

***Chatham Islands
County
Road Safety Report
2004 to 2008***



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June 2009

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Introduction and general information

The New Zealand Transport Agency provides information on road safety to its stakeholders and the public. It also has responsibility for promoting safety and sustainability in land transport, among a variety of other functions. This road safety report is an example of information supplied by the New Zealand Transport Agency.

This report helps identify road safety issues in Chatham Islands County area ('the county') by presenting tables or graphs of:

- numbers and trends in reported crashes and casualties
- characteristics and types of crashes and casualties
- factors contributing to crashes
- characteristics of crashes on council authority roads

The information is intended to assist road controlling authorities, the New Zealand Police and others in evaluating the safety performance of the road network in Chatham Islands County. Comparison with other cities, districts or regions elsewhere in the country is included.

Researchers, students, and organisations with an interest in road safety will also find the information useful.

Source of crash information

This report uses data from the New Zealand Transport Agency's crash database. This database includes all crashes involving injury and non-injury for which Police reports have been completed and forwarded to the New Zealand Transport Agency. Mostly five-year data (2004 to 2008) has been used, but 10-year data (1999 to 2008) has been used to analyse trends.

Council authority peer groups

Traffic crash patterns and features for an area can depend on the traffic and roading characteristics of that area. The most useful comparisons are made with other areas or authorities with similar characteristics, rather than with the whole country. The data for the city is compared with a peer group of similar council authorities (Group E) along with data for all New Zealand.

The peer group used for comparison with Chatham Islands County is Group E which consists of largely rural areas with small provincial towns with low traffic volumes. (Population 20000 and/or rural crashes greater than 55 percent). Council authorities included in this group are listed in Figure 1.4.

Definitions of urban and rural

Data has been separated for urban and rural (open) roads through this report because each has a distinctly different pattern of crashes. In this report urban roads are defined as all those with a speed limit of 70 km/h or less, however it should be noted that some locations which have been speed limit zoned might be more appropriately defined as rural but are included in urban zones.

Definition of statistically significant

A number of graphs include a comparison between the road controlling authority, all New Zealand and a similar peer group. These graphs can include an indication as to whether the difference is statistically significant. For the purposes of this report statistically significant means that a difference of this size is unlikely to be due to chance. Significance is noted at the 5% level ($P < 0.05$), this means that the observed result would occur by chance in only 1 in 20 similar situations.

Road user compliance data

The Ministry of Transport collects information on road user compliance with traffic law. This information includes speed surveys, occupant restraint use surveys and cycle helmet use surveys. Information about these surveys is available on Ministry of Transport web site.

The appropriate web addresses are as follows:

Speed Surveys <http://www.transport.govt.nz/research/SpeedSurveys/>

Safety belts <http://www.transport.govt.nz/research/safetybeltstatistics/>

Cycle helmets <http://www.transport.govt.nz/research/cyclehelmets2009/>

The information is also distributed quarterly in the Ministry of Transport publication Road safety progress.

The Ministry of Transport also conducts public attitude surveys. These have been undertaken annually since 1994. They evaluate attitudes to road safety issues, primarily alcohol-impaired driving and speed. Surveys are carried out in May and June of each year by trained interviewers who conduct interviews with respondents in their homes. The sample is chosen to be representative of the New Zealand adult population, and includes men and women aged 15 and over from towns, cities and rural areas throughout New Zealand.

The results of these surveys are available from:

<http://www.transport.govt.nz/research/PublicAttitudestoRoadSafety-Survey/>

General explanatory notes

1. Crash and casualty information in this report generally includes data for both council roads and state highways. Some tables and charts can separate this information, however figures 8.1–8.26 provide information for council roads only.
2. Crash and casualty rates are based on 2008 populations estimates updated from the 2006 census, traffic flows from the year 2008, and the average of five year crash data (2004–2008).
3. Traffic flows are based on Road Asset Maintenance and Management (RAMM) data from December 2008. As different road controlling authorities update flow data in RAMM at different times some data will be more up to date than other data, hence caution should be exercised when comparing traffic flow based crash rates in one authority with those of other authorities particularly as the traffic flow data (VKT) used in the calculations can not be considered definitive. Comparisons should be considered as indicative only.
4. With four to five categories of road for each council authority, some categories will only have short lengths of road. This may cause significant variation in the calculated crash and casualty rates.
5. The crash numbers include all those within the road controlling authority. The crash numbers used in the crash rate section can, however, vary slightly from the remainder of the document as only 'on road' crashes can be used. These are crashes on roads that have traffic volume information recorded. Crashes that occurred in car parks, reserves, beaches etc. are excluded.

6. The severity of a crash is determined as the most severely injured casualty in the crash. Injury severity is classified as fatal, serious, or minor as follows:
 - Fatal:** Injuries that result in death within 30 days of a crash.
 - Serious:** Fractures, concussion, internal injuries, crushing, severe cuts and lacerations, severe general shock necessitating medical treatment, and any injury involving removal to and detention in hospital.
 - Minor:** Injuries which are not serious but which require first aid, or cause discomfort or pain to the person injured, eg sprains and bruises.

7. Ethnicity of road users involved in crashes can now be recorded on traffic crash reports, although some reports may not include this data. Figures 3.25 and 3.26 shows the ethnicity of casualties, where known. Ethnicity is divided into five different groups. Only data for 2004 to 2008 is available. The graph includes all casualties irrespective of culpability.
NOTE: Ethnicity data should be treated with caution as the data can be considered subjective and incomplete.

8. For the licence status grouping in Figures 3.27 and 3.28 the 'no/wrong licence' group includes drivers who have never held a licence or have an expired or wrong class licence. This graph includes all drivers irrespective of injury or culpability.

9. See appendix for detailed descriptions of:
 - crash movement types and crash movement groupings (for Figures 4.1–4.4)
 - grouping of factors contributing to crashes (for Figures 5.1–5.14)

10. Due to the paucity of crash data from the County no blackspots or alarm sites have been determined, however a list of all reported crashes in the reporting period has been included to enable appropriate remedial works to be considered if necessary.

Crash Rates and Costs

Crash reporting rates

The ratio of 'reported serious injuries' can be assessed by comparing seriously injured casualty numbers from Police crash reports to hospital admissions, given that a serious injury is generally one requiring hospital attention.

Figure 1.1 below indicates the serious injury reporting rate for each region.

Figure 1.1 Reporting rate serious injuries to hospital admissions

Region	2004	2005	2006	2007	2008
Northland	34%	30%	28%	34%	31%
Auckland	22%	17%	19%	16%	16%
Waikato	51%	40%	38%	49%	46%
Bay of Plenty	28%	32%	37%	38%	27%
Gisborne	28%	31%	26%	29%	26%
Hawkes Bay	73%	80%	75%	59%	60%
Taranaki	66%	55%	65%	77%	41%
Manawatu-Wanganui	50%	38%	34%	35%	34%
Wellington	61%	68%	61%	73%	64%
Nelson-Marlborough	63%	44%	52%	54%	49%
West Coast	43%	53%	55%	59%	53%
Canterbury	37%	47%	42%	50%	45%
Otago	107%	99%	85%	77%	53%
Southland	74%	78%	103%	73%	53%
New Zealand	39%	36%	35%	37%	34%

This is the ratio of the number of persons with serious injuries in reported crashes divided by the number of persons admitted to hospital with serious injuries.

These variations in reporting rates need to be considered when viewing the trends in crashes and casualties shown in this report.

Note: These values should be considered indicative only.

Figure 1.2 Crashes per 100 million vehicle kilometres travelled

	Council roads		State Highways	
	Urban	Rural	Urban	Rural
Chatham Islands County	n/a	n/a	n/a	n/a
Group E	41	29	30	19
All NZ	35	27	30	16

Figure 1.3 Casualties per 100 million vehicle kilometres travelled

	Council roads		State Highways	
	Urban	Rural	Urban	Rural
Chatham Islands County	n/a	n/a	n/a	n/a
Group E	57	44	42	30
All NZ	45	39	42	25

Figure 1.4 Peer group crash and casualty rates
Group E

City or District name	Crashes per					Casualties per					2008 Population	% of rural crashes
	10,000 Population (5 year average)	100 million vehicle kilometres travelled				10,000 Population (5 year average)	100 million vehicle kilometres travelled					
		Council roads		State Highways			Council roads		State Highways			
		Urban	Rural	Urban	Rural		Urban	Rural	Urban	Rural		
Buller	40	14	15	31	18	59	18	21	46	27	9950	78
Carterton	29	45	26	32	13	41	65	34	41	22	7360	68
Central Hawkes Bay	28	30	22	17	15	42	49	34	25	21	13300	78
Central Otago	43	35	32	31	22	65	42	47	39	35	17700	82
Chatham Islands	75	n/a	n/a	n/a	n/a	88	n/a	n/a	n/a	n/a	640	0
Clutha	60	39	50	36	28	93	51	80	53	43	17350	85
Gore	34	49	25	23	25	50	57	39	32	39	12250	59
Grey	27	21	26	23	15	38	27	38	33	21	13650	56
Hauraki	45	33	29	29	18	66	40	38	36	29	17750	83
Hurunui	61	23	20	27	20	93	27	27	34	31	10850	92
Kaikoura	57	6	20	11	22	77	6	43	13	28	3760	94
Kaipara	47	45	37	35	31	67	54	53	47	46	18600	80
Kawerau	6	20	0	9	14	7	23	0	9	20	7050	24
Mackenzie	55	80	24	49	14	86	119	43	56	21	3950	82
Opotiki	31	50	19	83	18	47	73	22	133	29	9060	74
Otorohanga	45	67	24	47	27	67	82	34	74	43	9220	80
Queenstown-Lakes	42	39	34	18	22	66	57	58	24	35	26400	64
Rangitikei	37	17	26	16	13	62	21	35	24	24	14950	88
Ruapehu	41	32	22	26	22	65	44	36	40	35	13650	83
South Wairarapa	36	44	26	21	24	49	59	37	23	33	9190	81
Stratford	29	35	29	16	22	40	42	40	21	33	9100	76
Tararua	36	33	28	19	18	52	42	42	23	26	17750	81
Waimate	32	38	17	24	13	49	47	28	29	21	7450	81
Wairoa	43	36	18	33	31	63	57	27	36	47	8480	81
Waitomo	62	59	21	43	30	95	82	30	55	47	9600	87
Westland	42	16	15	34	14	64	31	19	64	22	8760	90
Group E	41	33	28	25	20	61	44	42	35	31	297770	79
All New Zealand	26	35	27	30	16	36	44	39	41	24	4267970	41

Group E : Small provincial towns, low traffic volumes. (Population less than 20,000 and/or rural crashes greater than 55 percent).

Crashes and casualties per 100 million VKT are based on five years of reported injury on-road crash data (2004-2008) and December (2007) VKT.

Crashes and casualties per 10,000 population are based on five year average crash data (2004-2008) and Statistics NZ 2008 population estimates.

Figure 1.5 Crashes per 100 million vehicle-kilometres travelled - urban council roads

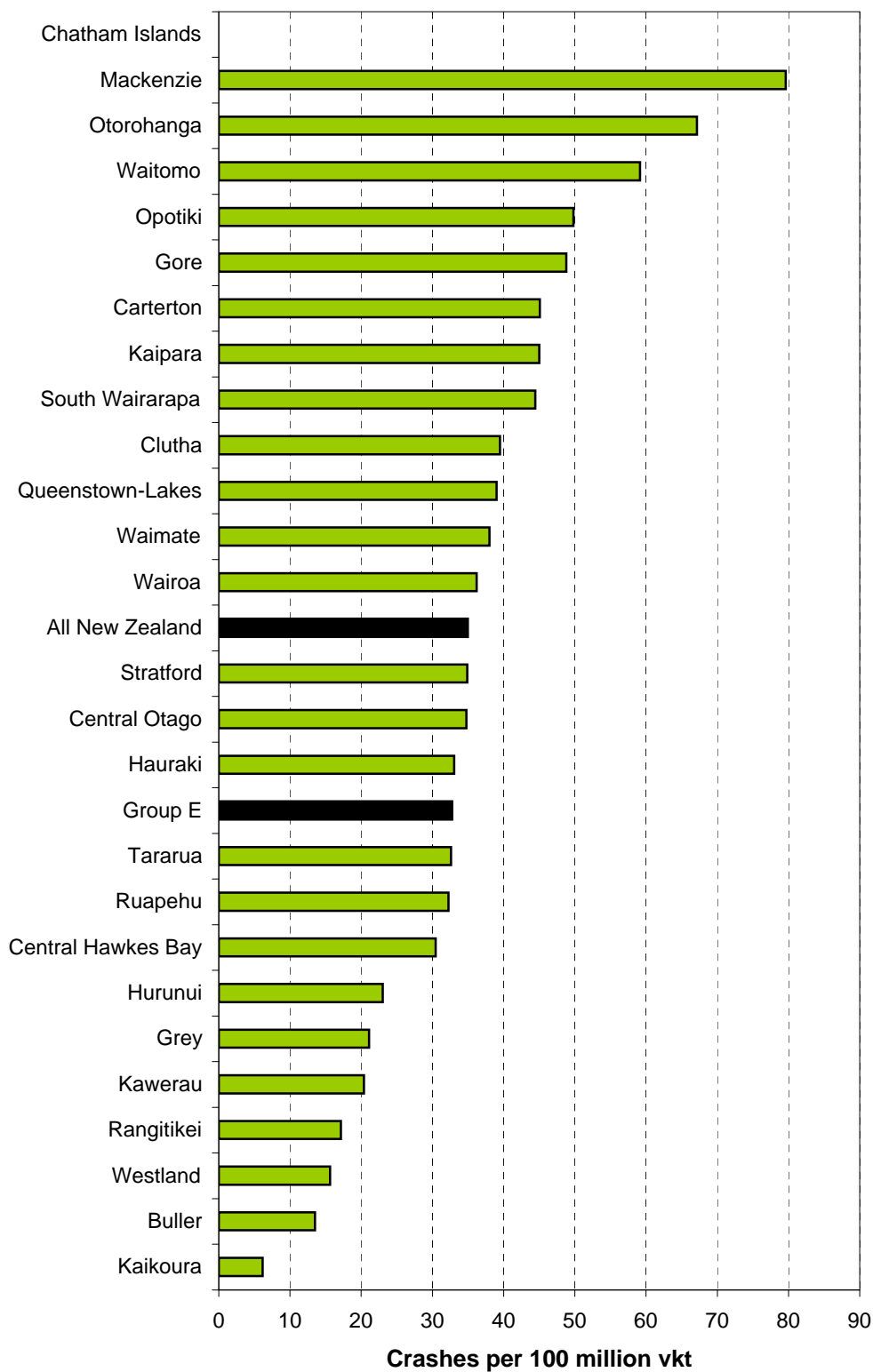


Figure 1.6 Crashes per 100 million vehicle-kilometres travelled - rural council roads

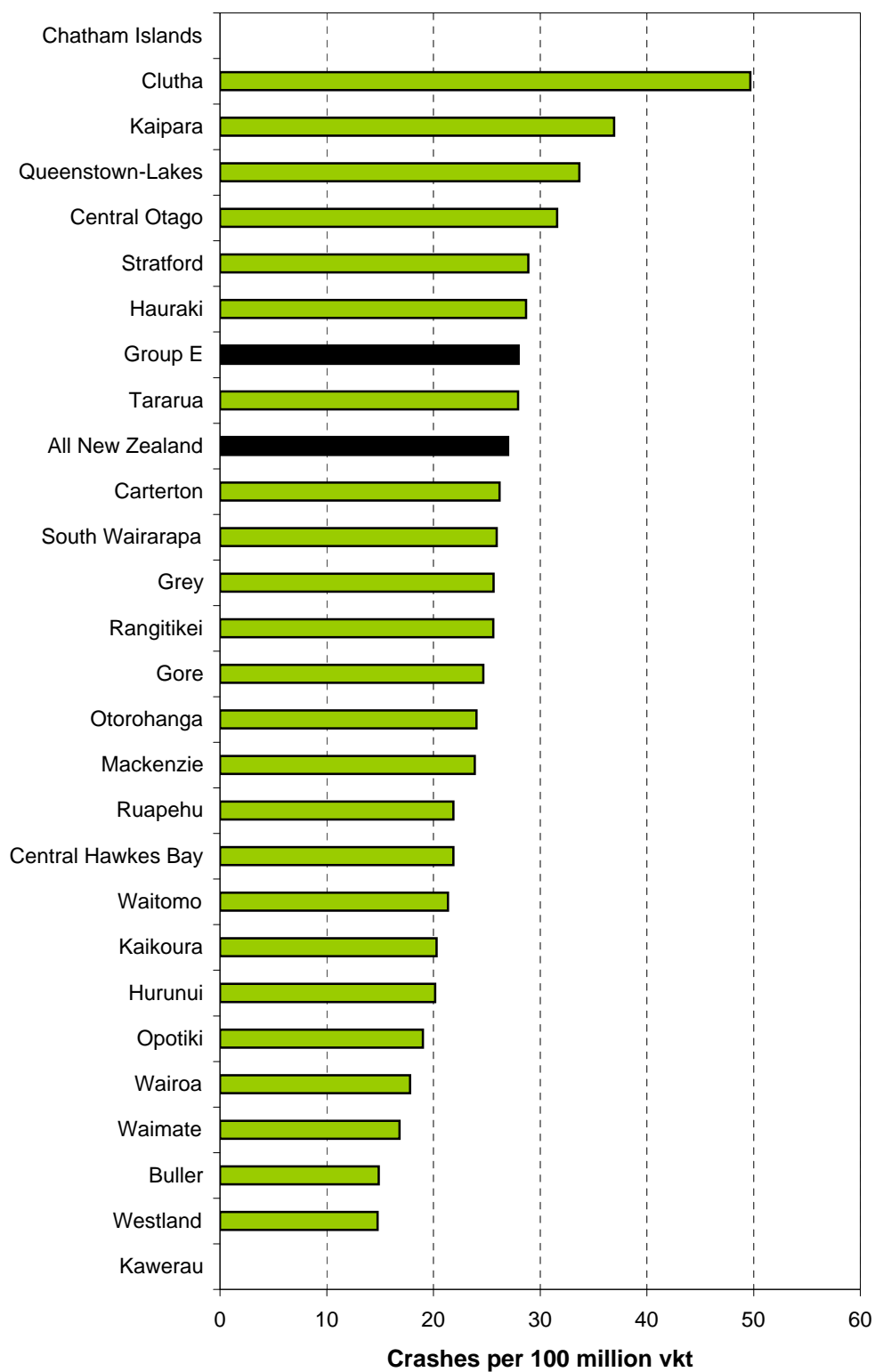


Figure 1.7 Crashes per 100 million vehicle kilometres travelled - urban state highways

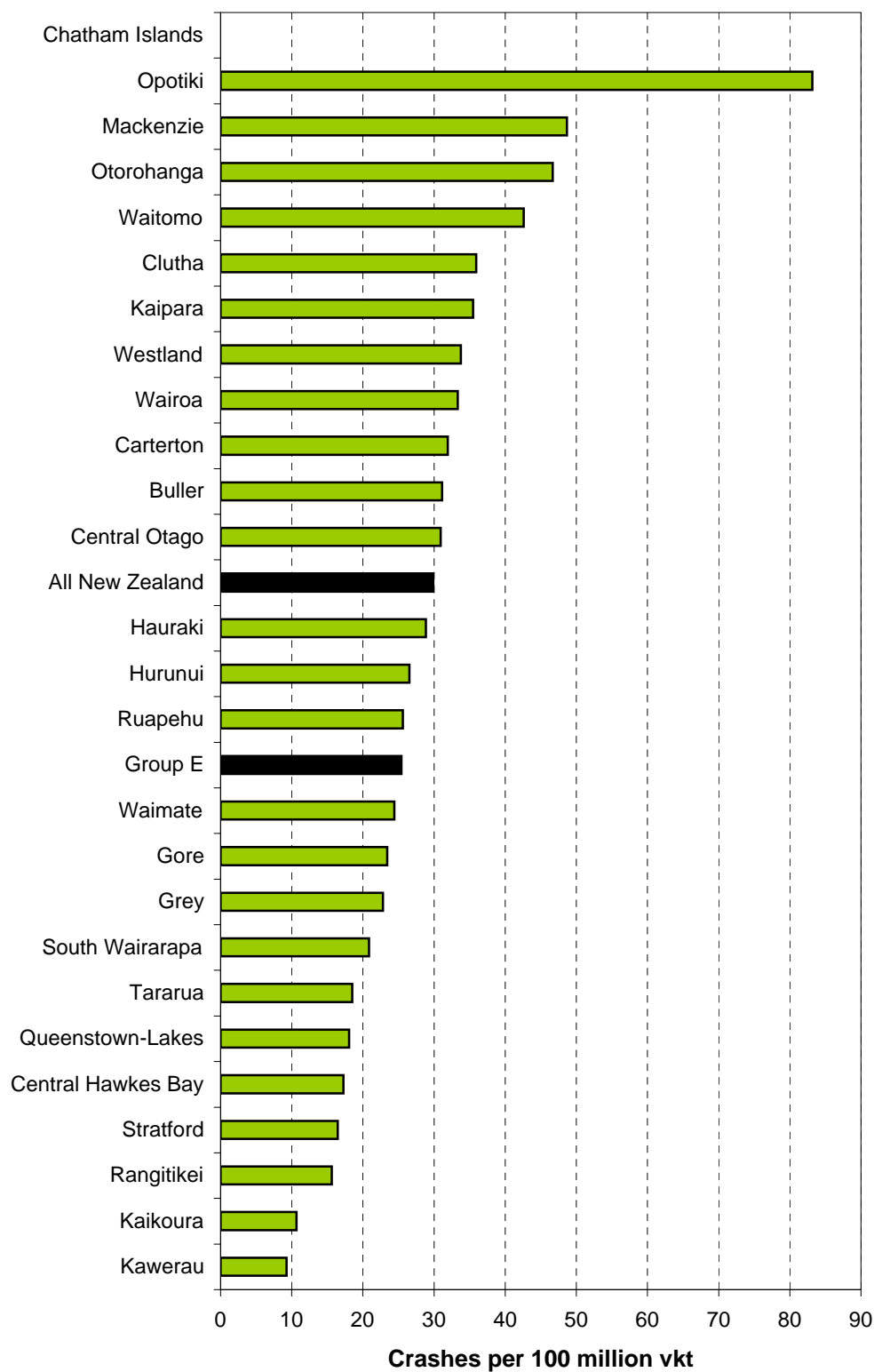
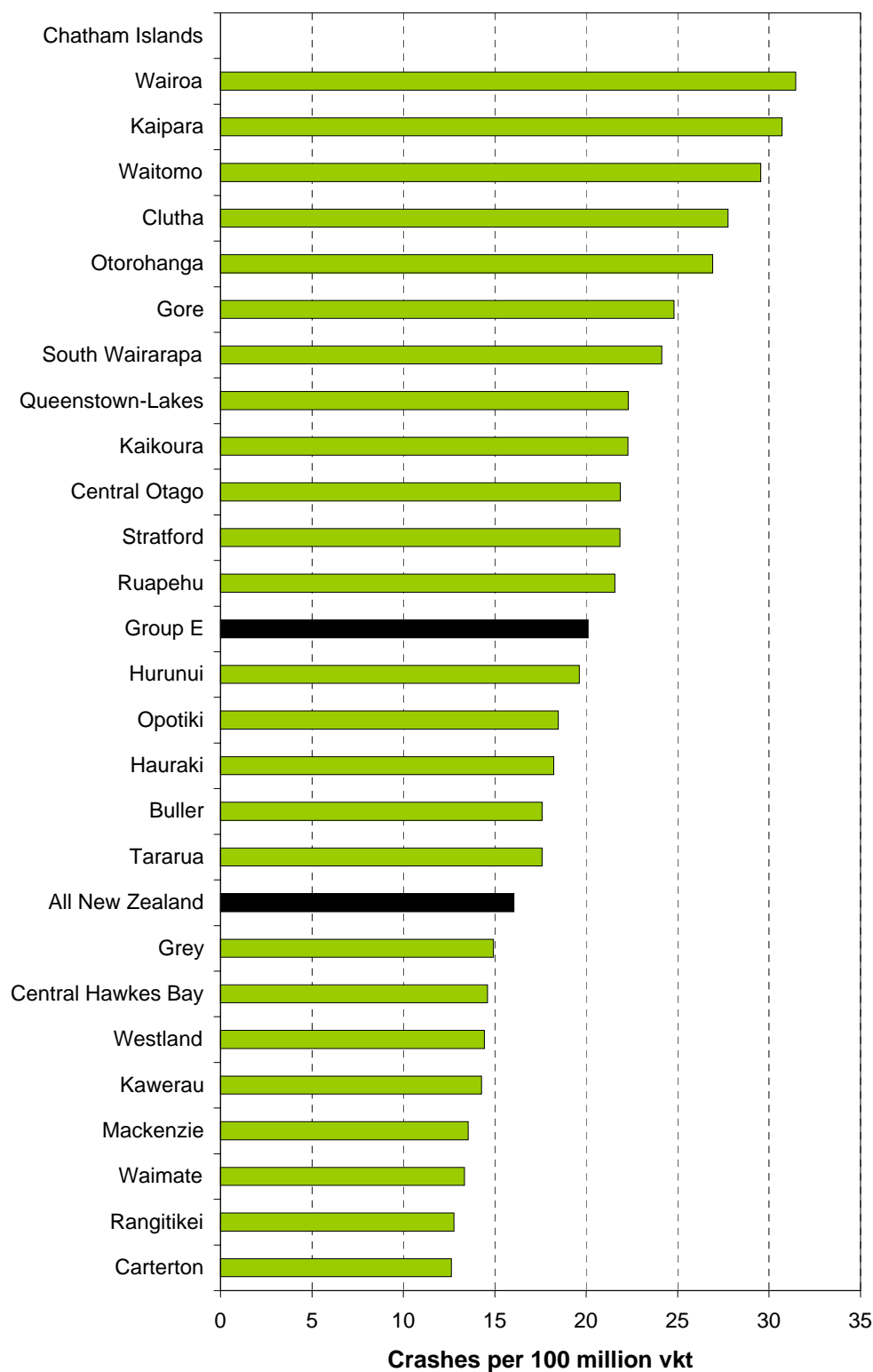
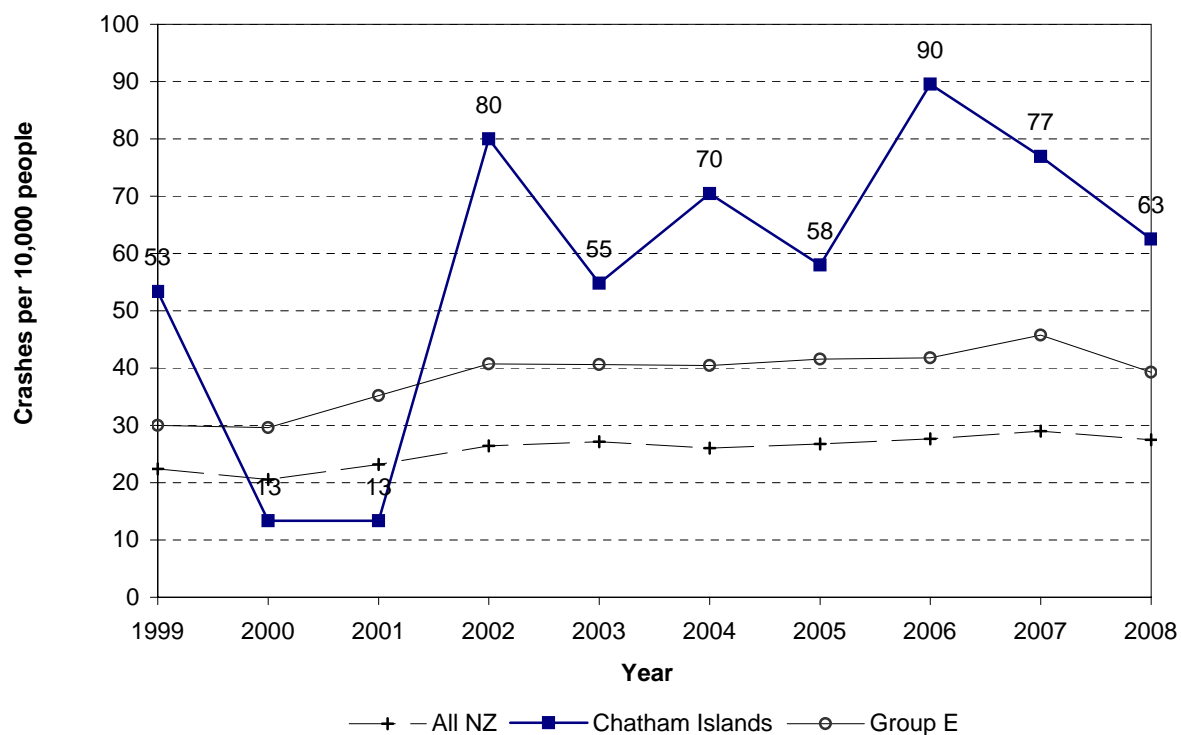


Figure 1.8 Crashes per 100 million vehicle-kilometres travelled - rural state highways



**Figure 1.9 Crashes per 10,000 people
Chatham Islands County**



**Figure 1.10 Casualties per 10,000 people
Chatham Islands County**

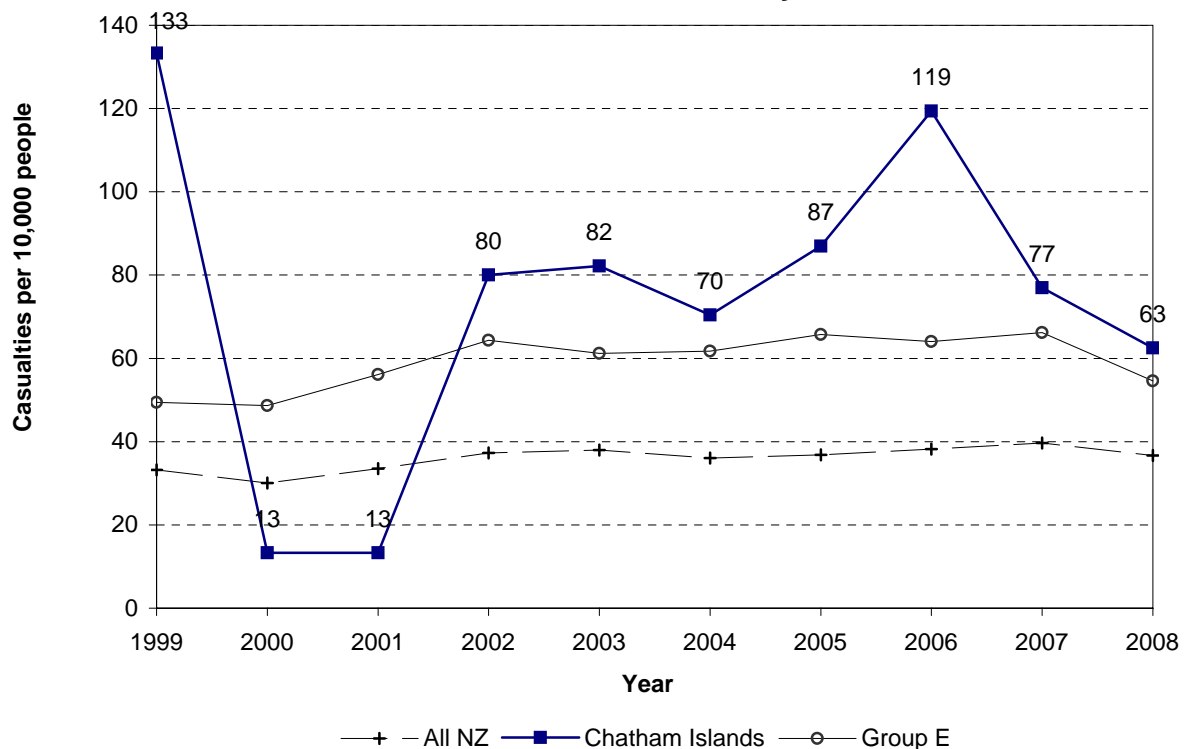


Figure 1.11 Social cost of crashes in Chatham Islands County in 2008

		Chatham Islands County	New Zealand
Council roads	urban	\$0.02	\$1,636.63
	rural	\$4.39	\$962.97
State Highways	urban	\$0.00	\$303.03
	rural	\$0.00	\$1,390.98
Total		\$4.41	\$4,293.62

Note: Crash costs are in \$ millions

The social costs of a road crash and the associated injuries include a number of different elements:

- Loss of life and life quality
- Loss of output due to temporary incapacitation
- Medical costs
- Legal costs
- Property damage costs

The average value of a loss of life due to a road crash is estimated by the amount of money the New Zealand population would be willing to pay for a safety improvement that would result in the expected avoidance of one premature death. This is the willingness to pay based value of statistical life or VOSL. The VOSL was established at \$2 million in 1991. This has been indexed to the average hourly earnings (ordinary time) to express the value in current dollars. The updated VOSL is \$3.35 million (in June 2008 dollars). Based on several international and New Zealand studies on VOSL, the average loss of life quality for permanent impairments due to a serious and a minor injury were estimated to be 10% and 0.4% of the VOSL respectively.

