

# briefing notes - road safety issues

## West Coast highways

New Zealand Transport Agency, (NZTA), has prepared this road safety issues report. It is based on reported crash data for the 2005–2009 period. The intent of the report is to highlight the key road safety issues to help identify possible ways to reduce the number of road deaths and injuries in West Coast highways.

In March 2010 the Government released a new strategy, “Safer Journeys”, to build on the gains made under the Road Safety to 2010 Strategy. The focus of these Issues Reports has changed to reflect the new strategy. Many of the issues reported on in the past fit neatly into the new strategy. An explanation of where things fit is included in this report.

The issues chosen for this report are drawn from: the most common crash types, those that appear over-represented when West Coast highways is compared to similar local bodies, those with high social cost, (high numbers of fatal and serious crashes), or those that are a priority under Safer Journeys.

We have included a brief overview of crashes on West Coast highways.

We encourage West Coast highways to use its free access to the Ministry of Transport’s Crash Analysis System (CAS), to delve deeper into the highlighted issues and other road safety issues in the district. Also the NZTA Southern Performance Information Team in Christchurch is available to provide further information or assistance if required.

Major road safety issues		2009 road trauma	
	Note Issues are not in any order	Casualties	West Coast highways
<b>West Coast highways</b>			
Bend - loss of control or head-on		Deaths	6
Speed		Serious casualties	28
Overseas drivers		Minor casualties	111
Nationally		Crashes	West Coast highways
Speed		Fatal crashes	6
Alcohol / Drugs		Serious injury crashes	22
Young Drivers		Minor injury crashes	71
Roads and Roadsides		Non-injury crashes	99
Motorcyclists			

## Safer Journeys

For the past few years road safety in New Zealand has been directed by the Road Safety to 2010 strategy. This strategy was introduced in 2003 and aimed to reduce deaths and casualties from road crashes.

In March 2010 the Government released a new strategy, "Safer Journeys", to build on the gains made under the Road Safety to 2010 strategy.

Under this new strategy, road safety will be looked at from a system wide approach rather than focusing on the road user. The emphasis will be on improving all the parts road transport system that impact on safety; the road, the vehicle, travel speeds and the road user.

A number of areas were chosen as the areas of focus under the strategy. These areas were assigned a priority, based on research that shows five major areas of concern, five areas of lesser concern, and three areas where continued focus is needed, or concern is emerging.

These divisions are shown in the table opposite. This table is a direct extract from page 12 of the Safer Journeys document, which can be found at:

<http://www.transport.govt.nz/saferjourneys/Documents/SaferJourneyStrategy.pdf>

In this year's Road Safety Issues Briefing Notes changes have been made to the wording, and to the data presented, to better reflect and emphasise the connections to the new strategy.

On the following page we present a table that shows the areas of "high concern" under the Safer Journeys strategy. This table allows some relative comparison of the Safer Journeys priorities across the local bodies and regional authorities in the Otago / Southland Region of the New Zealand Transport Agency.

