



New Zealand Government



briefing notes crash analysis

a Safe System approach

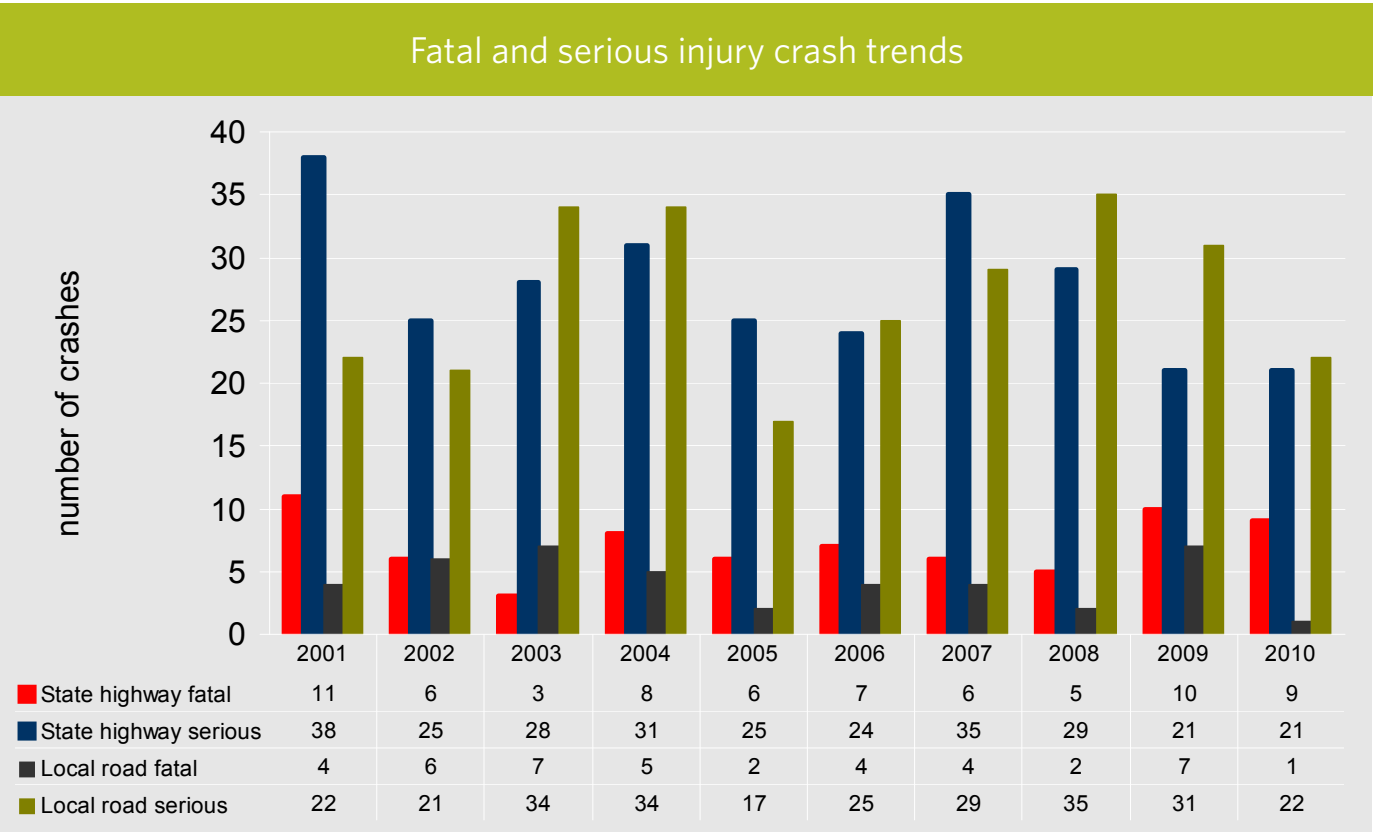
Taranaki road safety region

This report provides a snapshot of the Taranaki road safety region’s traffic crash data. This is the 12th year we have produced a set of briefing notes reporting on traffic crash data and addressing road safety issues across all territorial authorities.

Safer Journeys (NZ’s Road Safety Strategy 2020) is built upon a Safe System approach to road safety, where the emphasis is on reducing the effects of crashes as much as the numbers, and most importantly on reducing fatal and serious casualties on our roads. A crash is a single event that may involve multiple parties, many contributing factors and various casualties.

We have focused on the areas of high, medium and emerging concern set out in Safer Journeys, that are a strategic priority when compared nationally. Each area of concern is assessed locally and regionally by calculating the individual road user’s risk of a fatal or a serious injury.

We present 2010 overviews of the region and its local bodies based upon reported crash data, and the latest trends and crash characteristics for the 2006–2010 period. The identified regional issues are discussed in more detail. The information in this report covers both local roads (council owned roads) and state highways. Injury crash data is used throughout the report in charts, tables and maps, unless otherwise stated.



The region



MAP LEGEND

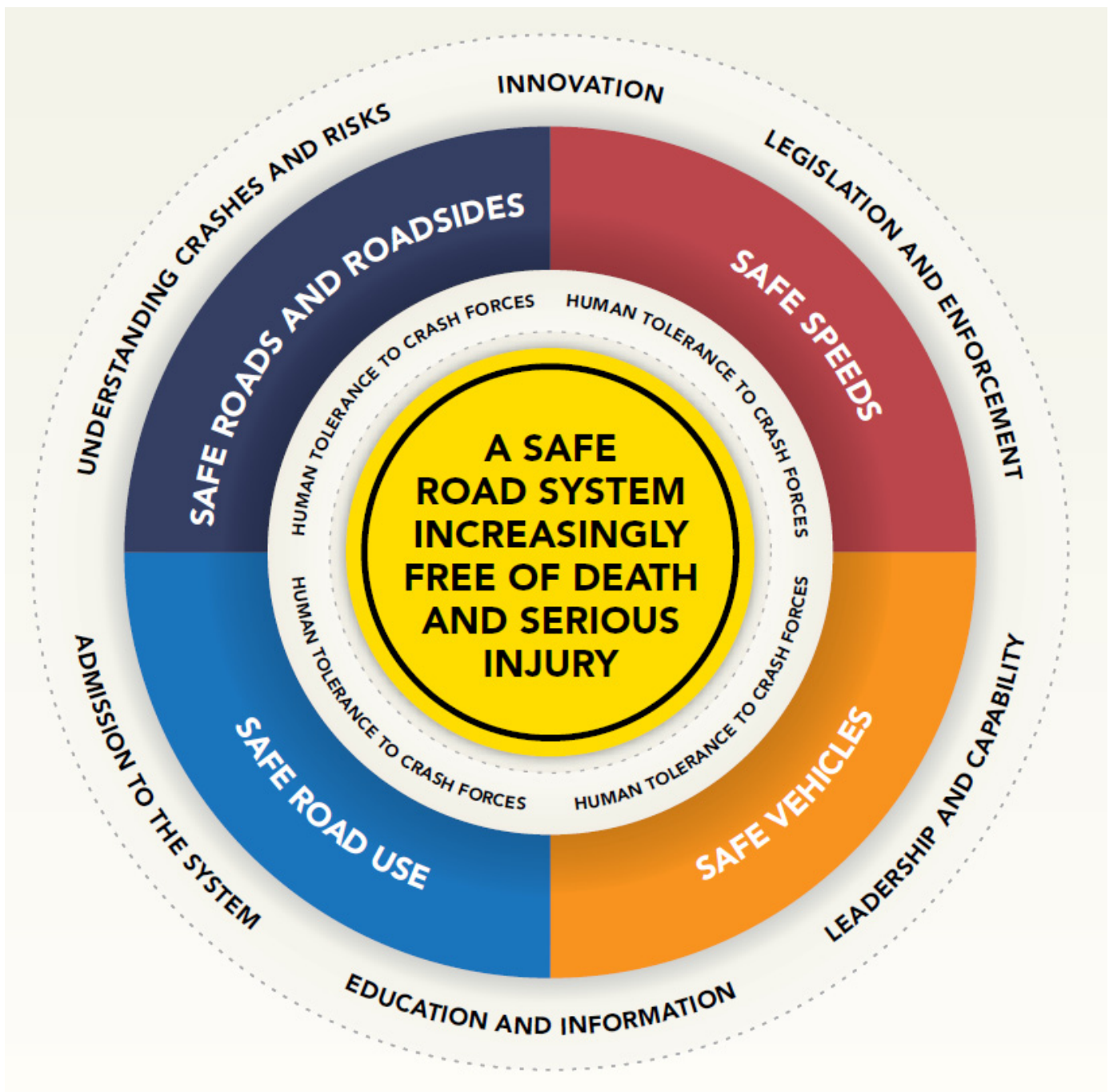
-  State Highway
-  Other Road
-  Territorial Authority Boundary
-  Regional Council Boundary
-  Urban Area

Safe System approach

Safer Journeys, New Zealand’s Road Safety Strategy 2010–2020, envisions a safe road system increasingly free of death and serious injury and introduces the Safe System approach to New Zealand.

This approach represents a fundamental shift in the way we think about road safety. A Safe System approach is about acknowledging that:

- Human beings make mistakes and crashes are inevitable
- The human body has a limited ability to withstand crash forces
- System designers and users must all share responsibility for managing crash forces to a level that does not result in death or serious injury
- It will take a whole-of-system approach to implement the Safe System approach in New Zealand



Taking a Safe System approach - a case study

The following case study is an example of what can go wrong while driving a vehicle on a public road. The parents of the crash victims referred to in the case study have expressed the wish that their tragic story will contribute to safer journeys for all New Zealanders in the future.

It was late afternoon one day In January 2007 when two teenage sisters aged 18 and 15 were tragically killed as a result of a crash. They were on an over bridge when their car slid sideways, crossed the centreline and hit an oncoming truck. They were killed instantly.

The coroner's report identified a number of factors which contributed to the crash. These factors included the tyres fitted to the vehicle, and also the possibility that the driver was texting while driving and may have been distracted.

In a safe road system we are encouraged to look at all aspects around crashes on the roads as we work to have a road network increasingly free from death and serious injury.

This incident demonstrates the many factors typically involved in a crash. To avoid similar fatalities we need to look beyond driver blame and work on strengthening all parts of the system: the roads and roadsides, the speed, the vehicle and the road use. The response to a problem may lie in more than one of these four cornerstones of a safe road system. For instance, in future, better management of both speed and loss of control may lie in vehicle technology.

Using the principles of a Safe System approach in this case, the following has been observed:

- **Safe roads and roadsides:** This section of State Highway 1 has a 100km/h speed limit and is rated a 'two star' road using the KiwiRAP* system for rating roads. The bridge where the crash occurred had a moderate right hand curve and a speed advisory of 85km/h. Records indicate that there had been five injury crashes reported in the immediate vicinity of the bridge. These included four lost control crashes, one of which resulted in a head-on crash.
 - * KiwiRAP rates roads from one to five stars according to their safety features.
- **Safe vehicles:** The vehicle driven by the sisters was a 1998 Japanese imported Toyota Trueno, which was unrated in the ANCAP* system. The vehicle had a current warrant of fitness at the time of the crash, but it was found that the tyres were not matched and the rear ones were both low in tread, and designed for cold/snow conditions. If the vehicle involved in this crash had been a five star ANCAP rated vehicle, the chances of fatality would have been reduced. Evidence suggests that this vehicle had lost control on more than one occasion previously due to driver input and had previously been involved in a crash and subsequently repaired.
 - * The Australasian New Car Assessment Programme (ANCAP) tests the protection provided to front seat occupants in serious head-on and side-impact crashes. These ratings allows comparison of the crash protection offered in a serious crash by different vehicles of similar weight.
- **Safe road use:** The driver of the car was an 18 year old who held a restricted drivers licence and had been driving for about two years. Evidence indicates that she may have been texting while driving and may have been distracted. In 2010 the law changed making cell phone use while driving illegal.
- **Safe speeds:** Since the crash the advisory speed has been reduced to 75km/h, and the sign is highlighted by a large white background. The Police investigation established that this vehicle was likely to have lost control due to fast steering input and that excessive speed could not be supported as a cause of the crash.

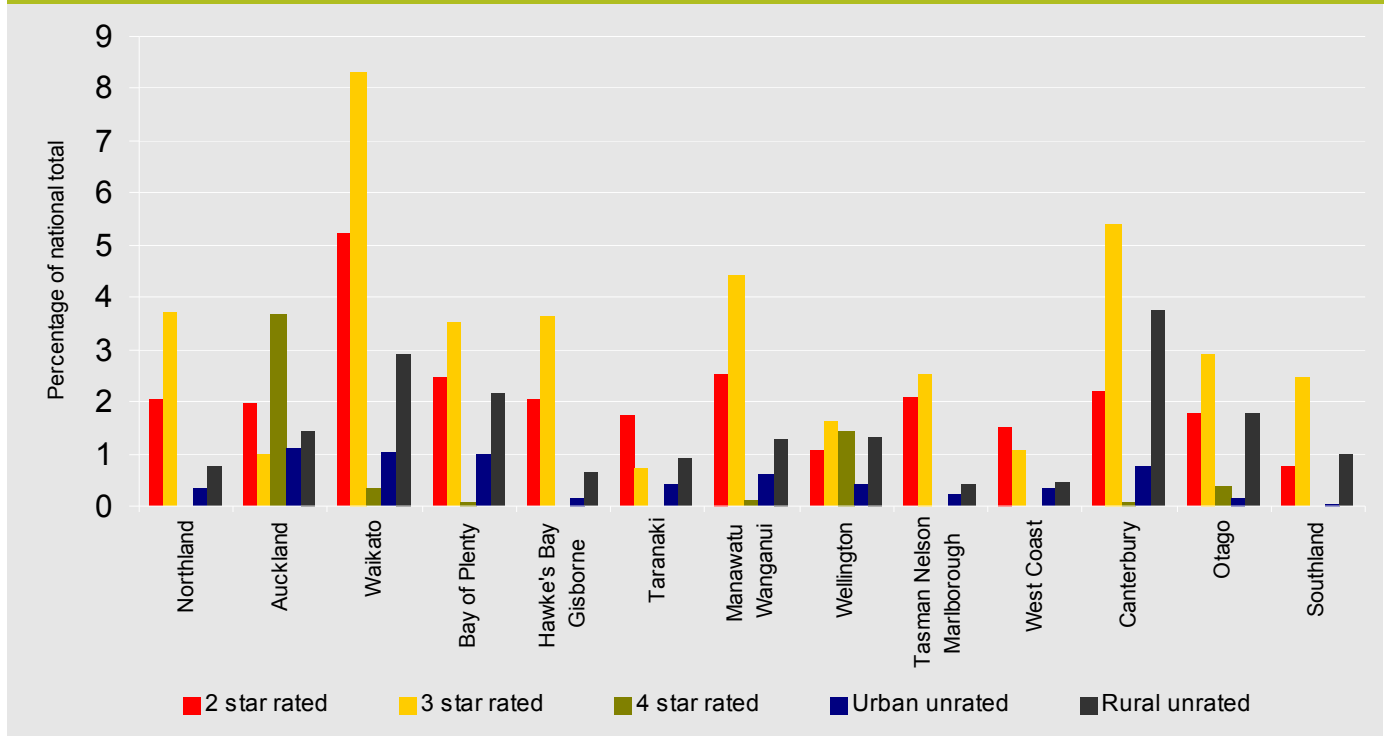
While this tragic crash is still fresh in the memory of these teenagers' loved ones, the lessons we can learn from a Safe System approach are of immense value. Road controlling authorities are encouraged to apply the Safe System approach in all their planning. Together we can achieve safer journeys for all New Zealanders.