Crash rates can vary due to reporting rates. These are adjusted on a regional basis in this report by comparing with hospitalisation rates.

The other social cost components are estimated based on a number of studies conducted during the early to mid-1990s and are updated for price changes by indexing to an appropriate price index.

For a detail discussion on this, please refer to 'The social cost of road crashes and injuries: June 2008 update', available at the Ministry of Transport's website:

<http://www.transport.govt.nz/assets/NewPDFs/NewFolder/Social-Cost-June-2008-update-final.pdf>

The average social cost per reported crash (in June 2008 dollars) are estimated at:

Rural fatal crash	\$4,199,000
Rural serious crash	\$776,000
Rural minor crash	\$90,000
Urban fatal crash	\$3,635,000
Urban serious crash	\$659,000
Urban minor crash	\$81,000

These values include an allowance for non-reported injury crashes, and the totals in Fig. 1.11 also include an allowance for non-injury crashes.

Crash Counts

Figure 2.1: Crash numbers and severity 2004 to 2008 - whole County

	2004	2005	2006	2007	2008	Total	%	Group E
Fatal crashes	0	0	0	0	1	1	4%	5%
Serious crashes	2	1	2	2	0	7	29%	24%
Minor crashes	3	3	4	3	3	16	67%	70%
Total injury crashes	5	4	6	5	4	24	100%	100%
Non-injury crashes	4	6	3	5	9	27		

Figure 2.2: Crash numbers and severity 2004 to 2008 - urban roads

	2004	2005	2006	2007	2008	Total	%	Group E
Fatal crashes	0	0	0	0	0	0	0%	3%
Serious crashes	0	0	0	0	0	0	0%	20%
Minor crashes	1	0	0	1	0	2	100%	77%
Total injury crashes	1	0	0	1	0	2	100%	100%
Non-injury crashes	0	1	2	0	1	4		

Figure 2.3: Crash numbers and severity 2004 to 2008 - rural roads

	2004	2005	2006	2007	2008	Total	%	Group E
Fatal crashes	0	0	0	0	1	1	5%	6%
Serious crashes	2	1	2	2	0	7	32%	26%
Minor crashes	2	3	4	2	3	14	64%	68%
Total injury crashes	4	4	6	4	4	22	100%	100%
Non-injury crashes	4	5	1	5	8	23		

Figure 2.4: Casualty numbers and severity 2004 to 2008 - whole County

	2004	2005	2006	2007	2008	Total	%	Group E
Fatal casualties	0	0	0	0	1	1	4%	4%
Serious casualties	2	3	3	2	0	10	36%	21%
Minor casualties	3	3	5	3	3	17	61%	75%
Total casualties	5	6	8	5	4	28	100%	100%

Figure 2.5: Casualty numbers and severity 2004 to 2008 - urban roads

	2004	2005	2006	2007	2008	Total	%	Group E
Fatal casualties	0	0	0	0	0	0	0%	2%
Serious casualties	0	0	0	0	0	0	0%	17%
Minor casualties	1	0	0	1	0	2	100%	81%
Total casualties	1	0	0	1	0	2	100%	100%

Figure 2.6: Casualty numbers and severity 2004 to 2008 - rural roads

	2004	2005	2006	2007	2008	Total	%	Group E
Fatal casualties	0	0	0	0	1	1	4%	5%
Serious casualties	2	3	3	2	0	10	38%	22%
Minor casualties	2	3	5	2	3	15	58%	73%
Total casualties	4	6	8	4	4	26	100%	100%

Figure 2.7 Number of injury crashes
Chatham Islands County all roads (urban & rural)

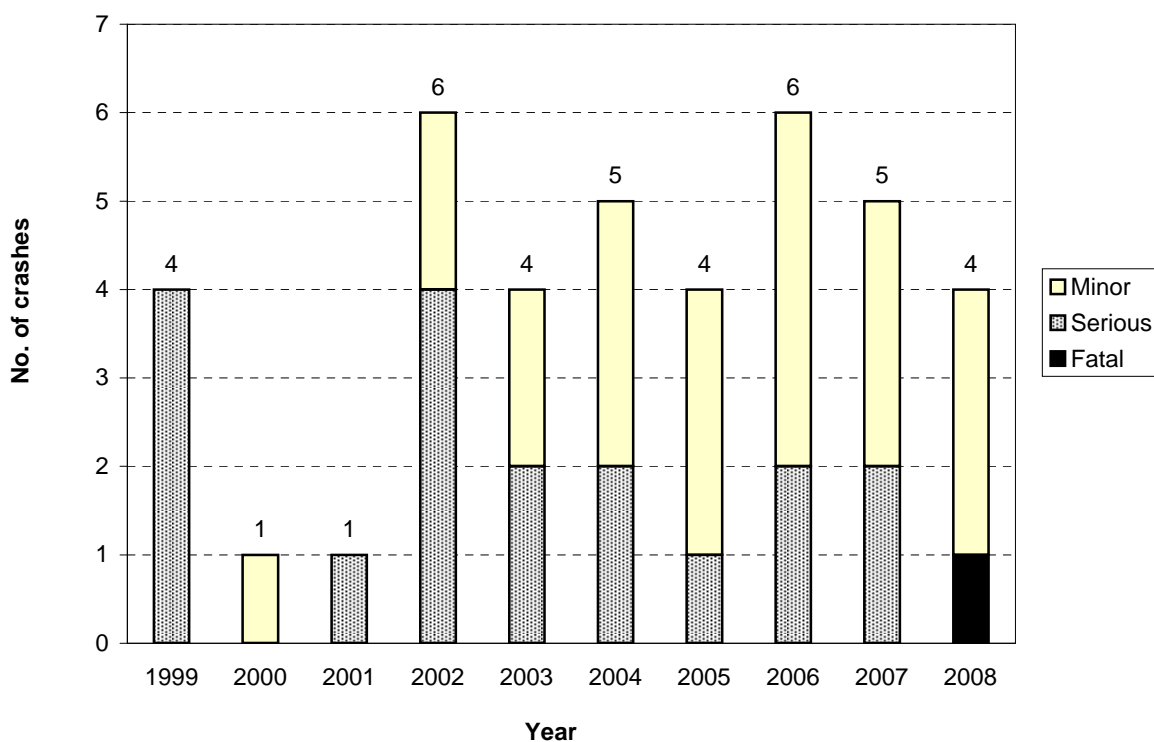
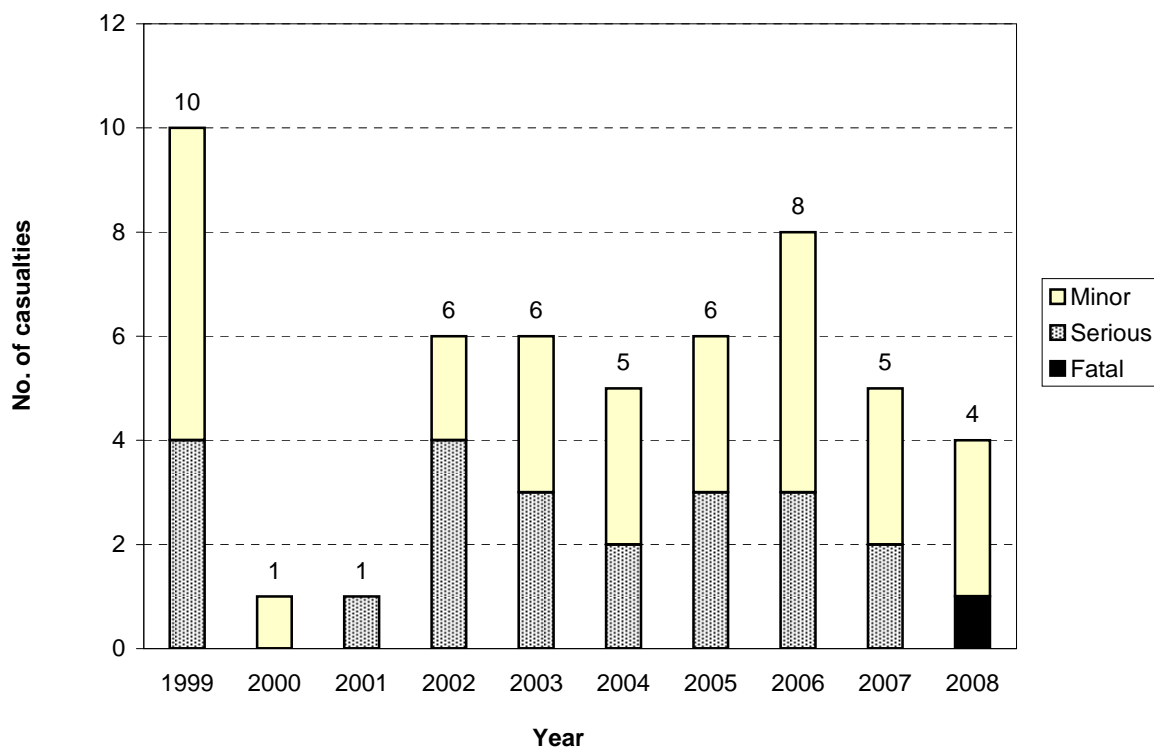
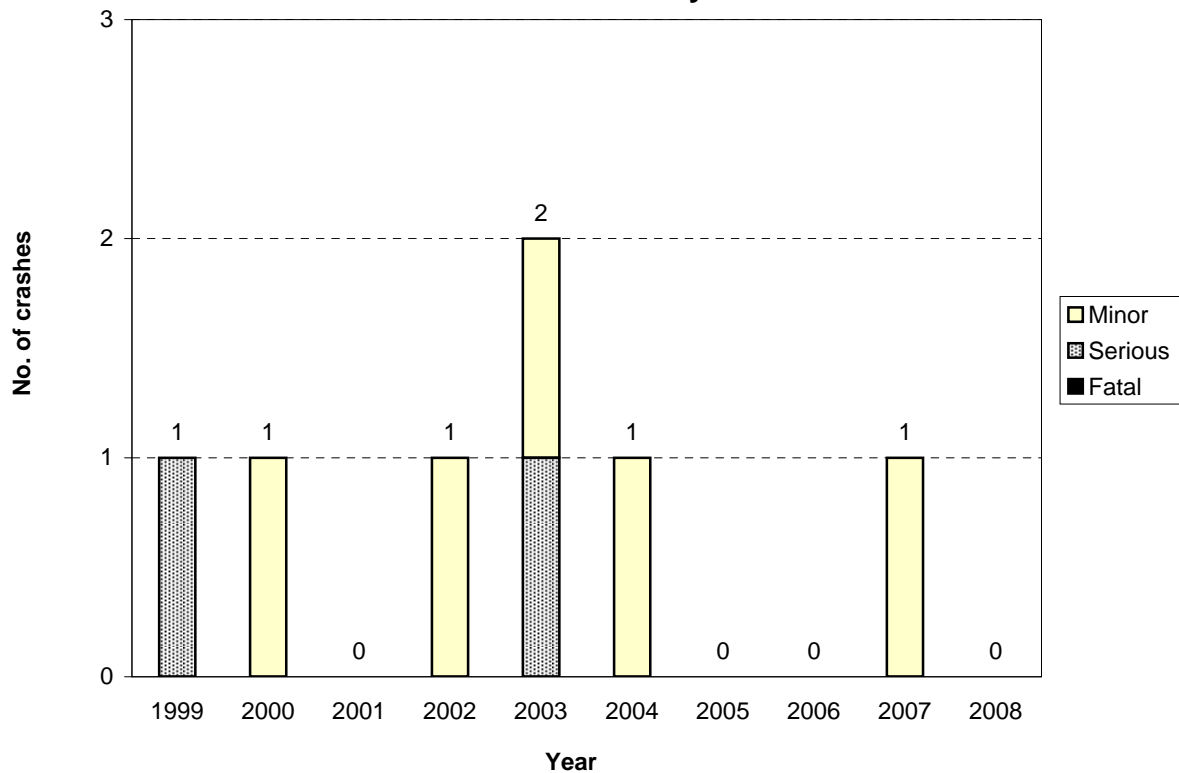


Figure 2.8 Number of casualties
Chatham Islands County all roads (urban & rural)



**Figure 2.9 Number of injury crashes
Chatham Islands County - urban**



**Figure 2.10 Number of casualties
Chatham Islands County - urban**

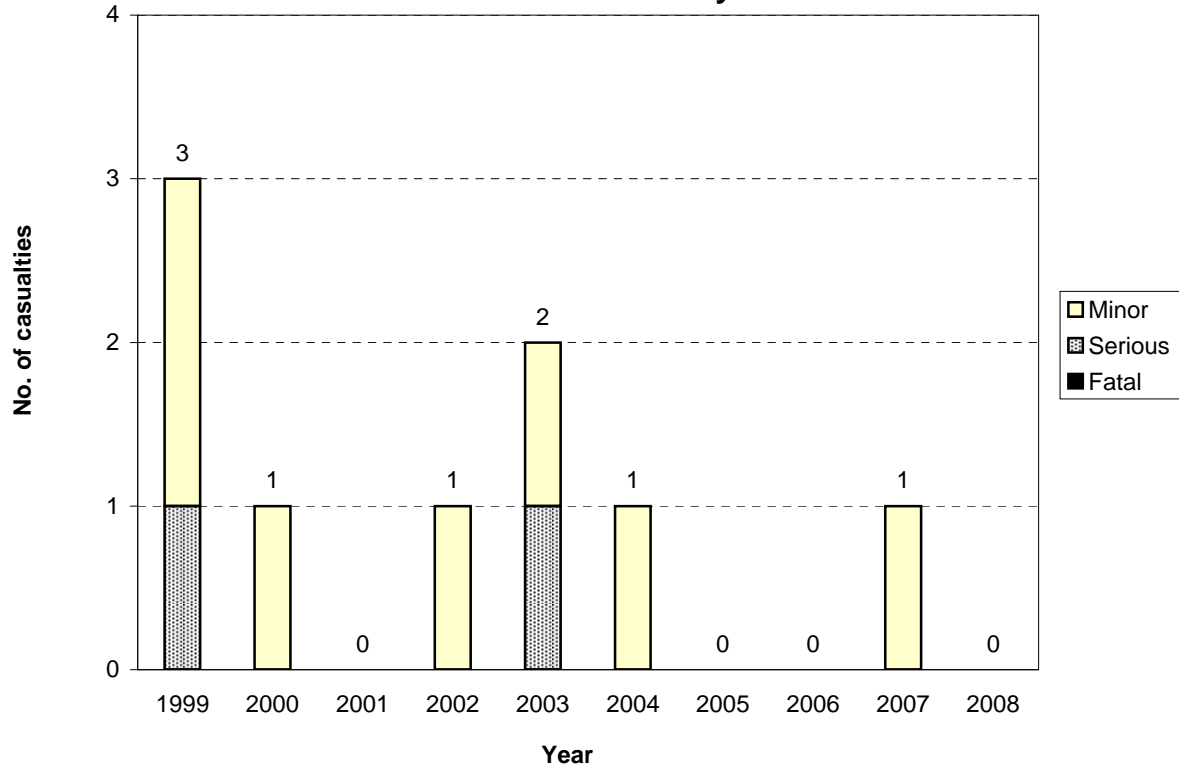


Figure 2.11 Number of injury crashes
Chatham Islands County - rural

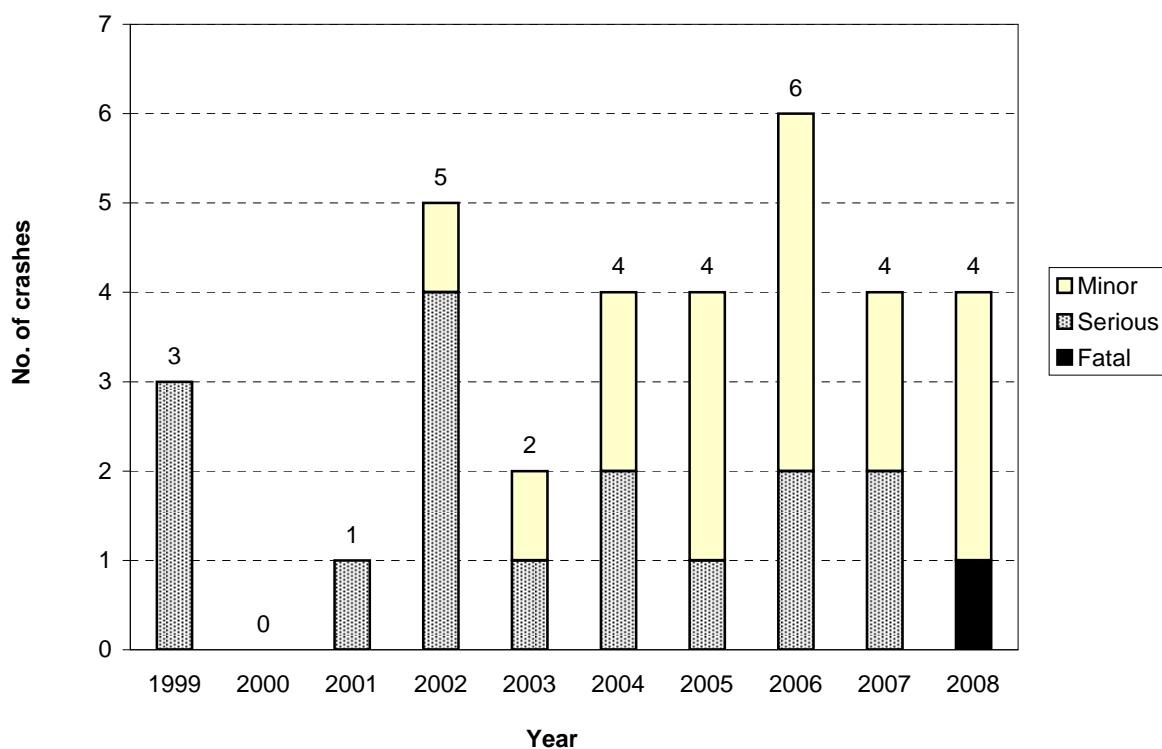
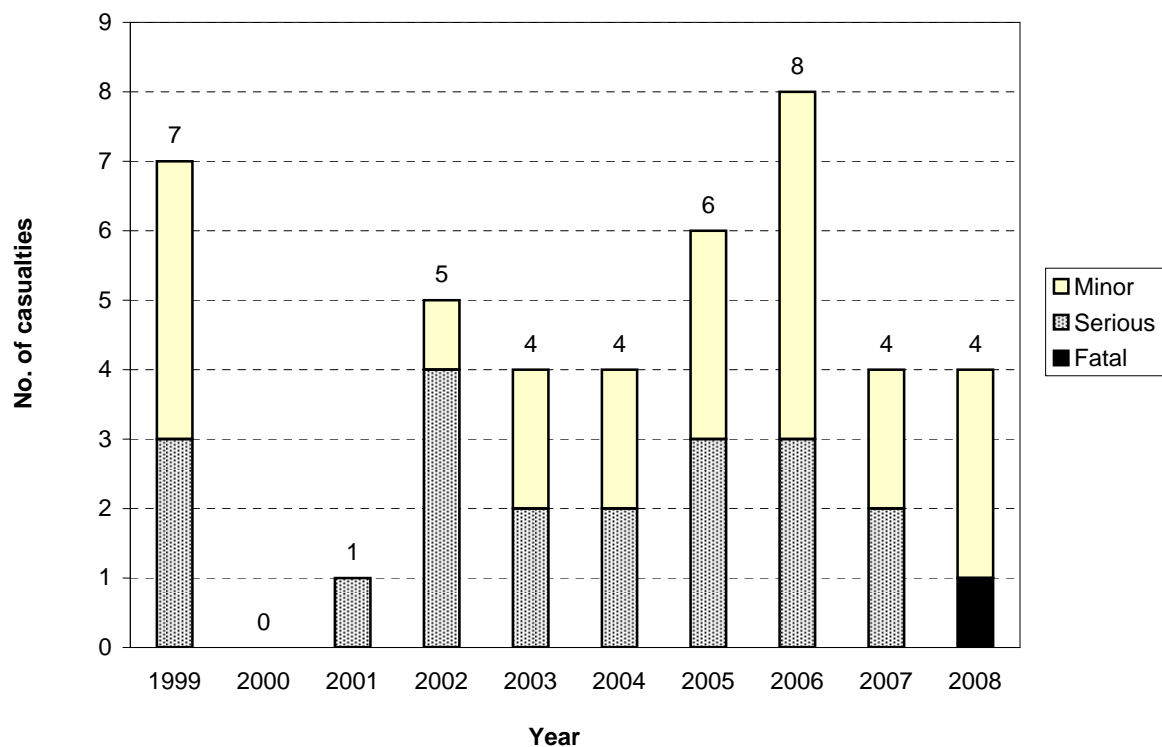
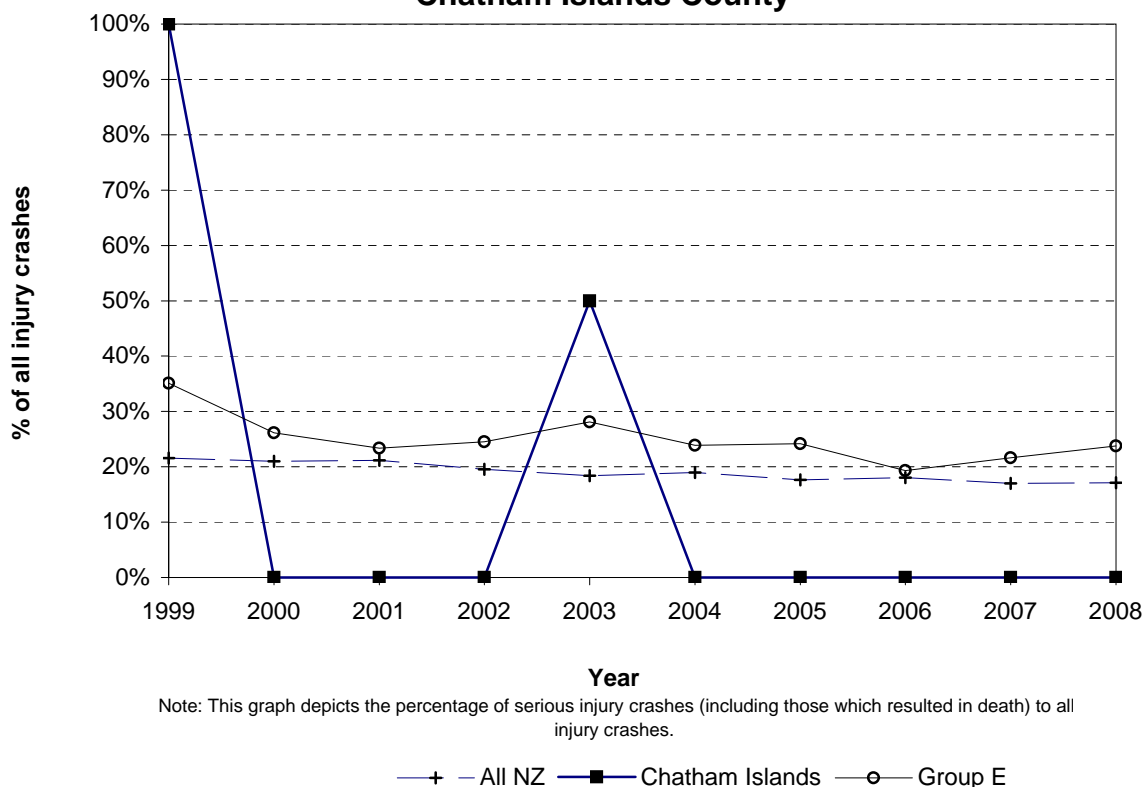


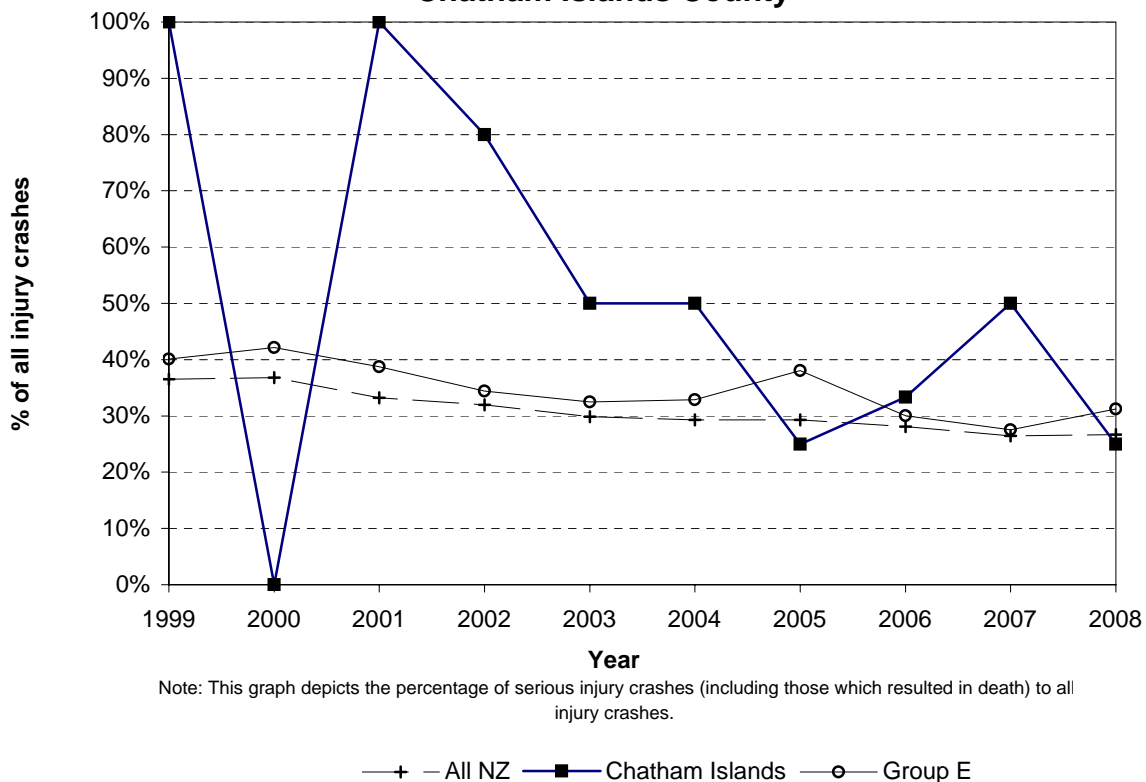
Figure 2.12 Number of casualties
Chatham Islands County - rural



**Figure 2.13 Severity ratio - urban
Chatham Islands County**

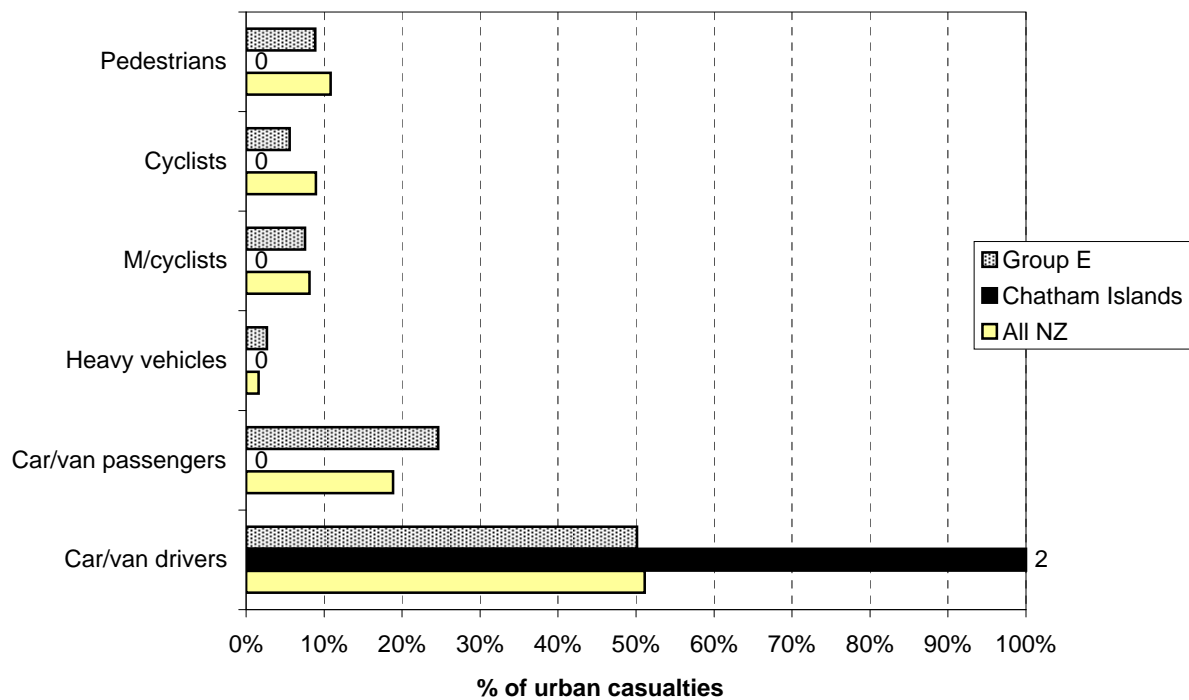


**Figure 2.14 Severity ratio - rural
Chatham Islands County**



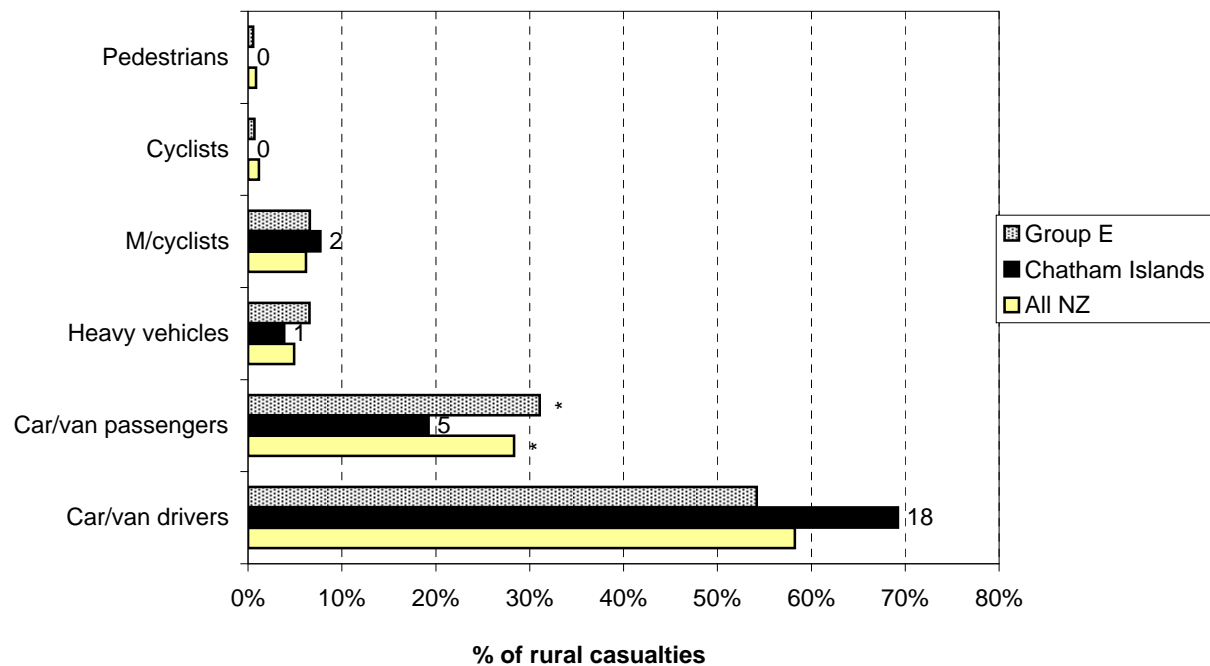
Road User Statistics

**Figure 3.1 Road user casualties - urban
Chatham Islands County (2004-2008)**



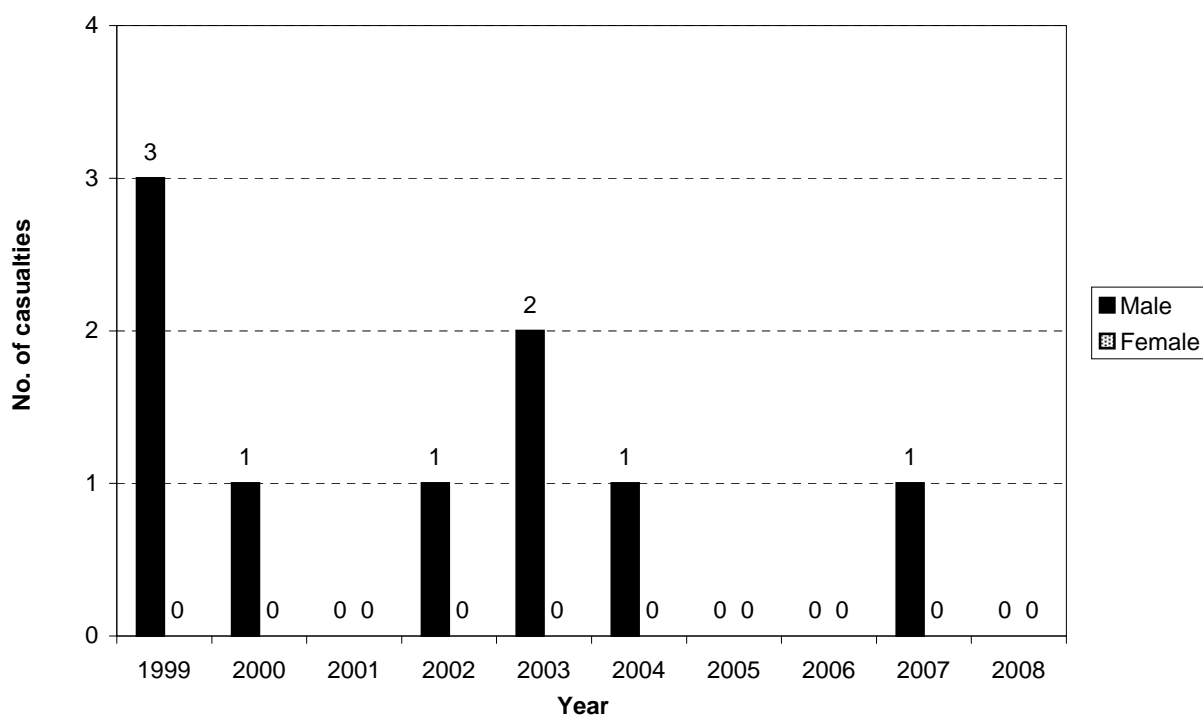
Note: While the graph plots percentages, the number of casualties is shown against the data points.
*Denotes statistically significant difference between Local Authority and National or Peer Group Proportions