**Table 3 – Safer Journeys' areas of concern and the Safe System**

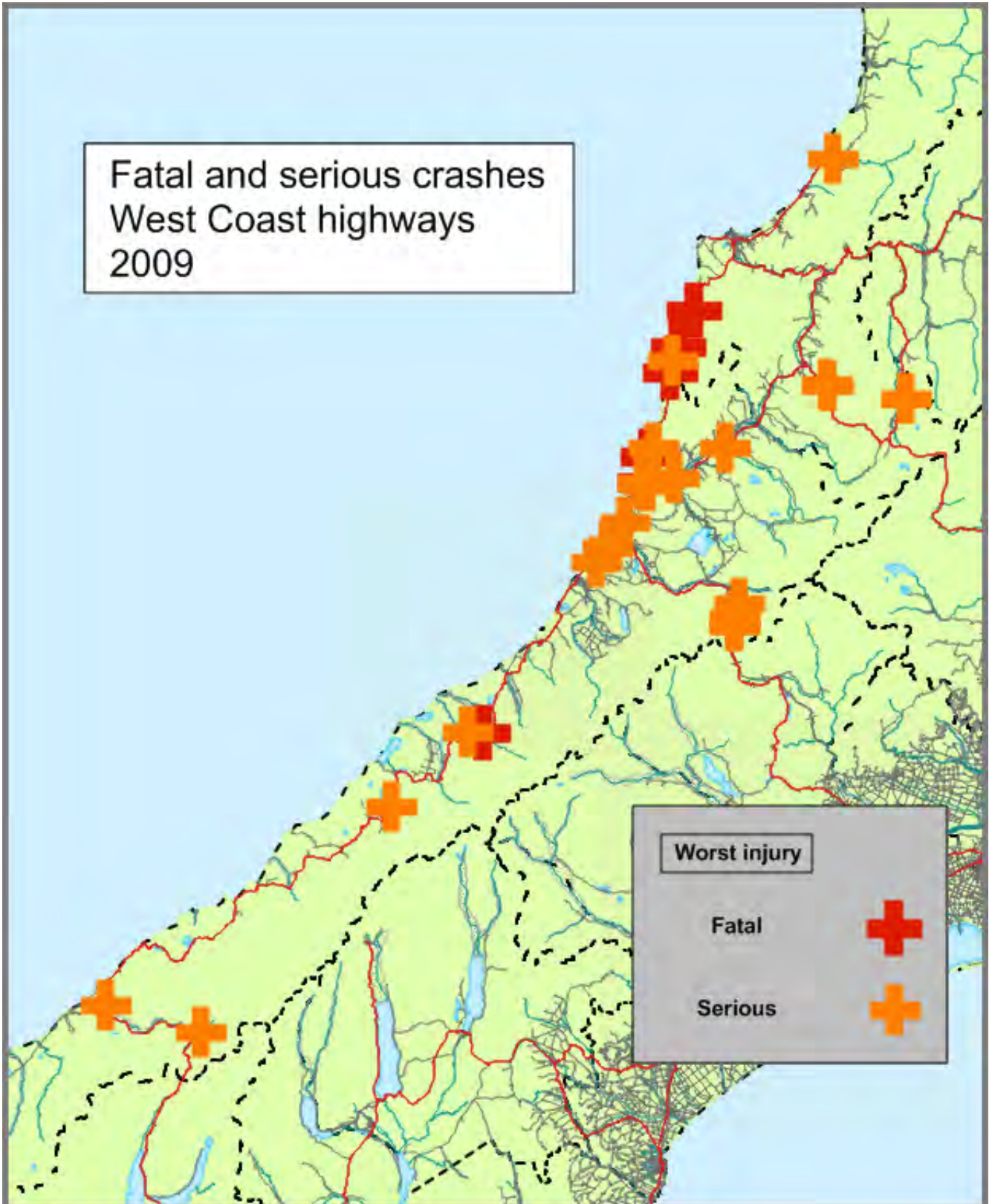
AREAS OF CONCERN WE WILL ADDRESS	WHERE WE WILL TAKE ACTION ACROSS THE SAFE SYSTEM			
	SAFE ROADS AND ROADSIDES	SAFE SPEEDS	SAFE VEHICLES	SAFE ROAD USE
<b>Areas of high concern</b>				
Reducing alcohol/drug impaired driving			✓	✓
Increasing the safety of young drivers	✓	✓	✓	✓
Safe roads and roadsides	✓			
Safe speeds	✓	✓	✓	
Increasing the safety of motorcycling	✓	✓	✓	✓
<b>Areas of medium concern</b>				
Improving the safety of the light vehicle fleet			✓	✓
Safe walking and cycling	✓	✓	✓	✓
Improving the safety of heavy vehicles	✓	✓	✓	✓
Reducing the impact of fatigue	✓	✓	✓	✓
Addressing distraction	✓		✓	✓
Reducing the impact of high risk drivers		✓	✓	✓
<b>Areas of continued and emerging focus</b>				
Increasing the level of restraint use			✓	✓
Increasing the safety of older New Zealanders	✓	✓	✓	✓

For some priorities (eg motorcycling), complementary action will be taken across all four areas of the Safe System. For others (eg reducing the impact of drink driving or safe roads), more effort would be focussed on one or two of the four Safe System areas.

