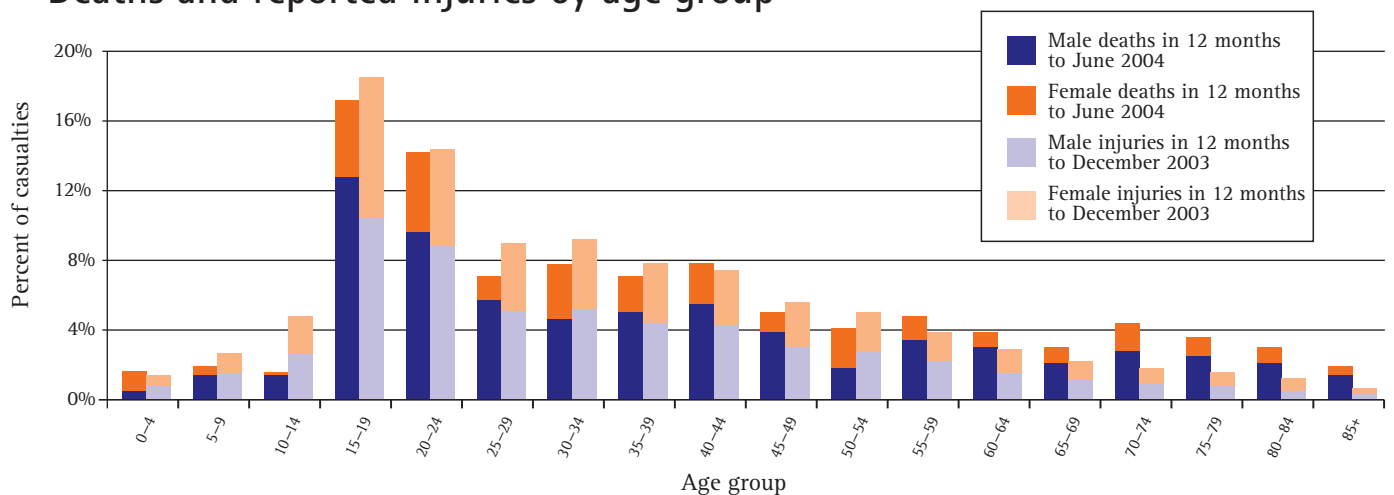
Age breakdowns

Deaths and reported injuries by road user type – rolling 12 month figures

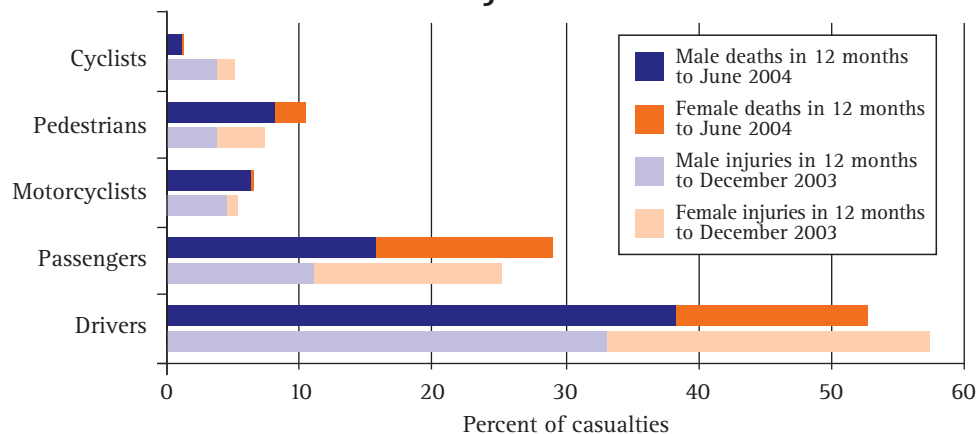
Age group	Drivers		Passengers		Motorcyclists		Pedestrians		Cyclists		Other		Total	
	Deaths	Injuries	Deaths	Injuries	Deaths	Injuries	Deaths	Injuries	Deaths	Injuries	Deaths	Injuries	Deaths	Injuries
Under-15	0	23	15	635	1	12	5	338	1	197	0	6	22	1211
15–24	63	2527	59	1362	4	244	11	228	0	150	0	8	137	4519
25–34	46	1689	11	418	4	169	3	103	1	109	0	1	65	2489
35–44	38	1462	9	258	9	167	7	102	2	98	0	0	65	2087
45–54	24	1050	7	183	5	95	4	54	0	64	0	0	40	1446
55–64	25	656	7	145	4	36	2	55	0	40	0	1	38	933
65–74	14	397	9	86	0	13	7	49	2	10	0	1	32	556
75+	20	308	8	93	1	3	7	62	0	9	1	6	37	481
Unknown	3	92	3	421	1	22	0	67	0	45	0	3	7	650
Total	233	8204	128	3601	29	761	46	1058	6	722	1	26	443	14372

Note: Deaths are for the 12 months to June 2004. Reported injuries are for the 12 months to December 2003.