**Figure 3.2 Road user casualties - rural
Chatham Islands County (2004-2008)**



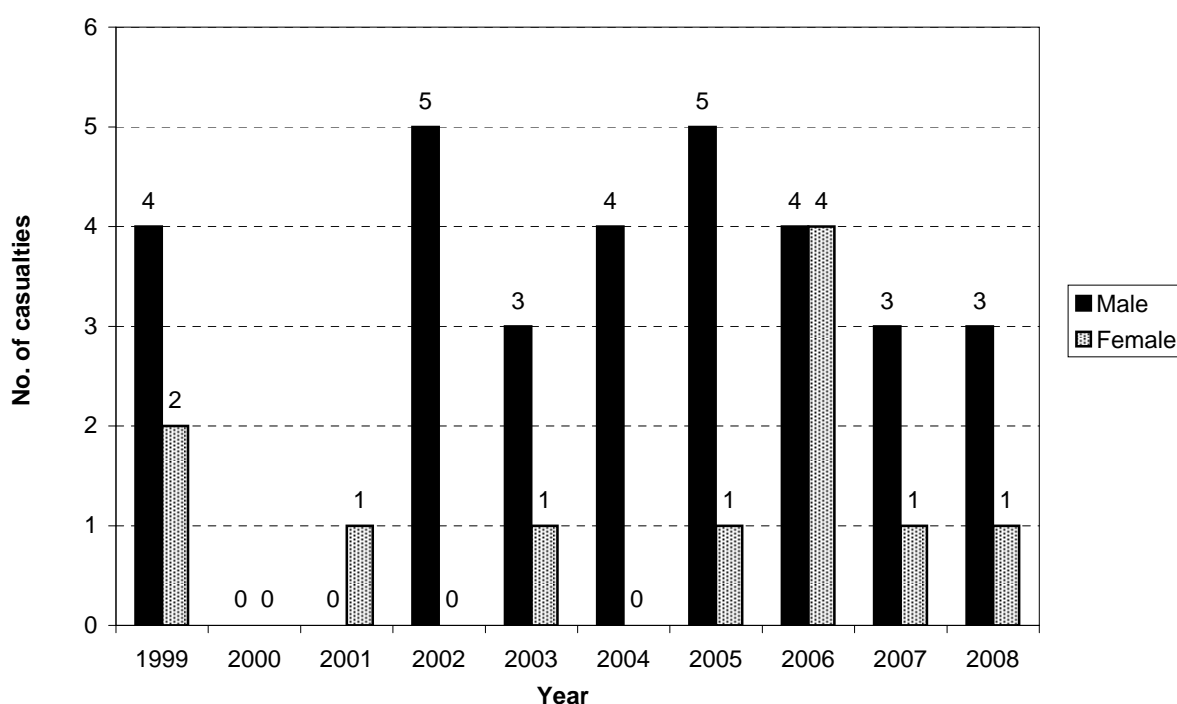
Note: While the graph plots percentages, the number of casualties is shown against the data points.
*Denotes statistically significant difference between Local Authority and National or Peer Group Proportions

**Figure 3.3 Male/female casualties - urban
Chatham Islands County**



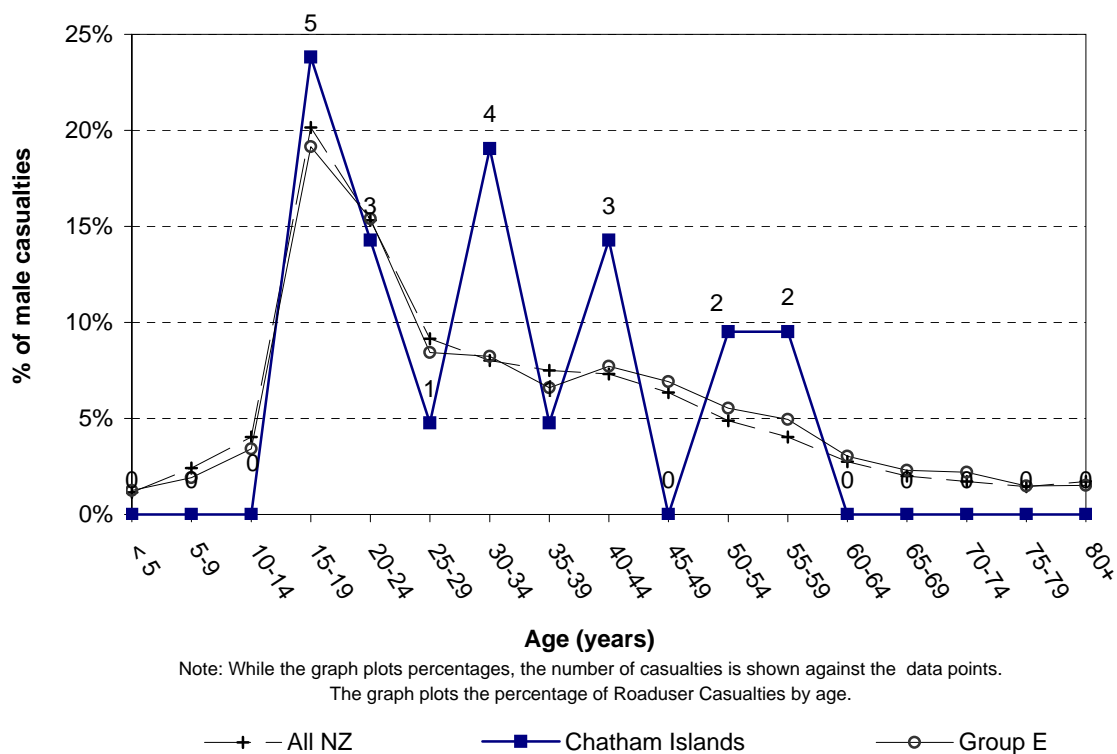
Note: This graph shows the number of male and female roadusers injured

**Figure 3.4 Male/female casualties - rural
Chatham Islands County**

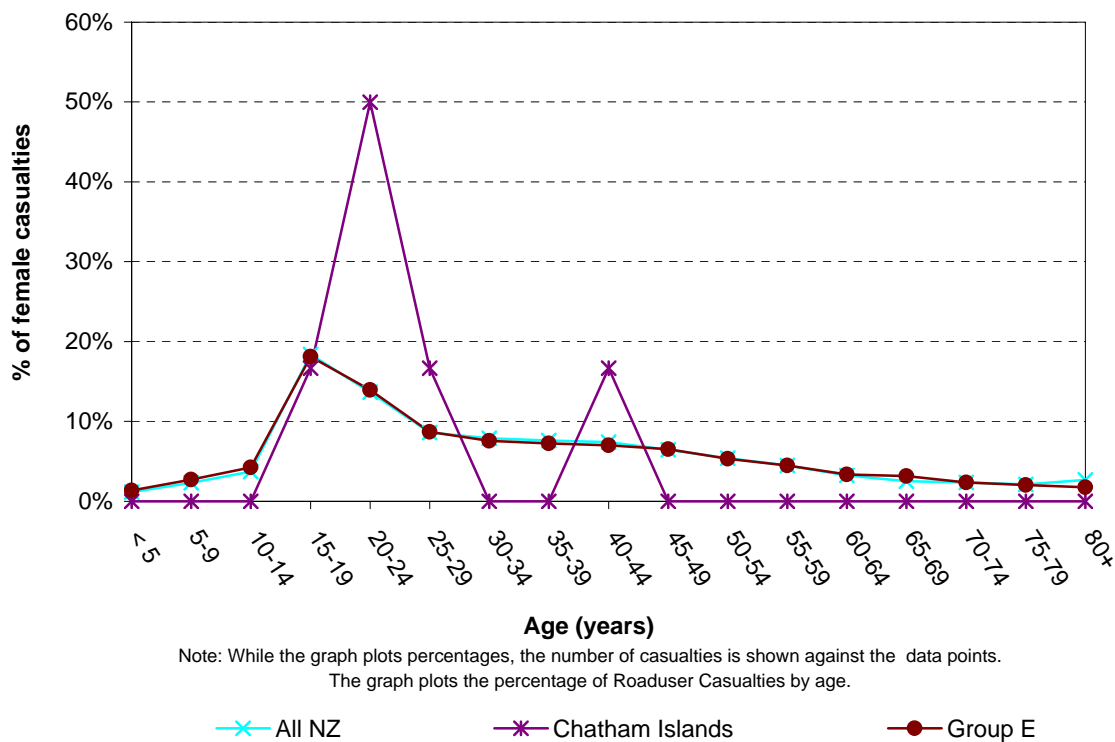


Note: This graph shows the number of male and female roadusers injured

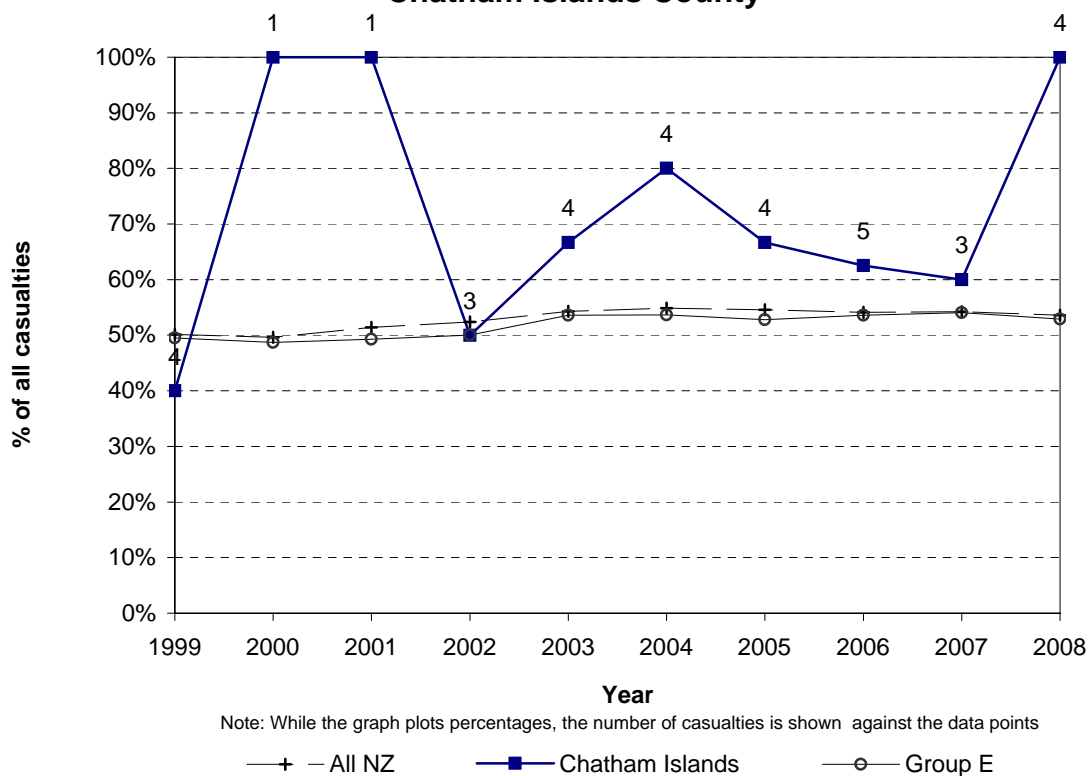
**Figure 3.5 Male casualties by age
Chatham Islands County (2004-2008)**



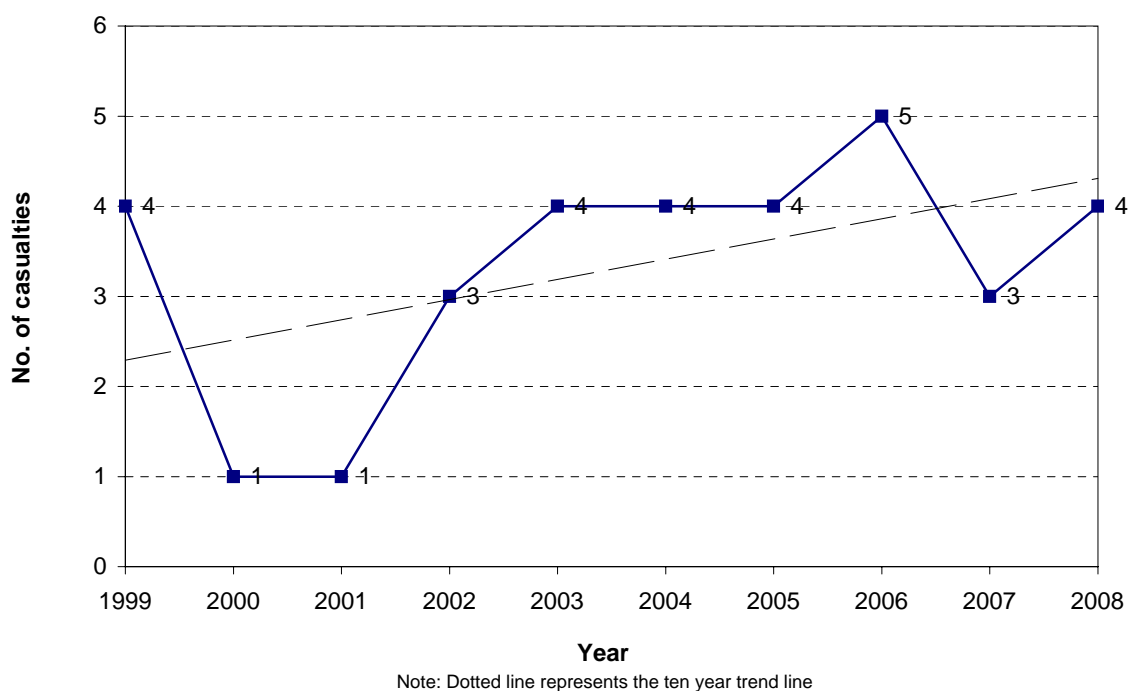
**Figure 3.6 Female casualties by age
Chatham Islands County (2004-2008)**



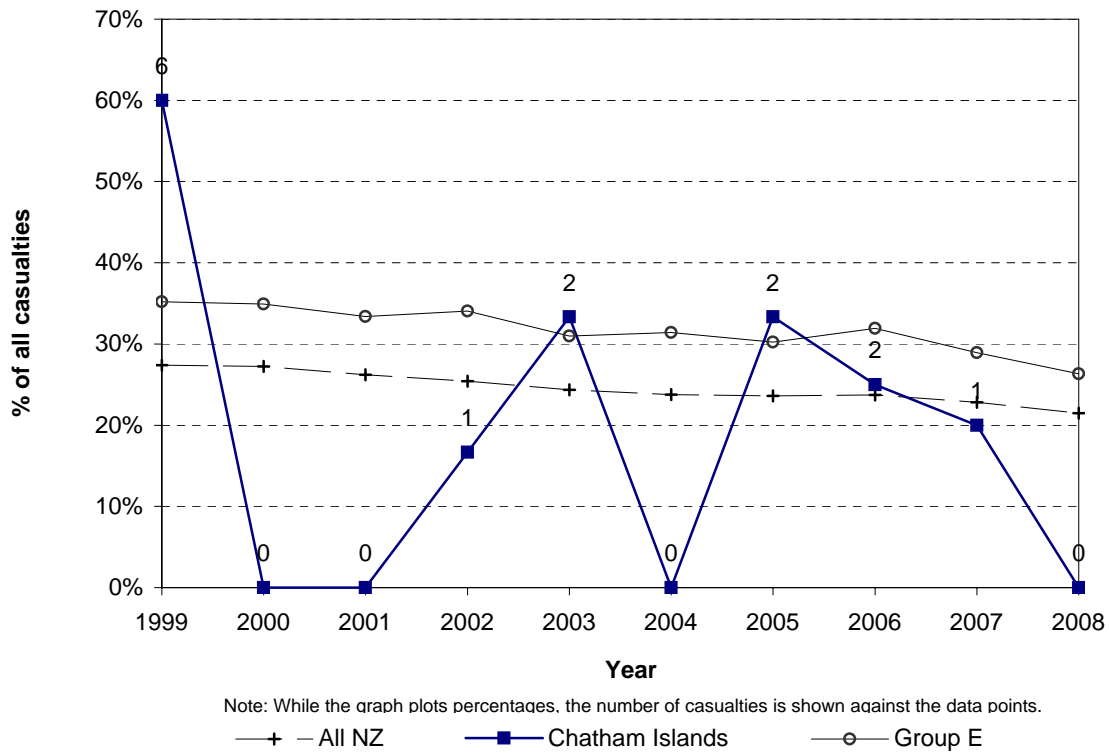
**Figure 3.7 Car/van driver casualties
Chatham Islands County**



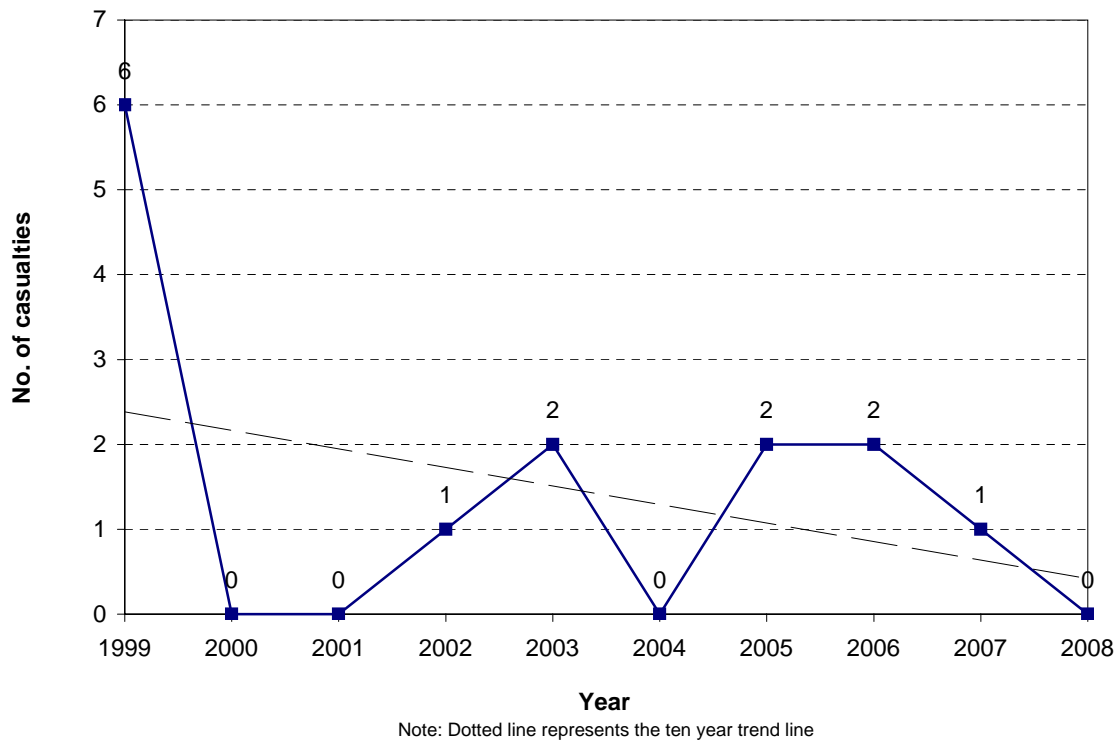
**Figure 3.8 Car/van driver casualties
Chatham Islands County**



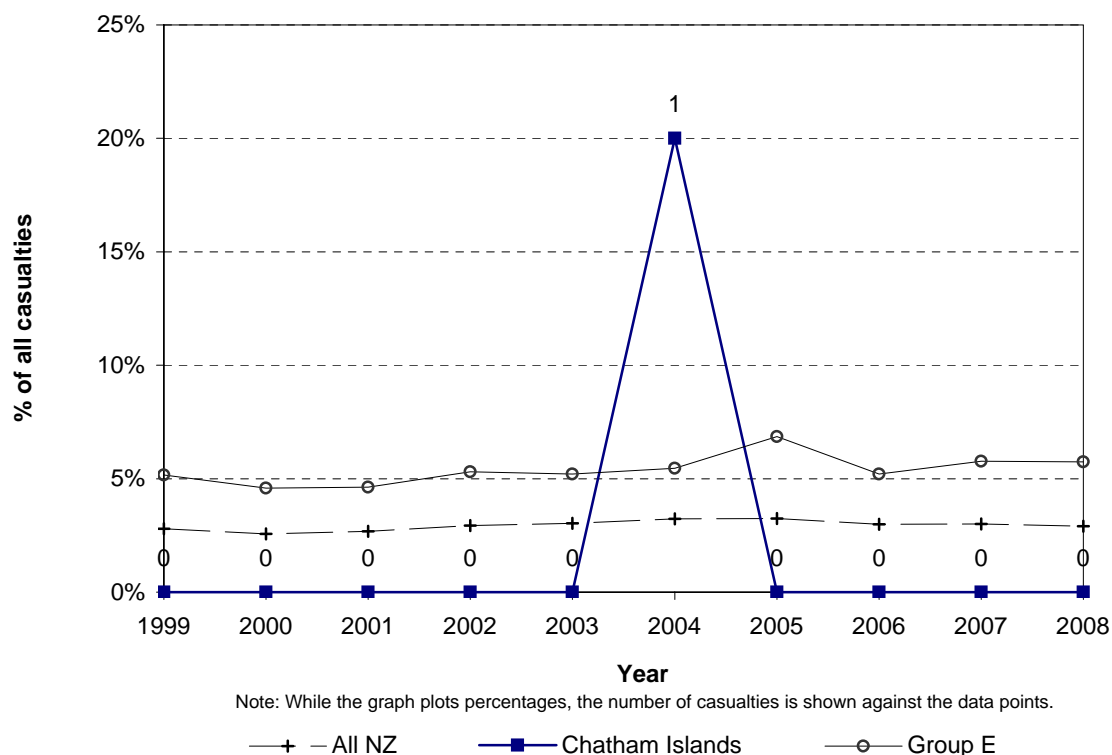
**Figure 3.9 Car/van passenger casualties
Chatham Islands County**



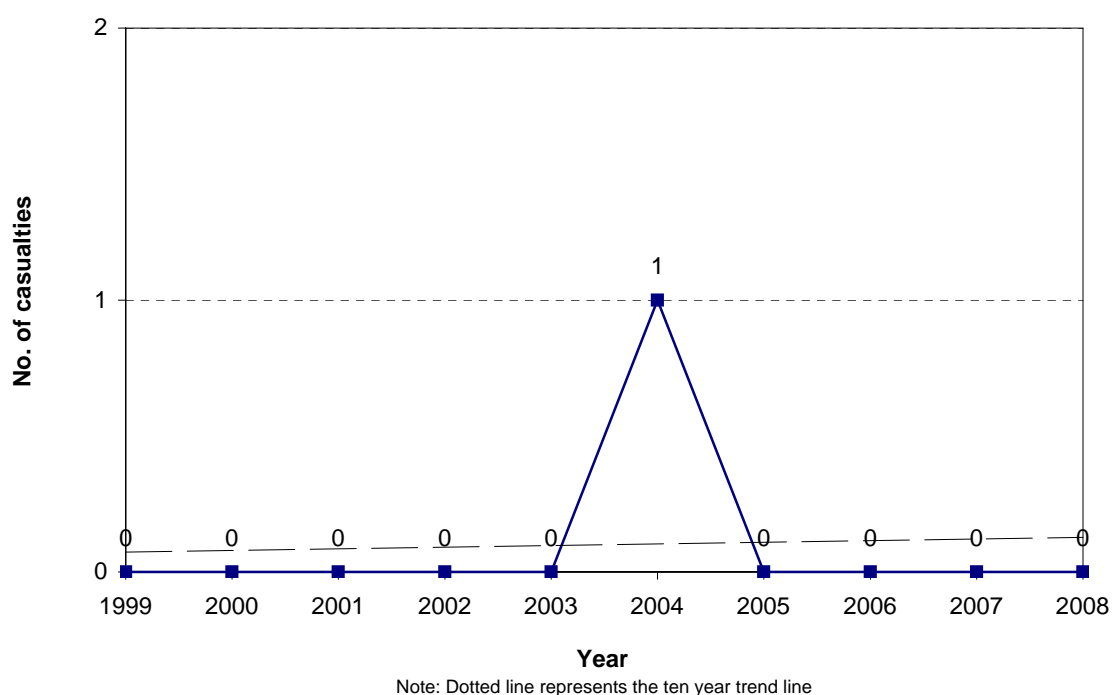
**Figure 3.10 Car/van passenger casualties
Chatham Islands County**



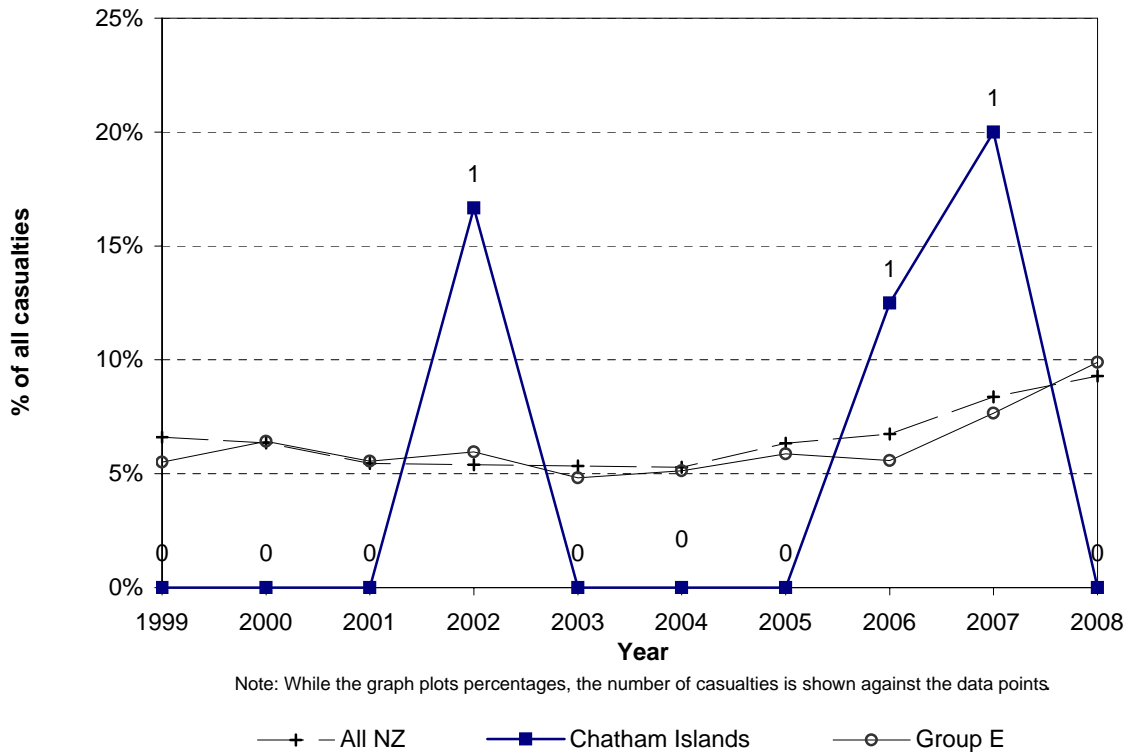
**Figure 3.11 Heavy vehicle casualties
Chatham Islands County**



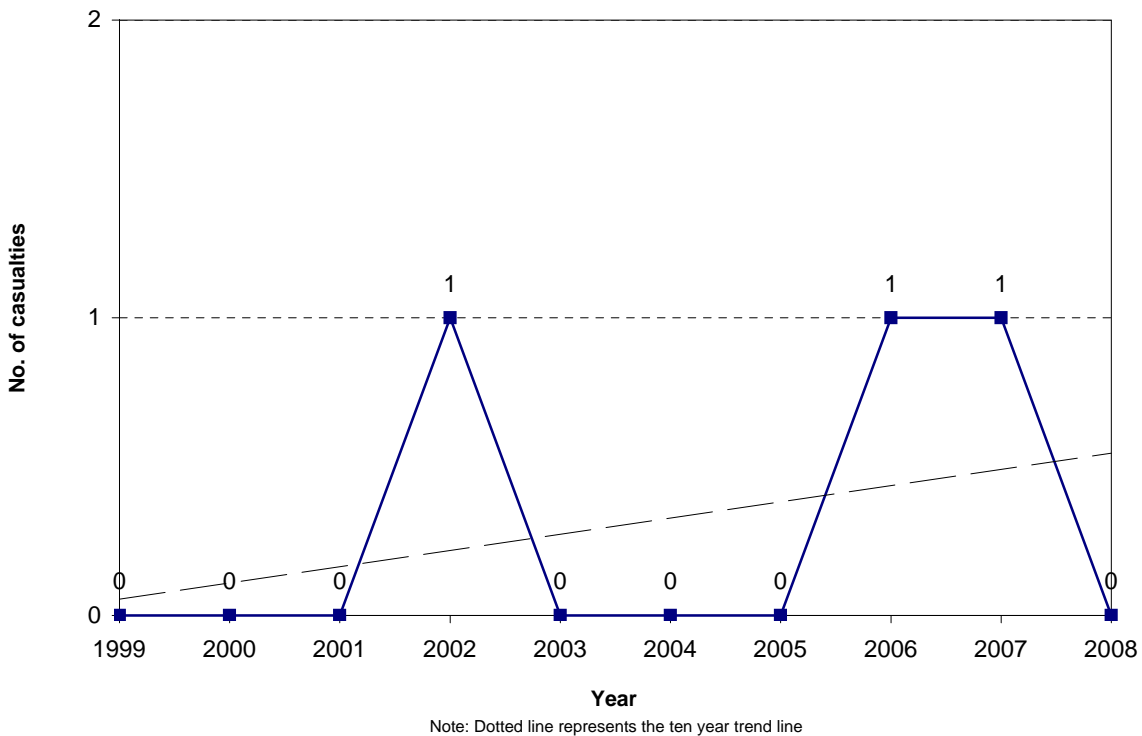
**Figure 3.12 Heavy vehicle casualties
Chatham Islands County**