A view across the Safe System approach

Safe roads & roadsides

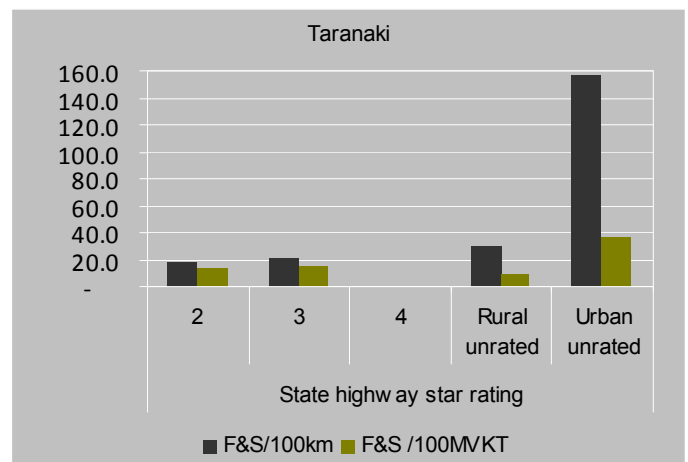
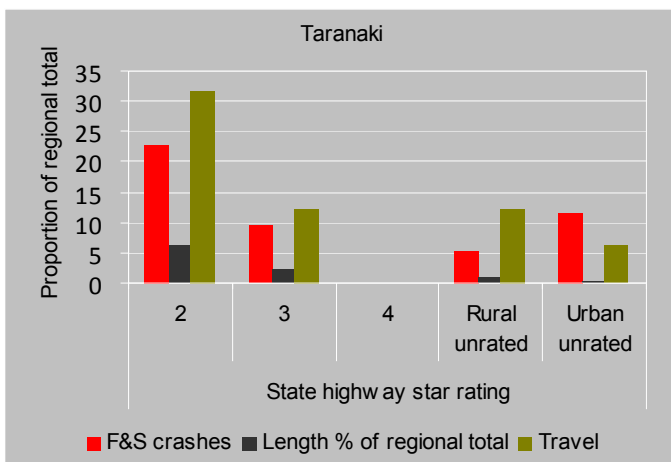
Regional distribution crashes state highway star rating (2008-2010 fatal & serious)



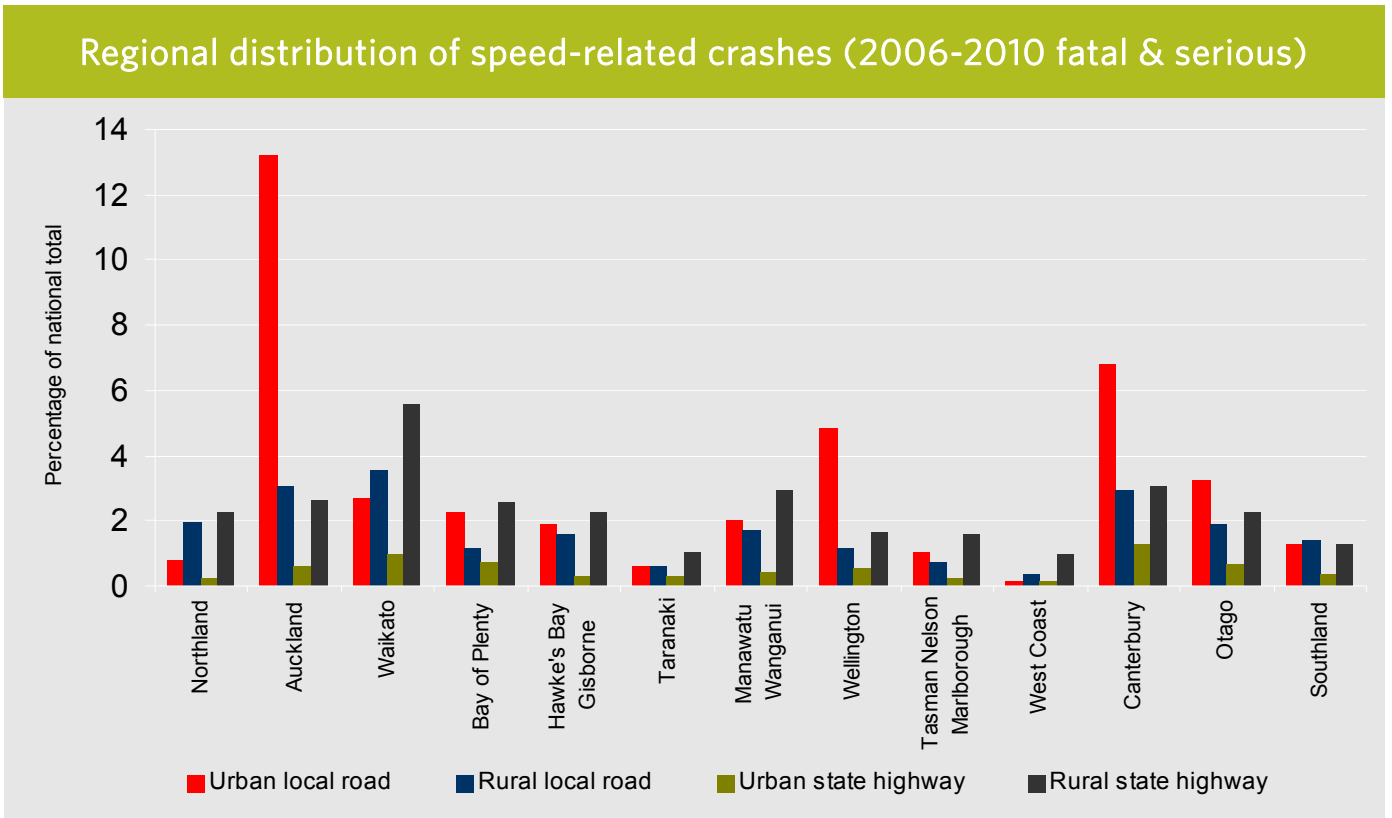
These three charts show the distribution of fatal and serious crashes on our state highway network. The chart above shows the regional distribution of all New Zealand fatal and serious crashes on our state highway network according to the star rating of that section of road where they occur.

The chart below left shows the distribution of fatal and serious crashes in Taranaki road safety region on the regions state highway network according to the star rating of that section of road where they occur. This is compared to the regional total length of and the distribution of regional travel on those star rated roads sections.

The chart below right shows the risk of a fatal and serious crash in Taranaki road safety region on the regions state highway network by both road length and individual use according to the star rating of that section of road where they occur.



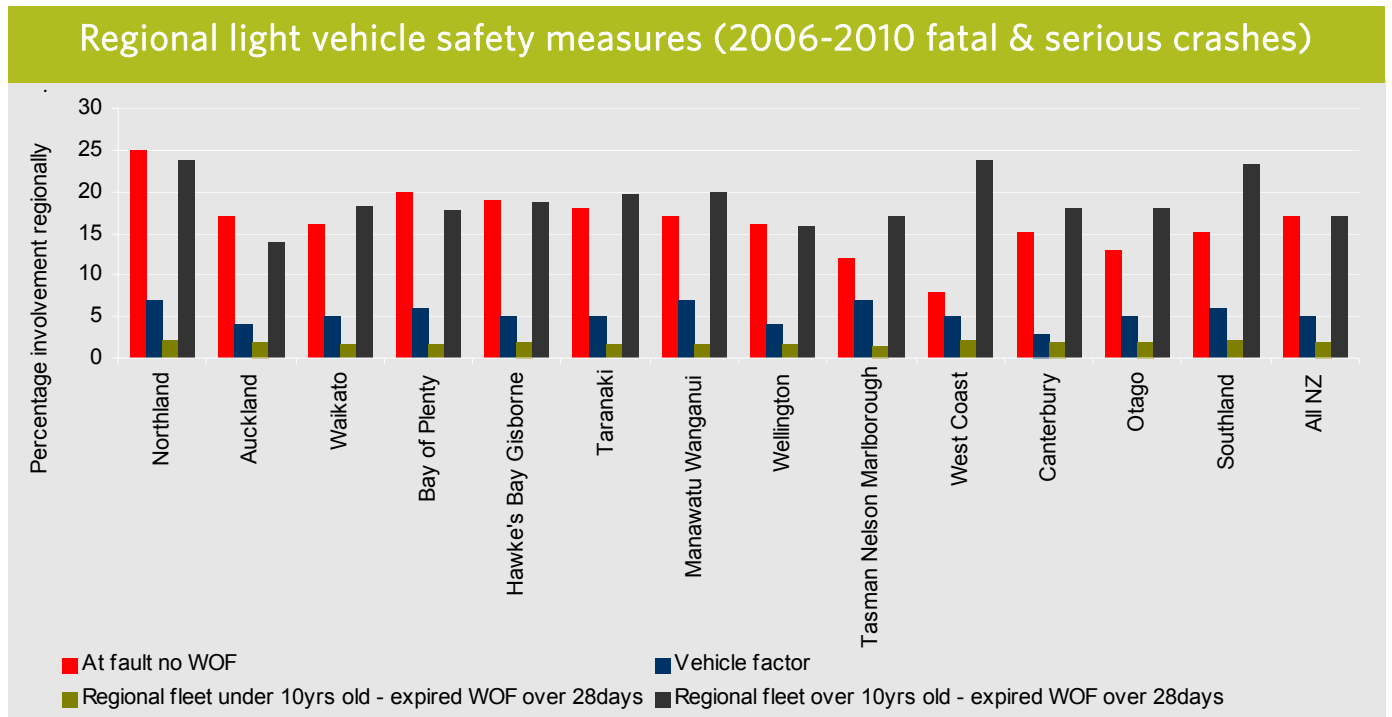
Safe speeds



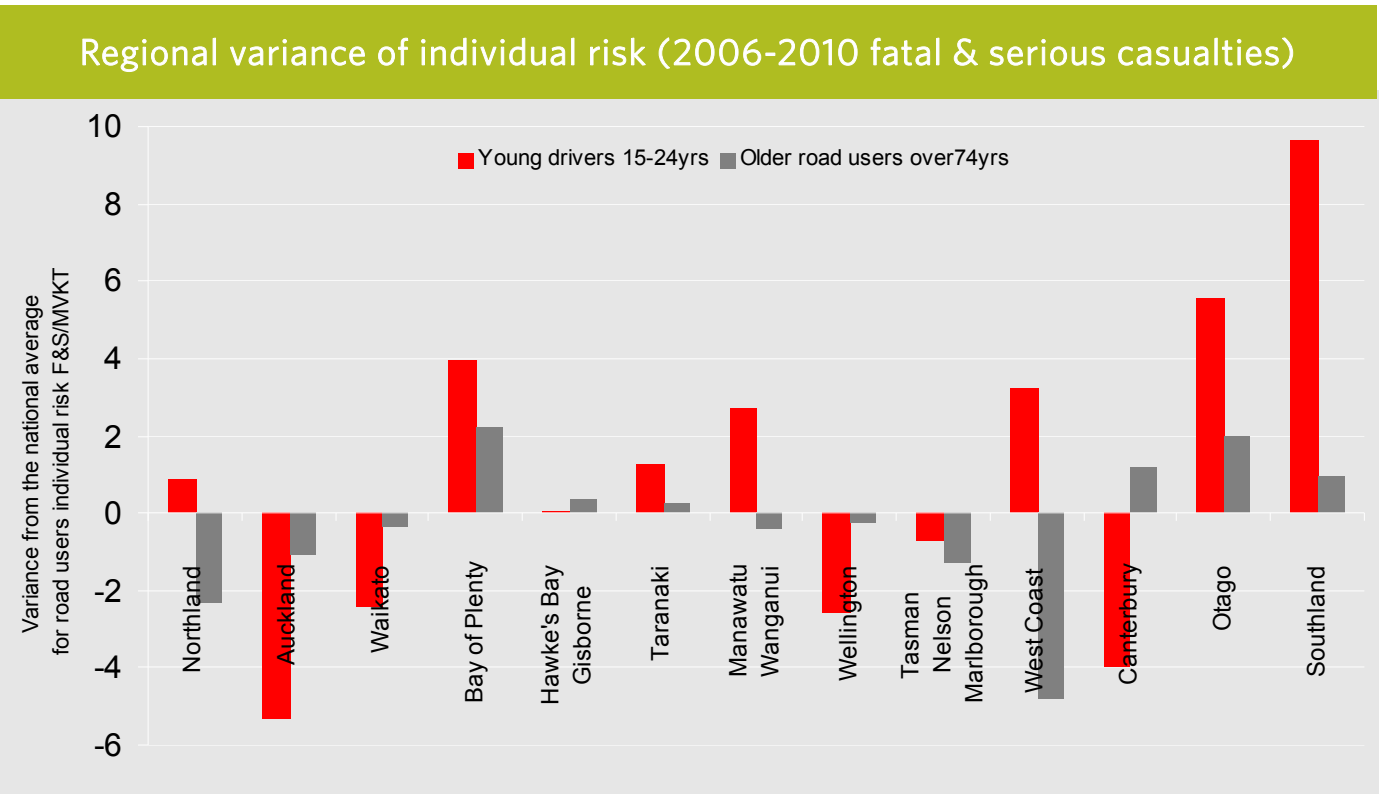
These two charts show the distribution of fatal and serious crashes across the road safety regions. The chart above shows speed-related crashes, split to show rural & urban speed zoning and local roads & state highways.

The chart below shows the involvement of light vehicles at fault with no current WOF and those with a vehicle fault in fatal or serious crashes. Also the regional proportion of light vehicles, showing both under and over 10 year old vehicles, that have an expired WOF of over 28 days.