Source  
Safer Journeys, Road Safety Strategy 2010-2020  
Ministry of Transport  
March 2010

Status of the areas of "high concern" from Safer Journeys 2020 - Canterbury / West Coast Region  
(table is based on 2005 to 2009 fatal and serious crashes - local roads as well as State Highways)

Area of concern	Reducing alcohol and drug impaired driving	Increase the Safety of young drivers	Safer roads and roadsides		Reducing speed related crashes	Increasing the safety of motorcycling
Measure	Percentage of crashes with this factor	Percentage of at fault drivers 24 years or less	Percentage of crashes with an object struck	Number of intersections with two or more fatal or serious casualties in the last five years	Percentage of crashes with this factor	Percentage of crashes involving a motorcyclist
Buller District	17	26	58	0	32	29
Grey District	20	23	49	1	29	31
Westland District	16	32	56	0	32	22
Kaikoura District	15	24	62	0	38	28
Hurunui District	18	21	64	0	34	16
Waimakariri District	20	32	50	3	17	15
Christchurch City	16	34	31	83	15	22
Selwyn District	20	26	45	5	16	17
Ashburton District	21	28	45	2	25	16
Timaru District	18	35	36	2	17	27
Mackenzie District	6	23	63	0	13	3
Waimate District	30	36	45	0	23	23
Chatham Islands	38	17	75	0	25	38
West Coast Region	17	34	55	1	31	27
Canterbury Region	17	31	39	95	18	20
New Zealand	23	34	45	446	23	18





## Overview

In 2009 on West Coast highways there were 71 reported injury crashes of which 28 were fatal or serious.

The table below shows the number of casualties resulting from the 71 injury crashes by rural or urban areas (rural is defined as an area with a speed limit of 80km/h or more).

Casualties 2009 West Coast highways				
	Fatalities	Serious injuries	Minor injuries	Total
Rural	4	26	102	132
Urban	2	2	9	13
Total	6	28	111	145

In 2009 on West Coast state highways, over 90 percent of casualties were from crashes on highways in rural areas.

In 2009 the number of reported fatal and injury crashes reported on West Coast highways was the highest in the last ten years.