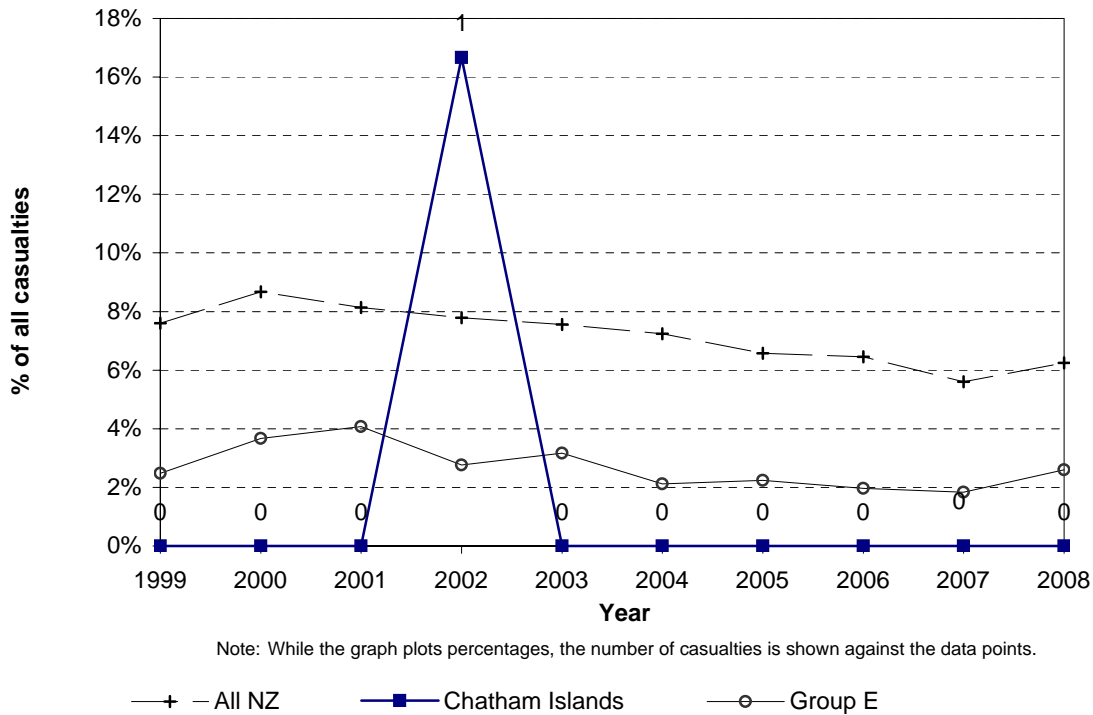
**Figure 3.13 Motorcyclist casualties
Chatham Islands County**



**Figure 3.14 Motorcyclist casualties
Chatham Islands County**



**Figure 3.15 Pedestrian casualties
Chatham Islands County**



**Figure 3.16 Pedestrian casualties
Chatham Islands County**

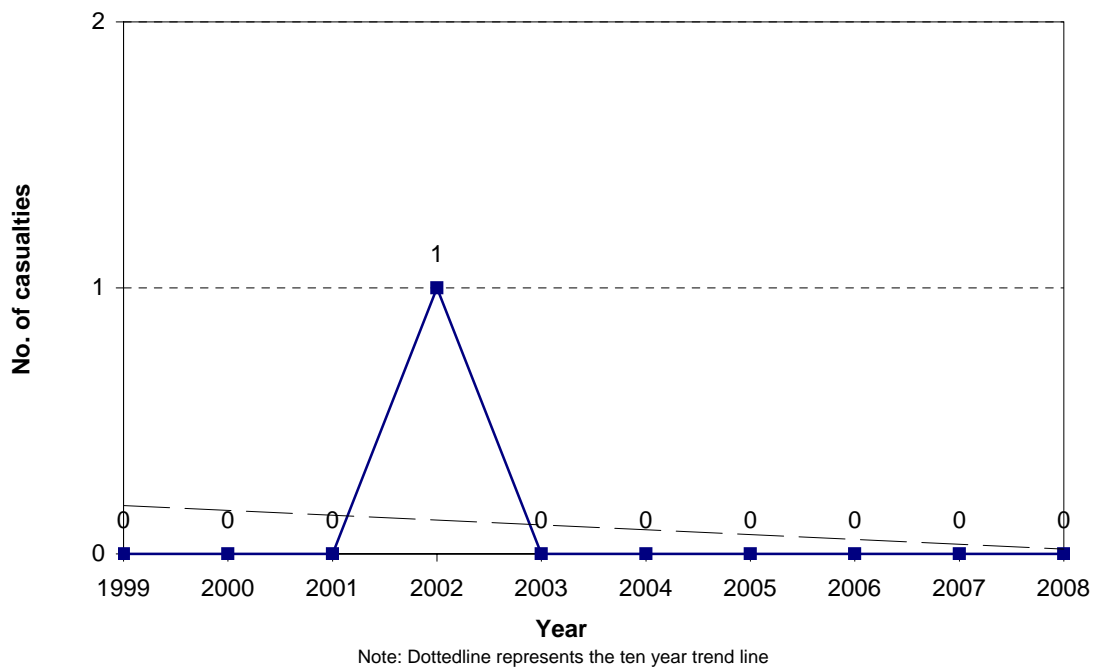


Figure 3.17 Cyclist casualties
Chatham Islands County

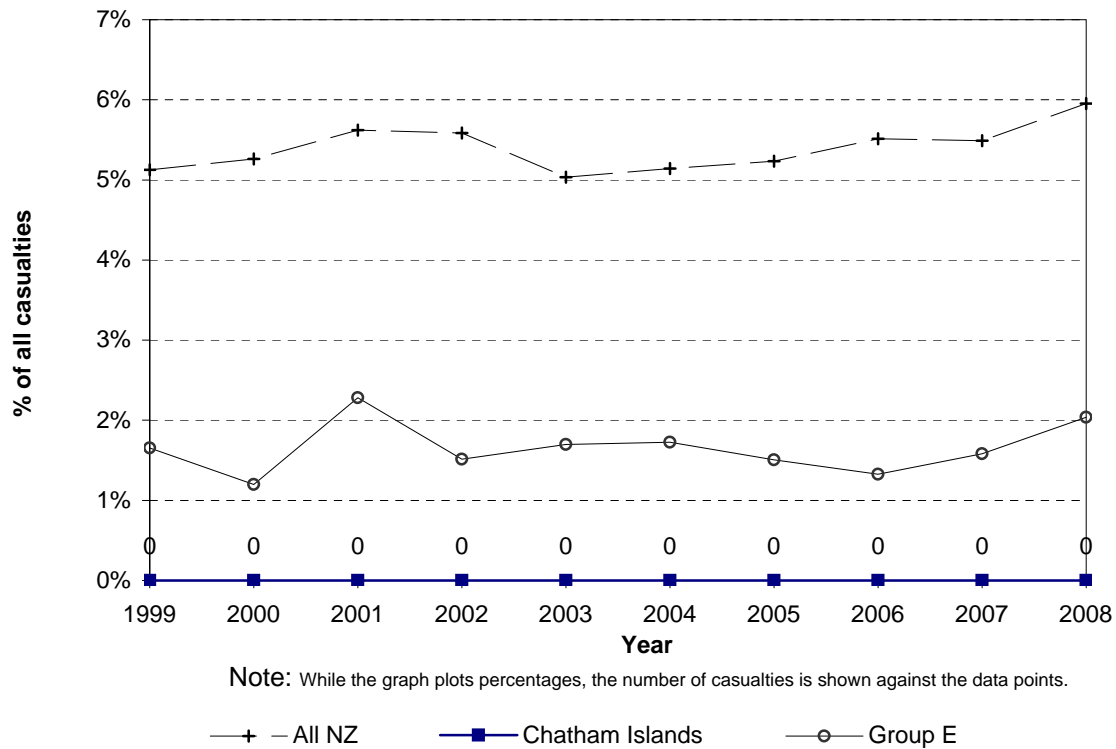
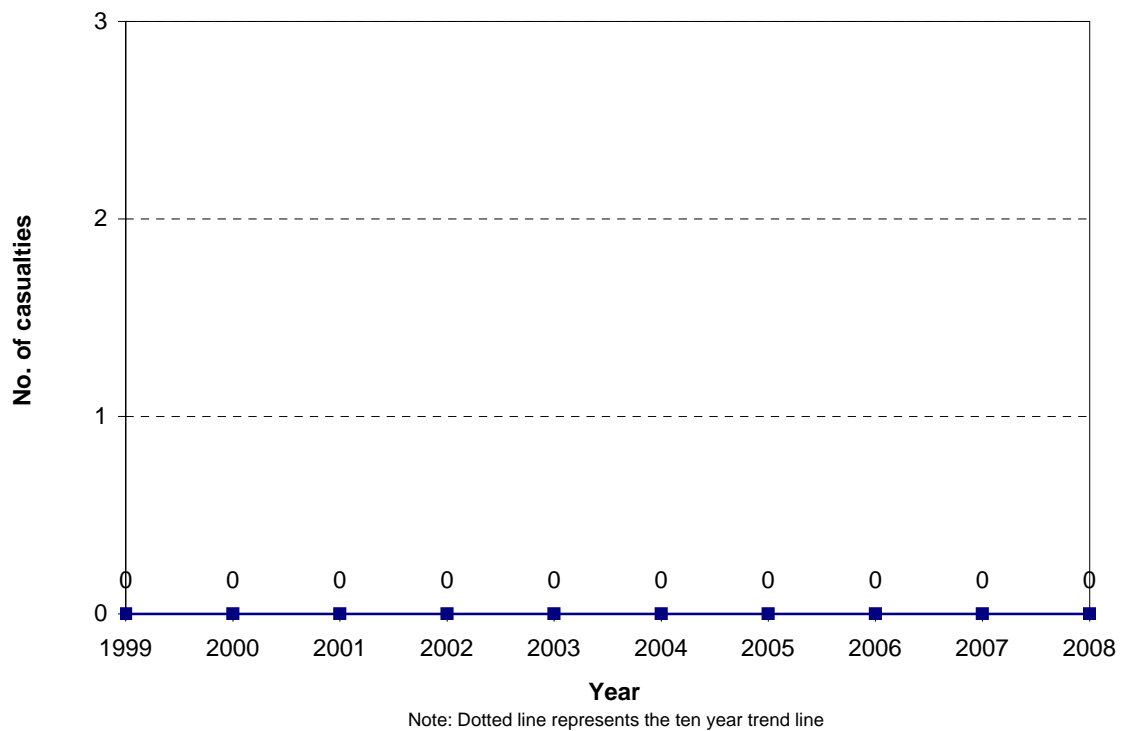
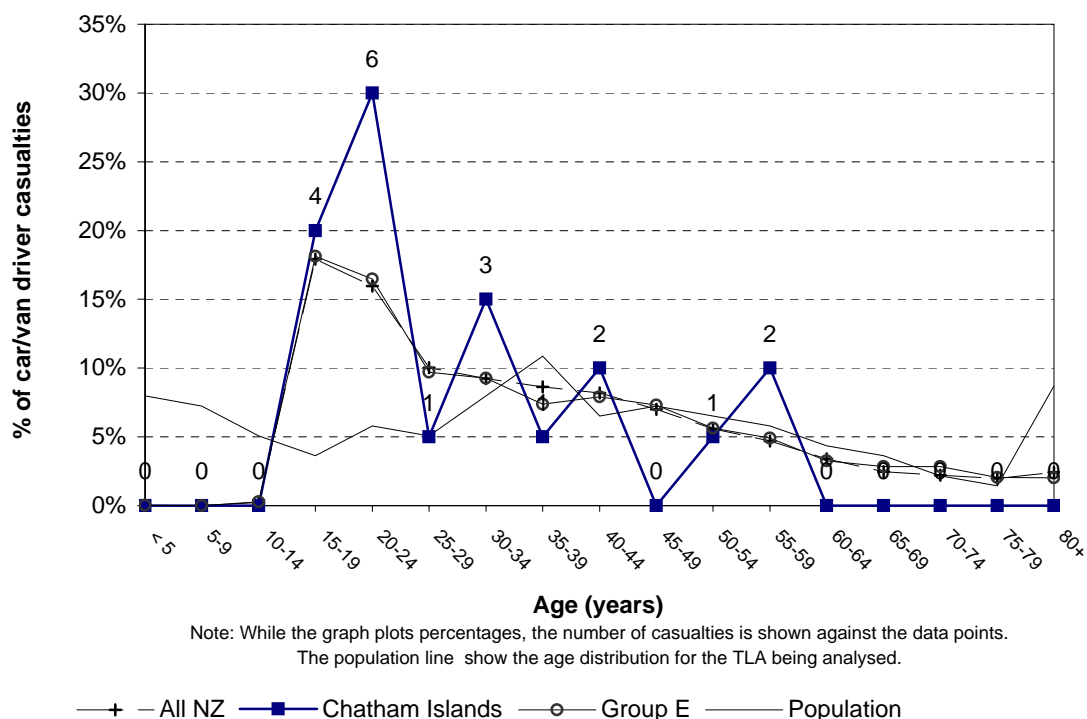


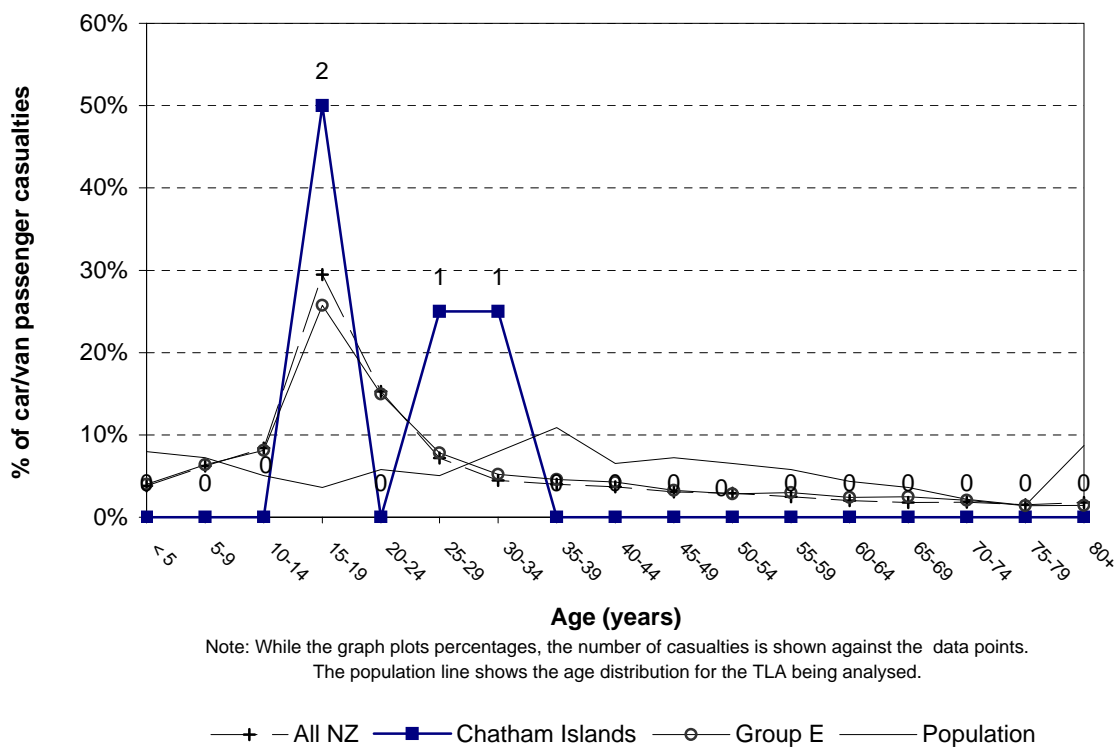
Figure 3.18 Cyclist casualties
Chatham Islands County



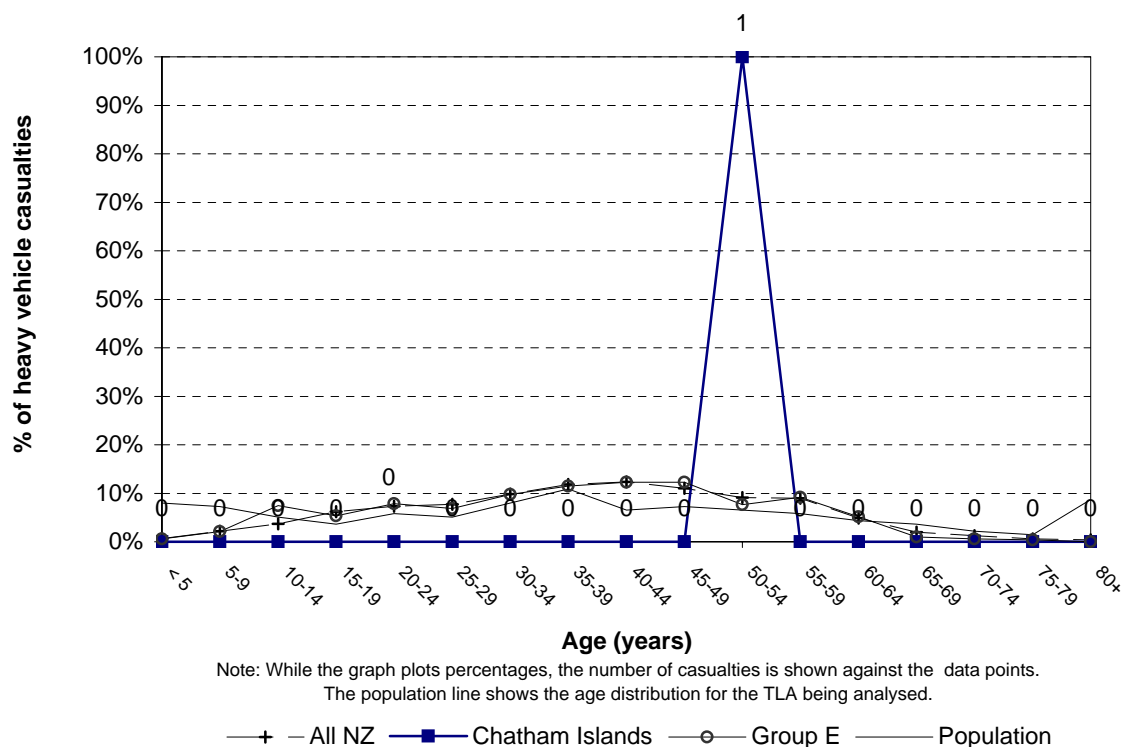
**Figure 3.19 Car/van driver casualty age
Chatham Islands County (2004-2008)**



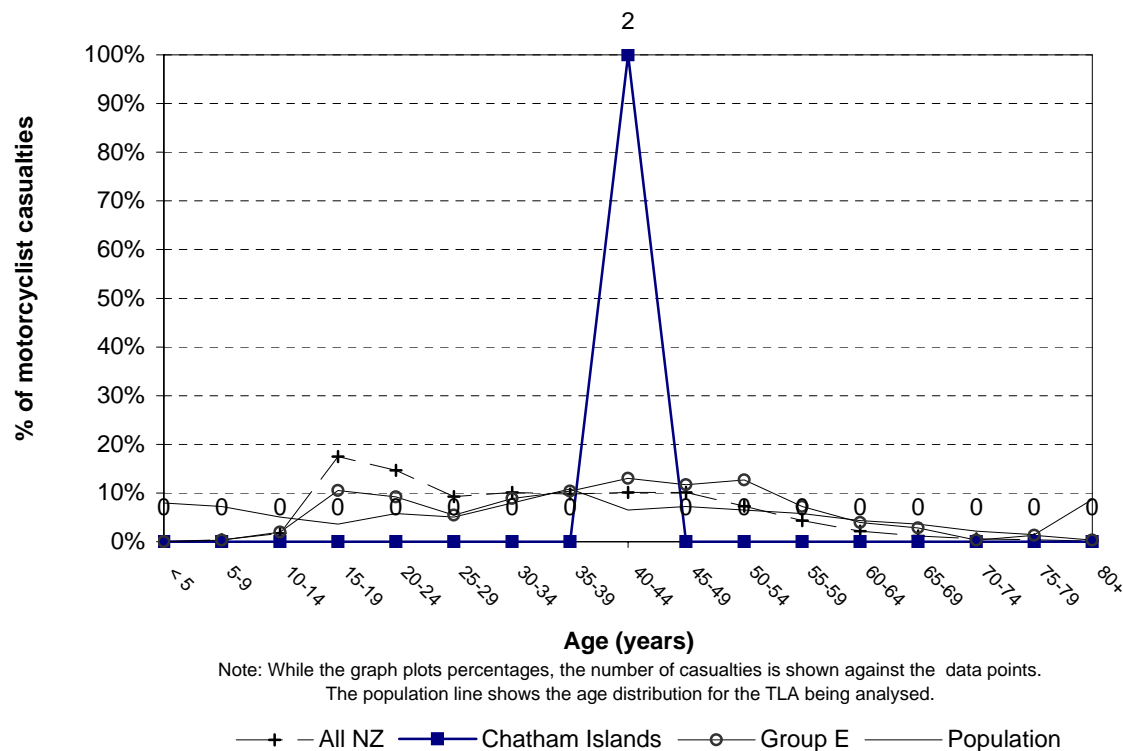
**Figure 3.20 Car/van passenger casualty age
Chatham Islands County (2004-2008)**



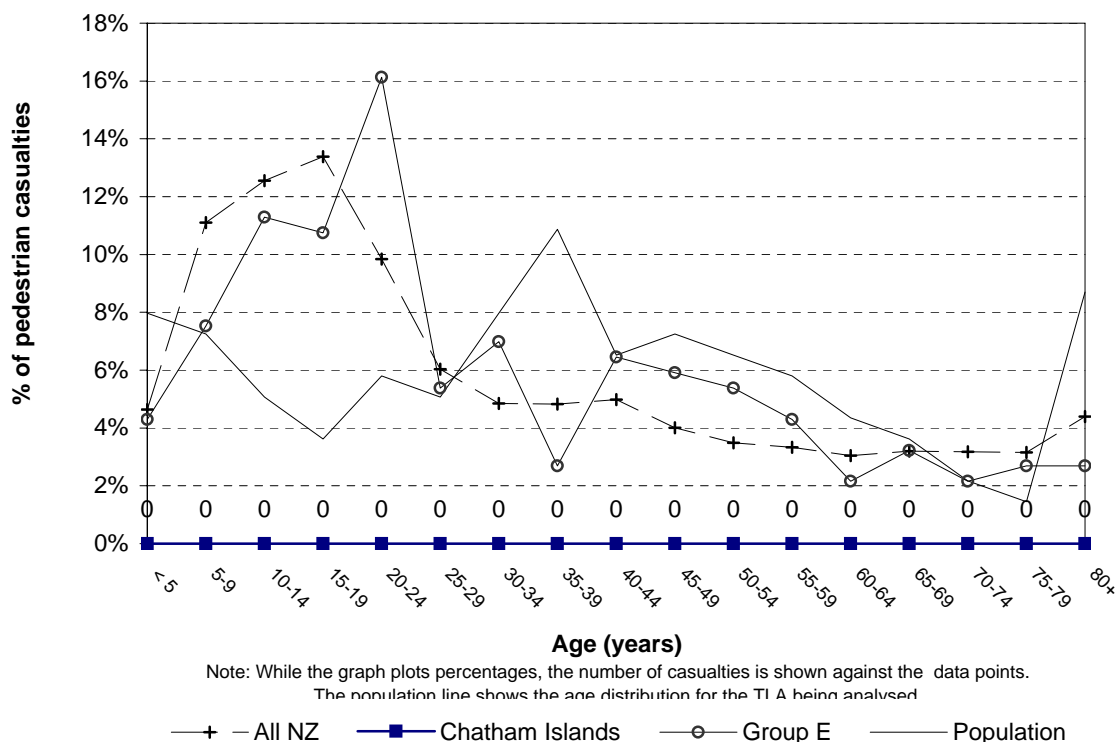
**Figure 3.21 Heavy vehicle casualty age
Chatham Islands County (2004-2008)**



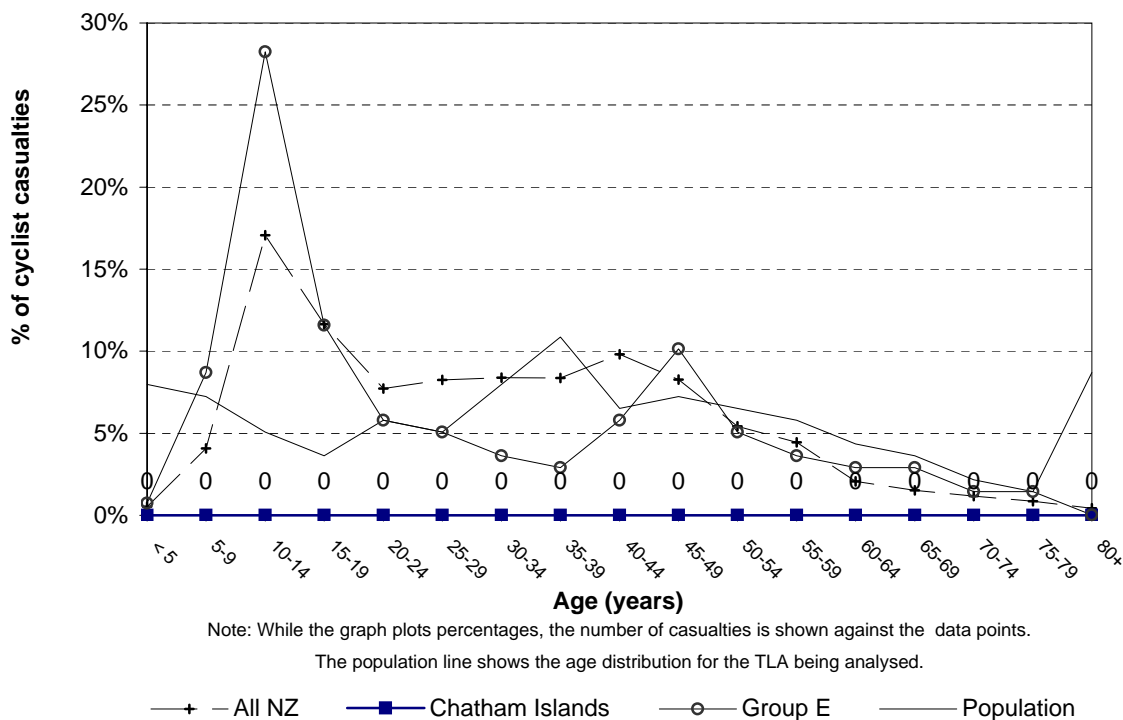
**Figure 3.22 Motorcyclist casualty age
Chatham Islands County (2004-2008)**



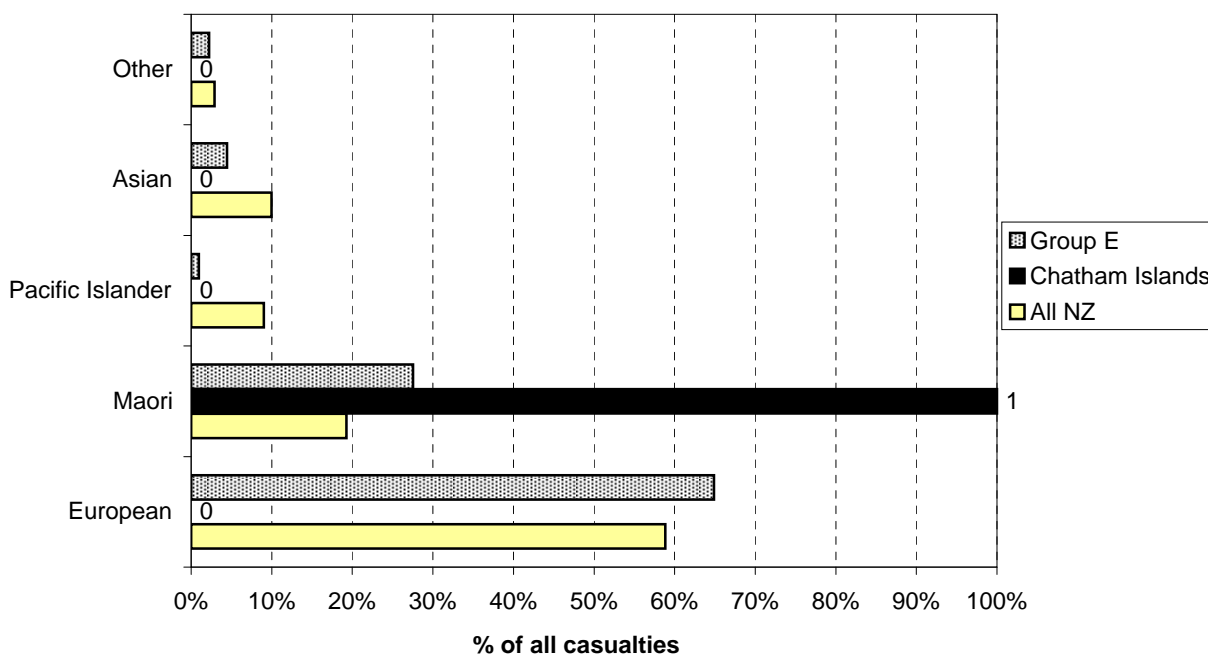
**Figure 3.23 Pedestrian casualty age
Chatham Islands County (2004-2008)**



**Figure 3.24 Cyclist casualty age
Chatham Islands County (2004-2008)**



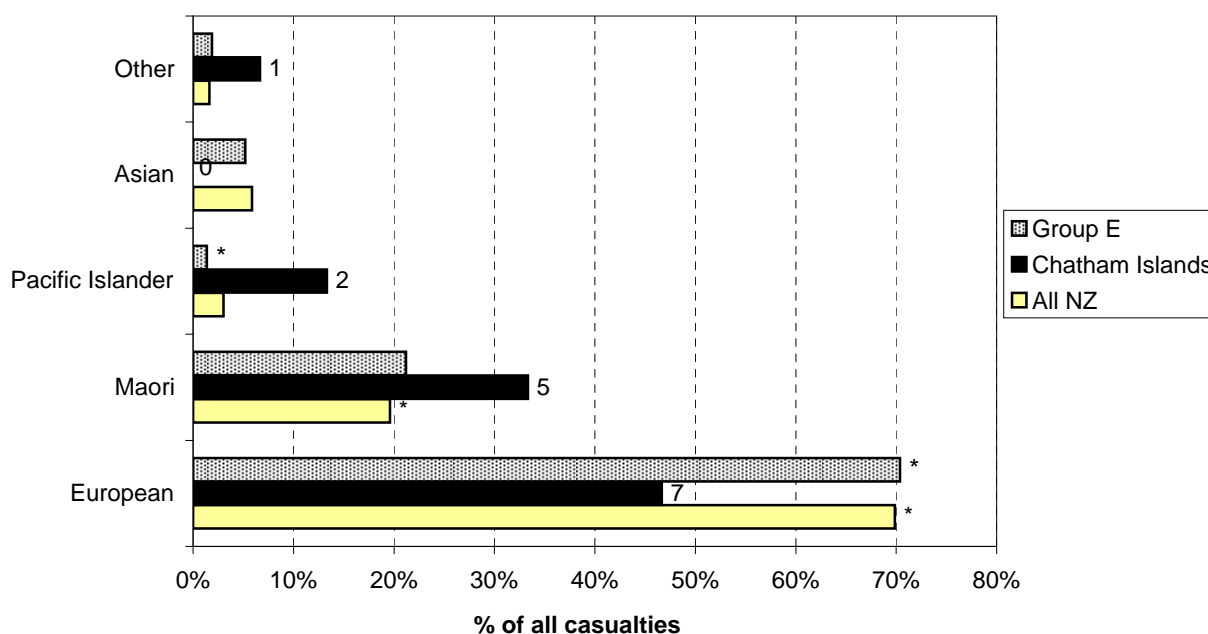
**Figure 3.25 Casualty ethnicity - urban
Chatham Islands County (2004-2008)**



Note: While the graph plots percentages, the number of crashes is shown against the data points.