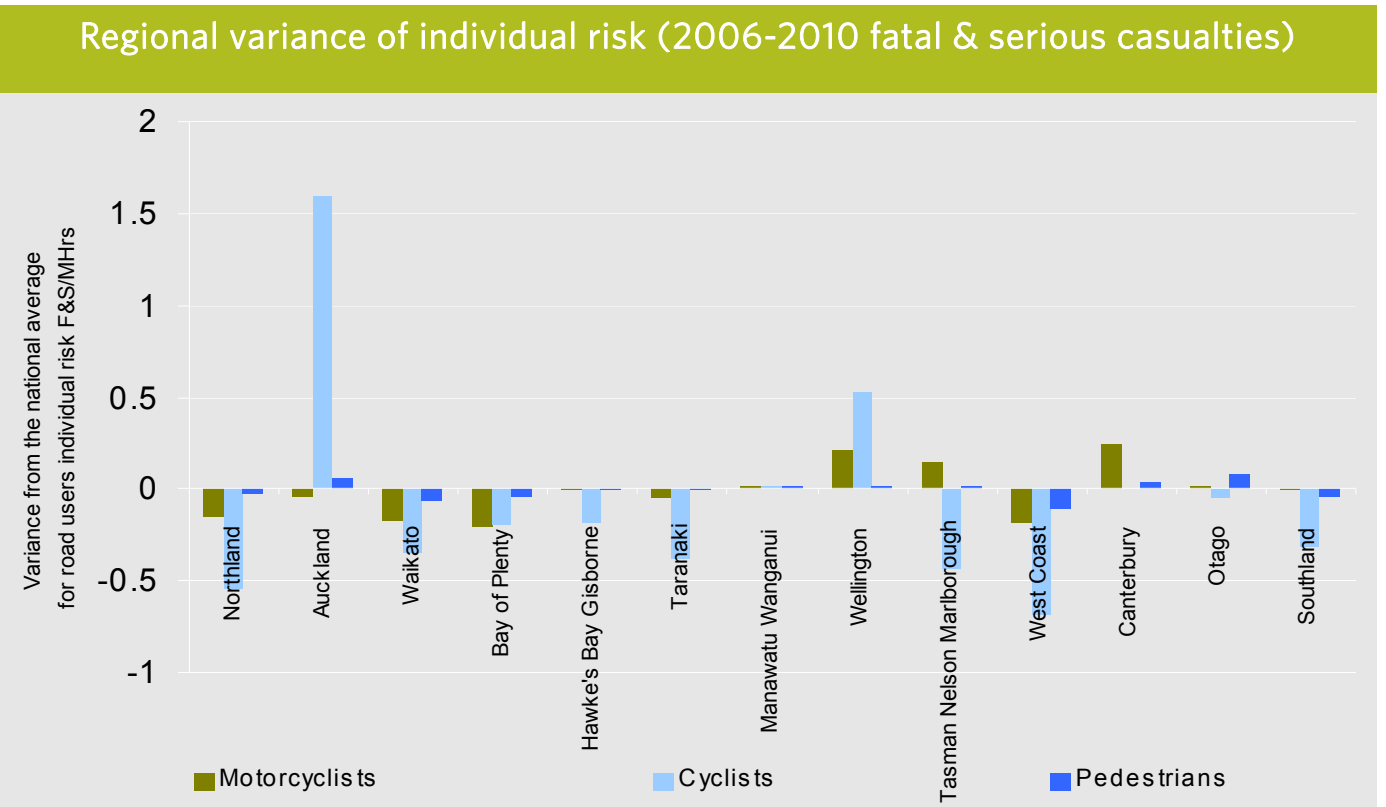
Safe vehicles



Safe road use



These two charts show the variance of individual risk to specific road users across the road safety regions. The chart above show young drivers of light vehicles, that is those aged 15-24 years, compared with older road-users, those persons aged over 74 years. The chart below shows and compares the individual risk to vulnerable road users, these are motorcyclists, cyclists and pedestrians. This measure of risk has been used in this series of reports to select specific issue to be discussed at a regional level.



Risk levels across Safer Journeys' areas of concern

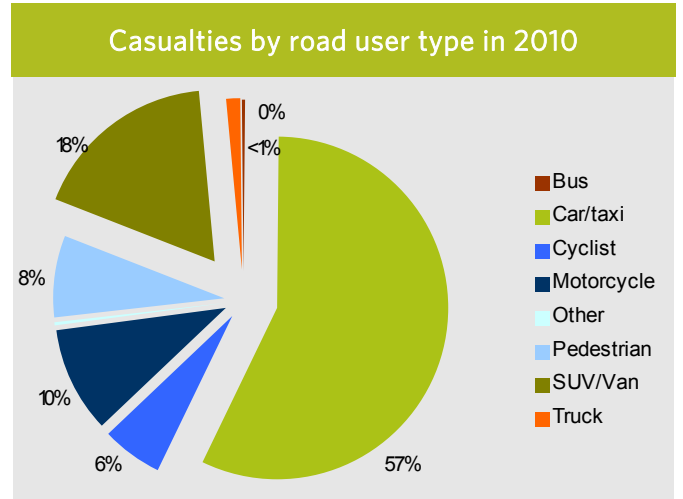
Taranaki road safety region selected areas of concern					
Taranaki	Safer Journeys' area of concern		New Plymouth District	Stratford District	South Taranaki District
		Young drivers	Safer Journeys areas of high concern		Red
	Alcohol & drugs			Amber	
	Roads & roadsides: Rural roads			Red	
	Roads & roadsides: Urban intersections			Amber	
	Too fast for conditions				Amber
	Motorcyclists			Red	
	Cyclists	Areas of medium concern	Red		
	Pedestrians		Red		
	Attention diverted			Green	
	Fatigue			Red	Amber
	Older road users	Emerging concern		Green	Green

Each area of concern is assessed locally and regionally by calculating the individual road user's risk of a fatal or serious injury. The degree of risk for each issue has been ranked nationally and the significance of this is shown above. For further information - <http://www.nzta.govt.nz/resources/communities-at-risk-register/>

Key:	Red	High individual risk
	Amber	Medium-high individual risk
	Green	Above average individual risk

2010 regional overview

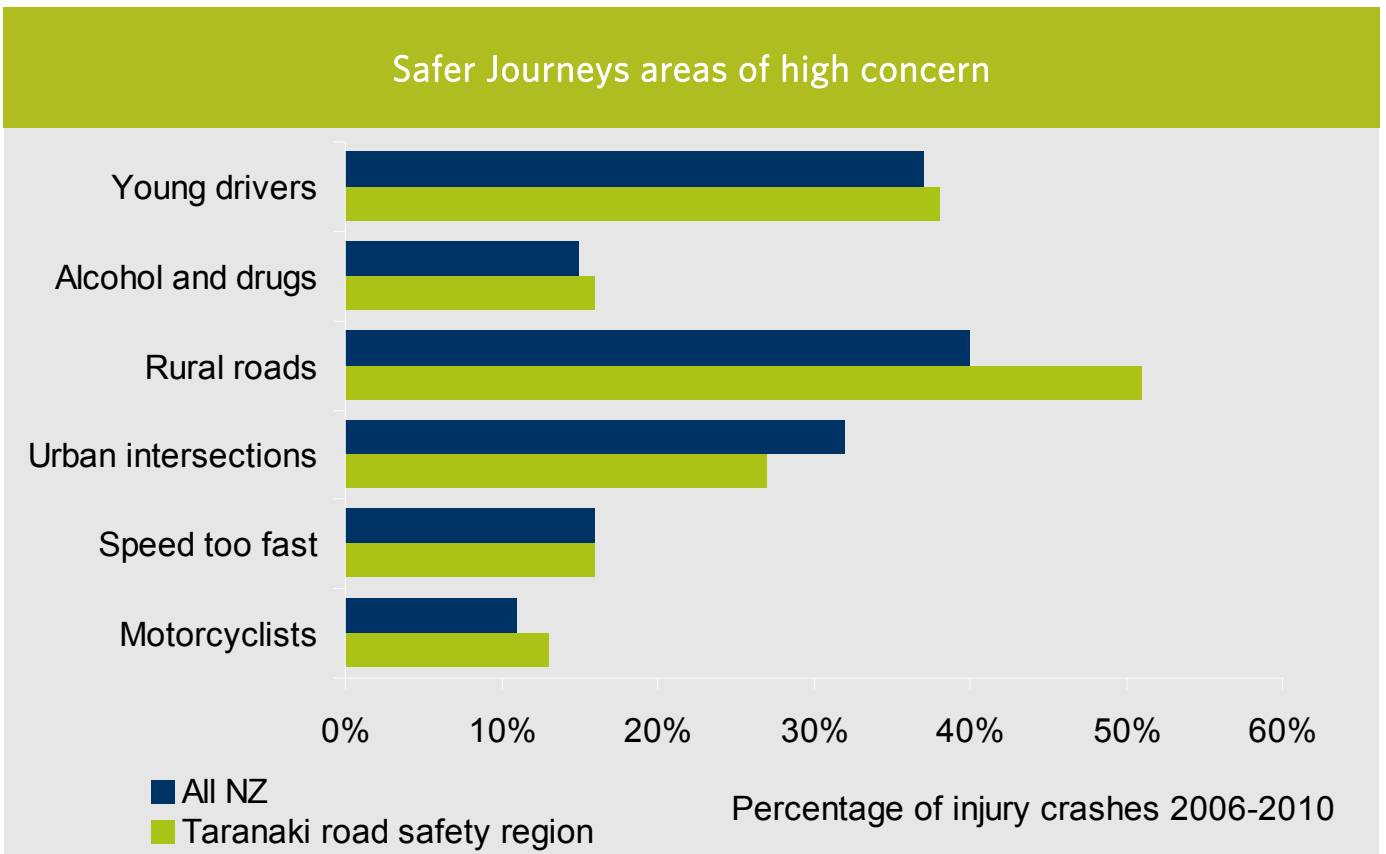
2010 road trauma	
Casualties	Taranaki road safety region
Death	11
Serious injury	52
Minor injury	282
Total casualties	345



Police reported crashes	Taranaki road safety region
Fatal crashes	10
Serious injury crashes	43
Minor injury crashes	218
Total injury crashes	271
Non-injury crashes	855

2010 MoT calculation social cost of all crashes	
Local roads	\$ 38.70M
State highways	\$ 68.11M
Total	\$ 106.81M

NOTE: The estimated social cost includes loss of life or quality of life, loss of output due to injuries, medical and rehabilitation costs, legal and court costs and property damage.



Regional local roads

In the 2006-2010 period in Taranaki road safety region there were 745 injury crashes on local roads resulting in 18 deaths and 166 serious injuries.

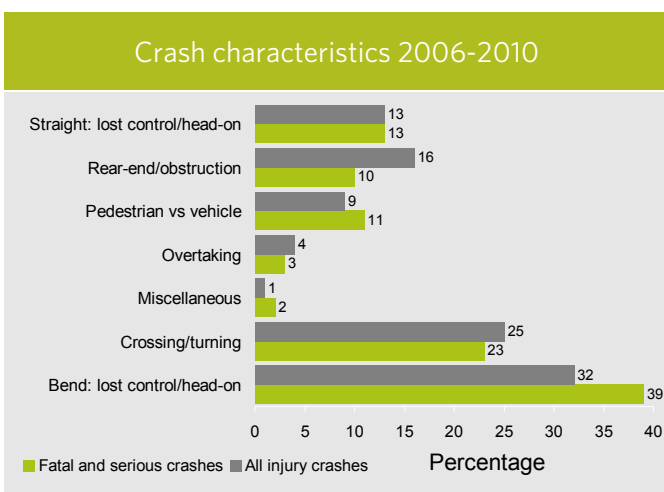
The latest five year data shows a downward trend in both fatal and serious injury crashes on local roads.

The table below shows the number of casualties split into rural or urban areas, (rural is defined as an area with a speed limit of 80km/hr or more).

Casualties by urban/rural 2006 -2010				
	Fatalities	Serious injuries	Minor injuries	Total
Rural	16	82	291	389
Urban	2	84	508	594
Total	18	166	799	983

The chart below shows the distribution of crashes by their general characteristic, showing the combined number of fatal and serious injury crashes against all injury crashes.

Two-fifths of fatal and serious injury crashes were loss of control or head-on crashes at bends. Nearly a fifth of the fatal and serious injury crashes involved crossing and turning movements.



The following table shows the factors attributed to contributing to injury crashes, showing the combined number of fatal and serious injury crashes against all injury crashes.

Crashes are a complex combination of contributing factors and usually have more than one factor attributed to it, and as a result the percentages in the table will not add neatly to 100.

Nearly a third of fatal and serious injury crashes involved poor observation and alcohol each. A quarter of the fatal and serious injury crashes involved speed too fast for the conditions and poor handling each. A fifth of the fatal and serious injury crashes involved failing to give way or stop and a tenth involved road factors.

Factors contributing to crashes Local roads 2006-2010

Crash factor	Percentage fatal and serious crashes	Percentage all injury crashes
Alcohol	30	20
Too fast (for the conditions—not over the speed limit necessarily)	25	20
Failed to give way or stop	21	25
Failed to keep left	6	4
Overtaking	3	3
Incorrect lane or position	3	4
Poor handling (for example losing control while braking)	23	19
Poor observation (not checking properly)	31	41
Poor judgement (for example misjudging speed of others)	13	13
Fatigue	3	4
Disabled / ill	5	5
Pedestrian factors	9	7
Vehicle factors	3	4
Other (misc)	11	9
Road factors	12	10
Weather	6	4

Further information about injury crashes on local roads 2006-2010:

- 23 percent on wet roads
- 32 percent during night time
- 39 percent at intersections
- 44 percent of crashes struck roadside objects (in total 467 objects hit)
- Most represented five year age group in at fault drivers in crashes, 15 to 19 years (26 percent of at fault drivers)
- 15 percent of crashes involved motorcycles
- At fault driver held full NZ licence: 53 percent

Regional state highways

In the 2006-2010 period in Taranaki road safety region there were 795 injury crashes on state highways resulting in 40 deaths and 163 serious injuries.

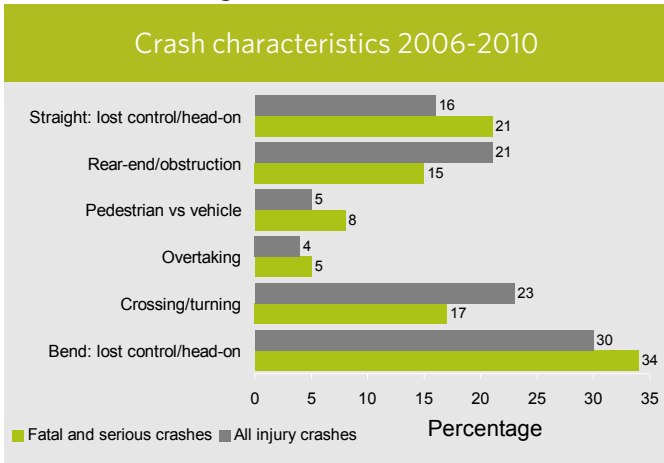
The latest five year data shows an upward trend in fatal crashes and a downward trend in serious injury crashes on state highways.

The table below shows the number of casualties split into rural or urban areas, (rural is defined as an area with a speed limit of 80km/hr or more).

Casualties by urban/rural 2006 -2010				
	Fatalities	Serious injuries	Minor injuries	Total
Rural	34	128	589	751
Urban	6	35	314	355
Total	40	163	903	1106

The chart below shows the distribution of crashes by their general characteristic, showing the combined number of fatal and serious injury crashes against all injury crashes.

A third of fatal and serious injury crashes were loss of control or head-on crashes at bends. A fifth of the fatal and serious injury crashes involved loss of control or head-on crashes on straight roads.



The following table shows the factors attributed to contributing to injury crashes, showing the combined number of fatal and serious injury crashes against all injury crashes.

Crashes are a complex combination of contributing factors and usually have more than one factor attributed to it, and as a result the percentages in the table will not add neatly to 100.