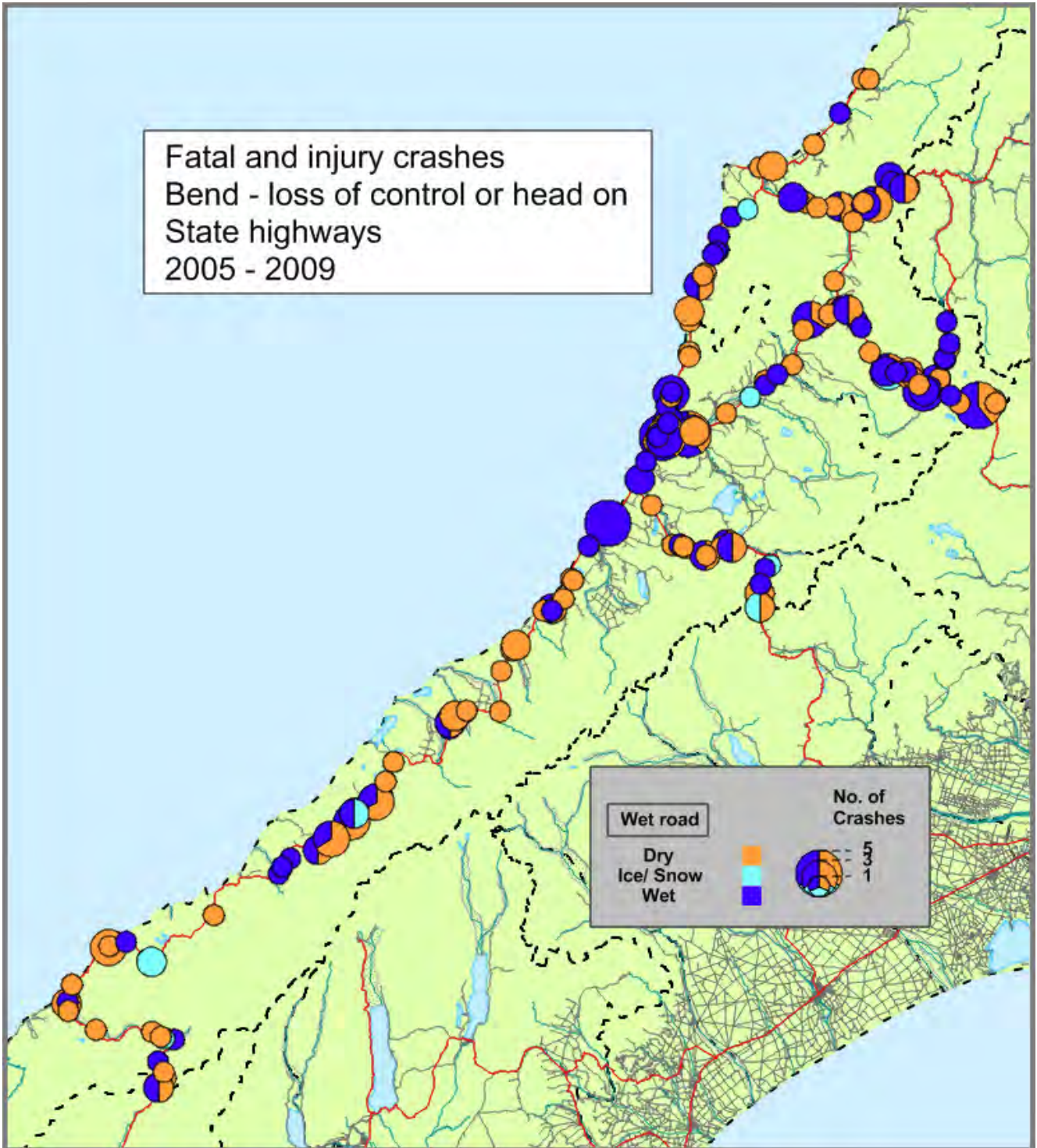
Crash trends in West Coast highways				
Year	Fatal Crashes	Serious Crashes	Minor Crashes	Total Crashes
2000	4	23	33	60
2001	12	17	50	79
2002	8	12	40	60
2003	3	17	57	77
2004	9	16	44	69
2005	3	21	53	77
2006	2	23	59	84
2007	6	24	61	91
2008	4	21	63	88
2009	6	22	71	99

The following table illustrates where the issues considered for this report fit within the Safer Journeys priority. The numbers and percentages give an indication of how they fit in the priorities for West Coast highways.

Crash characteristics (2005 to 2009) West Coast highways				
Crash type or contributory cause	Percent fatal and serious crashes	Percent all injury crashes	No. of injury crashes	Safer Journeys priority
Alcohol	16	12	52	1
Too fast	27	27	119	1
At bends	61	58	253	1
On straights	17	17	74	1
Intersections	6	12	52	1
Road factors	22	21	90	1
Motorcycling	23	14	65	1
Young drivers	26	28	122	1
Fatigue	14	13	56	2
Distraction	10	5	36	2
Pedestrians	2	1	5	2
Cycling	1	1	6	2
Heavy vehicles	16	11	48	2
Older road users	9	8	34	3
Overseas drivers	19	23	103	-

Further information about the 439 injury crashes on West Coast highways, 2005 to 2009:

- 22 deaths, 145 serious injuries and 490 minor casualties
- Five year age group with most at fault drivers in injury crashes: 20 to 24 years (16 percent of at fault drivers)
- Social cost of crashes in 2009 \$50.05 m



## Bend - loss of control or head on

Between 2005 and 2009, 58 percent of all injury crashes in West Coast highways were bend - loss of control or head on crashes. These crashes resulted in 14 deaths, 85 serious injuries and 273 minor injuries.

In 2009, the number of fatal crashes was the highest in the five years period.

Bend - loss of control or head on crashes West Coast highways (2005 - 2009)				
Crash year	Fatal crashes	Serious crashes	Minor crashes	Total
2005	1	12	33	46
2006	2	11	32	45
2007	3	18	39	60
2008	3	12	32	47
2009	4	14	37	55
Total	13	67	173	253

Young drivers, those aged 15 to 24 years, made up 29 percent of at fault drivers. Those aged 40 to 49 years represented 17 percent.

Overall, males made up over 70 percent of at fault drivers.