*Denotes statistically significant difference between Local Authority and National or Peer Group Proportions

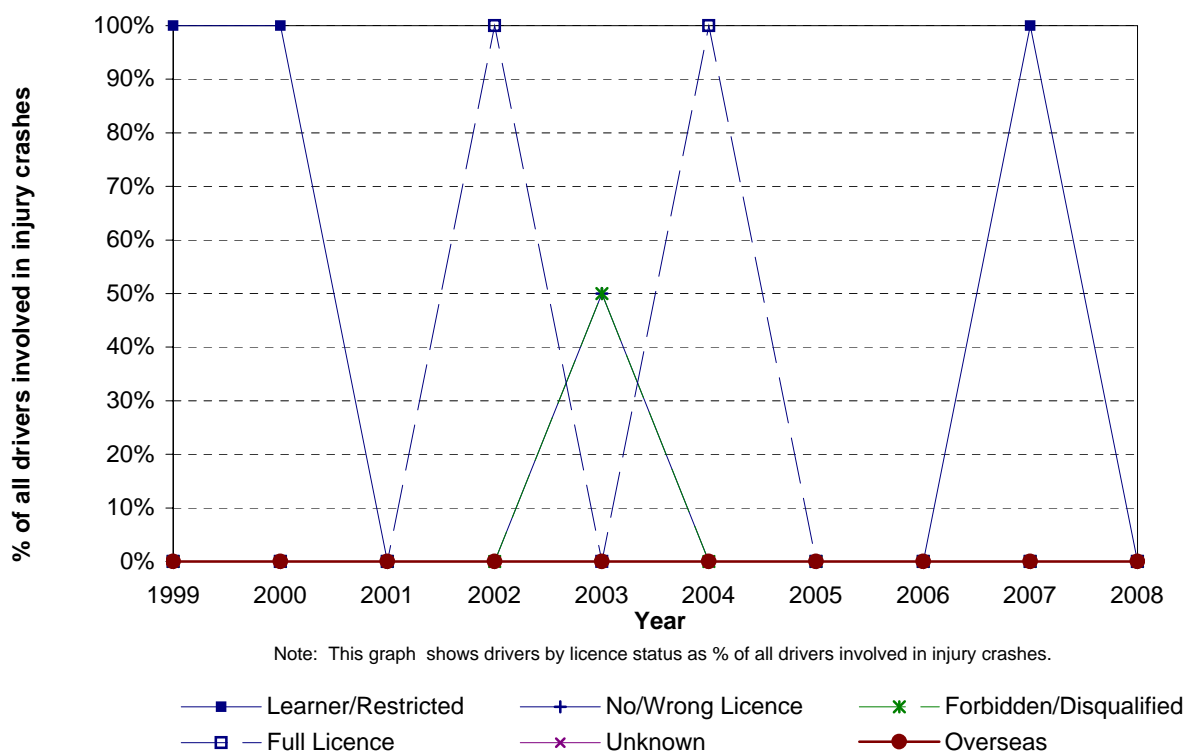
**Figure 3.26 Casualty ethnicity - rural
Chatham Islands County (2004-2008)**



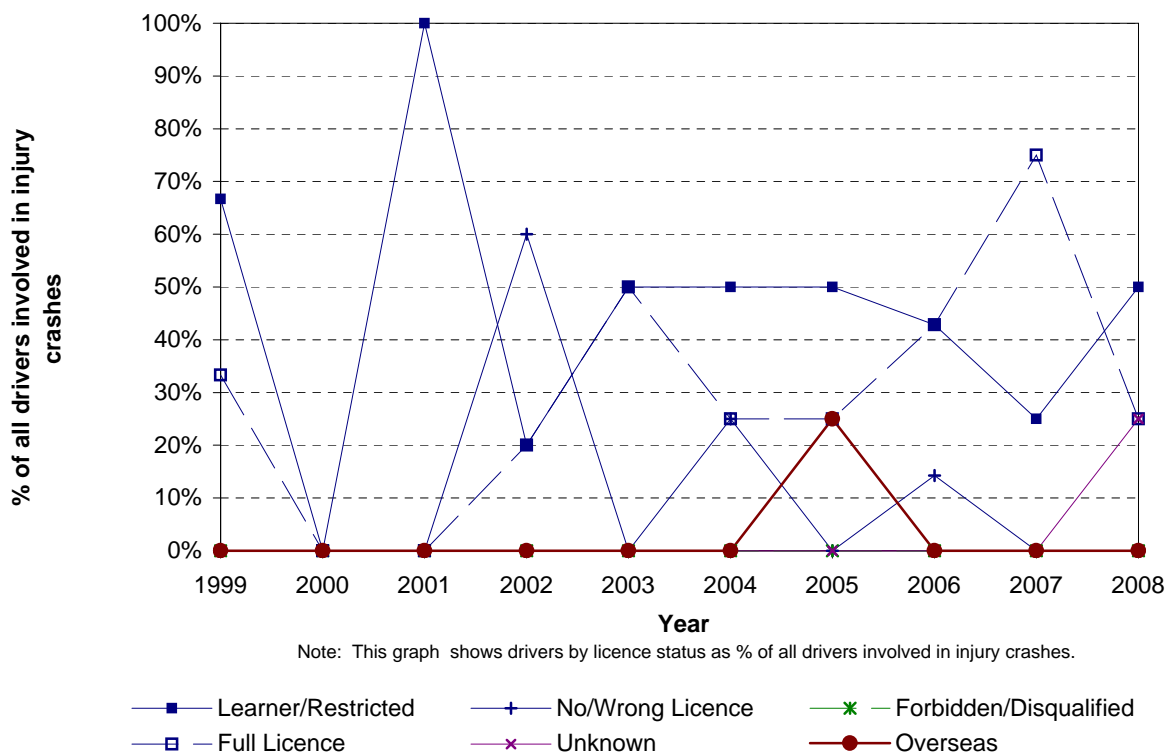
Note: While the graph plots percentages, the number of crashes is shown against the data points.

*Denotes statistically significant difference between Local Authority and National or Peer Group Proportions

**Figure 3.27 Licence status - urban
Chatham Islands County**

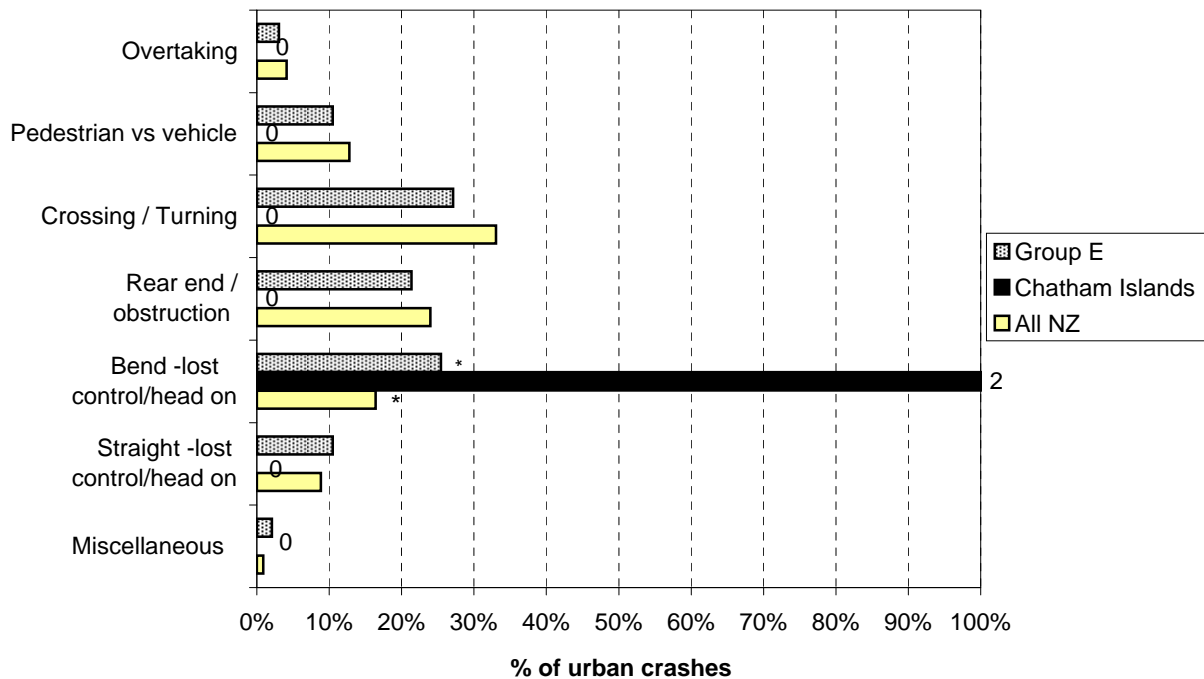


**Figure 3.28 Licence status - rural
Chatham Islands County**



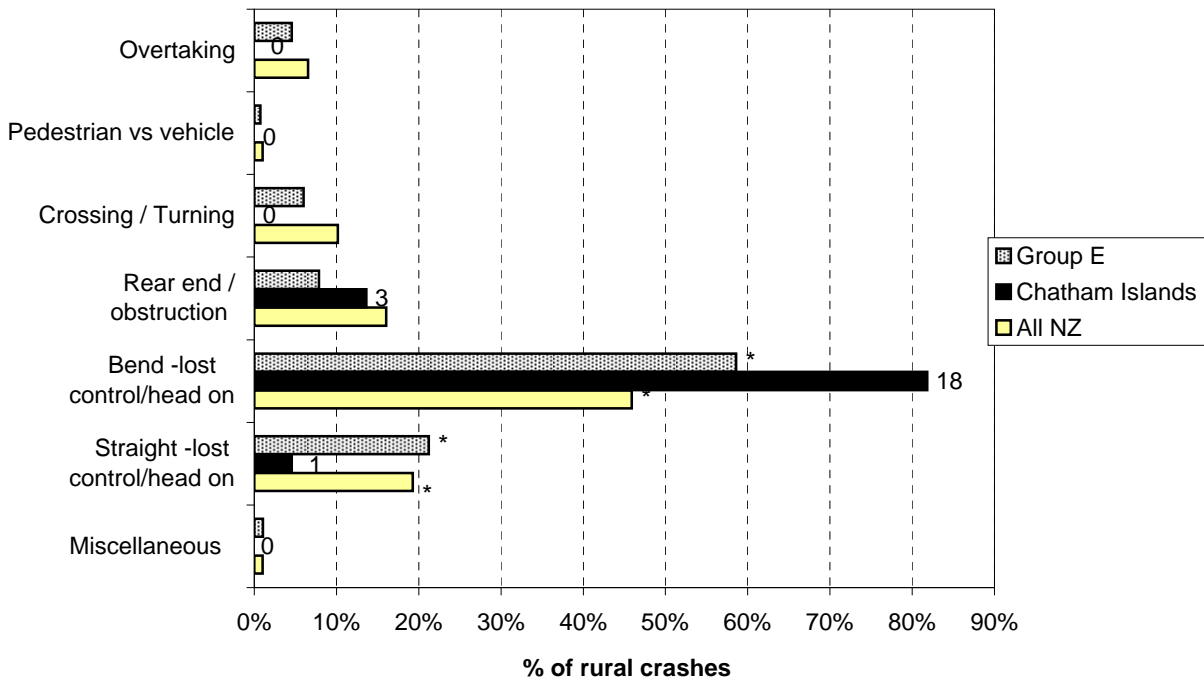
Crash Type Statistics

**Figure 4.1 Crash movement type - urban
Chatham Islands County (2004-2008)**



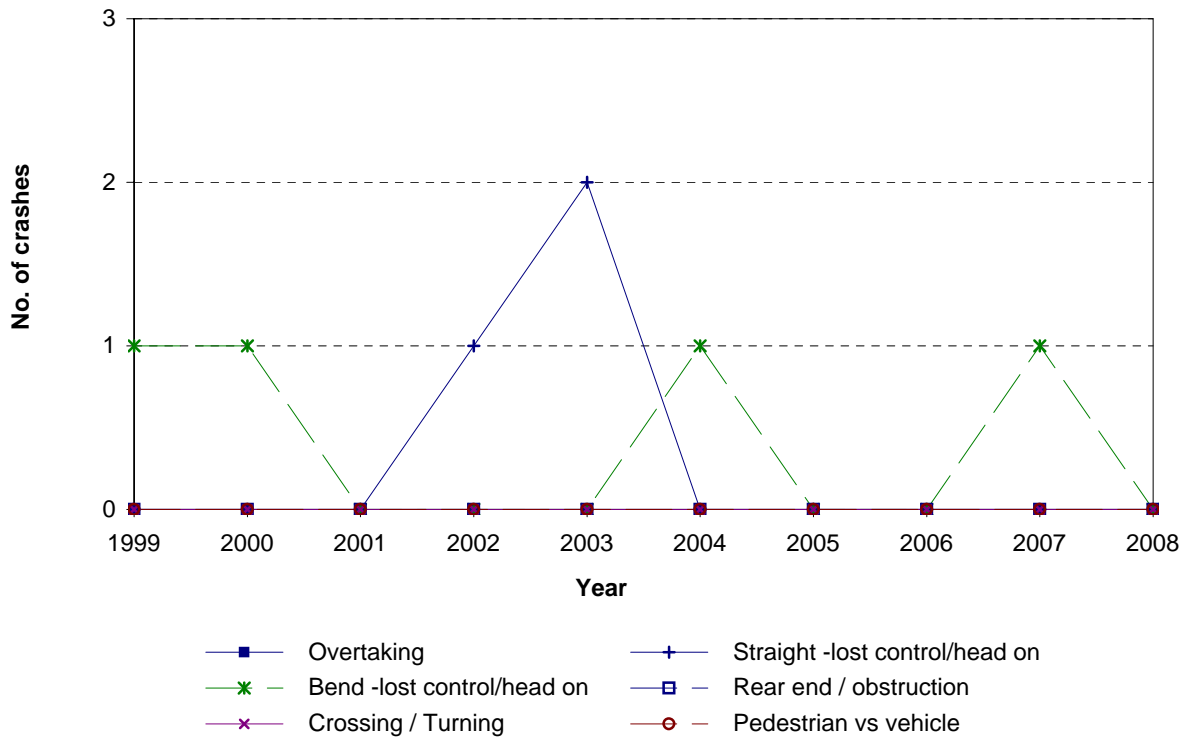
Note: While the graph plots percentages, the number of crashes is shown against the data points.
*Denotes statistically significant difference between Local Authority and National or Peer Group Proportions

**Figure 4.2 Crash movement type - rural
Chatham Islands County roads (2004-2008)**

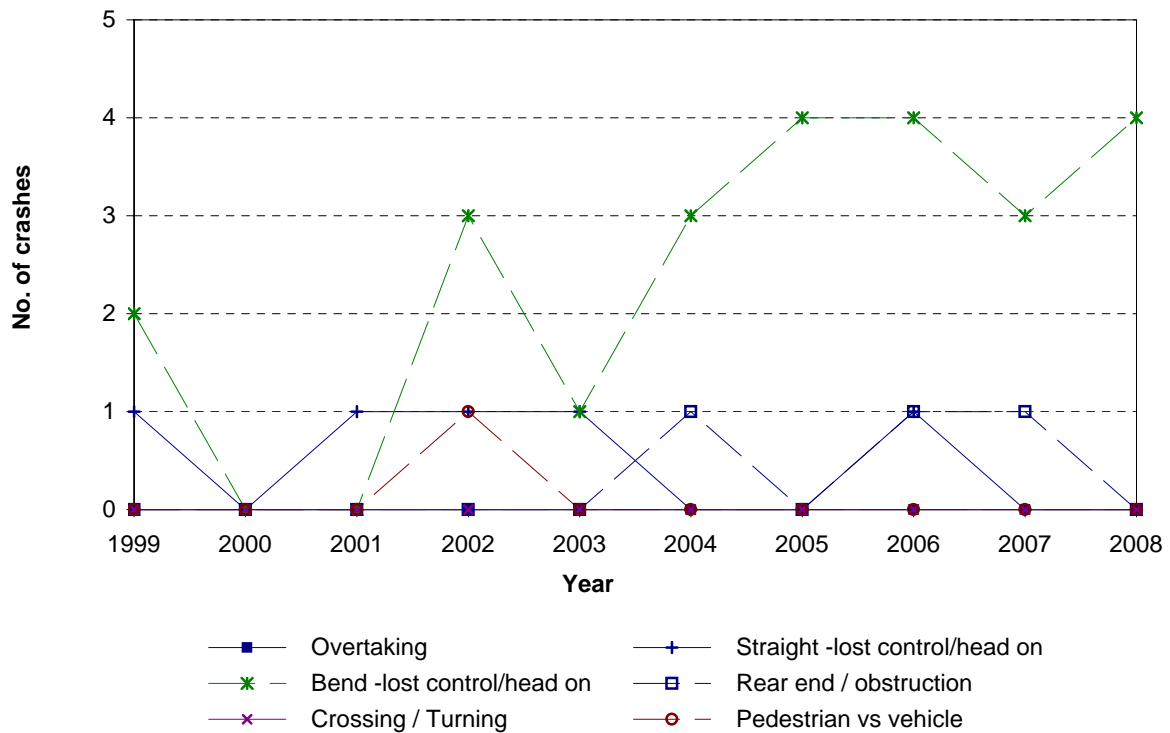


Note: While the graph plots percentages, the number of crashes is shown against the data points.
*Denotes statistically significant difference between Local Authority and National or Peer Group Proportions

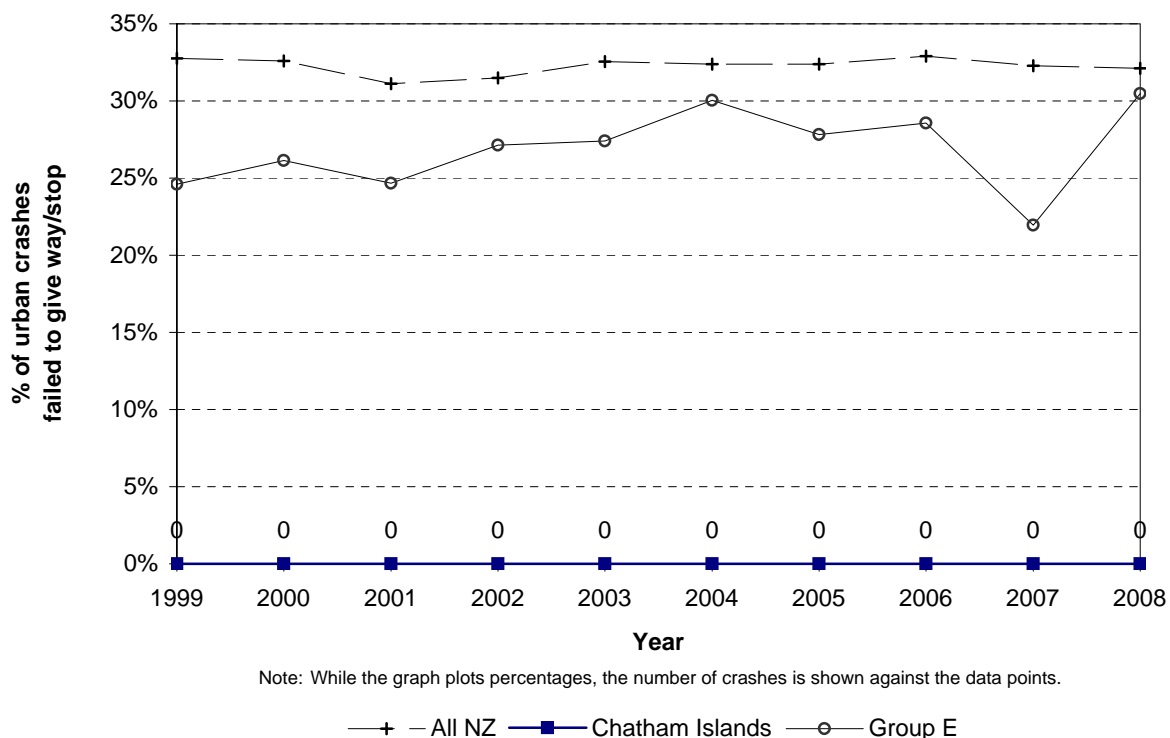
**Figure 4.3 Crash movement type - trends
Chatham Islands County - urban roads**



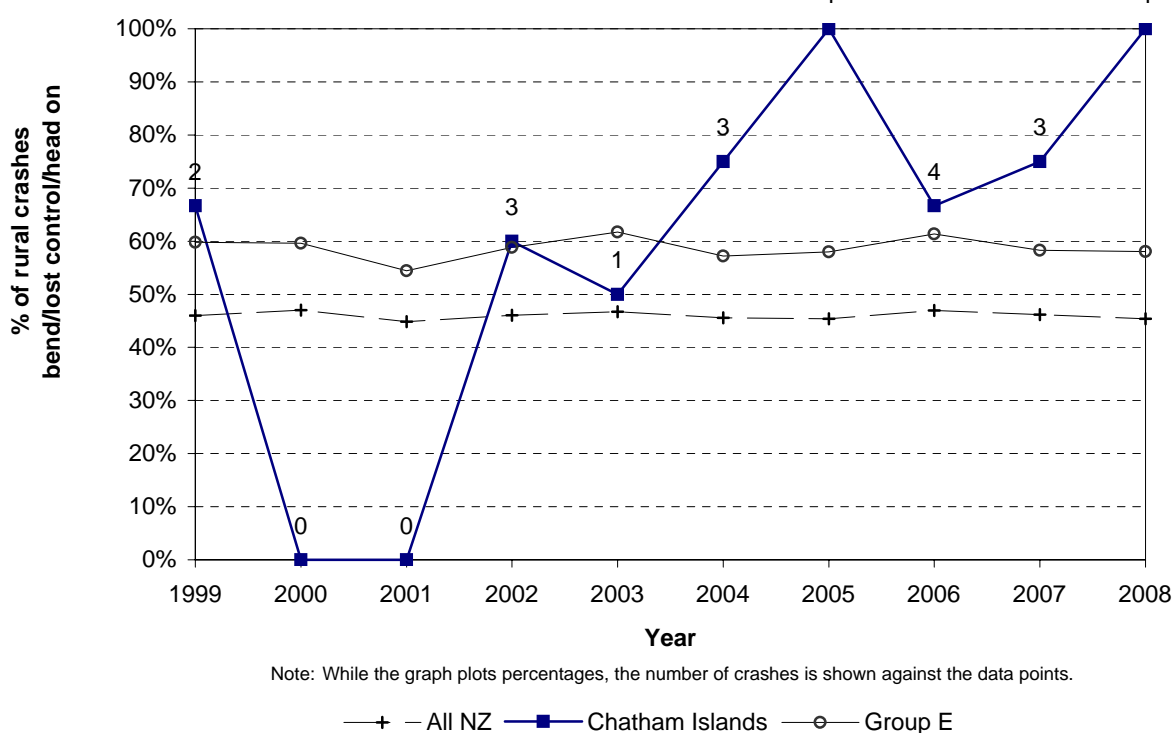
**Figure 4.4 Crash movement type - trends
Chatham Islands County - rural roads**



**Figure 4.5 Failed to give way / stop
Chatham Islands County - urban roads**

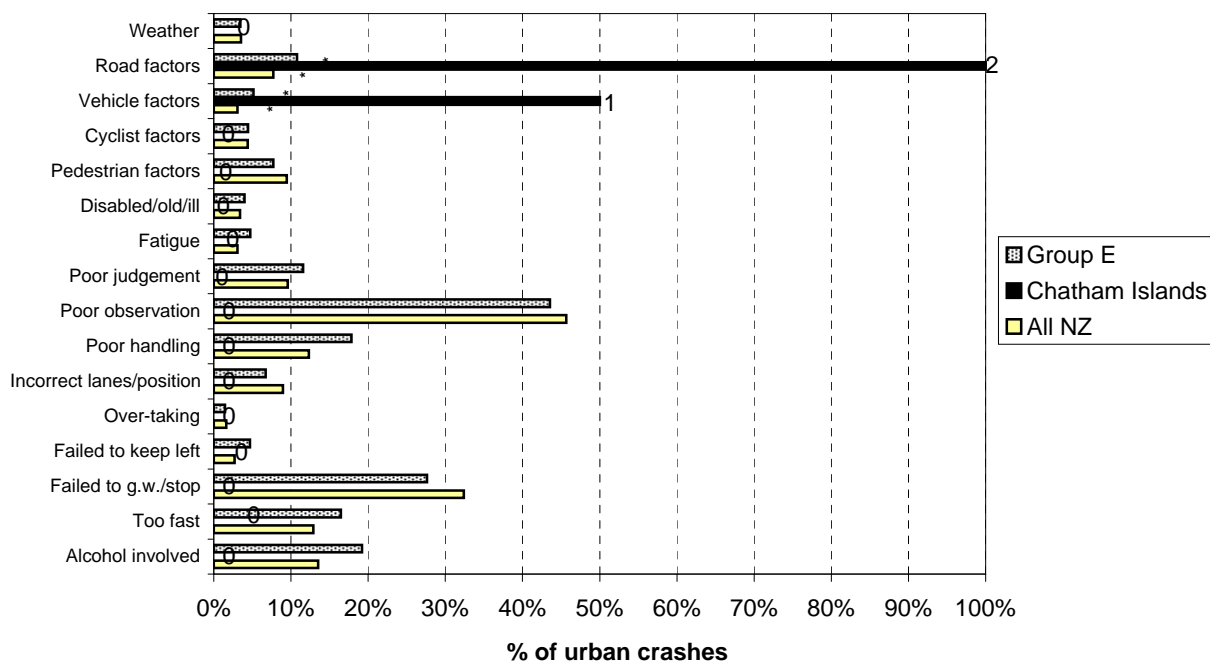


**Figure 4.6 Bend - lost control / head - on
Chatham Islands County - rural roads**



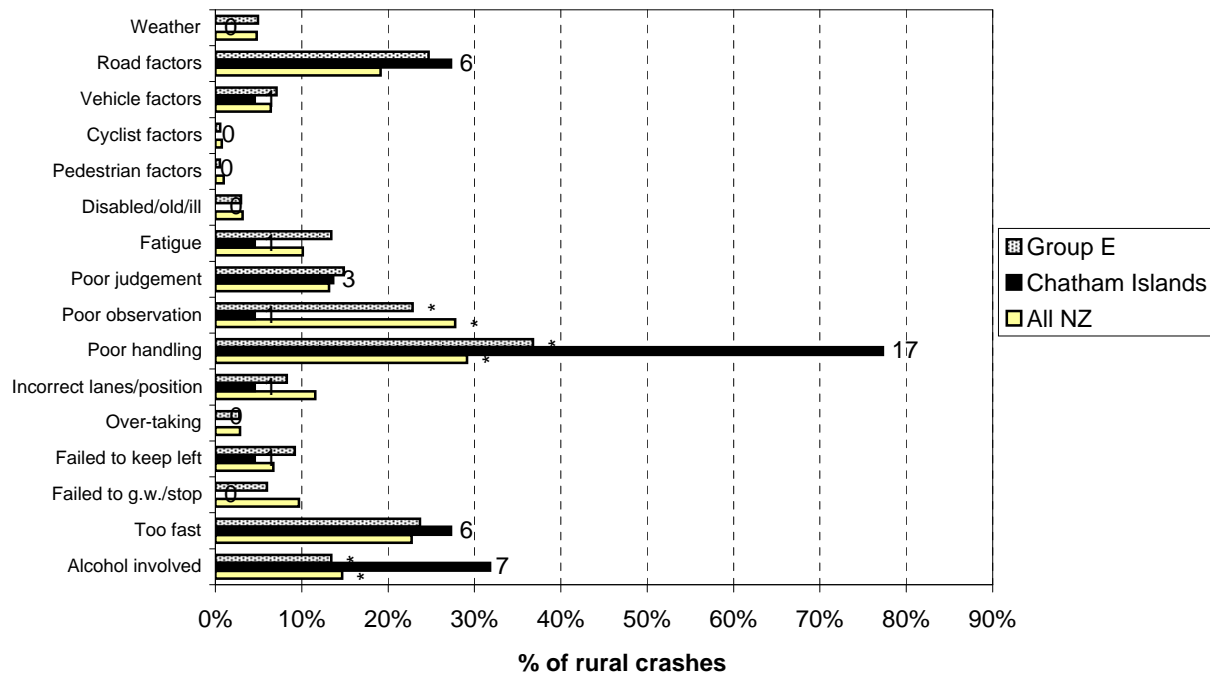
Crash Factor Statistics

**Figure 5.1 Contributing factors - urban
Chatham Islands County (2004-2008)**



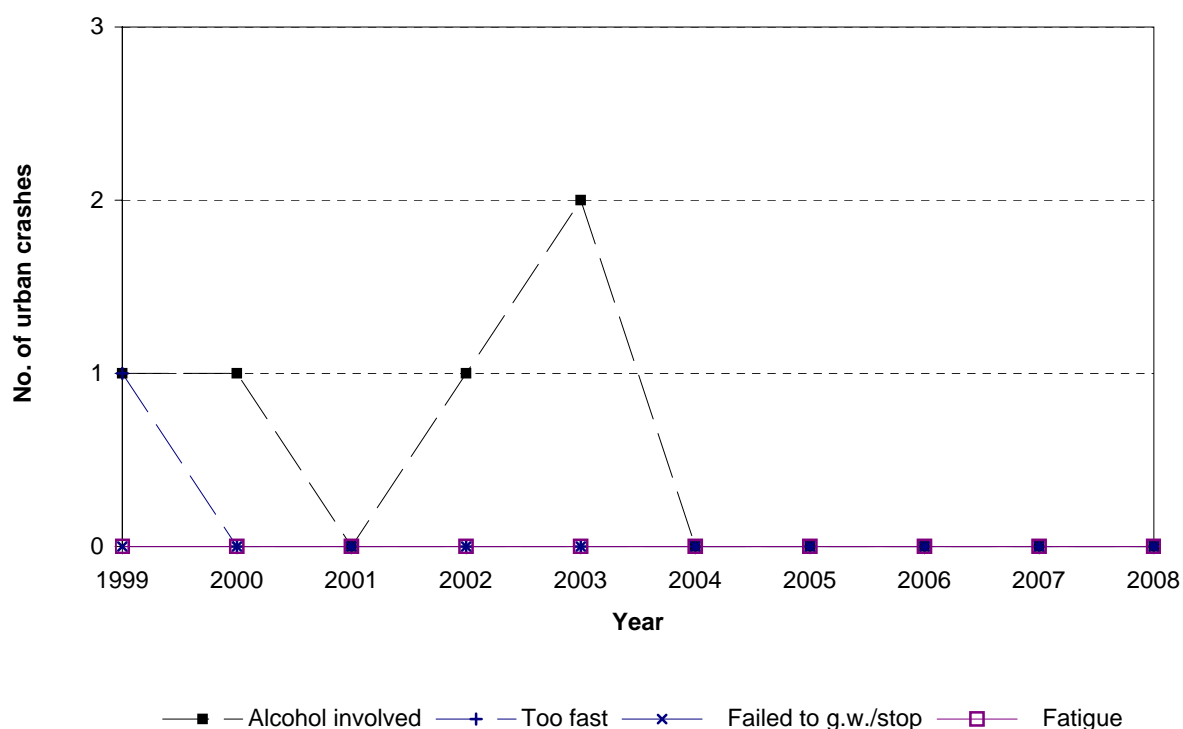
Note: While the graph plots percentages, the number of crashes is shown against the data points.
*Denotes statistically significant difference between Local Authority and National or Peer Group Proportions