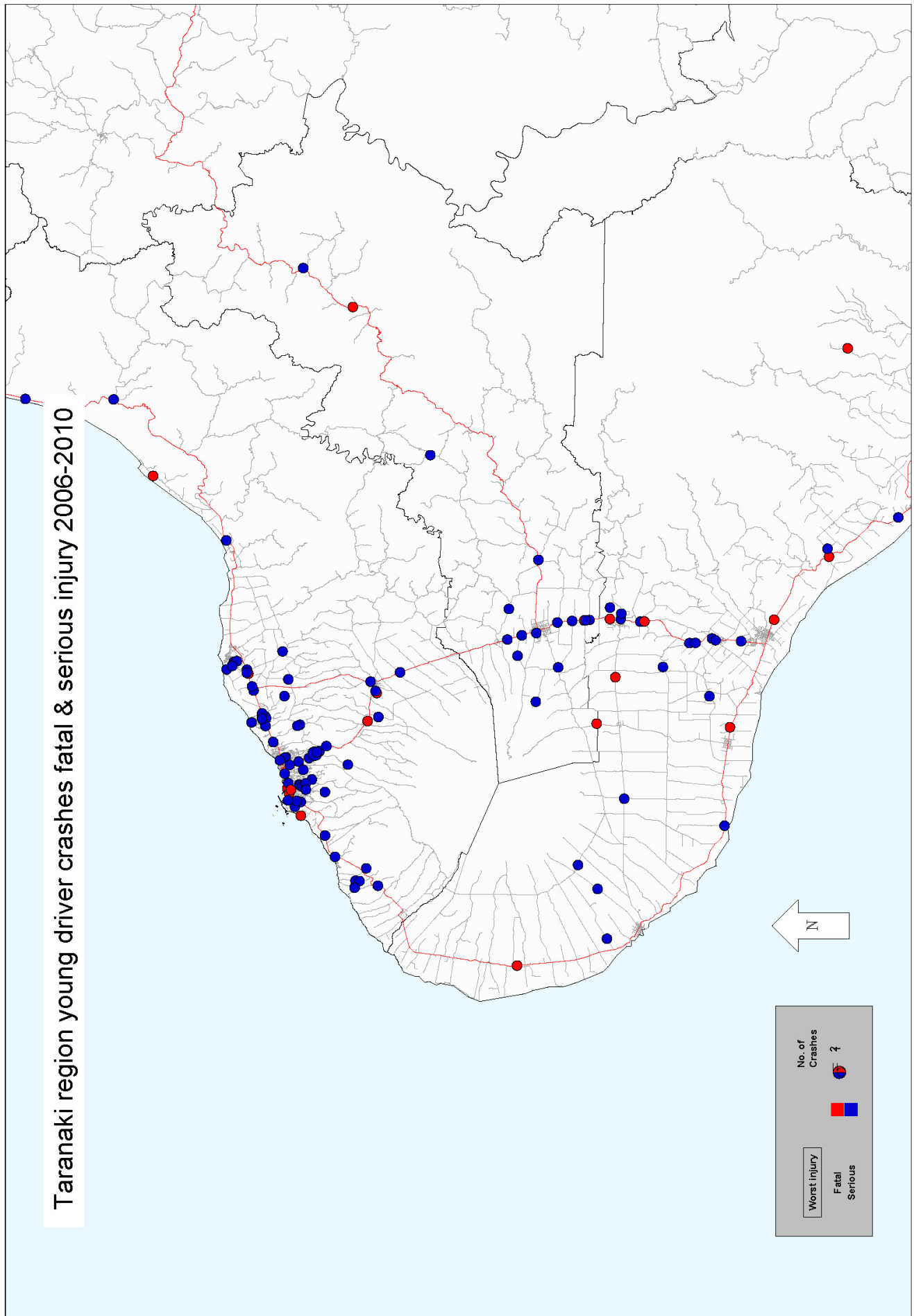
Nearly a third of fatal and serious injury crashes involved poor observation. Over a fifth of the fatal and serious injury crashes involved alcohol. A sixth of the fatal and serious injury crashes involved failing to give way or stop. A seventh of the fatal and serious injury crashes involved speed too fast for the conditions and a similar proportion involved driver fatigue.

Factors contributing to crashes State highways 2006-2010		
Crash factor	Percentage fatal and serious crashes	Percentage all injury crashes
Alcohol	22	12
Too fast (for the conditions—not over the speed limit necessarily)	15	13
Failed to give way or stop	17	22
Failed to keep left	12	5
Overtaking	3	2
Incorrect lane or position	7	8
Poor handling (for example losing control while braking)	17	18
Poor observation (not checking properly)	30	40
Poor judgement (for example misjudging speed of others)	10	12
Fatigue	14	10
Disabled / ill	3	5
Pedestrian factors	9	5
Vehicle factors	5	7
Other (misc)	8	7
Road factors	12	13
Weather	8	3

Further information about injury crashes on state highways 2006-2010:

- 31 percent on wet roads
- 30 percent during night time
- 37 percent at intersections
- 45 percent of crashes struck roadside objects (in total 513 objects hit)
- Most represented five year age group in at fault drivers in crashes, 15 to 19 years (20 percent of at fault drivers)
- 11 percent of crashes involved motorcycles
- At fault driver held full NZ licence: 60 percent

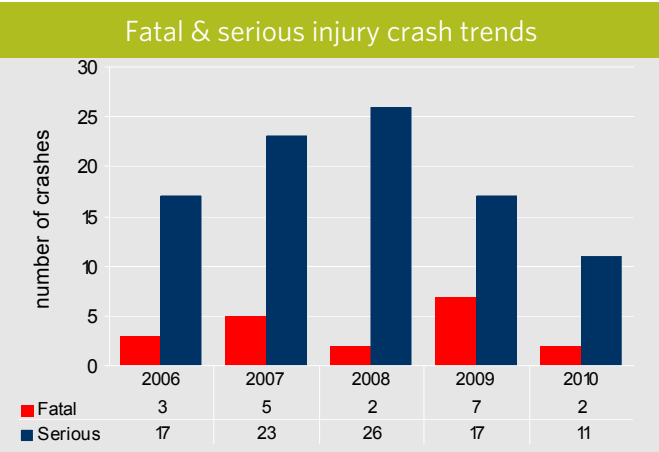
Regional young driver fatal & serious crashes



Young drivers

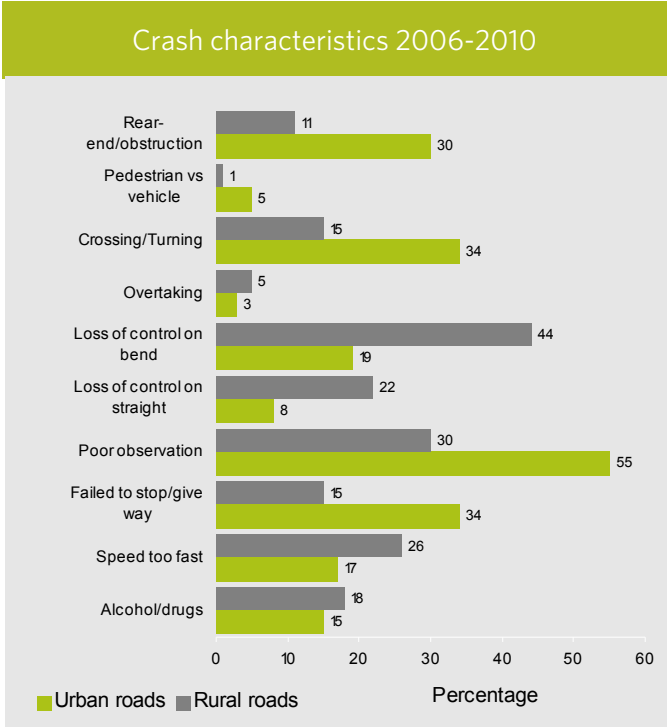
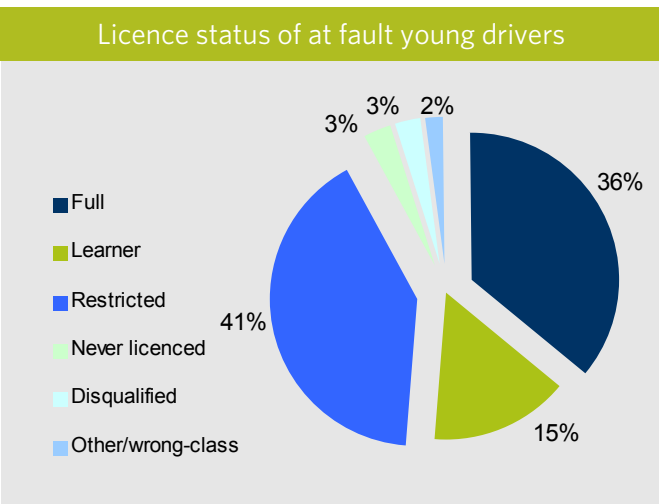
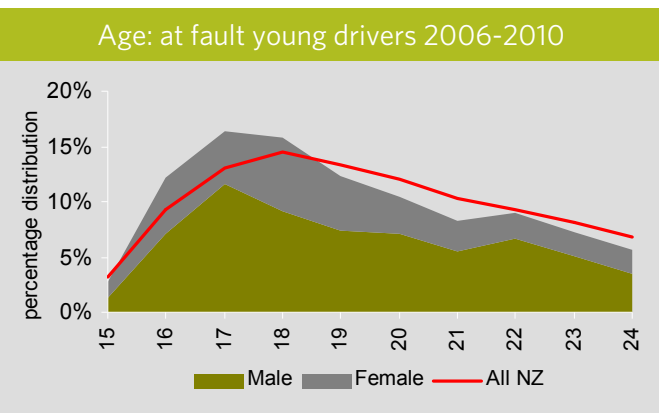
Young drivers are those aged 15 to 24 years. This age group is highly represented in national crash statistics and is a high priority target for Safer Journeys.

In Taranaki road safety region between 2006 and 2010, there were 606 injury crashes involving young drivers (289 on local roads and 317 on state highways).



A third of all at fault young drivers in the region were aged 17-18 years olds, 21 percent were male of this age and 12 percent were female.

Two-fifths of young at fault drivers held a restricted licence while over a third held a full NZ licence.



Further information about injury crashes involving young drivers in the road safety region 2006-2010:

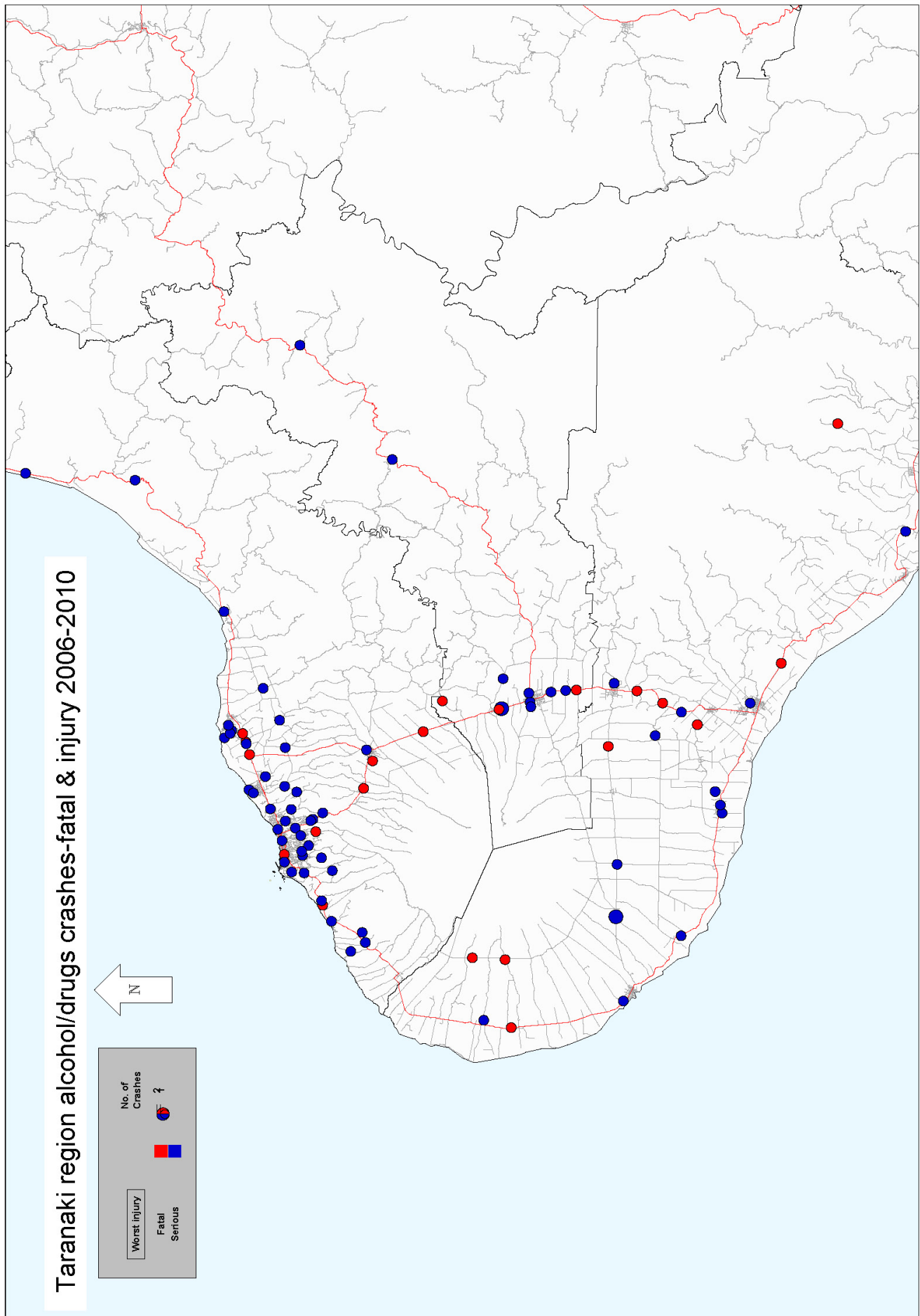
Local roads

- 6 deaths, 68 serious injuries 342 minor injuries
- 48 percent were single vehicle crashes
- 62 percent were on urban roads
- 36 percent at intersections
- 40 percent at night
- 26 percent wet or icy roads
- Worst month May
- Worst day of week Friday
- Worst three hour time period 3 pm to 6 pm

State highways

- 15 deaths, 60 serious injuries 397 minor injuries
- 34 percent were single vehicle crashes
- 36 percent were on urban roads
- 42 percent at intersections
- 34 percent at night
- 31 percent on wet or icy roads
- Worst month July
- Worst day of week Saturday
- Worst three hour time period 3pm to 6 pm

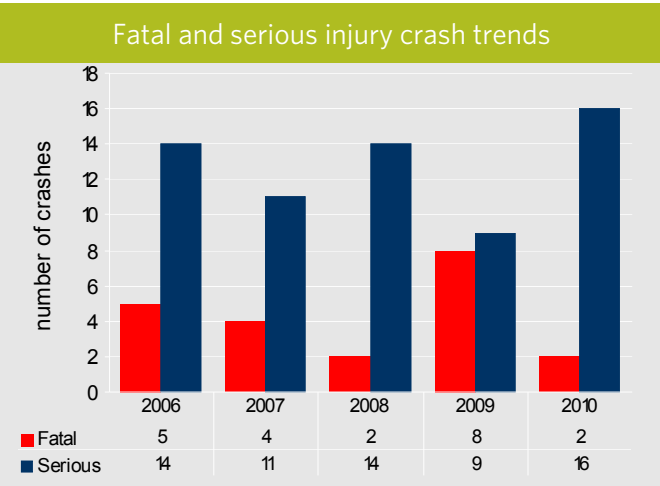
Regional alcohol/drug-related fatal & serious crashes