At fault drivers in Bend - loss of control or head on crashes 2005 to 2009			
Ages	Male	Female	Total
15 to 19	22	7	29
20 to 24	27	14	41
25 to 29	19	10	29
30 to 39	23	17	40
40 to 49	33	9	42
50 to 59	23	5	28
60 to 69	17	4	21
70 and over	9	7	16
Total	173	73	246

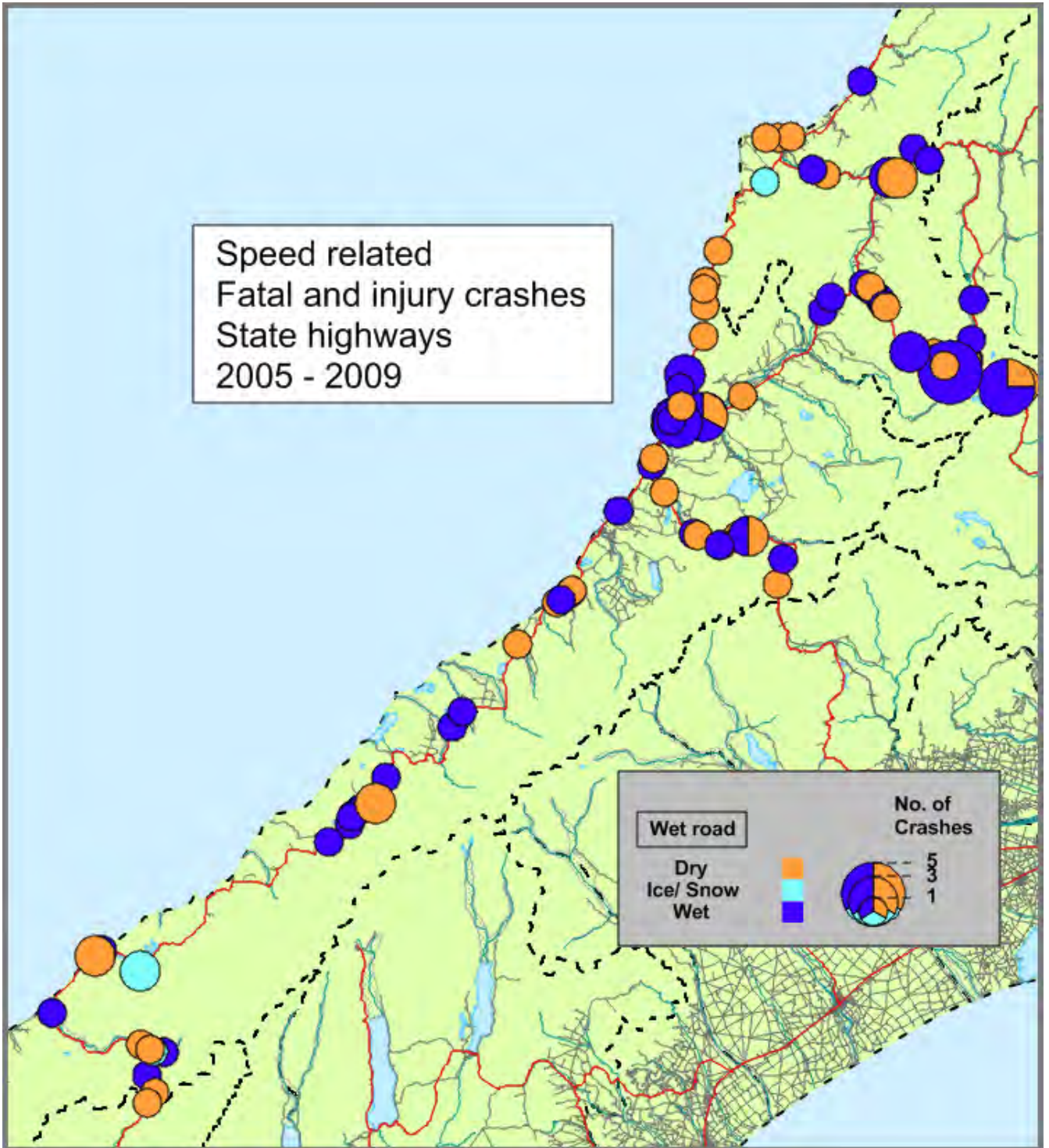
If drivers lose control, their vehicles they may crash into roadside hazards such as ditches, banks, poles or trees. Hitting roadside objects can result in a minor off-road event becoming more serious.