**Figure 5.2 Contributing factors - rural
Chatham Islands County (2004-2008)**

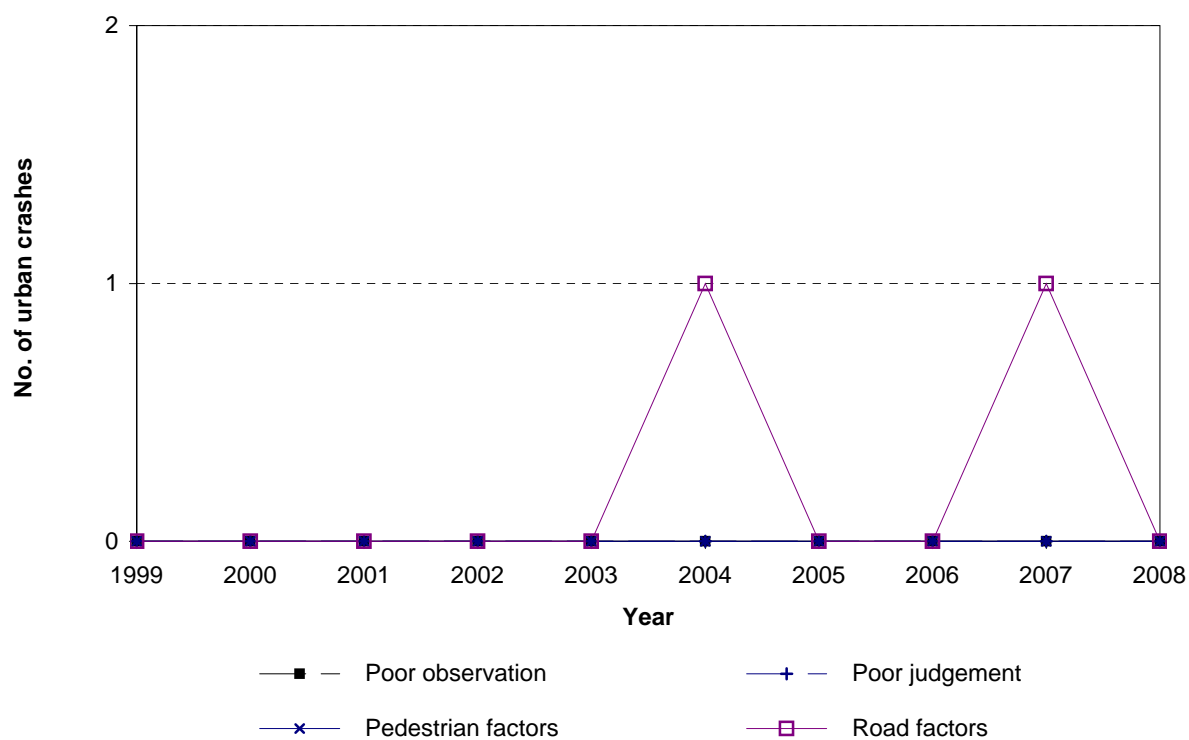


Note: While the graph plots percentages, the number of casualties is shown against the data points.
*Denotes statistically significant difference between Local Authority and National or Peer Group Proportions

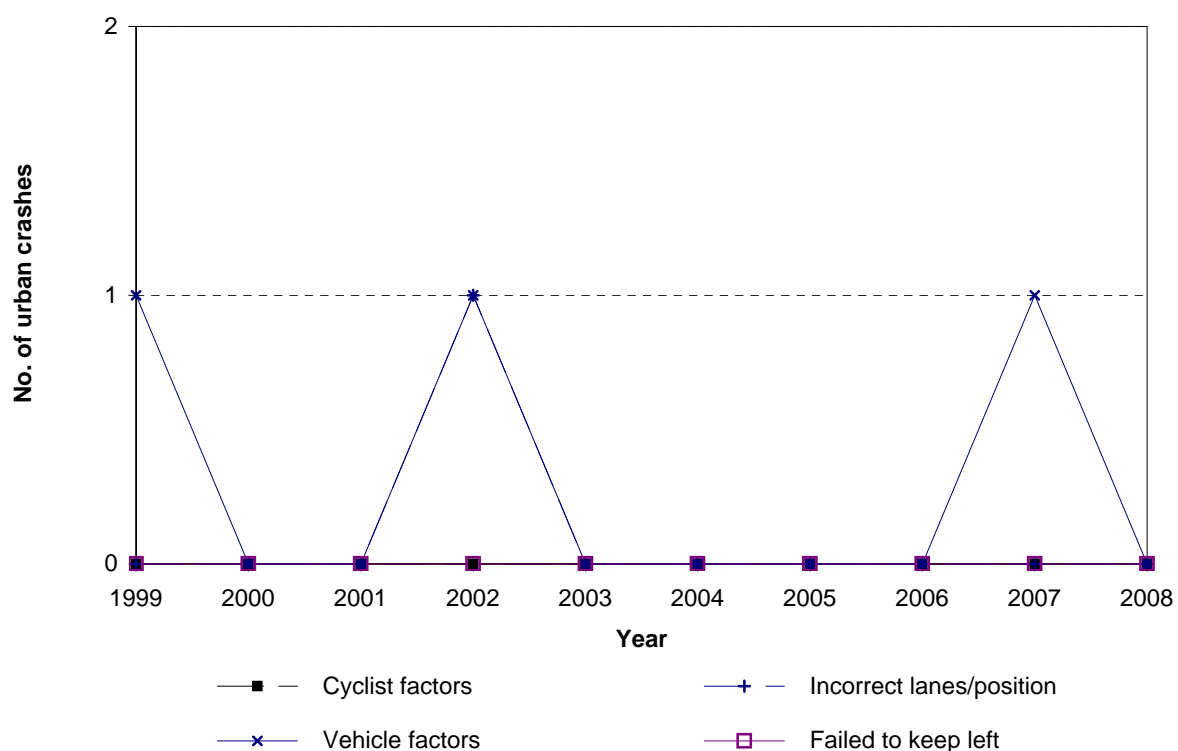
**Figure 5.3 Contributing factor trends
Chatham Islands County - urban roads**



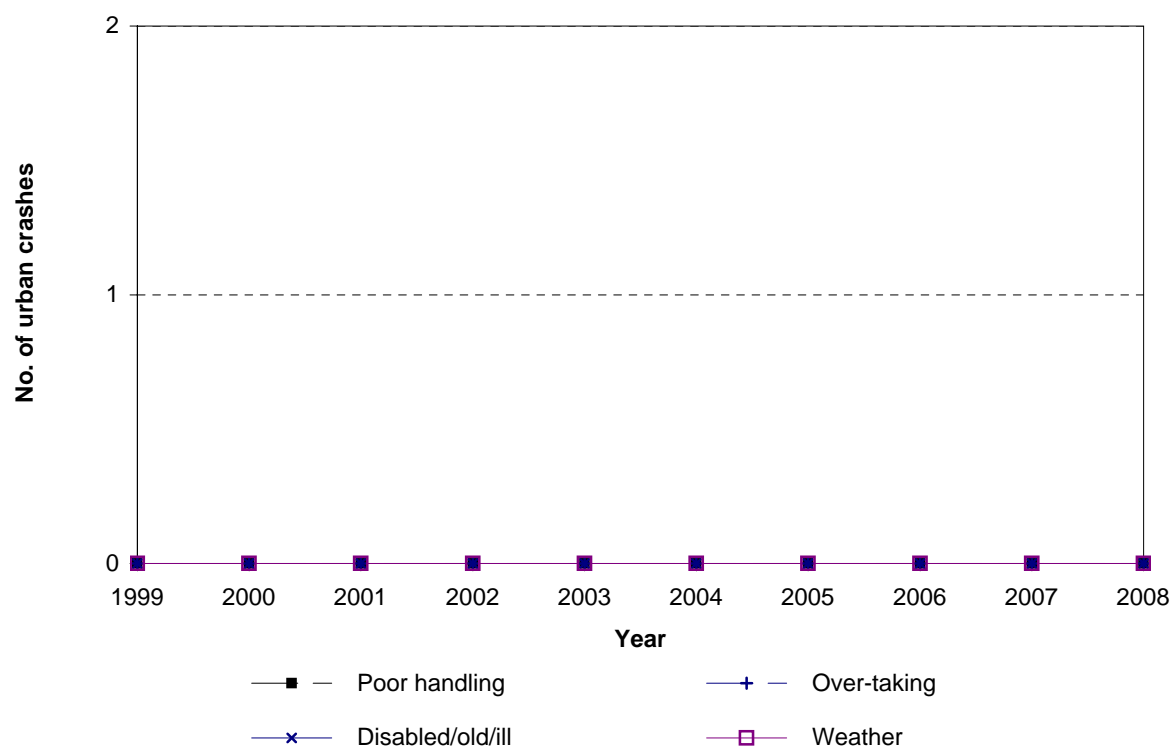
**Figure 5.4 Contributing factor trends
Chatham Islands County - urban roads**



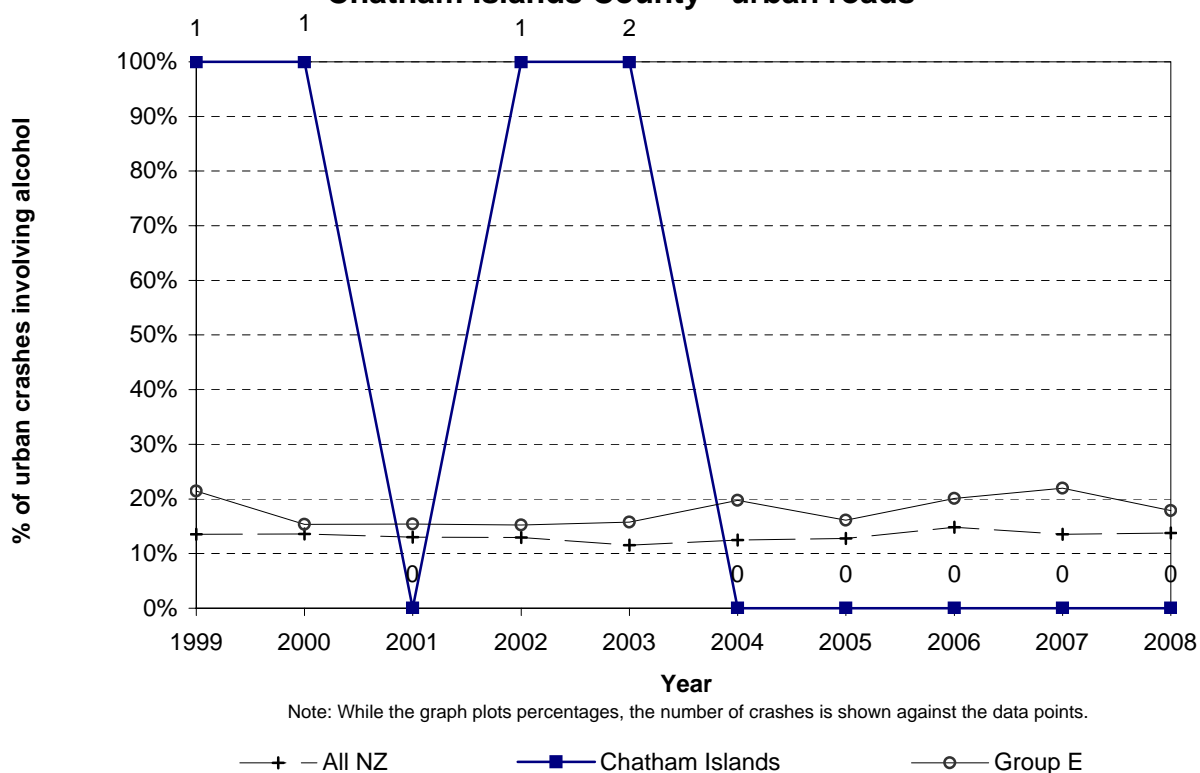
**Figure 5.5 Contributing factor trends
Chatham Islands County - urban roads**



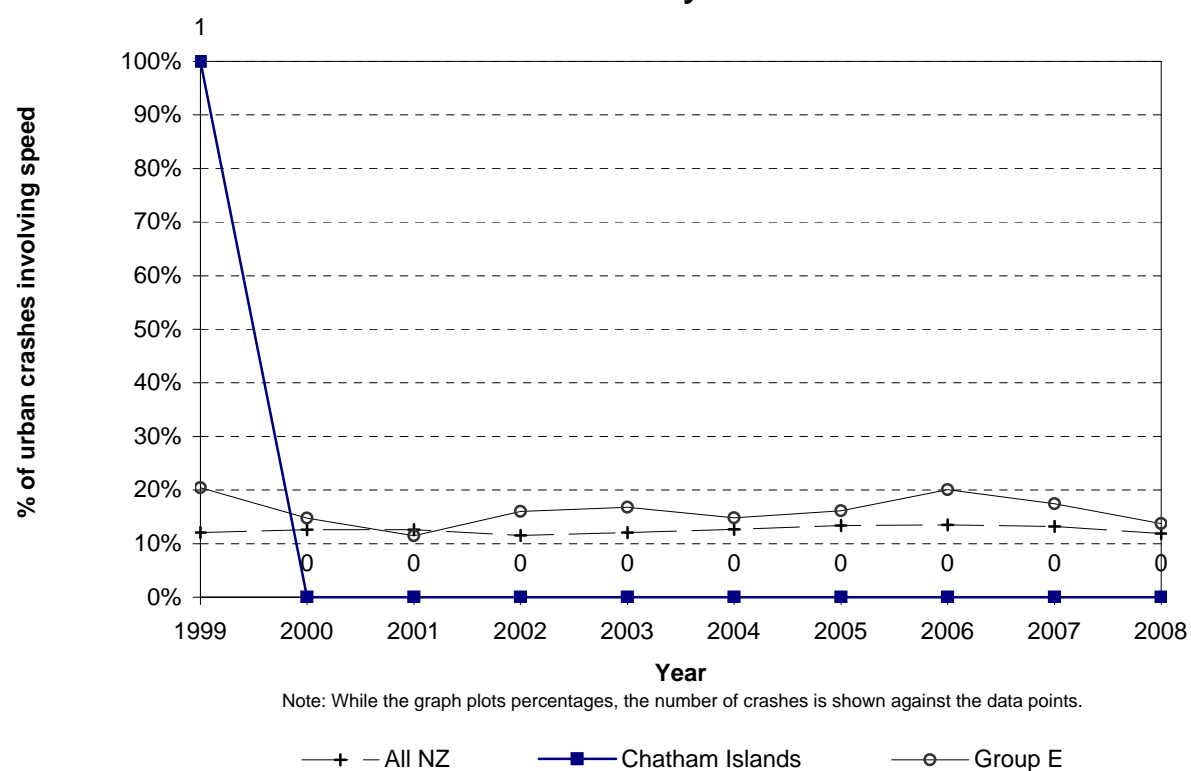
**Figure 5.6 Contributing factor trends
Chatham Islands County - urban roads**



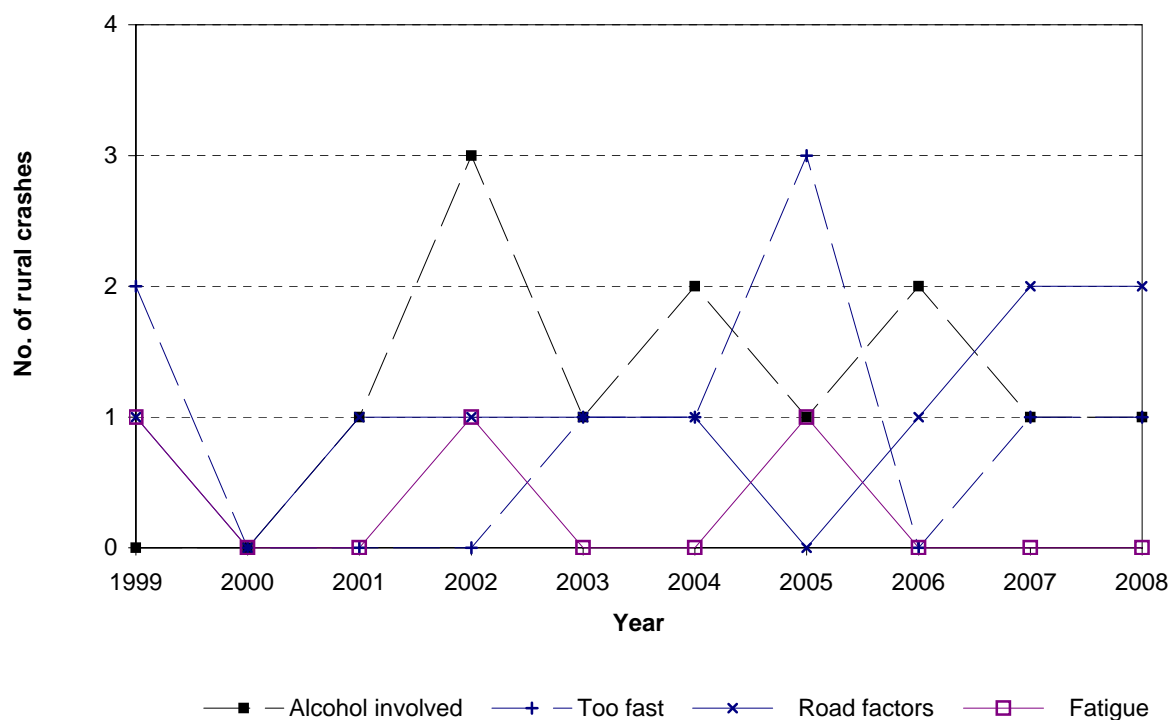
**Figure 5.7 Alcohol involved trend
Chatham Islands County - urban roads**



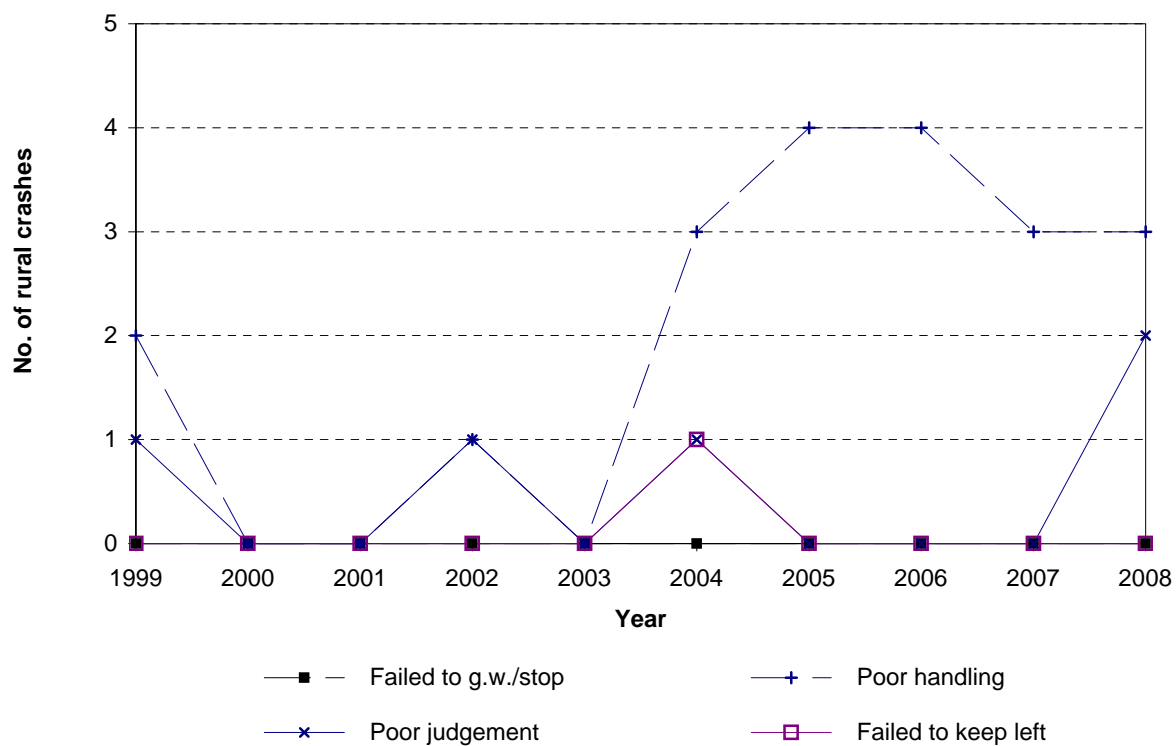
**Figure 5.8 Speed involved trend
Chatham Islands County - urban roads**



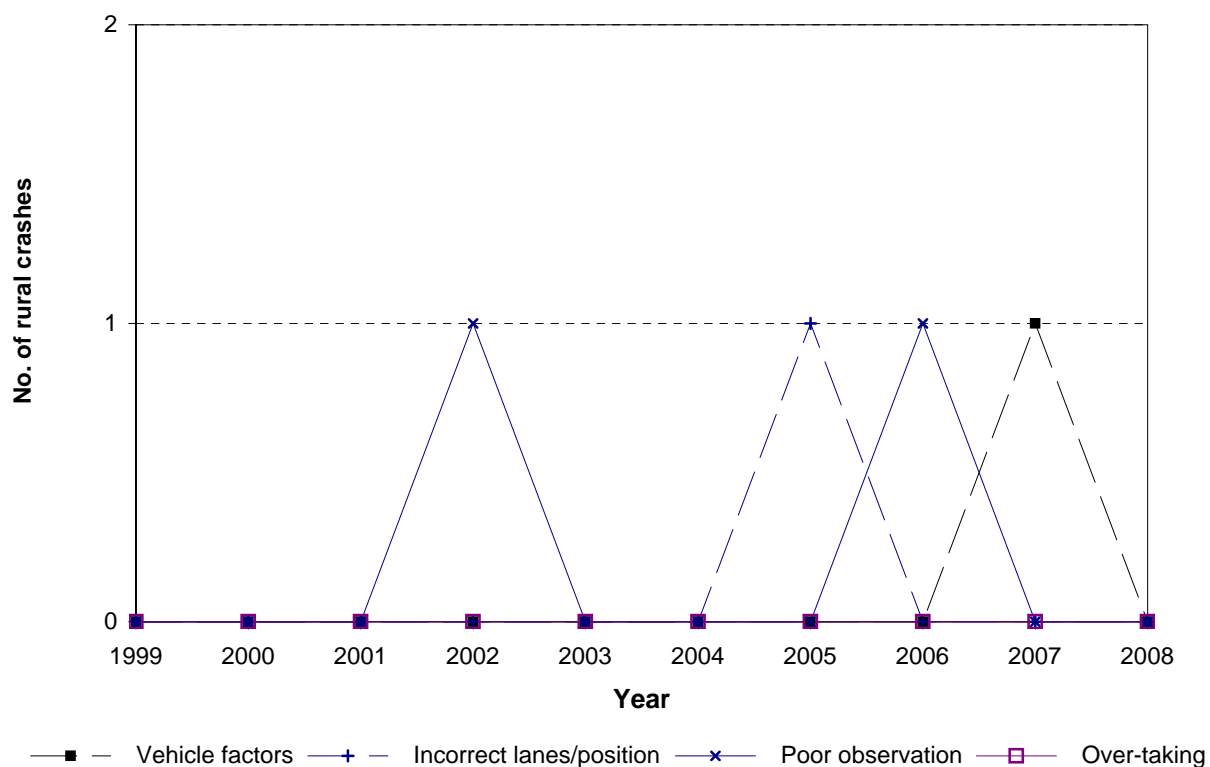
**Figure 5.9 Contributing factor trends
Chatham Islands County - rural roads**



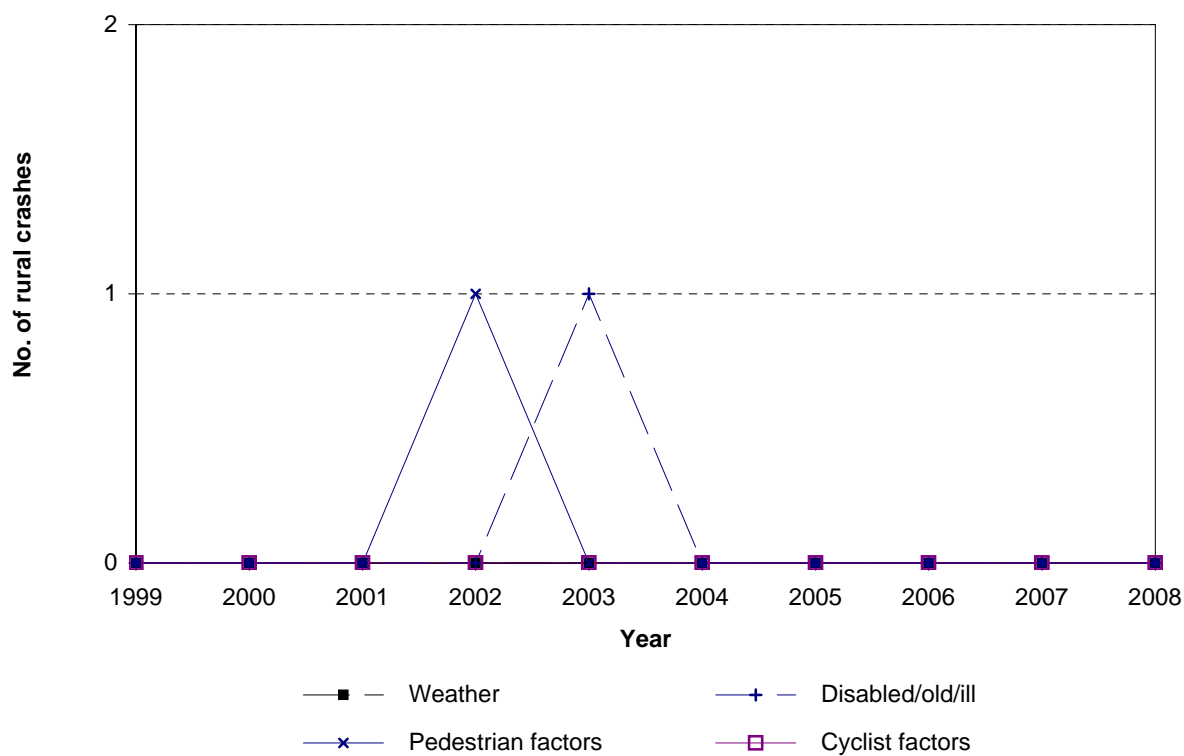
**Figure 5.10 Contributing factor trends
Chatham Islands County - rural roads**



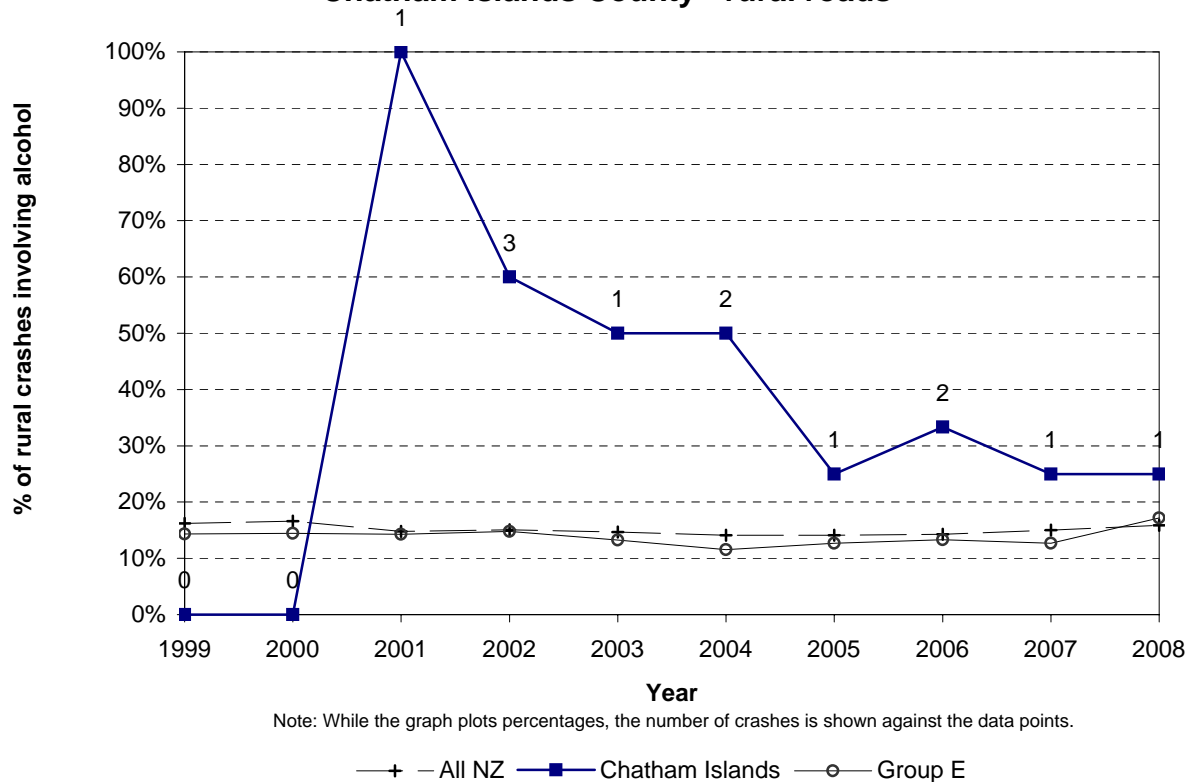
**Figure 5.11 Contributing factor trends
Chatham Islands County - rural roads**



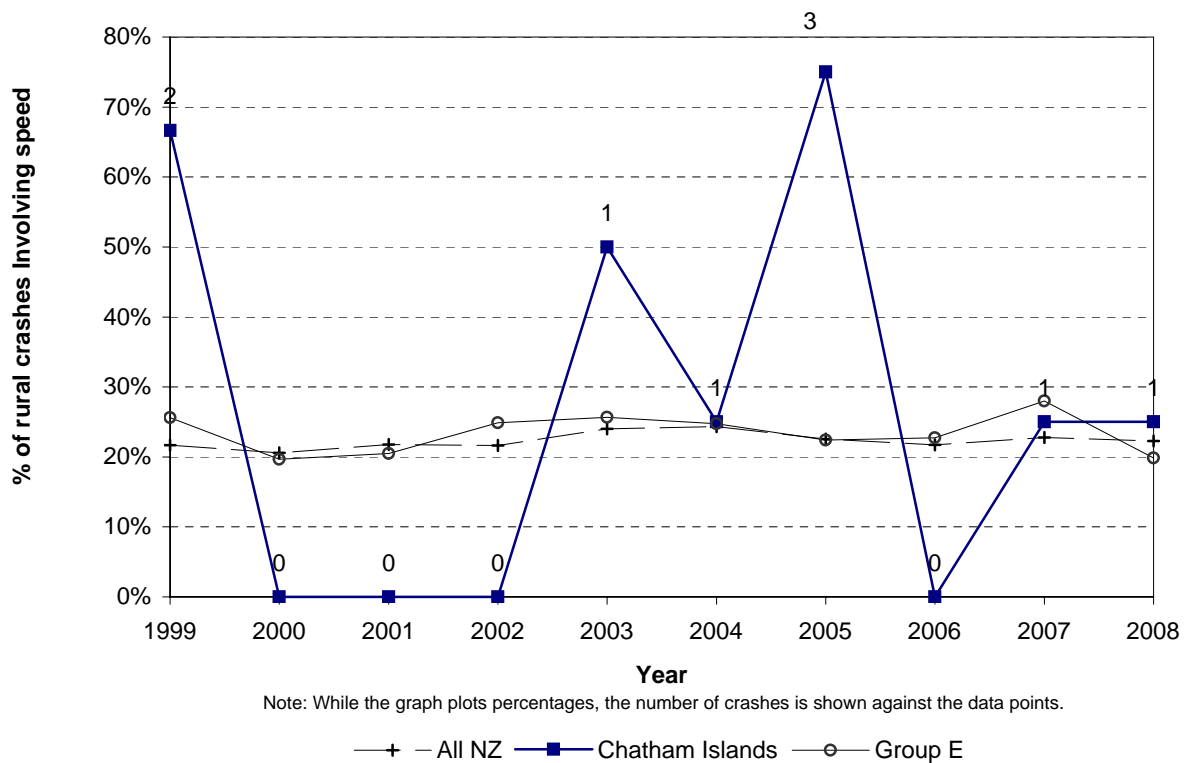
**Figure 5.12 Contributing factor trends
Chatham Islands County - rural roads**