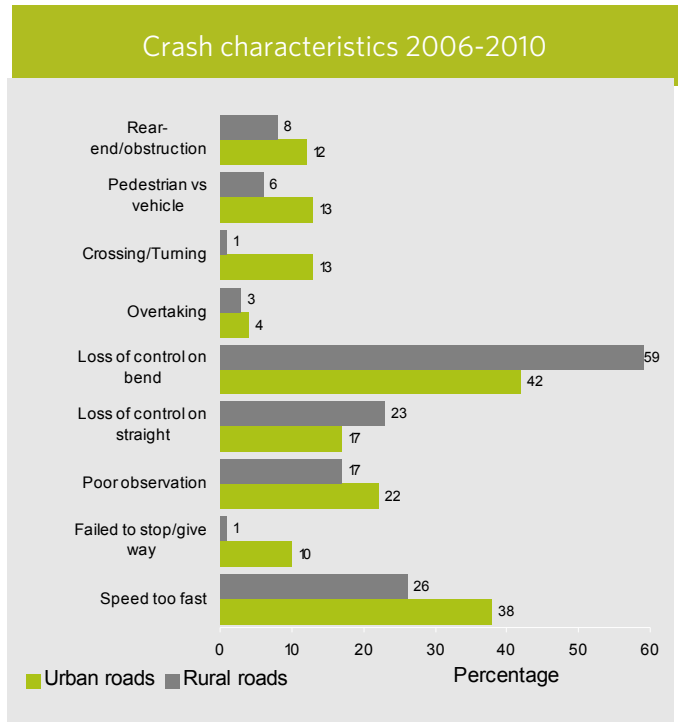
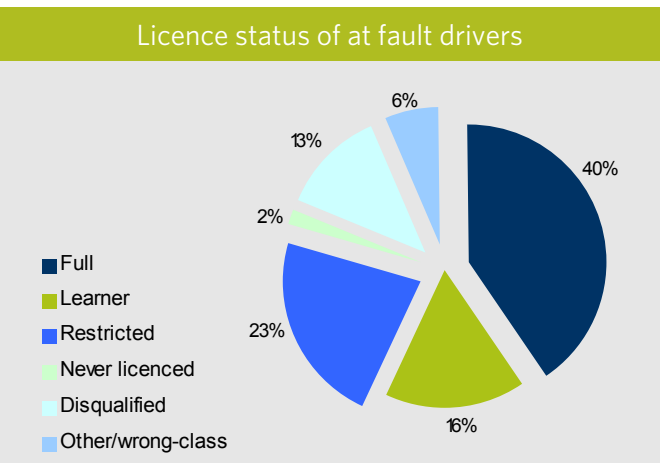
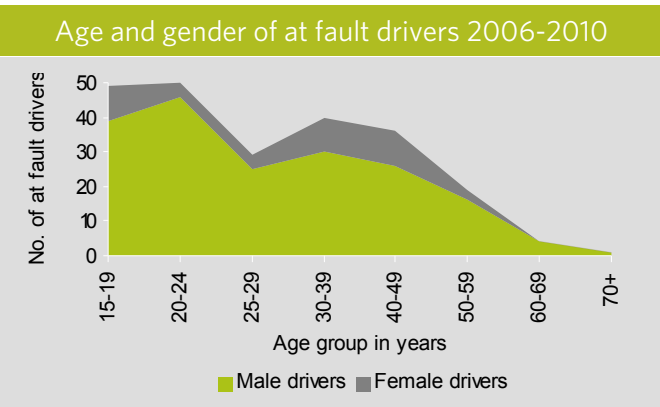
Alcohol and drugs

Alcohol affects the way people drive. Studies show that the risk of being involved in a crash increases rapidly as a driver's blood alcohol level rises. A driver over the legal limit (80mg of alcohol per 100ml of blood) is sixteen times more likely to be involved in a fatal crash than a sober driver.

In Taranaki road safety region, alcohol was a factor in 245 injury crashes; 147 on local roads and 98 on state highways.



Three-quarters of at fault drivers in alcohol related injury crashes were male and two-fifths were under 25 years of age. Nearly two-fifths of at fault drivers in these injury crashes held a full NZ licence.



Further information about alcohol related injury crashes in the road safety region 2006-2010:

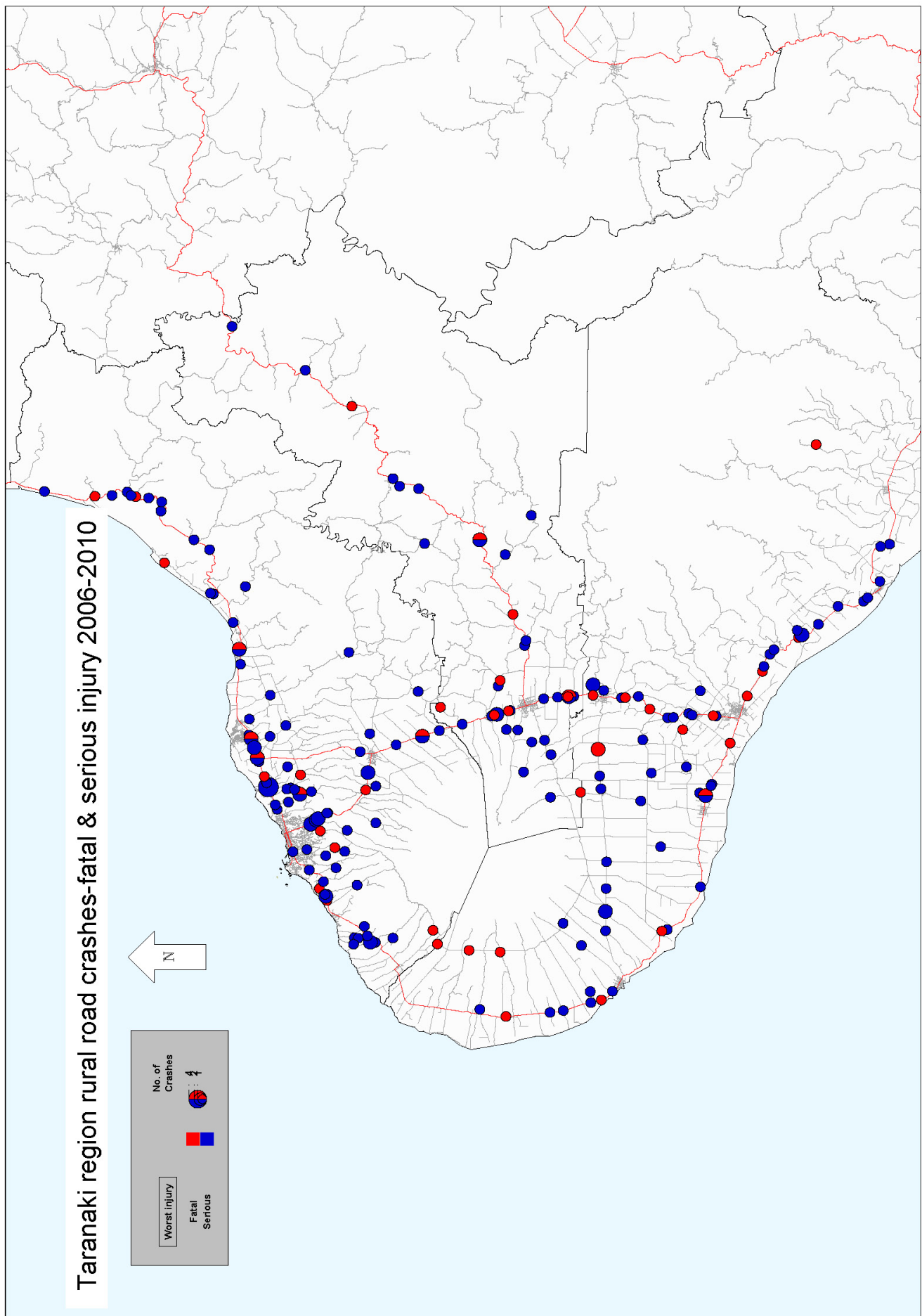
Local roads

- 8 deaths, 52 serious injuries and 148 minor injuries
- Most common crash type lost control at a bend (85 crashes)
- 33 percent at intersections
- 78 percent night time
- Worst three hour time period, midnight to 3am
- Worst day Sunday, best Monday
- Number of roadside objects struck, 176
- Most common object struck, fence

State highways

- 14 deaths, 36 serious injuries and 105 minor injuries
- Most common crash type lost control at a bend (42 crashes)
- 18 percent at intersections
- 73 percent night time
- Worst three hour time period, midnight to 3am
- Worst day Sunday, best Wednesday
- Number of roadside objects struck, 100
- Most common object struck, fence

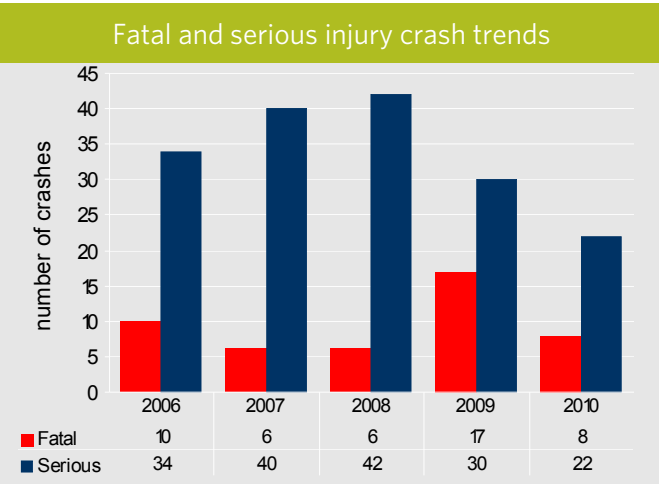
Regional rural road fatal & serious crashes



Rural roads

High risk rural roads are a high priority for Safer Journeys and many of the issues for these road are around the provision of a safe road environment. This includes appropriate geometric design, good delineation, adequate surface skid resistance and a roadside free of unforgiving hazards.

Between 2006 and 2010 in Taranaki road safety region there were 789 injury crashes on rural roads (that is roads with a speed limit of 80km/hr or more). This represents 66 percent of all fatal and serious crashes in the region.



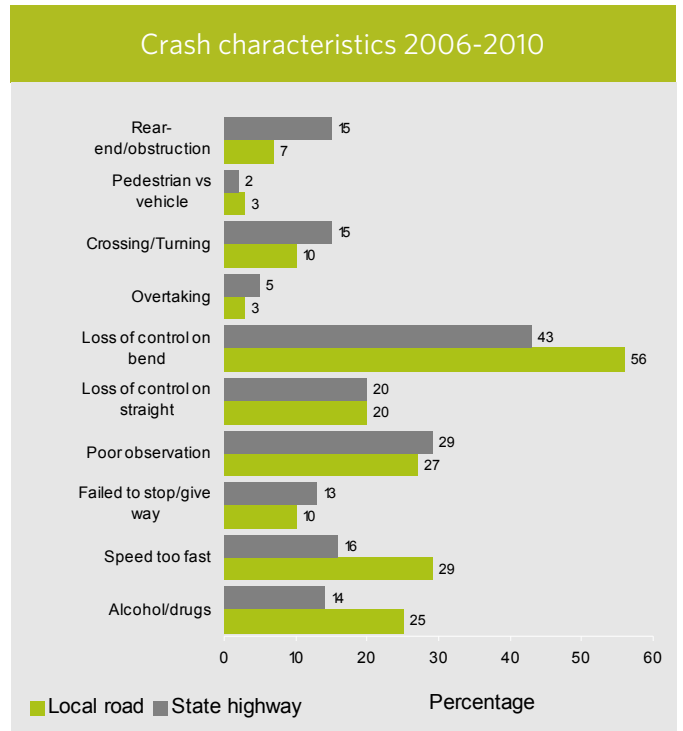
A significant problem on rural roads are roadside hazards which contribute to the overall crash outcome by increasing injury severity but can in themselves be a contributory factor in a crash.

For example occupants in an errant vehicle striking a large tree close to the road edge are likely to sustain worse injuries than if the tree was not present.

CAS records roads conditions and road faults at the time of the crash if they are reported by the attending officer and these are detailed below.

Types of road factors in injury crashes	
Road factor type	Number of times reported
Slippery road*	79
Road surface in poor condition	36
Road obstructed	6
Visibility limited	23
Signs or signals (needed or faulty)	5
Markings (needed or faulty)	1
Street lighting	2

*note that NZTA does not assume that a road that is wet is necessarily slippery. This factor is only added to CAS if the attending Police Officer specifically mentions a slippery road.



Further information about injury rural road crashes in the road safety region 2006-2010:

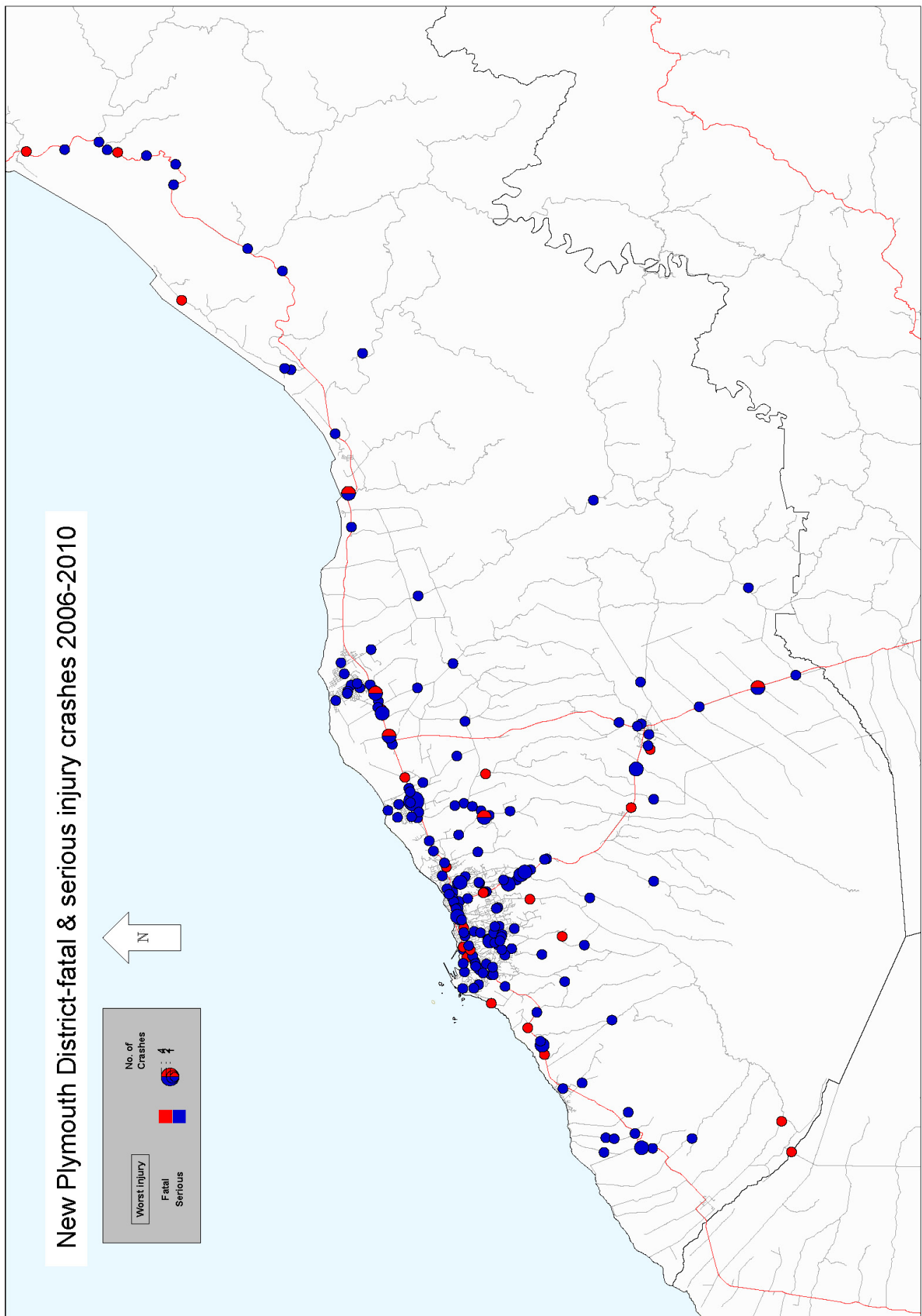
Local roads

- In 271 crashes there were 16 deaths, 84 serious injuries and 291 minor injuries
- Most common crash type was loss of control at bends (151 crashes)
- 14 percent at intersections
- 26 percent wet road
- 36 percent night time
- 16 percentage of crases included a contributory road related crash factor
- Most common at fault driver age group, 15 to 19 years (28 percent of at fault drivers)