The most common roadside hazards struck in injury bend - loss of control or head on crashes in West Coast highways were cliffs or banks (57), over bank (36), ditch (36), tree (30) and fence (26) from a total of 227 objects struck.

Further information about the 253 injury bend - loss of control or head on crashes on West Coast highways, (2005 to 2009):

- 14 deaths, 85 serious injuries and 273 minor injuries
- 12 percent of crashes involved alcohol
- 42 percent of crashes involved speed too fast for the conditions
- 26 percent involved road factors
- 65 percent involved poor handling
- 94 percent were on rural roads
- 51 percent were on wet or icy roads
- 25 percent were at night
- Worst month February
- Worst day of week Saturday
- Worst time period 3 pm till 6 pm







## Speed

Nationally, speed is one of the major contributing factors to road crashes. Reducing speeds is an important road safety goal. Excessive speed increases the likelihood of a crash occurring by reducing the time available for a driver to react to a situation. It also leads to more severe injuries. Research has shown that a one km/h reduction in average speed can produce a three percent reduction in injury crashes.

Speed related crashes in CAS are not necessarily crashes where the driver was exceeding the posted speed limit but are crashes where in the opinion of the Police Officer reporting the crash the driver was travelling too fast for the prevailing conditions.

Between 2005 and 2009, 27 percent of injury crashes on West Coast highways involved travelling too fast for the conditions. These crashes resulted in 5 deaths, 37 serious injuries and 127 minor injuries.

Speed related crashes, West Coast highways					
Area	2005	2006	2007	2008	2009
Rural	18	18	37	14	21
Urban	1	5	3	1	1
Total	19	23	40	15	22

Crash numbers rose in 2007 and then reduced to close to the previous level.

The other main causes contributing to speed related crashes were:

- Handling errors
- Errors of judgement
- Alcohol

Young drivers made up 34 percent of at fault drivers in speed related crashes on West Coast highways, although speed is not just a young driver issue, as other age groups are well represented.