**Figure 5.13 Alcohol involved trend
Chatham Islands County - rural roads**

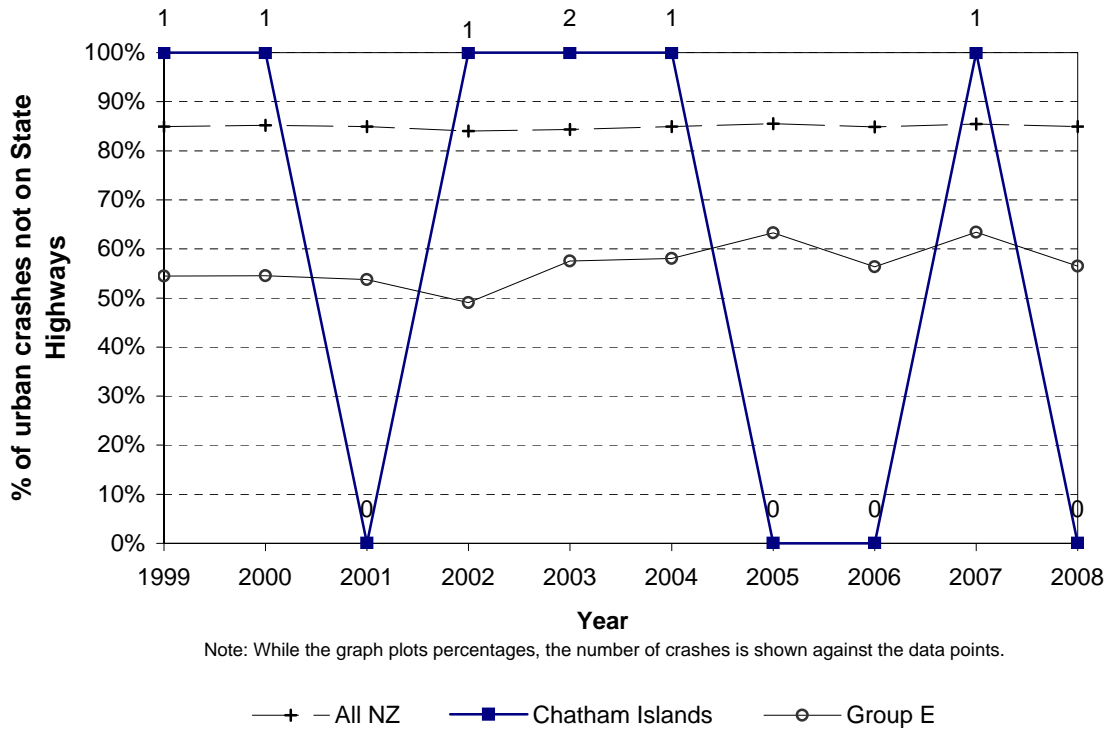


**Figure 5.14 Speed involved trend
Chatham Islands County - rural roads**



Environmental Statistics

**Figure 6.1 Crashes not on state highways
Chatham Islands County - urban roads**



**Figure 6.2 Crashes not on state highways
Chatham Islands County - rural roads**

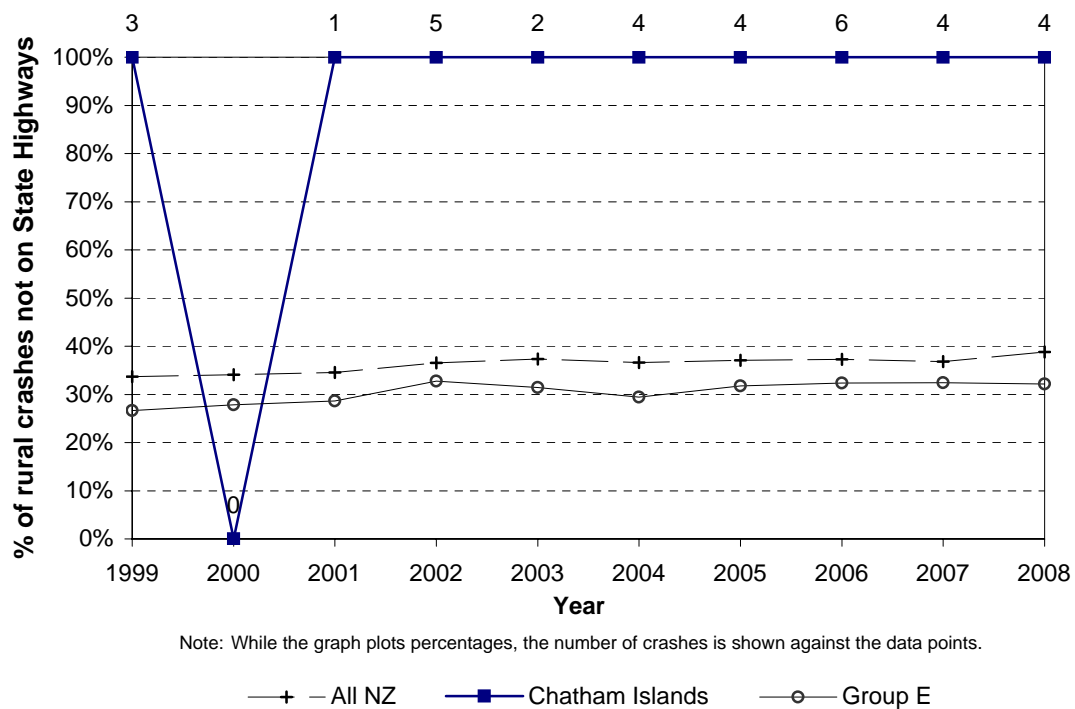


Figure 6.3 Intersection crashes
Chatham Islands County - urban roads

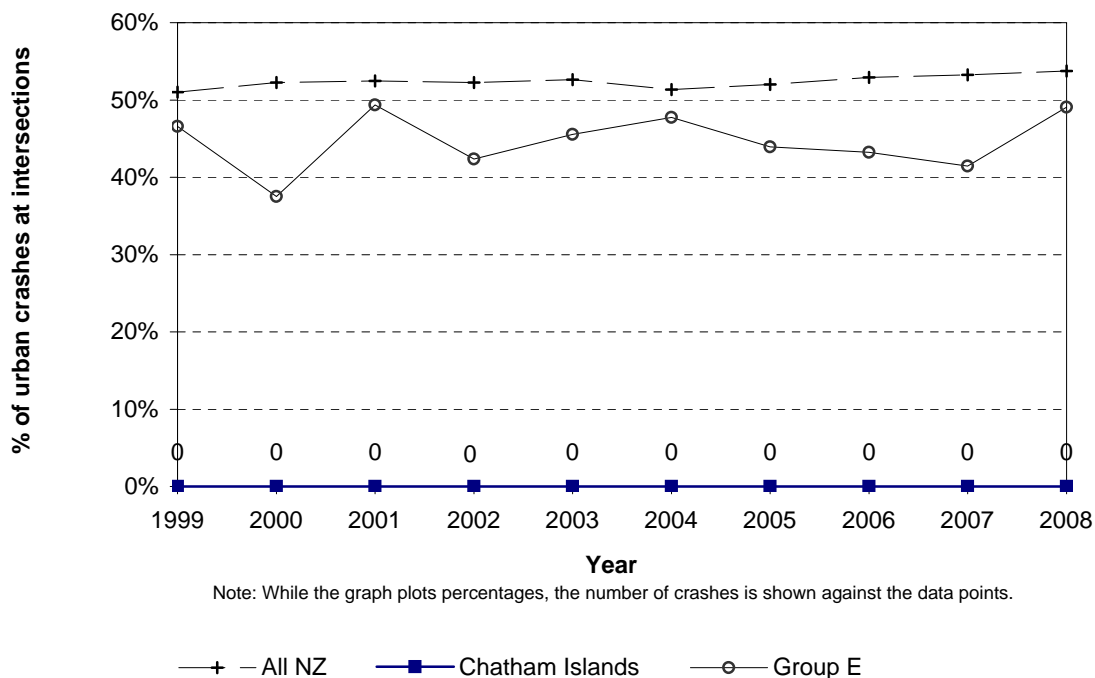


Figure 6.4 Intersection crashes
Chatham Islands County - rural roads

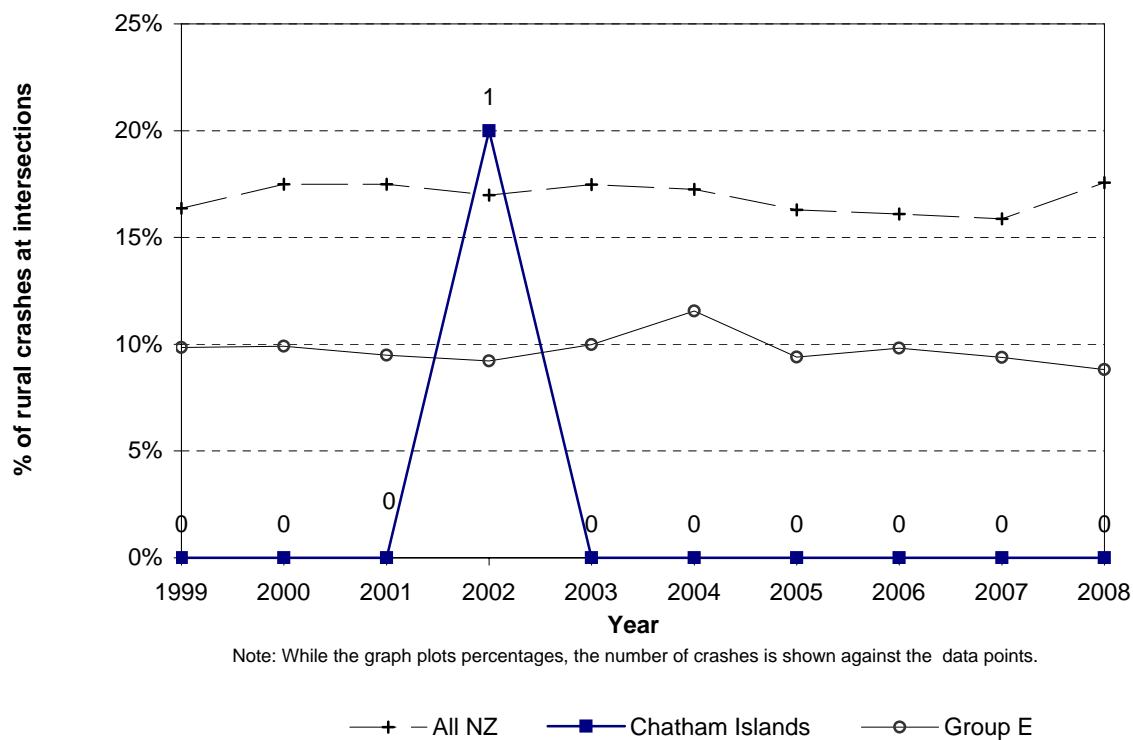


Figure 6.5 Wet road crashes
Chatham Islands County - urban roads

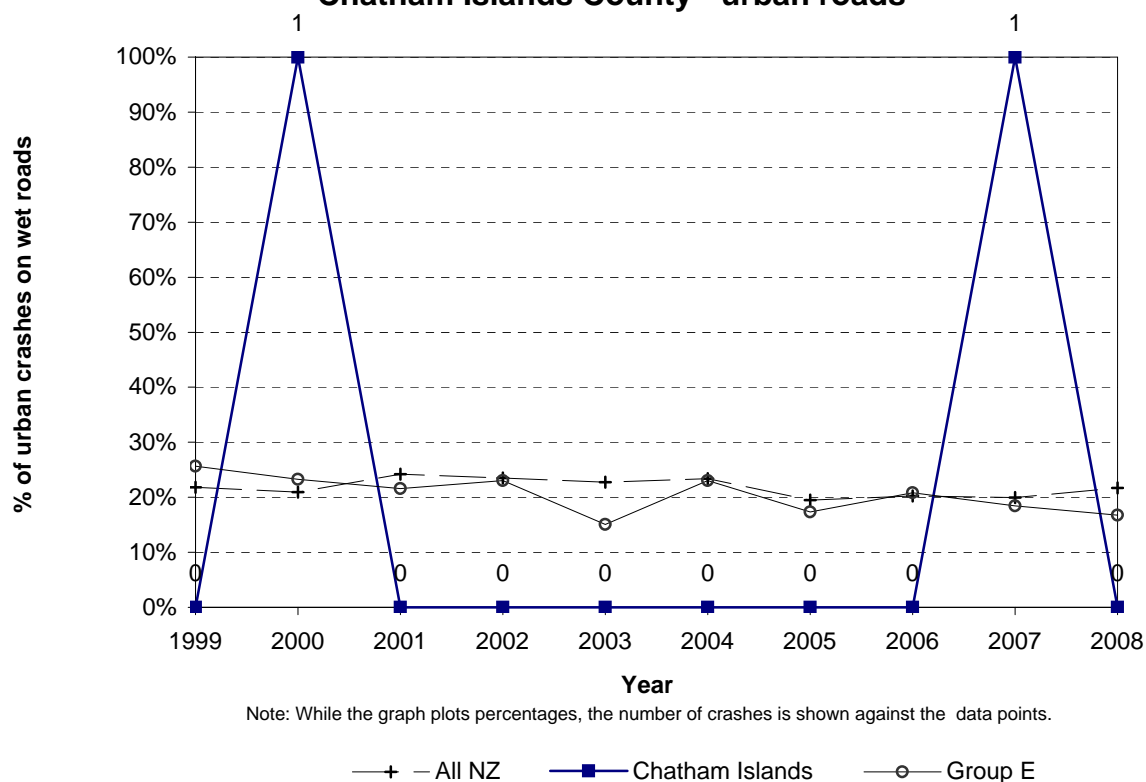
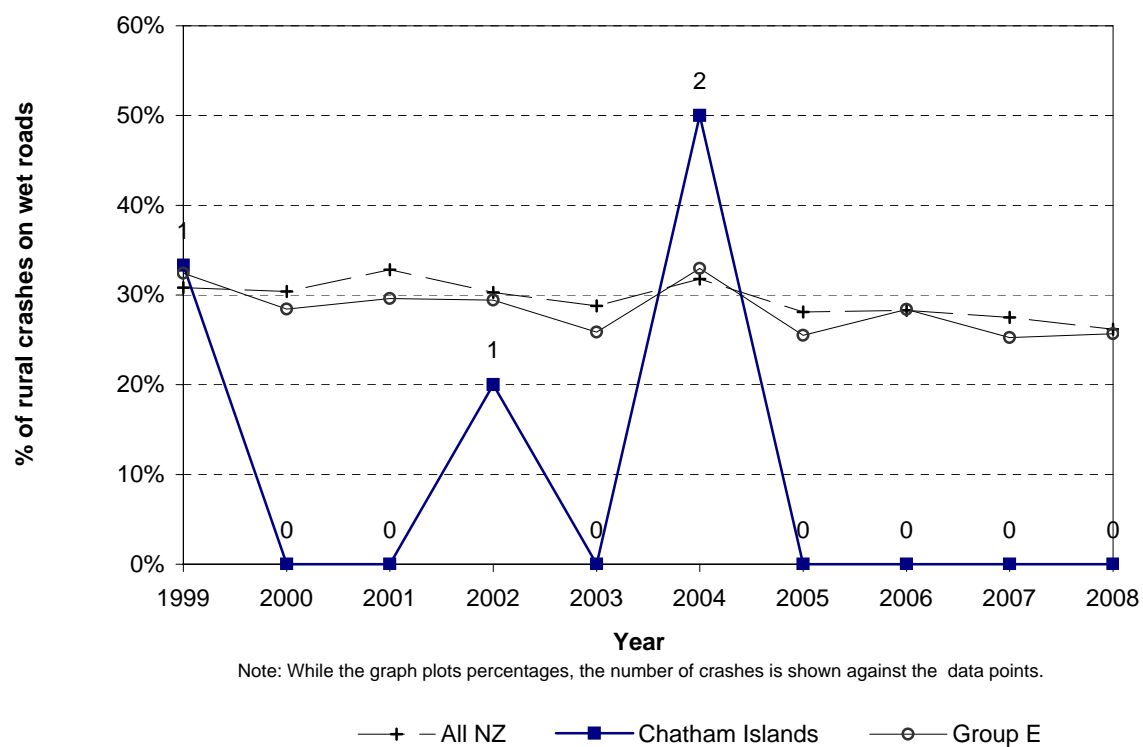
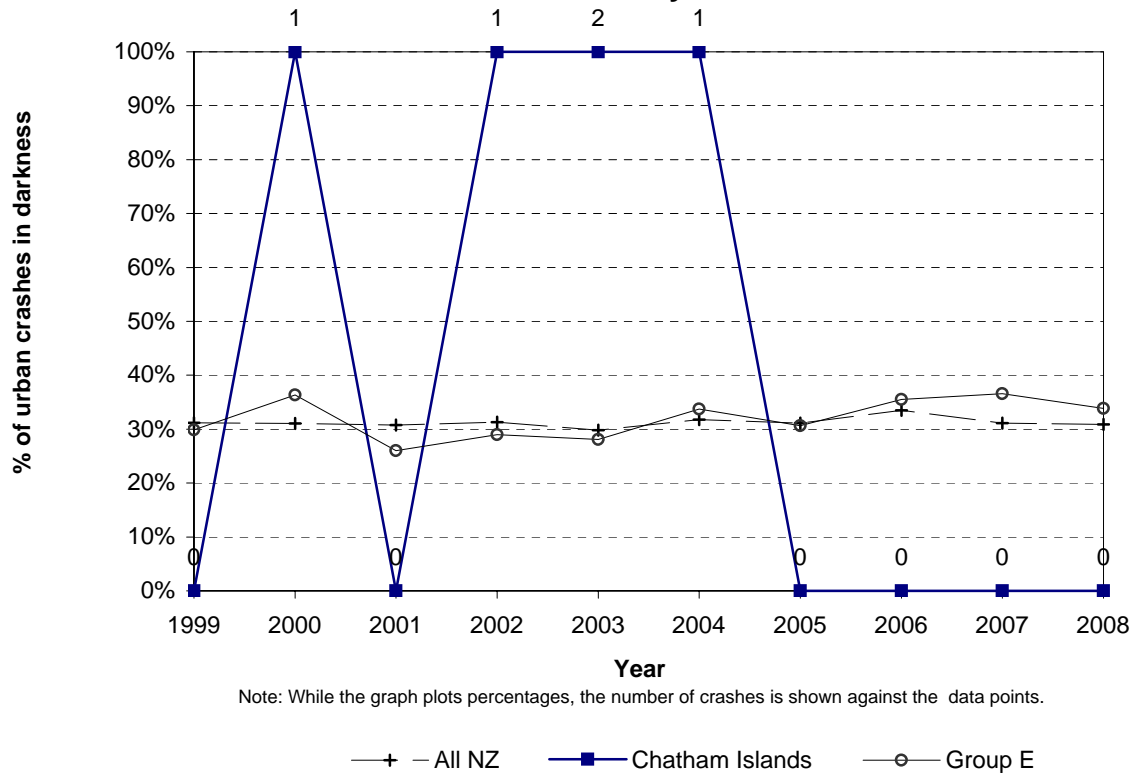


Figure 6.6 Wet road crashes
Chatham Islands County - rural roads



**Figure 6.7 Crashes in darkness
Chatham Islands County - urban roads**



**Figure 6.8 Crashes in darkness
Chatham Islands County - rural roads**

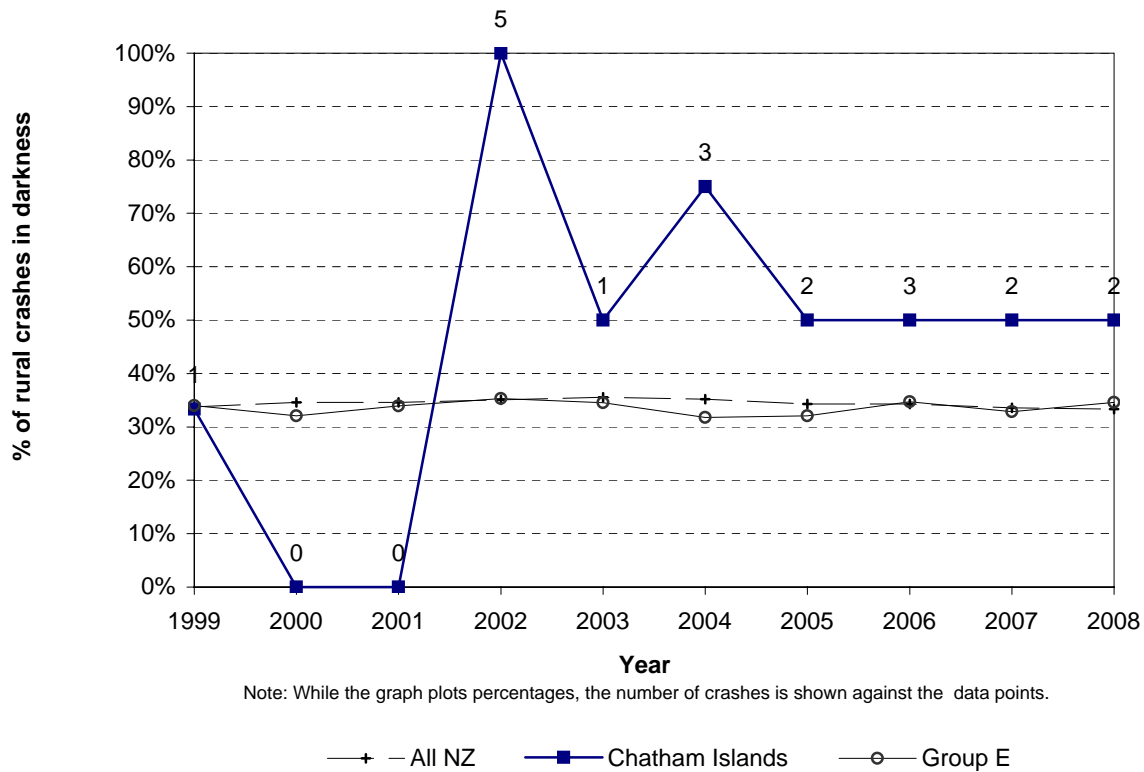
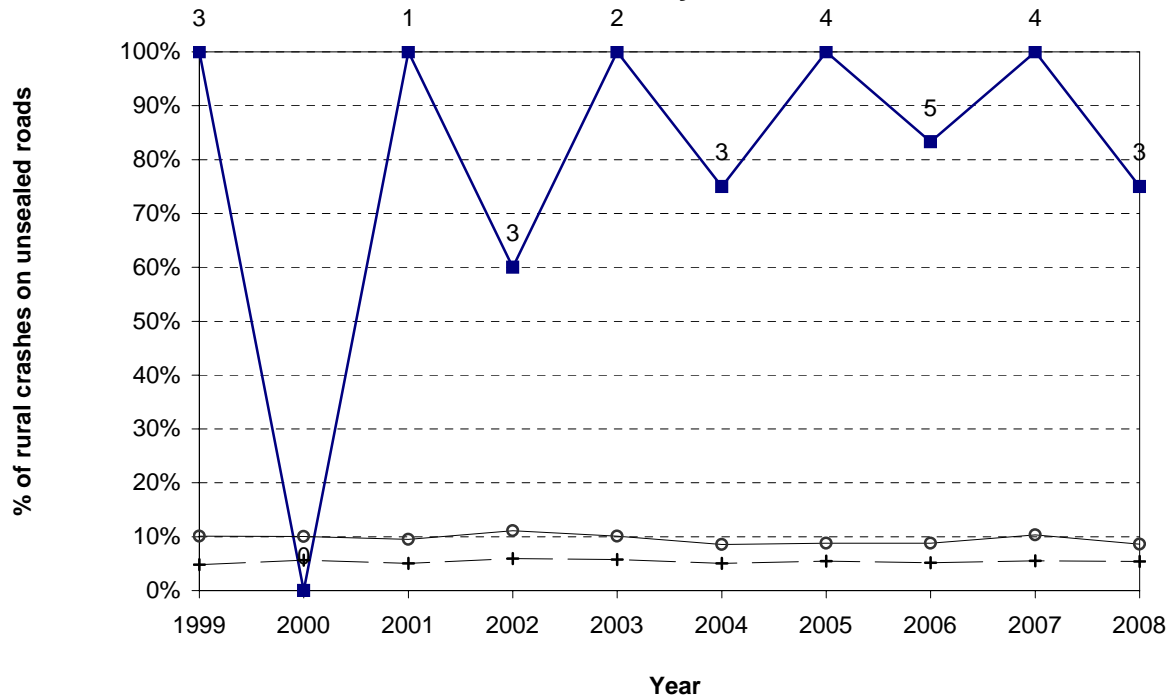


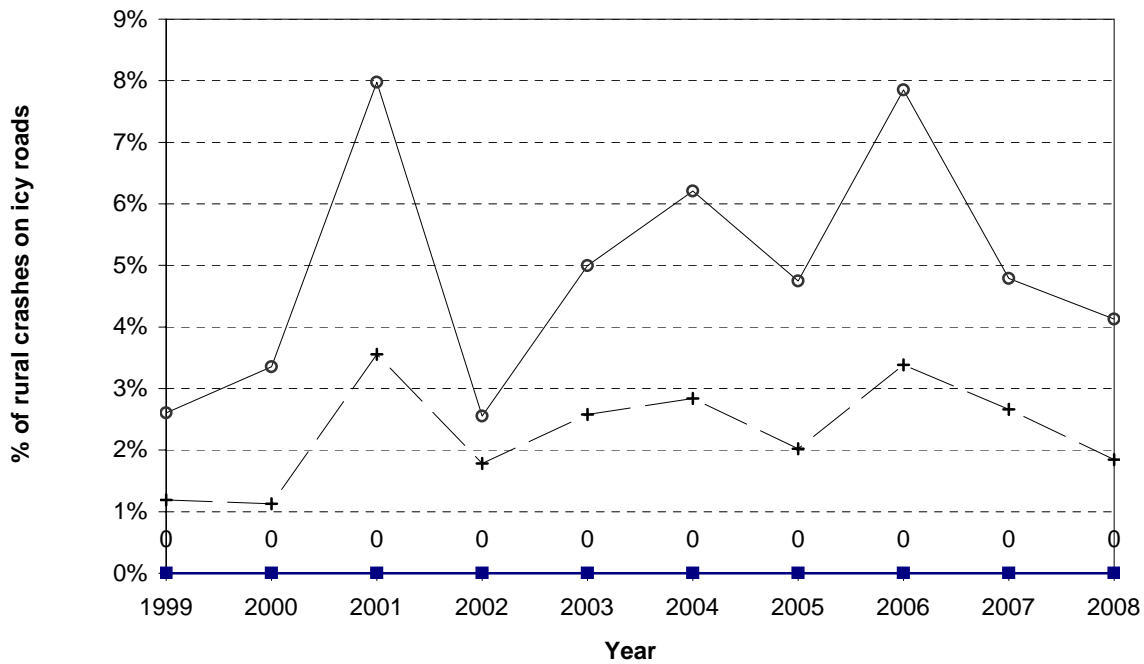
Figure 6.9 Unsealed road crashes
Chatham Islands County - rural roads



Note: While the graph plots percentages, the number of crashes is shown against the data points.

—+— All NZ —■— Chatham Islands —○— Group E

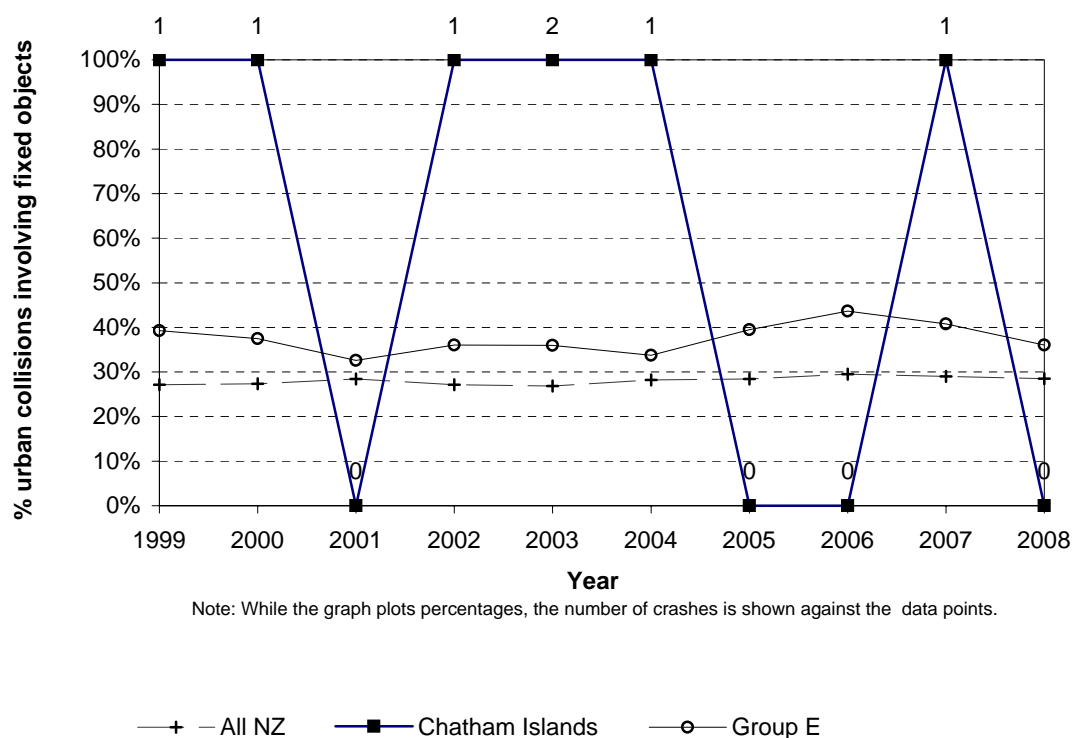
Figure 6.10 Icy road crashes
Chatham Islands County - rural roads



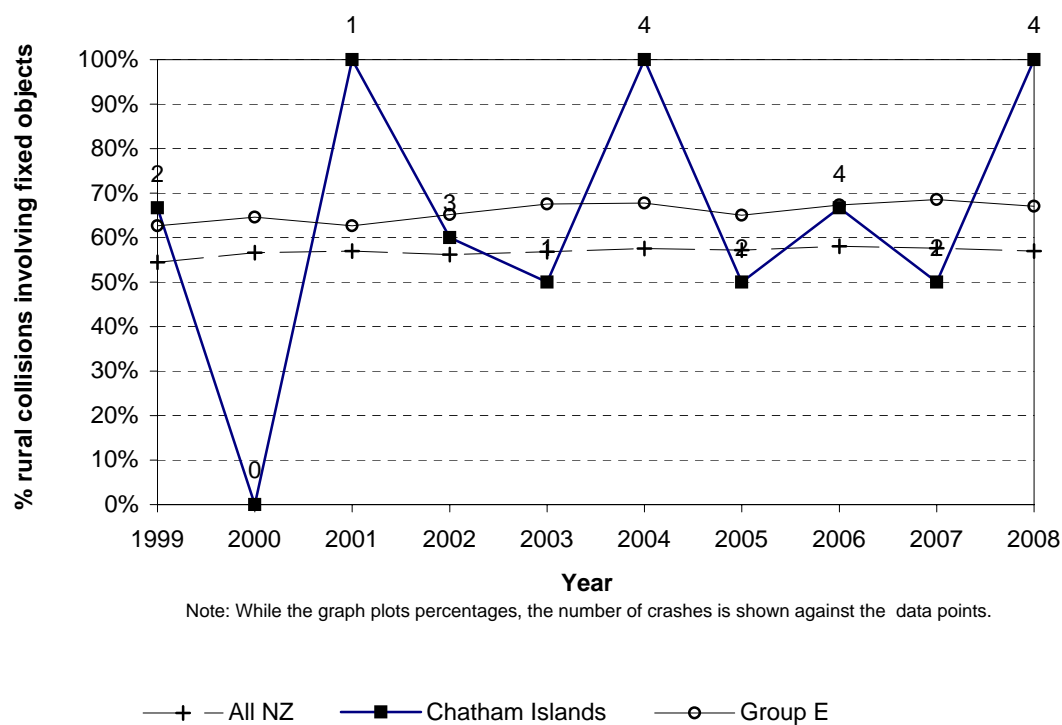
Note: While the graph plots percentages, the number of crashes is shown against the data points.