State highways

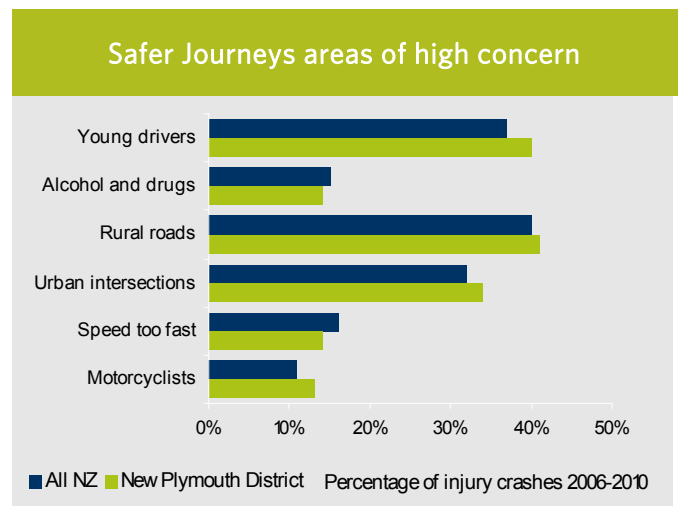
- In 518 crashes there were 34 deaths, 128 serious injuries and 589 minor injuries
- Most common crash type loss of control at a bend (224 crashes)
- 24 percent at intersections
- 34 percent wet road
- 33 percent night time
- 18 percentage of crases included a contributory road related crash factor
- Most common at fault driver age group, 15 to 19 years (19 percent of at fault drivers)

New Plymouth District fatal & serious crashes



New Plymouth District 2010 overview

2010 road trauma	
Casualties	New Plymouth District
Death	3
Serious injury	28
Minor injury	173
Total casualties	204



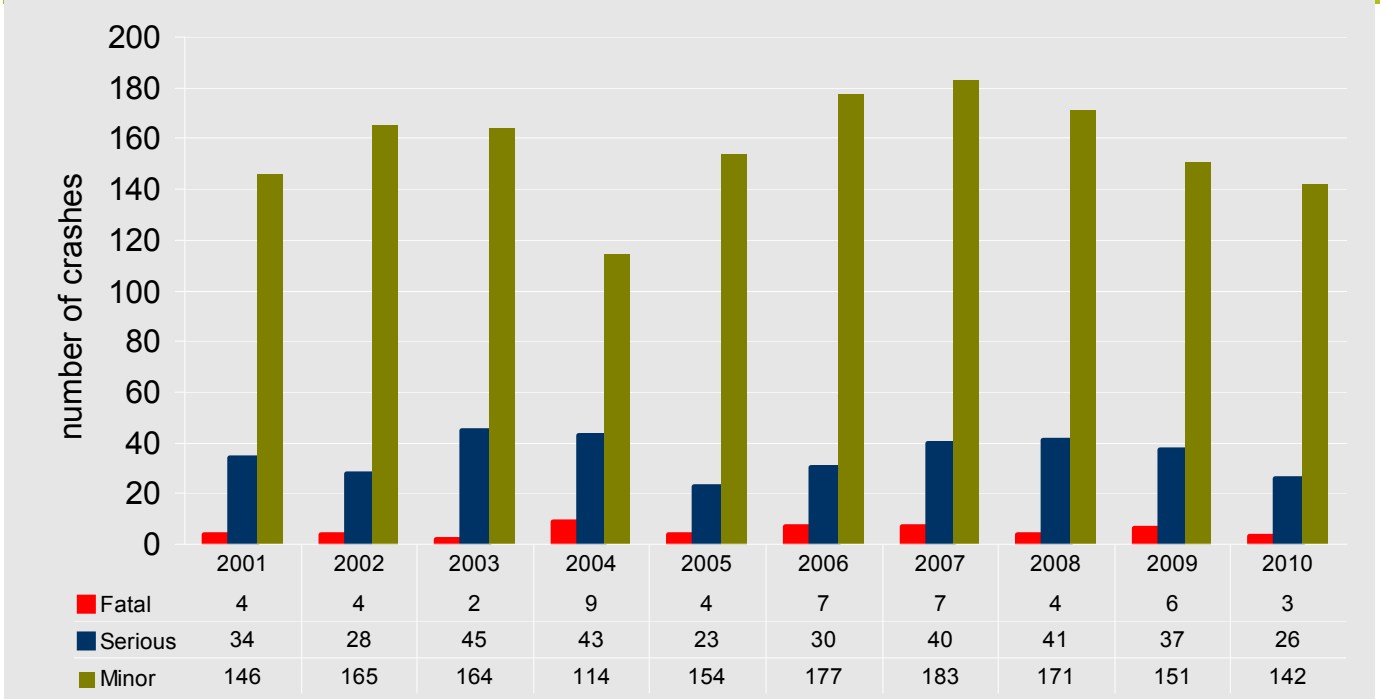
Police reported crashes	New Plymouth District
Fatal crashes	3
Serious injury crashes	26
Minor injury crashes	142
Total injury crashes	171
Non-injury crashes	456

2010 MoT calculation social cost of all crashes

Local roads	\$ 24.13M
State highways	\$ 31.12M
Total	\$ 55.25M

NOTE: The estimated social cost includes loss of life or quality of life, loss of output due to injuries, medical and rehabilitation costs, legal and court costs and property damage.

Injury crash trends



New Plymouth District local roads

In the 2006-2010 period in New Plymouth District there were 511 injury crashes on local roads resulting in 9 deaths and 111 serious injuries.

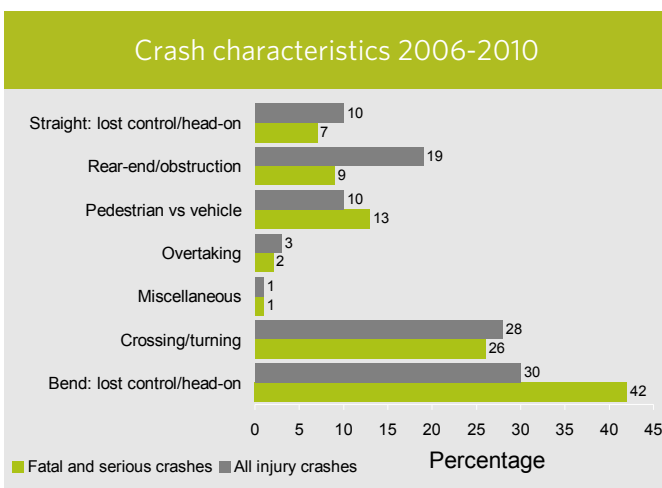
The latest five year data shows a level trend in fatal crashes and an upward trend in serious injury crashes on local roads.

The table below shows the number of casualties split into rural or urban areas, (rural is defined as an area with a speed limit of 80km/hr or more).

Casualties by urban / rural 2006 to 2010 Local roads				
	Fatalities	Serious injuries	Minor injuries	Total
Rural	7	39	131	177
Urban	2	72	408	482
Total	9	111	539	659

The chart below shows the distribution of crashes by their general characteristic, showing the combined number of fatal and serious injury crashes against all injury crashes.

Over two-fifths of fatal and serious injury crashes were loss of control or head-on crashes at bends. A quarter of the fatal and serious injury crashes involved crossing and turning movements.



The following table shows the factors that contributed to injury crashes, showing the combined number of fatal and serious injury crashes against all injury crashes.

Crashes are a complex combination of contributing factors and usually have more than one factor attributed to it, and as a result the percentages in the table will not add neatly to 100.

A third of fatal and serious injury crashes involved poor observation. A quarter of the fatal and serious injury crashes involved alcohol, speed too fast for the conditions and failing to give way or stop each. A tenth of the fatal and serious injury crashes involved pedestrian factors and road factors each.

Local road crash characteristics 2006 to 2010

Crash factor	Percentage all injury crashes	Percentage fatal and serious crashes	Percentage fatal and serious in similar local bodies
Alcohol	18	27	27
Too fast (for the conditions—not over the speed limit necessarily)	18	25	26
Failed to give way or stop	27	25	19
Failed to keep left	4	6	7
Overtaking	3	2	2
Incorrect lane or position	4	3	6
Poor handling (for example losing control while braking)	15	19	24
Poor observation (not checking properly)	44	33	30
Poor judgement (for example misjudging speed of others)	11	12	16
Fatigue	3	1	5
Disabled / ill	5	6	5
Pedestrian factors	8	11	8
Vehicle factors	3	1	5
Other (misc)	8	10	11
Road factors	9	10	11
Weather	4	6	3

Further information about injury crashes on local roads in the district 2006 to 2010:

- 23 percent on wet roads
- 32 percent during night time
- 43 percent at intersections
- 39 percent of injury crashes struck roadside objects (in total 295 objects hit)
- Most represented age group in at fault drivers in injury crashes, 15 to 19 years (25 percent of at fault drivers)
- 17 percent of crashes involved motorcycles
- 52 percent of at fault driver held full NZ licence

New Plymouth District state highways

In the 2006-2010 period in New Plymouth District there were 514 injury crashes on state highways resulting in 18 deaths and 90 serious injuries.

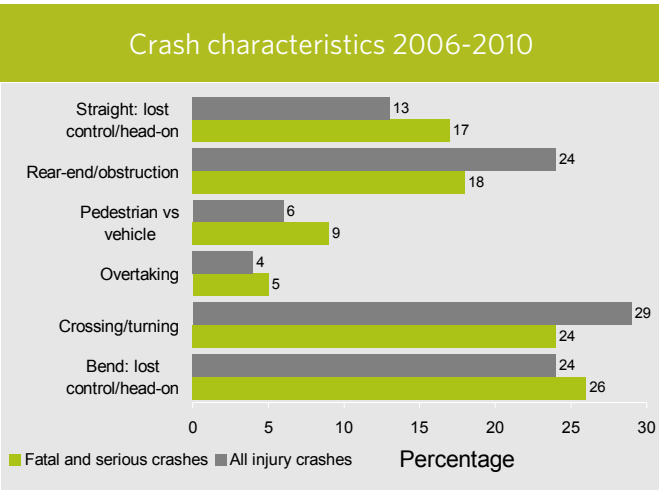
The latest five year data shows a downward trend in both fatal and serious injury crashes on state highways.

The table below shows the number of casualties split into rural or urban areas, (rural is defined as an area with a speed limit of 80km/hr or more).

Casualties by urban / rural 2006 to 2010 State highways				
	Fatalities	Serious injuries	Minor injuries	Total
Rural	12	65	345	422
Urban	6	25	244	275
Total	18	90	589	697

The chart below shows the distribution of crashes by their general characteristic, showing the combined number of fatal and serious injury crashes against all injury crashes.

A quarter of fatal and serious injury crashes were loss of control or head-on crashes at bends and crossing/turning movements each. A fifth of the fatal and serious injury crashes involved rear-end/obstruction type crashes.



The following table shows the factors that contributed to injury crashes, showing the combined number of fatal and serious injury crashes against all injury crashes.

Crashes are a complex combination of contributing factors and usually have more than one factor attributed to it, and as a result the percentages in the table will not add neatly to 100.

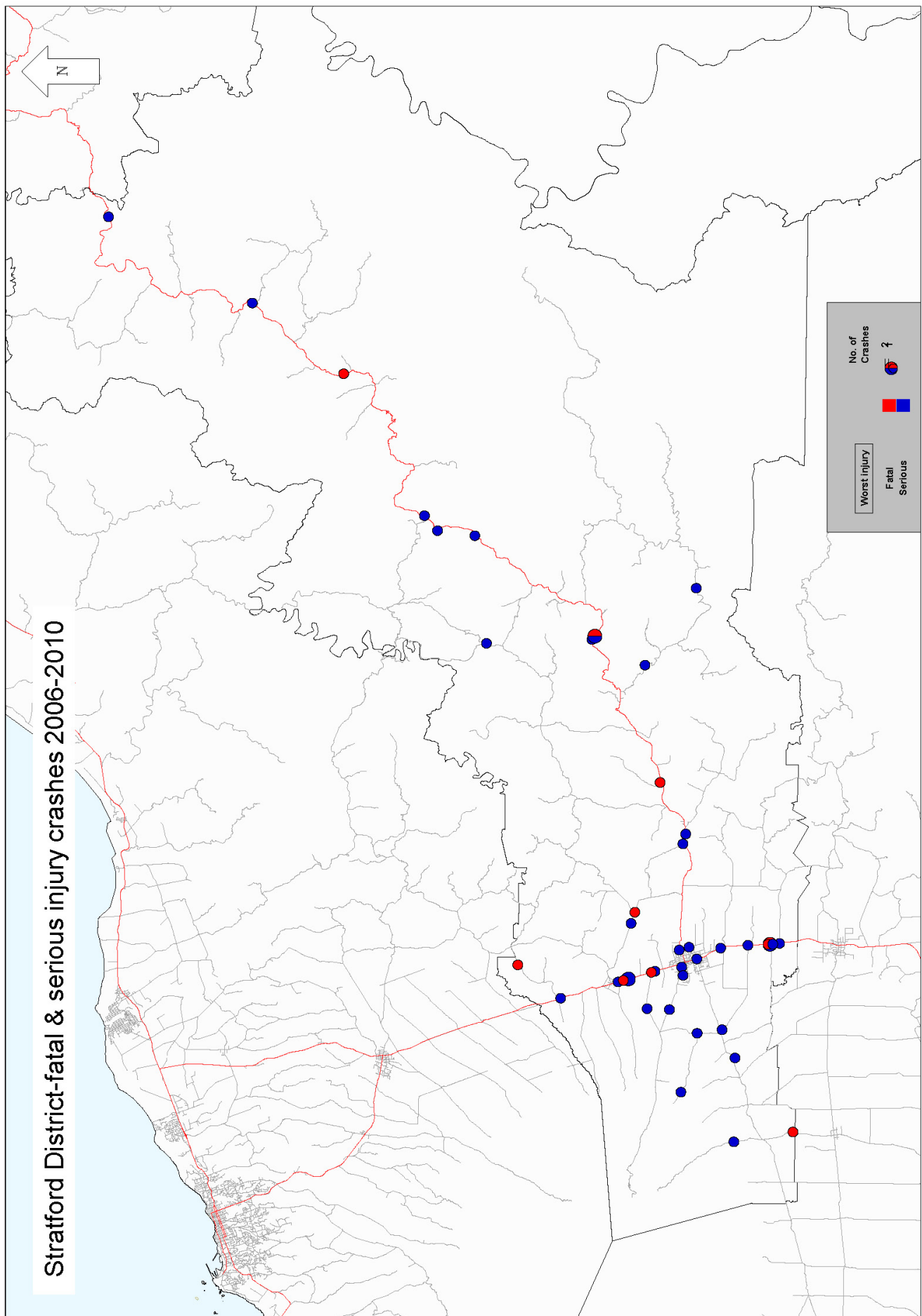
Nearly two-fifths of fatal and serious injury crashes involved poor observation. A quarter of the fatal and serious injury crashes involved failing to give way or stop. A fifth of the fatal and serious injury crashes involved alcohol and poor handling each.