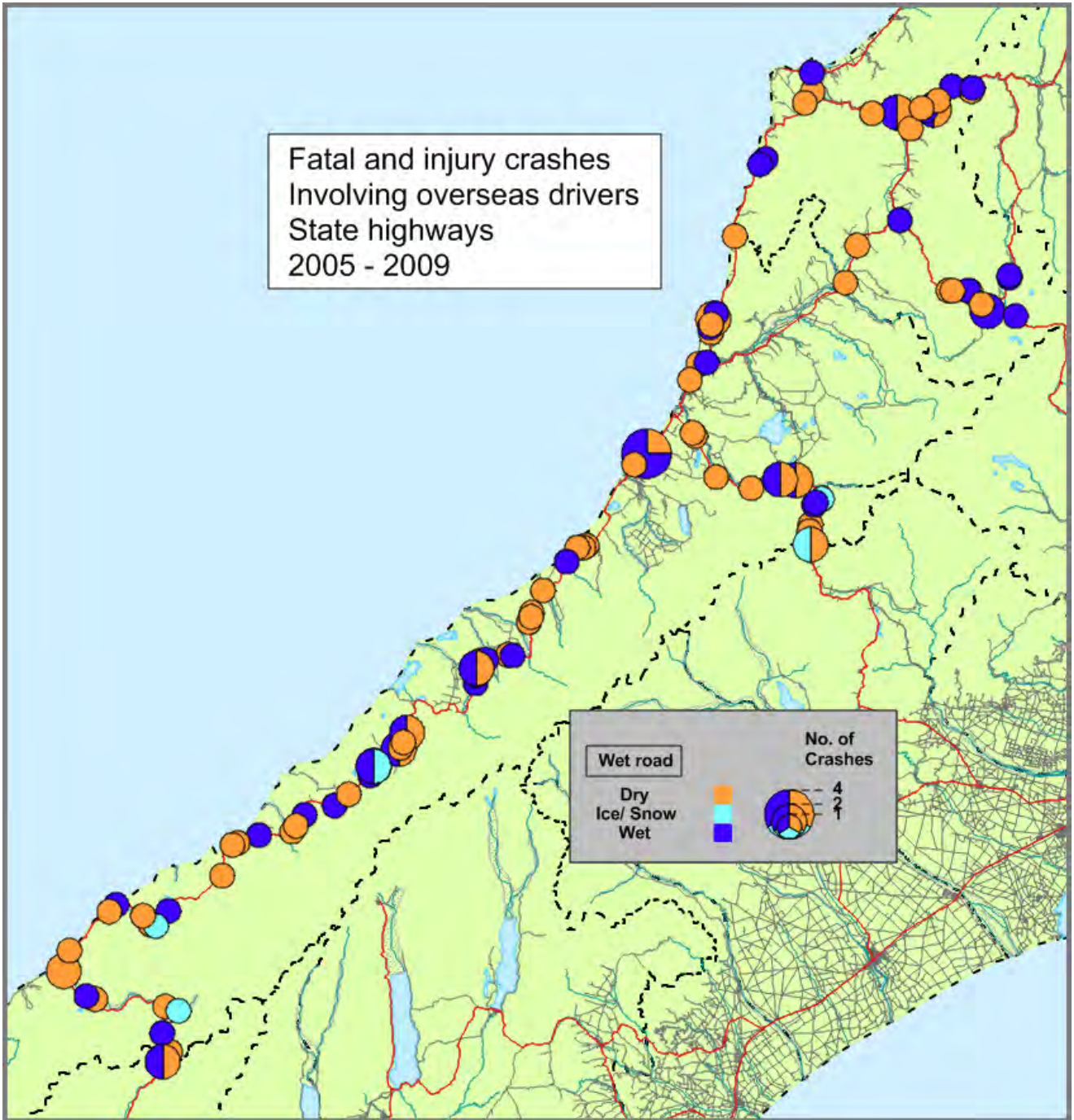
Overall males represented 71 percent of at fault drivers in speed related crashes on highways

### Age and gender of at fault drivers in speed related injury crashes. (2005 - 2009) West Coast highways

Drivers age	Male	Female	Total
15-19 years	15	4	19
20 - 24	15	7	22
25 - 29	10	5	15
30 - 39	13	9	22
40 - 49	15	3	18
50 - 59	8	2	10
60 - 69	3	3	6
70+	6	1	7
<b>Total</b>	<b>85</b>	<b>34</b>	<b>119</b>

Further information about the 119 speed related injury crashes on West Coast highways(2005 to 2009):

- 5 deaths, 37 serious injuries and 127 minor injuries
- Most common crash type bend - loss of control or head on
- 89 percent mid-block
- 9 percent urban
- 57 percent wet or icy road
- 26 percent night time
- Worst month June, November
- Worst day of week Tuesday
- Worst time 3 pm - 6 pm



## Overseas drivers

On roads on West Coast highways between 2005 and 2009 19 percent of drivers involved in injury crashes were overseas drivers. These 117 crashes resulted in 4 deaths, 47 serious injuries and 154 minor injuries. Overseas drivers may include both tourists and New Zealand residents driving on an overseas licence.

### Casualties from crashes involving overseas drivers (2005 - 2009) West Coast highways

	2005	2006	2007	2008	2009
Fatal	1	0	0	1	2
Serious	9	9	5	16	8
Minor	40	25	28	24	37
Total	50	34	33	41	47

The number of casualties from crashes involving overseas drivers dropped from a high of 50 in 2005 to a low of 33 in 2007, but has since risen to 47 in 2009.

### Injury crashes involving Overseas drivers (2005 to 2009) West Coast highways

Highway number	Number of crashes	Social cost of crashes (m)
SH 6	86	\$35.5
SH 65	2	\$0.19
SH 67A	1	\$0.09
SH 69	1	\$0.09
SH 7	12	\$7.31
SH 73	15	\$4.81

Over nine in every ten crashes in that involved an overseas driver in the area were on roads in rural areas.

On roads in West Coast highways, 59 percent of all crashes involving overseas drivers were Bend - loss of control or head-on crashes. Straight road - loss of control or head on crashes accounted a further 15 percent of injury crashes, and Rear end/obstruction crashes represented 15 percent of crashes.