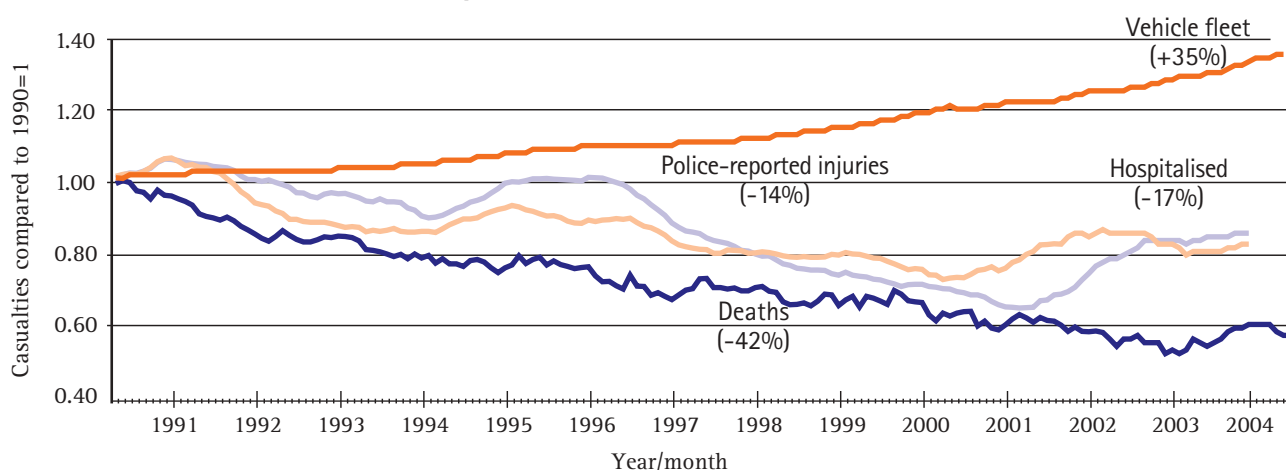
Deaths and reported injuries by age group



Types of road users killed and injured



Road crash casualties compared with 1990



Note: reported injury statistics for 2003 are based on 12 months to December 2003.

Road crash data

	1998	1999	2000	2001	2002	2003	2004
Deaths and injuries							
Deaths							
Number of road deaths	501	508	462	455	405	461	443 [†]
Deaths per 10,000 vehicles	2.2	2.1	1.8	1.7	1.5	1.6	1.6 [†]
Deaths per 100,000 people	13.2	13.4	12.1	11.8	10.3	11.5	11.0 [†]
Injuries							
Reported injuries	12412	11999	10962	12368	13918	14372*	
Number hospitalised (discharges)	6260	5954	5960	6670	6510	6520*	
Number hospitalised for over one day	3511	3158	2846	2880	2740	2710*	
Number hospitalised for over three days	2238	1966	1815	1794	1730	1690*	
[†] Deaths in 12 months to 30 June 2004 * Injuries in 12 months to 31 December 2003							

Behavioural measure

Speed							
Rural speed, % over 110 km/h	21%	19%	17%	13%	9%	6%	
Rural speed, mean (km/h)	102.2	101.8	101.1	100.2	99.1	98.0	
Rural speed, 85th percentile (km/h)	113	112	111	109	107	105	
Alcohol							
Number of drivers killed with excess alcohol	74	61	58	55	60	73	
Proportion of drivers killed with excess alcohol	27%	21%	21%	21%	24%	28%	
Occupant restraints							
Safety belts worn by adults, front	88%	89%	90%	92%	92%	92%	94%
Safety belts worn by adults, rear	62%	67%	76%	70%	78%	81%	
Children restrained, 0–14 years	88%	89%	87%	89%	94%	96%	97%
Child restraints used, 0–4 years	76%	75%	79%	82%	86%	86%	
Cycle helmets							
Cycle helmets worn, weekday	95%	95%	93%	94%	89%	89%	92%