State highways crash characteristics 2006 to 2010			
Crash factor	Percentage all injury crashes	Percentage fatal and serious crashes	Percentage fatal and serious on similar state highways
Alcohol	10	20	19
Too fast (for the conditions—not over the speed limit necessarily)	10	11	18
Failed to give way or stop	29	24	17
Failed to keep left	4	9	10
Overtaking	2	3	4
Incorrect lane or position	7	5	8
Poor handling (for example losing control while braking)	17	20	24
Poor observation (not checking properly)	44	38	32
Poor judgement (for example misjudging speed of others)	12	8	11
Fatigue	8	12	15
Disabled / ill	4	2	6
Pedestrian factors	5	9	6
Vehicle factors	7	6	6
Other (misc)	5	5	8
Road factors	11	8	11
Weather	3	2	4

Further information about injury crashes on state highways in the district 2006 to 2010:

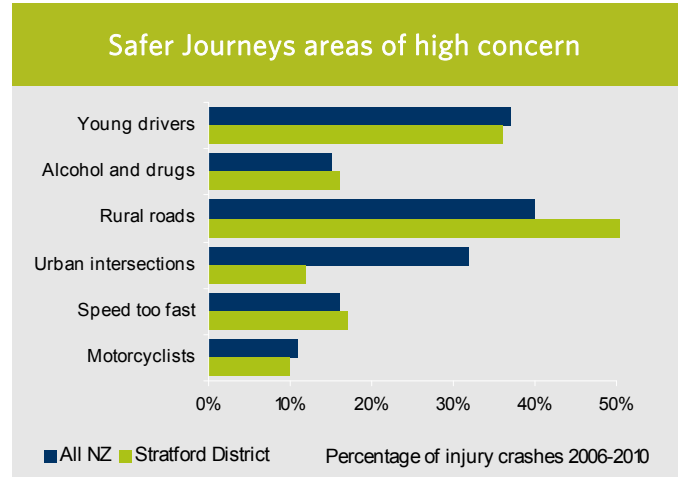
- 29 percent on wet roads
- 27 percent during night time
- 45 percent at intersections
- 35 percent of injury crashes struck roadside objects (in total 257 objects hit)
- Most represented age group in at fault drivers in injury crashes, 15 to 19 years (22 percent of at fault drivers)
- 10 percent of crashes involved motorcycles
- 61 percent of at fault driver held full NZ licence

Stratford District fatal & serious crashes



Stratford District 2010 overview

2010 road trauma	
Casualties	Stratford District
Death	3
Serious injury	11
Minor injury	32
Total casualties	46

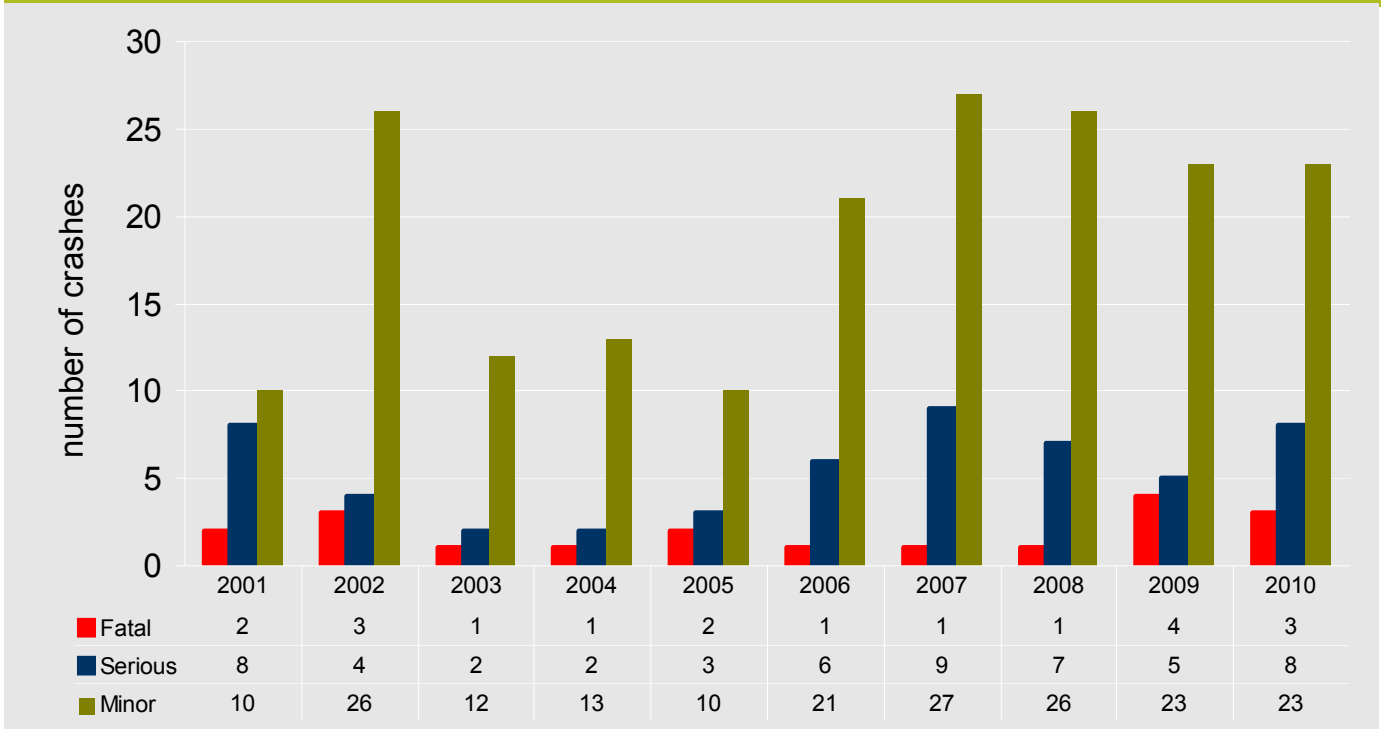


Police reported crashes	Stratford District
Fatal crashes	3
Serious injury crashes	8
Minor injury crashes	23
Total injury crashes	34
Non-injury crashes	41

2010 MoT calculation social cost of all crashes	
Local roads	\$ 6.87M
State highways	\$ 14.66M
Total	\$ 21.53M

NOTE: The estimated social cost includes loss of life or quality of life, loss of output due to injuries, medical and rehabilitation costs, legal and court costs and property damage.

Injury crash trends



Stratford District local roads

In the 2006-2010 period in Stratford District there were 67 injury crashes on local roads resulting in 3 deaths and 19 serious injuries.

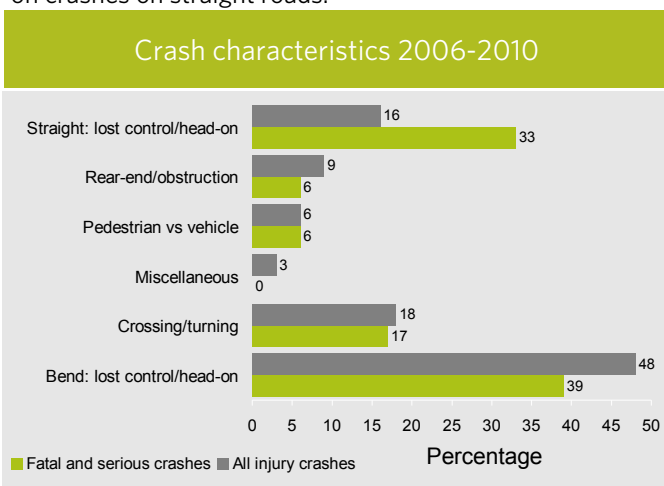
The latest five year data shows a slightly downward trend in combined fatal and serious injury crashes on local roads.

The table below shows the number of casualties split into rural or urban areas, (rural is defined as an area with a speed limit of 80km/hr or more).

Casualties by urban / rural 2006 to 2010 Local roads				
	Fatalities	Serious injuries	Minor injuries	Total
Rural	3	14	44	61
Urban	0	5	21	26
Total	3	19	65	87

The chart below shows the distribution of crashes by their general characteristic, showing the combined number of fatal and serious injury crashes against all injury crashes.

Two-fifths of fatal and serious injury crashes were loss of control or head-on crashes at bends. A third of the fatal and serious injury crashes involved loss of control or head-on crashes on straight roads.



The following table shows the factors that contributed to injury crashes, showing the combined number of fatal and serious injury crashes against all injury crashes.

Crashes are a complex combination of contributing factors and usually have more than one factor attributed to it, and as a result the percentages in the table will not add neatly to 100.

Nearly a third of fatal and serious injury crashes involved poor handling. Over a quarter of the fatal and serious injury crashes involved alcohol. A sixth of the fatal and serious injury crashes involved failing to give way or stop and a fifth involved poor observation.

Local road crash characteristics 2006 to 2010

Crash factor	Percentage all injury crashes	Percentage fatal and serious crashes	Percentage fatal and serious in similar local bodies
Alcohol	18	28	30
Too fast (for the conditions—not over the speed limit necessarily)	21	11	30
Failed to give way or stop	24	17	9
Failed to keep left	10	11	9
Overtaking	0	0	2
Incorrect lane or position	4	6	6
Poor handling (for example losing control while braking)	33	33	38
Poor observation (not checking properly)	31	22	23
Poor judgement (for example misjudging speed of others)	15	11	19
Fatigue	3	11	5
Disabled / ill	6	6	3
Pedestrian factors	4	6	5
Vehicle factors	9	6	7
Other (misc)	7	11	12
Road factors	13	17	21
Weather	3	0	5

Further information about injury crashes on local roads in the district 2006 to 2010:

- 28 percent on wet roads
- 33 percent during night time
- 33 percent at intersections
- 52 percent of injury crashes struck roadside objects (in total 44 objects hit)
- Most represented age group in at fault drivers in injury crashes, 15 to 19 years (29 percent of at fault drivers)
- 9 percent of crashes involved motorcycles
- 60 percent of at fault driver held full NZ licence

Stratford District state highways

In the 2006-2010 period in Stratford District there were 98 injury crashes on state highways resulting in 7 deaths and 30 serious injuries.

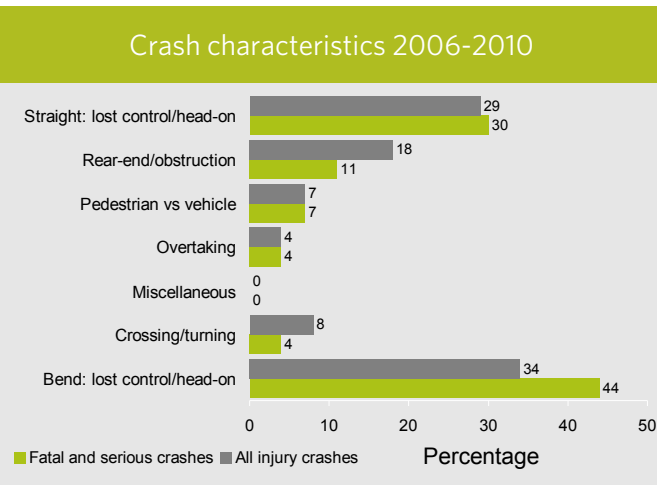
The latest five year data shows a slightly upward trend in combined fatal and serious injury crashes on state highways.

The table below shows the number of casualties split into rural or urban areas, (rural is defined as an area with a speed limit of 80km/hr or more).

Casualties by urban / rural 2006 to 2010 State highways				
	Fatalities	Serious injuries	Minor injuries	Total
Rural	7	28	86	121
Urban	0	2	20	22
Total	7	30	106	143

The chart below shows the distribution of crashes by their general characteristic, showing the combined number of fatal and serious injury crashes against all injury crashes.

Over two-fifths of fatal and serious injury crashes were loss of control or head-on crashes at bends. Nearly a third of the fatal and serious injury crashes involved loss of control or head-on crashes on straight roads.



The following table shows the factors that contributed to injury crashes, showing the combined number of fatal and serious injury crashes against all injury crashes.

Crashes are a complex combination of contributing factors and usually have more than one factor attributed to it, and as a result the percentages in the table will not add neatly to 100.

Nearly a third of fatal and serious injury crashes involved poor alcohol. A quarter of the fatal and serious injury crashes involved speed too fast for the conditions and a similar proportion accounted for road factors. A fifth of the fatal and serious injury crashes involved driver fatigue.

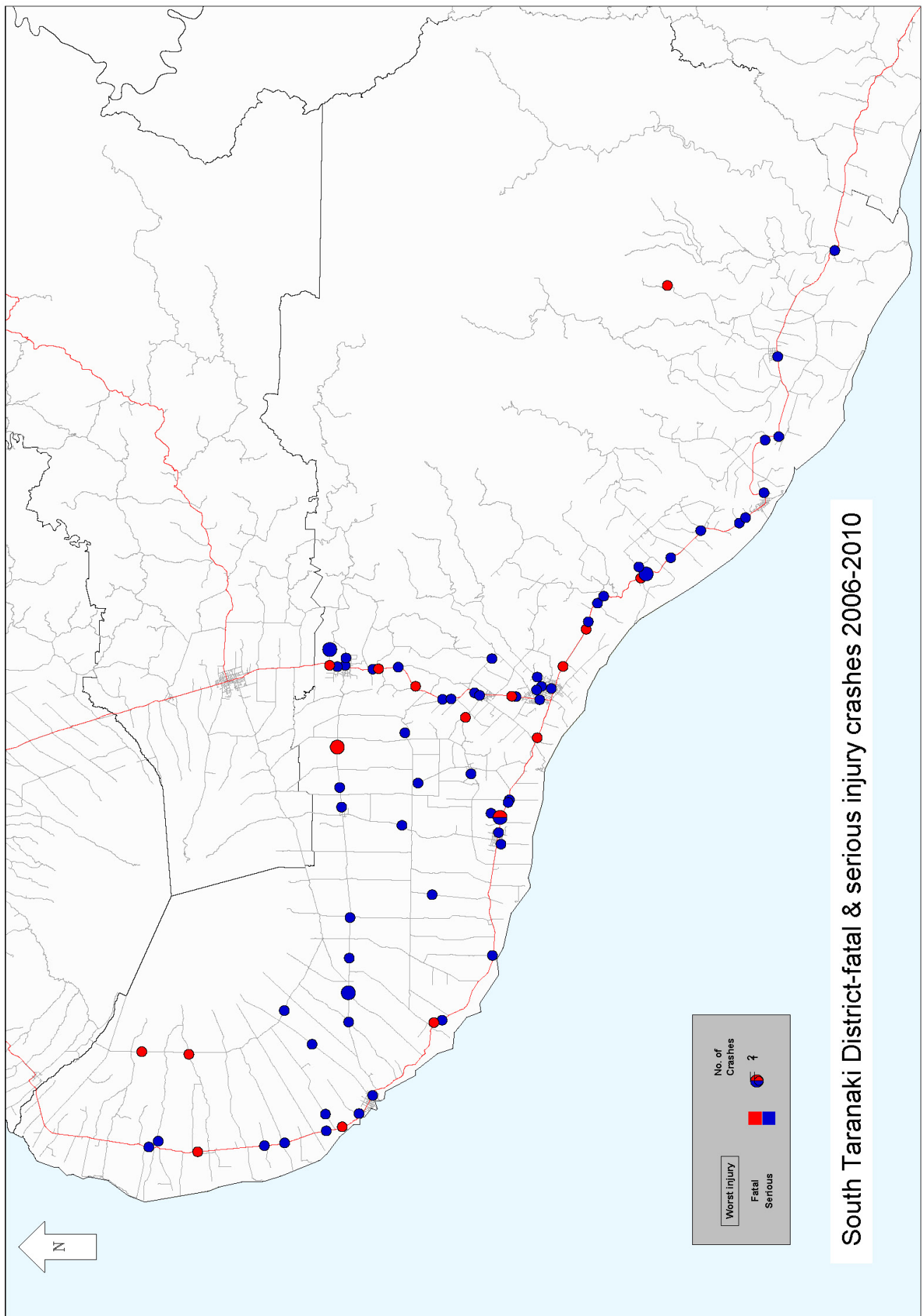
State highways crash characteristics 2006 to 2010