Male drivers of all ages made up two thirds of at-fault drivers.

### Ages of drivers at fault in crashes involving overseas drivers West Coast highways (2005-2009)

Ages (years)*	Male	Female	Total
15 to 19	4	3	7
20 to 24	13	6	19
25 to 29	11	7	18
30 to 39	13	11	24
40 to 49	15	6	21
50 to 59	7	4	11
60 to 69	10	1	11
70 +	4	1	5

The common home locations of the overseas drivers were:

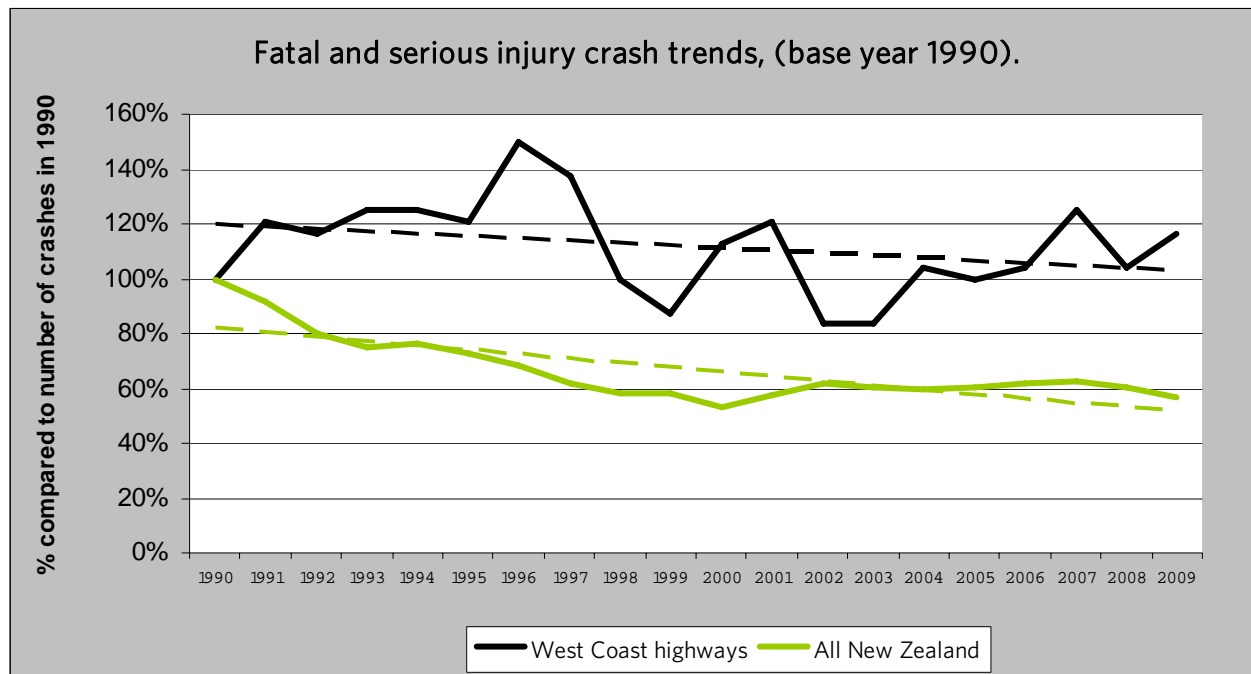
Europe	29
North America	20
United Kingdom	19
Asia	17
Australia	14

Further information about the 117 injury crashes involving overseas drivers in West Coast highways 2005 to 2009:

- Most common crash factors were:- Poor handling, Poor observation, Poor judgement and too fast.
- 6 percent of crashes were at intersections
- 8 percent of crashes at night
- 45 percent in of crashes in wet or icy conditions
- Worst month February
- Worst day of week Tuesday
- Worst times midday to 3 pm

## Looking back - the last two decades.

The vision of the Government’s “Safer Journeys” road safety strategy is “A safe road system that is increasingly free of road deaths and serious injuries”. The chart below illustrates the progress made in reducing fatal and serious casualties since 1990, for both West Coast highways and for the country as a whole.



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