Crash factor	Percentage all injury crashes	Percentage fatal and serious crashes	Percentage fatal and serious in similar local bodies
Alcohol	15	30	21
Too fast (for the conditions—not over the speed limit necessarily)	14	26	22
Failed to give way or stop	9	7	7
Failed to keep left	5	11	10
Overtaking	1	4	4
Incorrect lane or position	12	4	8
Poor handling (for example losing control while braking)	18	11	38
Poor observation (not checking properly)	35	15	23
Poor judgement (for example misjudging speed of others)	10	7	15
Fatigue	17	19	18
Disabled / ill	3	4	4
Pedestrian factors	7	11	3
Vehicle factors	6	0	8
Other (misc)	8	11	9
Road factors	15	26	18
Weather	2	0	5

Further information about injury crashes on state highways in the district 2006 to 2010:

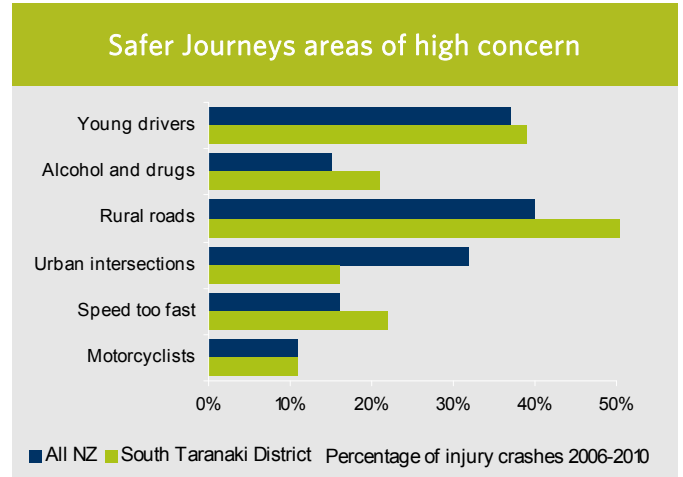
- 30 percent on wet roads
- 20 percent at intersections
- 36 percent during night time
- 59 percent of injury crashes struck roadside objects (in total 81 objects hit)
- Most represented age group in at fault drivers in injury crashes, 15 to 24 years (34 percent of at fault drivers)
- 10 percent of crashes involved motorcycles
- 67 percent of at fault driver held full NZ licence

South Taranaki District fatal & serious crashes



South Taranaki District 2010 overview

2010 road trauma	
Casualties	South Taranaki District
Death	5
Serious injury	13
Minor injury	77
Total casualties	95



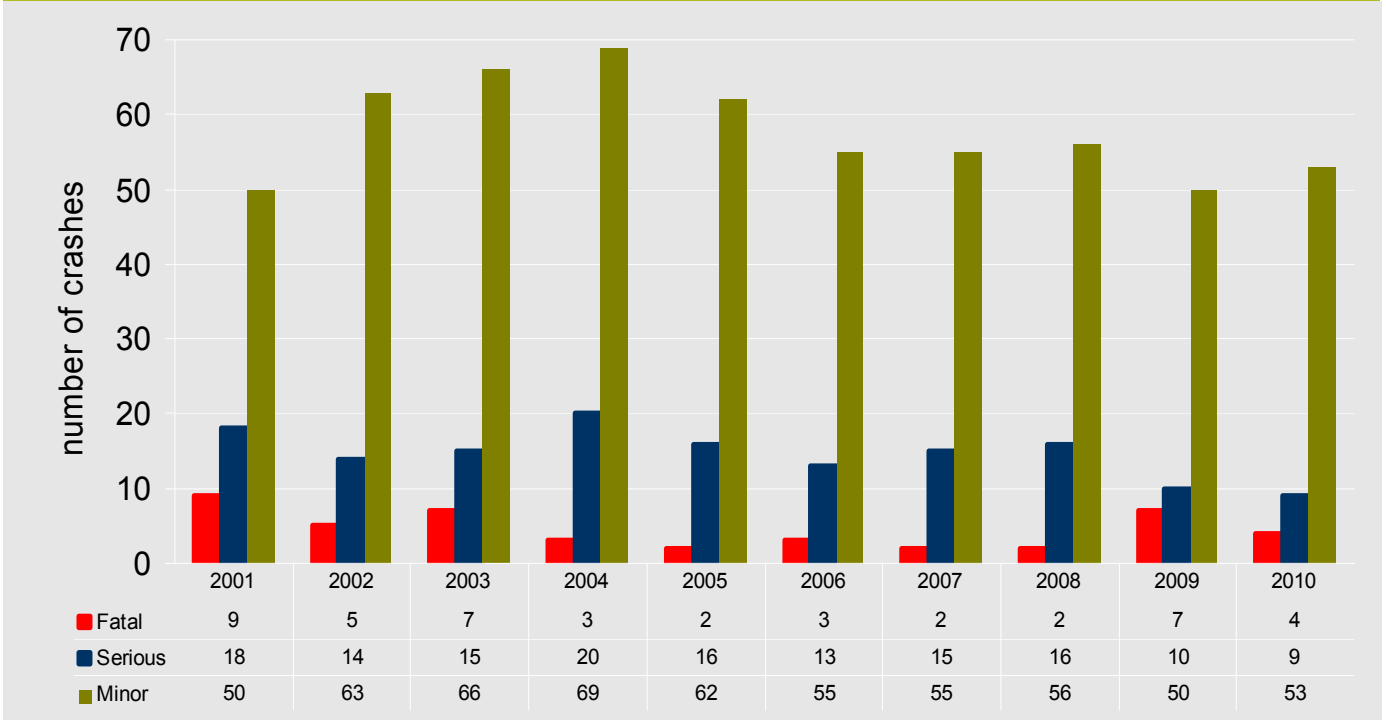
Police reported crashes	South Taranaki District
Fatal crashes	4
Serious injury crashes	9
Minor injury crashes	53
Total injury crashes	66
Non-injury crashes	87

2010 MoT calculation social cost of all crashes

Local roads	\$ 7.72M
State highways	\$ 22.32M
Total	\$ 30.04M

NOTE: The estimated social cost includes loss of life or quality of life, loss of output due to injuries, medical and rehabilitation costs, legal and court costs and property damage.

Injury crash trends



South Taranaki District local roads

In the 2006-2010 period in South Taranaki District there were 167 injury crashes on local roads resulting in 6 deaths and 36 serious injuries.

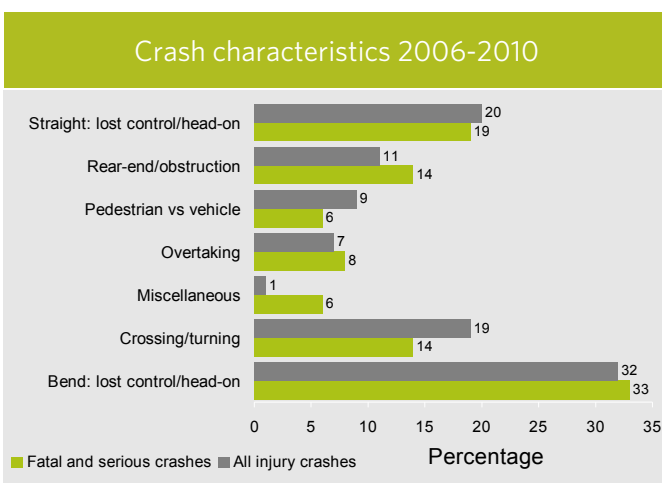
The latest five year data shows a level trend in combined fatal and serious injury crashes on local roads.

The table below shows the number of casualties split into rural or urban areas, (rural is defined as an area with a speed limit of 80km/hr or more).

Casualties by urban / rural 2006 to 2010 Local roads				
	Fatalities	Serious injuries	Minor injuries	Total
Rural	6	29	116	151
Urban	0	7	79	86
Total	6	36	195	237

The chart below shows the distribution of crashes by their general characteristic, showing the combined number of fatal and serious injury crashes against all injury crashes.

A third of fatal and serious injury crashes were loss of control or head-on crashes at bends. A fifth of the fatal and serious injury crashes involved loss of control or head-on crashes on straight roads.



The following table shows the factors that contributed to injury crashes, showing the combined number of fatal and serious injury crashes against all injury crashes.

Crashes are a complex combination of contributing factors and usually have more than one factor attributed to it, and as a result the percentages in the table will not add neatly to 100.

Nearly a third of fatal and serious injury crashes involved poor handling and speed too fast for the conditions each. Two-fifths of the fatal and serious injury crashes involved alcohol. Over a quarter of the fatal and serious injury crashes involved poor observation and a seventh involved road factors.

Local road crash characteristics 2006 to 2010

Crash factor	Percentage all injury crashes	Percentage fatal and serious crashes	Percentage fatal and serious in similar local bodies
Alcohol	24	39	28
Too fast (for the conditions—not over the speed limit necessarily)	26	31	28
Failed to give way or stop	20	14	16
Failed to keep left	4	3	7
Overtaking	4	8	3
Incorrect lane or position	2	0	8
Poor handling (for example losing control while braking)	25	31	35
Poor observation (not checking properly)	35	28	28
Poor judgement (for example misjudging speed of others)	19	14	15
Fatigue	5	6	7
Disabled / ill	5	3	4
Pedestrian factors	7	6	5
Vehicle factors	6	6	7
Other (misc)	11	14	12
Road factors	11	14	17
Weather	4	11	6

Further information about injury crashes on local roads in the district 2006 to 2010:

- 19 percent on wet roads
- 34 percent during night time
- 29 percent at intersections
- 54 percent of injury crashes struck roadside objects (in total 128 objects hit)
- Most represented age group in at fault drivers in injury crashes, 15 to 19 years (29 percent of at fault drivers)
- 12 percent of crashes involved motorcycles
- 51 percent of at fault driver held full NZ licence

South Taranaki District state highways

In the 2006-2010 period in South Taranaki District there were 183 injury crashes on state highways resulting in 15 deaths and 43 serious injuries.

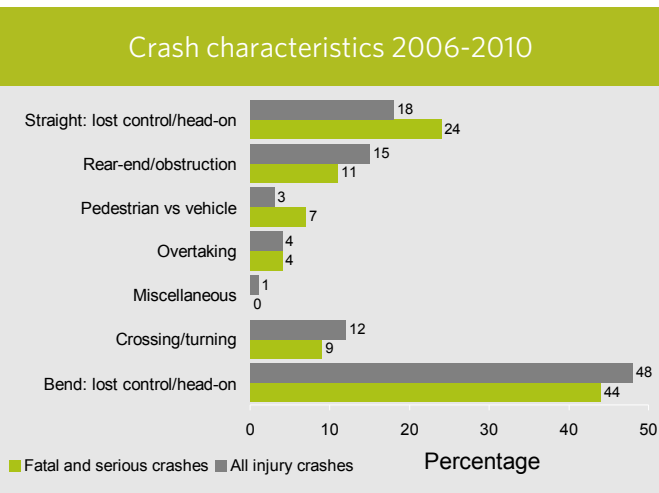
The latest five year data shows an upward trend in fatal crashes and a downward trend in serious injury crashes on state highways.

The table below shows the number of casualties split into rural or urban areas, (rural is defined as an area with a speed limit of 80km/hr or more).

Casualties by urban / rural 2006 to 2010 State highways				
	Fatalities	Serious injuries	Minor injuries	Total
Rural	15	35	158	208
Urban	0	8	50	58
Total	15	43	208	266

The chart below shows the distribution of crashes by their general characteristic, showing the combined number of fatal and serious injury crashes against all injury crashes.

Over two-fifths of fatal and serious injury crashes were loss of control or head-on crashes at bends. A quarter of the fatal and serious injury crashes involved loss of control or head-on crashes on straight roads.



The following table shows the factors that contributed to injury crashes, showing the combined number of fatal and serious injury crashes against all injury crashes.

Crashes are a complex combination of contributing factors and usually have more than one factor attributed to it, and as a result the percentages in the table will not add neatly to 100.

Over a fifth of fatal and serious injury crashes involved poor observation. A fifth of the fatal and serious injury crashes involved alcohol. Nearly a similar proportion of the fatal and serious injury crashes involved speed too fast for the conditions, failing to keep left and driver fatigue each.

State highways crash characteristics 2006 to 2010

Crash factor	Percentage all injury crashes	Percentage fatal and serious crashes	Percentage fatal and serious on similar state highways
Alcohol	19	20	23
Too fast (for the conditions—not over the speed limit necessarily)	18	18	21
Failed to give way or stop	11	7	14
Failed to keep left	9	18	10
Overtaking	1	2	4
Incorrect lane or position	8	11	9
Poor handling (for example losing control while braking)	23	16	31
Poor observation (not checking properly)	31	22	27
Poor judgement (for example misjudging speed of others)	10	16	13
Fatigue	14	18	15
Disabled / ill	7	4	5
Pedestrian factors	3	7	5
Vehicle factors	7	7	8
Other (misc)	10	13	9
Road factors	17	11	17
Weather	1	2	5

Further information about injury crashes on state highways in the district 2006 to 2010:

- 38 percent on wet roads
- 36 percent during night time
- 22 percent at intersections
- 63 percent of injury crashes struck roadside objects (in total 175 objects hit)
- Most represented age group in at fault drivers in injury crashes, 15 to 24 years (33 percent of at fault drivers)
- 11 percent of crashes involved motorcycles
- 54 percent of at fault driver held full NZ licence

Contacts

NZ Transport Agency

Palmerston North Regional Office

Level 3
43 Ashley Street
PO Box 1947
Palmerston North 4440
Tel 64 6 953 6396
Fax 64 6 953 6203
<http://www.nzta.govt.nz>



New Zealand Police

Road Policing Manager
Central DHQ-PM
Private Bag 11040 Manawatu Mail Centre
Tel 06 351 3600

Further information

This report has been prepared by the Crash Analysis team at the NZ Transport Agency. The intent of this report is to highlight road safety issues and assist in identifying possible ways to reduce the number of road deaths and injuries. It has been prepared using data from the NZTA and Ministry of Transport's Crash Analysis System (CAS) database. The Briefing Notes present information derived from pertinent statistics to be used for decision support.

More detailed information may be obtained from either the local council (local roads), regional council or the NZ Transport Agency.

The NZ Transport Agency encourages local bodies, regional councils and NZ Police to study the briefing notes reports. There will be road safety issues beyond those covered in this Road Safety Issues Report and we encourage our partners to use their access to the Crash Analysis System to identify and examine these further.

Useful web-links

- <http://www.nzta.govt.nz/>
- <http://www.smartmovez.org.nz/>
- <http://www.localgovt.co.nz/>
- <http://www.transport.govt.nz/>
- <http://www.decadeofaction.org/>