—+— All NZ —■— Chatham Islands —○— Group E

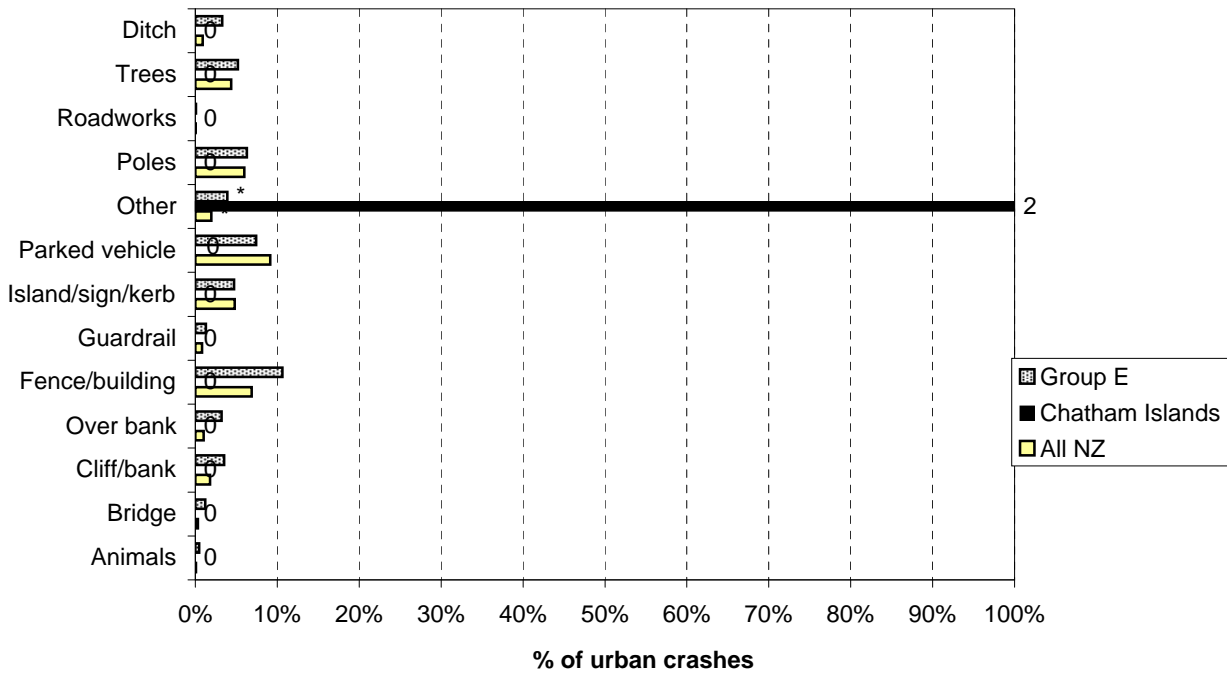
**Figure 6.11 Collisions with objects
Chatham Islands County - urban roads**



**Figure 6.12 Collisions with objects
Chatham Islands County - rural roads**

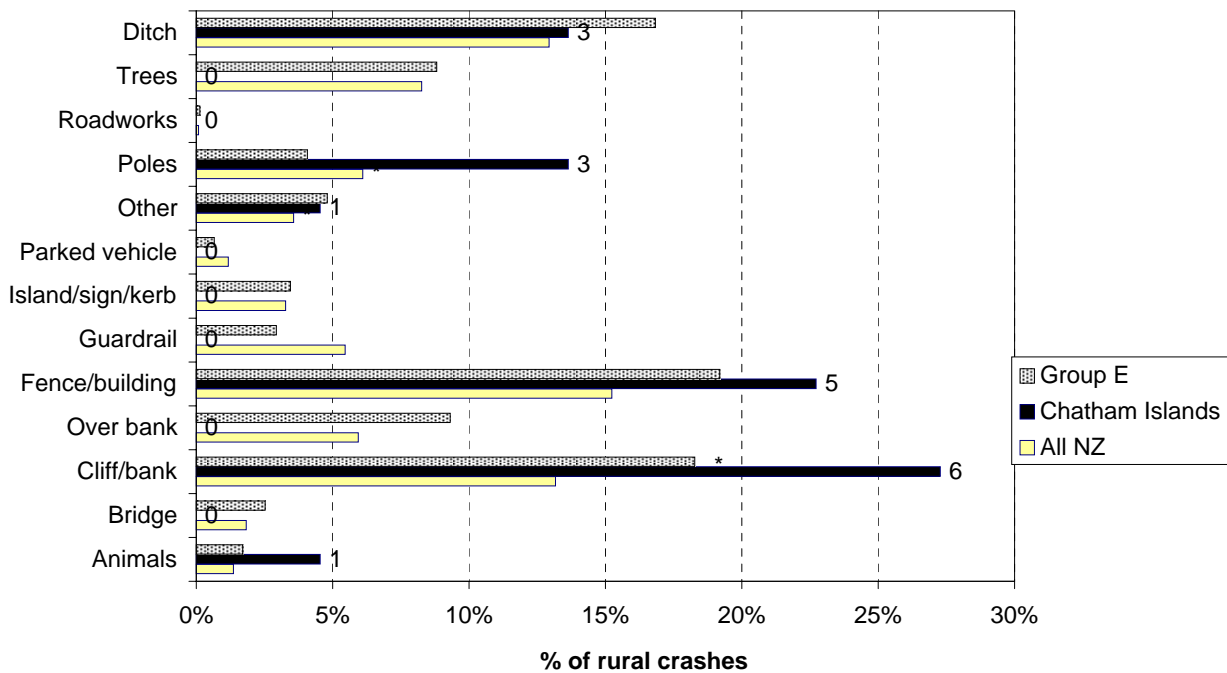


**Figure 6.13 Objects struck - urban
Chatham Islands County (2004-2008)**



Note: While the graph plots percentages, the number of crashes is shown against the data points.
*Denotes statistically significant difference between Local Authority and National or Peer Group Proportions

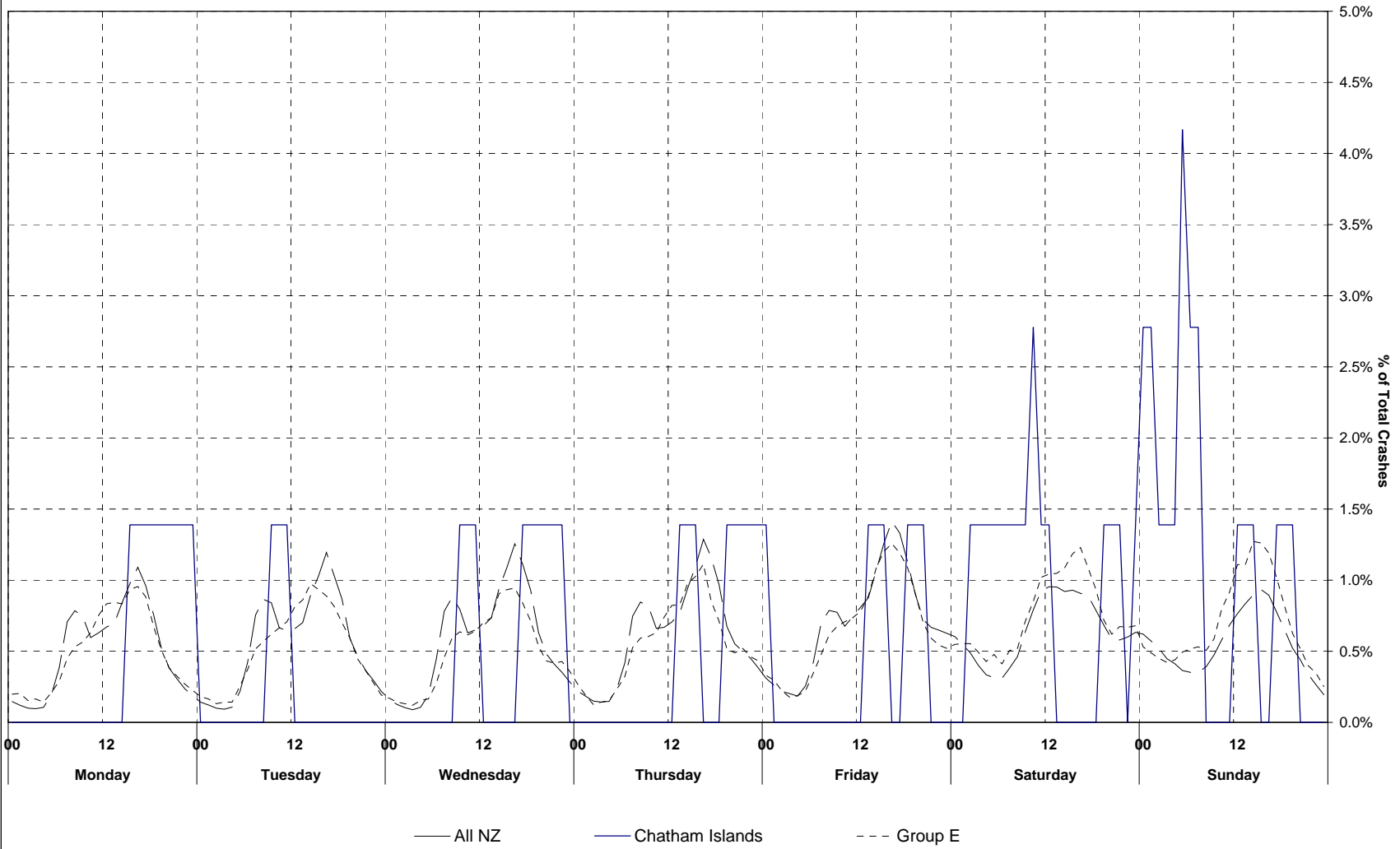
**Figure 6.14 Objects struck - rural
Chatham Islands County (2004-2008)**



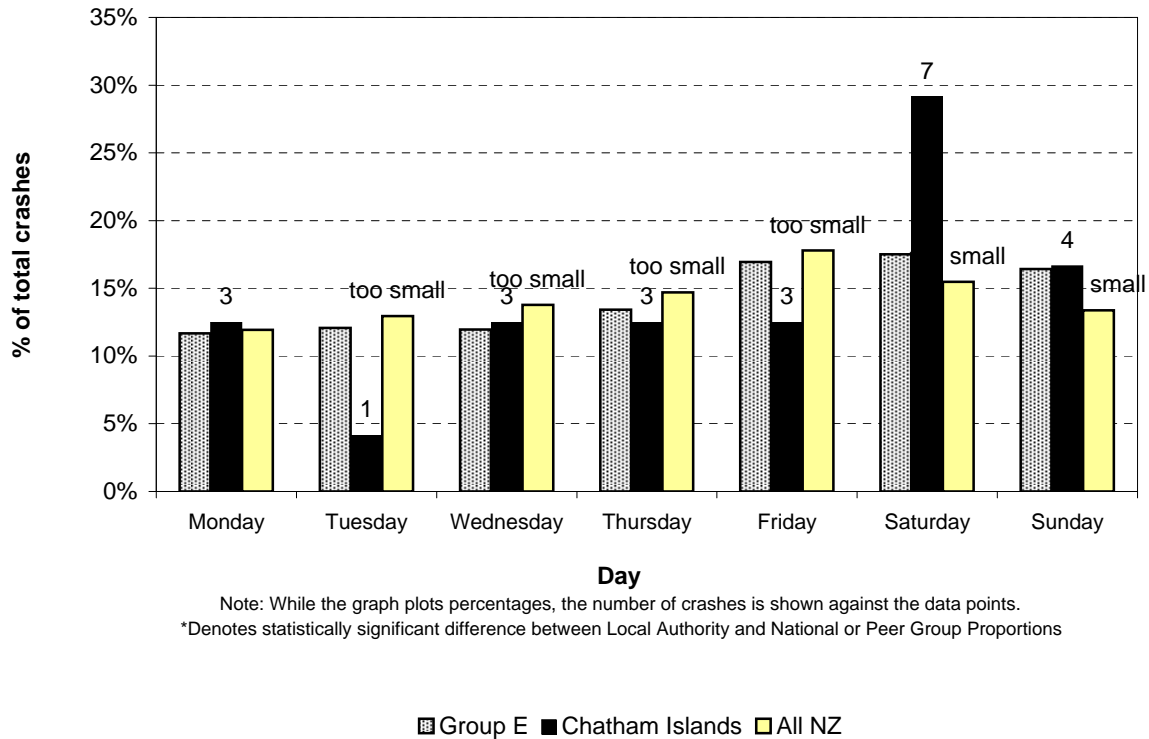
Note: While the graph plots percentages, the number of crashes is shown against the data points.
*Denotes statistically significant difference between Local Authority and National or Peer Group Proportions

Date and Time Statistics

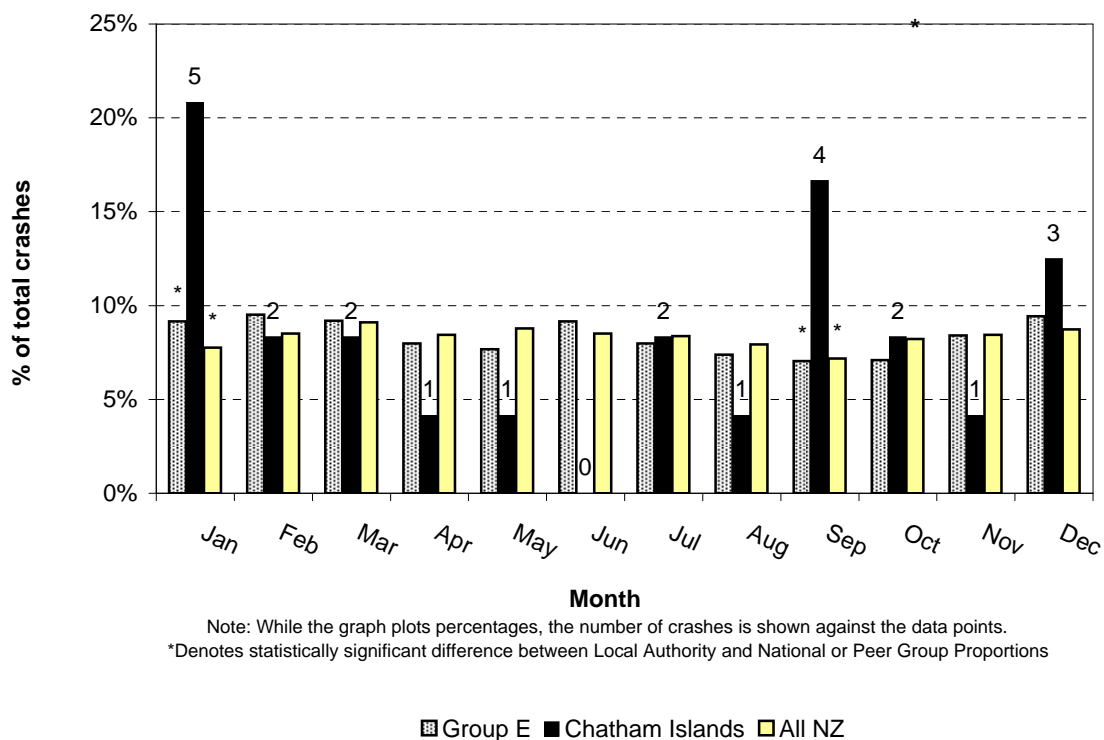
Figure 7.1 Time pattern over average week
Chatham Islands County (2004-2008)



**Figure 7.2 Day of week (6 a.m. to 6 a.m.)
Chatham Islands County (2004-2008)**



**Figure 7.3 Month of year
Chatham Islands County (2004-2008)**



Crash Location Statistics

CRASH ROAD	CRASH DIST	CRASH DIRN	SIDE ROAD	CRASH ID	DATE	Day of Week	TIME	Description of Event	CAUSES	ROAD WET	LIGHT	WTHRa	JUNC TYPE	TRAF CTRL	Fatalities	Serious Injury	Minor Injury
AIR BASE ROAD	5100 E		NORTH ROAD	2454823	16/09/2004	Thu	915	VAN1 EBD on AIR BASE ROAD lost control turning right, VAN1 hit Fence, Post Or Pole on right hand bend	VAN1 too fast entering corner ENV: surface	Dry	Bright Sun	Fine	Unknown	Nil	0	0	0
AIR BASE ROAD	2000 N		NORTH ROAD	2822659	18/08/2008	Mon	1600	SUV1 NBD on AIR BASE ROAD lost control turning right, SUV1 hit Post Or Pole on right hand bend	SUV1 lost control when turning ENV: road surface deep loose metal	Dry	Overcast	Fine	Unknown	N/A	0	0	1
AIR BASE ROAD	I		NORTH ROAD	2756550	25/10/2007	Thu	1600	SUV1 NBD on AIR BASE ROAD lost control turning left, SUV1 hit Fence, Tree	SUV1 too fast entering corner, lost control on unsealed road	Dry	Overcast	Fine	T Type Junction	Nil	0	0	0
BARBADOES ST	I		TUAM ST	2873001	30/08/2008	Sat	1310	CAR1 EBD on TUAM ST lost control turning left, CAR1 hit Phone Box Etc., Parked Vehicle	CAR1 too fast entering corner, lost control when turning, wrong way in one way street	Dry	Bright Sun	Fine	X Type Junction	Traffic Signal	0	0	0
FLOWER POT - GLORY ROAD	2350 N		NORTHHEAD ROAD	2711603	5/03/2007	Mon	2200	MOTOR CYCLE1 NBD on FLOWER POT - GLORY ROAD lost control turning right on right hand bend	MOTOR CYCLE1 alcohol suspected, lost control on unsealed road ENV: visibility limited by temporary obstruction	Dry	Dark	Fine	Unknown	Nil	0	1	0
KAINGAROA ROAD	1370 S		PAYNTERS PLACE	2612903	24/09/2006	Sun	30	SUV1 NBD on KAINGAROA ROAD lost control turning left, SUV1 hit Cliff Bank	SUV1 alcohol suspected	Dry	Dark	Fine	Unknown	Nil	0	0	1
NORTH ROAD	1200 W		KAINGAROA ROAD	2613429	13/11/2006	Mon	1930	SUV1 WBD on NORTH ROAD hit rear end of MOTOR CYCLE2 stopped/moving slowly	SUV1 alcohol test below limit, failed to notice car slowing. MOTOR CYCLE2 alcohol test below limit	Dry	Bright Sun	Fine	Unknown	Nil	0	2	0
NORTH ROAD	2900 N		PORT HUTT ROAD	2551309	2/03/2005	Wed	930	VAN1 NBD on NORTH ROAD lost control turning right on right hand bend	VAN1 lost control when turning, puncture or blowout	Dry	Bright Sun	Fine	Unknown	Nil	0	0	0
NORTH ROAD	3000 N		PORT HUTT ROAD	2656881	11/12/2006	Mon	1600	CAR1 NBD on NORTH ROAD lost control turning right, CAR1 hit Tree on right hand bend	CAR1 lost control due to road conditions, lost control on unsealed road ENV: road surface deep loose metal	Dry	Bright Sun	Fine	Unknown	Nil	0	0	0
NORTH ROAD	6900 N		PORT HUTT ROAD	2551297	7/02/2005	Mon	1000	TRUCK1 NBD on NORTH ROAD lost control turning right on right hand bend	TRUCK1 swung wide on bend, lost control due to road conditions ENV: road surface deep loose metal	Dry	Bright Sun	Fine	Unknown	Nil	0	0	0
NORTH ROAD	7000 N		PORT HUTT ROAD	2871607	27/02/2008	Wed	1330	SUV1 NBD on NORTH ROAD lost control turning right, SUV1 hit Fence on right hand bend	SUV1 lost control under heavy braking, lost control due to road conditions, new driver showed inexperience ENV: road surface deep loose metal	Dry	Bright Sun	Fine	Unknown	N/A	0	0	0
NORTH ROAD	280 N		RAPANUI ROAD	2870743	19/03/2008	Wed	1000	SUV1 SBD on NORTH ROAD lost control turning right, SUV1 hit Cliff Bank on right hand bend	SUV1 lost control due to road conditions ENV: road surface deep loose metal	Dry	Overcast	Fine	Unknown	N/A	0	0	0
NORTH ROAD	400 N		RAPANUI ROAD	2821062	25/01/2008	Fri	1415	SUV1 NBD on NORTH ROAD lost control turning left, SUV1 hit Cliff Bank	SUV1 lost control due to road conditions, new driver showed inexperience ENV: road surface deep loose metal	Dry	Bright Sun	Fine	Unknown	N/A	0	0	1
NORTH ROAD	1400 N		TE MATARAE ROAD	2412371	4/07/2004	Sun	445	CAR1 NBD on NORTH ROAD lost control turning right, CAR1 hit Cliff Bank, Fence on right hand bend	CAR1 alcohol test above limit or test refused, too fast entering corner	Wet	Dark	Mist	Unknown	Nil	0	0	1

CRASH ROAD	CRASH DIST	CRASH DIRN	SIDE ROAD	CRASH ID	DATE	Day of Week	TIME	Description of Event	CAUSES	ROAD WET	LIGHT	WTHRa	JUNC TYPE	TRAF CTRL	Fatalities	Serious Injury	Minor Injury
NORTH ROAD	200 S		TE ONE SCHOOL	2553716	10/07/2005	Sun	605	CAR1 SBD on NORTH ROAD lost control turning right, CAR1 hit Fence, Post Or Pole on right hand bend	CAR1 alcohol test above limit or test refused, too fast entering corner, lost control while returning to seal from unsealed shoulder	Wet	Dark	Light Rain	Unknown	Nil	0	0	0
NORTH ROAD		A	TE ONE SCHOOL	2650045	2/01/2006	Mon	2130	CAR1 NBD on NORTH ROAD lost control; went off road to right, CAR1 hit Fence	CAR1 suddenly swerved to avoid animal	Dry	Dark	Fine	Unknown	Nil	0	0	0
NORTH ROAD	200 N		WAIPAPA CRK BR	2774725	20/12/2007	Thu	2345	TRUCK1 NBD on NORTH ROAD hit obstruction, TRUCK1 hit Stray Animal	ENV: street lighting, wild animal	Dry	Dark	Fine	Unknown	N/A	0	0	0
NORTH ROAD	2100 N		WAITANGI WHARF OWENGA ROAD	2611475	18/02/2006	Sat	300	SUV1 SBD on NORTH ROAD lost control; went off road to left, SUV1 hit Fence, Post Or Pole	SUV1 alcohol test above limit or test refused, lost control, suddenly swerved to avoid animal	Dry	Dark	Fine	Unknown	Nil	0	0	1
NORTH ROAD	2300 N		WAITANGI WHARF OWENGA ROAD	2823595	25/12/2008	Thu	2345	SUV1 NBD on NORTH ROAD lost control turning left, SUV1 hit Fence	SUV1 too fast entering corner, lost control when turning, inexperience	Dry	Dark	Fine	Unknown	N/A	0	0	1
NORTH ROAD	9600 N		WAITANGI WHARF OWENGA ROAD	2611005	10/01/2006	Tue	1000	VAN1 NBD on NORTH ROAD lost control turning right, VAN1 hit Fence on right hand bend	VAN1 lost control when turning, lost control on unsealed road	Dry	Bright Sun	Fine	Unknown	Nil	0	1	1
NORTH ROAD	2800 N		WHAREKAURI ROAD	2611681	29/04/2006	Sat	915	SUV1 SBD on NORTH ROAD lost control turning left, SUV1 hit Ditch	SUV1 lost control under heavy braking, suddenly swerved to avoid animal ENV: farm animal straying	Dry	Bright Sun	Fine	Unknown	Nil	0	0	1
NORTH ROAD	800 S		WHAREKAURI ROAD	2874269	15/12/2008	Mon	1215	SUV1 NBD on NORTH ROAD lost control turning left, SUV1 hit Fence	SUV1 lost control when turning, lost control on unsealed road, inexperience	Dry	Bright Sun	Fine	Unknown	N/A	0	0	0
OWENGA ROAD	350 N		MAIN ROAD	2873639	6/08/2008	Wed	800	SUV1 WBD on OWENGA ROAD lost control turning right, SUV1 hit Fence on right hand bend	SUV1 lost control, suddenly swerved to avoid animal	Wet	Dark	Light Rain	Unknown	N/A	0	0	0
PORT HUTT ROAD	50 S		NORTH ROAD	2453511	28/07/2004	Wed	1900	VAN1 EBD on PORT HUTT ROAD hit obstruction, VAN1 hit Stray Animal	VAN1 did not see or look for other party until too late ENV: farm animal straying	Dry	Dark	Fine	Unknown	Nil	0	0	0
PORT HUTT ROAD	3600 W		NORTH ROAD	2513562	5/02/2005	Sat	1145	VAN1 EBD on PORT HUTT ROAD lost control turning right, VAN1 hit Ditch on right hand bend	VAN1 too fast entering corner, lost control on unsealed road	Dry	Bright Sun	Fine	Unknown	Nil	0	3	0
PORT HUTT ROAD	5600 W		NORTH ROAD	2873611	11/10/2008	Sat	2115	SUV1 WBD on PORT HUTT ROAD hit obstruction, SUV1 hit Stray Animal	ENV: farm animal straying	Dry	Dark	Fine	Unknown	N/A	0	0	0
PORT HUTT ROAD	4700 E		WAITANGI WEST ROAD	2712641	7/03/2007	Wed	1800	SUV1 EBD on PORT HUTT ROAD lost control turning left	SUV1 lost control on unsealed road	Dry	Bright Sun	Fine	Unknown	Nil	0	0	1
PORT HUTT ROAD	30 E		WHANGATETE BR	2872434	10/07/2008	Thu	2100	SUV1 WBD on PORT HUTT ROAD lost control turning left, SUV1 hit Ditch	SUV1 lost control on unsealed road	Dry	Dark	Fine	Unknown	N/A	0	0	0
WAITANGI TUKU ROAD	2700 S		WAITANGI WHARF OWENGA ROAD	2774723	18/12/2007	Tue	2200	VAN1 NBD on WAITANGI TUKU ROAD hit obstruction, VAN1 hit Stray Animal	ENV: visibility limited by crest or dip, farm animal straying	Dry	Dark	Fine	Unknown	N/A	0	0	0
WAITANGI TUKU ROAD	12680 S		WAITANGI WHARF OWENGA ROAD	2612924	28/09/2006	Thu	2030	SUV1 SBD on WAITANGI TUKU ROAD lost control turning left	SUV1 lost control on unsealed road ENV: slippery	Dry	Twilight	Fine	Unknown	Nil	0	0	1
WAITANGI WHARF OWENGA ROAD	400 E		MORI ROAD	2722084	30/05/2007	Wed	2145	SUV1 EBD on WAITANGI WHARF OWENGA ROAD hit obstruction, SUV1 hit Stray Animal	SUV1 dazzling headlights ENV: farm animal straying	Dry	Dark	Fine	Unknown	N/A	0	1	0

CRASH ROAD	CRASH DIST	CRASH DIRN	SIDE ROAD	CRASH ID	DATE	Day of Week	TIME	Description of Event	CAUSES	ROAD WET	LIGHT	WTHRa	JUNC TYPE	TRAF CTRL	Fatalities	Serious Injury	Minor Injury
WAITANGI WHARF OWENGA ROAD	20 W		MORI ROAD	2774724	23/12/2007	Sun	1830	VAN1 EBD on WAITANGI WHARF OWENGA ROAD hit obstruction, VAN1 hit Stray Animal	ENV: farm animal straying	Dry	Overcast	Fine	Unknown	N/A	0	0	0
WAITANGI WHARF OWENGA ROAD		A	NAIRN RIV BR	2554161	15/07/2005	Fri	2330	VAN1 EBD on WAITANGI WHARF OWENGA ROAD lost control; went off road to right, VAN1 hit Bridge	VAN1 fatigue (drowsy, tired, fell asleep)	Wet	Dark	Light Rain	Unknown	Nil	0	0	0
WAITANGI WHARF OWENGA ROAD		A	NAIRN RIV BR	2657057	11/12/2006	Mon	1520	VAN1 NBD on WAITANGI WHARF OWENGA ROAD hit rear end of VAN2 stopped/moving slowly	VAN1 alcohol suspected, failed to notice car slowing	Dry	Bright Sun	Fine	Unknown	Nil	0	0	0
WAITANGI WHARF OWENGA ROAD	330 E		NORTH ROAD	2820065	12/10/2008	Sun	130	CAR1 EBD on WAITANGI WHARF OWENGA ROAD lost control turning right, CAR1 hit Fence on right hand bend	CAR1 alcohol test above limit or test refused, lost control when turning	Dry	Dark	Fine	Unknown	N/A	1	0	0
WAITANGI WHARF OWENGA ROAD	1000 E		NORTH ROAD	2412335	4/07/2004	Sun	625	CAR1 NBD on WAITANGI WHARF OWENGA ROAD lost control turning left, CAR1 hit Post Or Pole	CAR1 alcohol test above limit or test refused, lost control when turning ENV: road slippery (rain)	Wet	Twilight	Light Rain	Unknown	Nil	0	1	0
WAITANGI WHARF OWENGA ROAD	3700 E		NORTH ROAD	2555465	14/10/2005	Fri	1830	CAR1 EBD on WAITANGI WHARF OWENGA ROAD lost control; went off road to right, CAR1 hit Cliff Bank, Guard Rail	CAR1 lost control, fatigue (drowsy, tired, fell asleep)	Dry	Bright Sun	Fine	Unknown	Nil	0	0	0
WAITANGI WHARF OWENGA ROAD	4600 E		NORTH ROAD	2411054	24/01/2004	Sat	600	CAR1 EBD on WAITANGI WHARF OWENGA ROAD hit obstruction, CAR1 hit Cliff Bank, Other	CAR1 lost control avoiding another vehicle, suddenly swerved to avoid animal ENV: farm animal straying	Dry	Twilight	Fine	Unknown	Nil	0	0	1
WAITANGI WHARF OWENGA ROAD	4650 E		NORTH ROAD	2513129	23/10/2005	Sun	630	VAN1 EBD on WAITANGI WHARF OWENGA ROAD lost control turning right on right hand bend	VAN1 too fast entering corner, lost control on unsealed road, fatigue (drowsy, tired, fell asleep)	Dry	Twilight	Fine	Unknown	Nil	0	0	1
WAITANGI WHARF OWENGA ROAD	5800 E		NORTH ROAD	2754637	30/04/2007	Mon	1150	VAN1 EBD on WAITANGI WHARF OWENGA ROAD lost control turning right, VAN1 hit Cliff Bank on right hand bend	VAN1 too fast entering corner, lost control avoiding another vehicle	Wet	Overcast	Fine	Unknown	Nil	0	0	0
WAITANGI WHARF OWENGA ROAD	5900 E		NORTH ROAD	2513478	18/12/2005	Sun	1330	VAN1 EBD on WAITANGI WHARF OWENGA ROAD lost control turning right on right hand bend	VAN1 alcohol suspected, too fast entering corner, lost control while returning to seal from unsealed shoulder	Dry	Bright Sun	Fine	Unknown	Nil	0	0	1
WAITANGI WHARF OWENGA ROAD	200 E		TE AWINANGA RIV BR	2555466	20/10/2005	Thu	2200	VAN1 EBD on WAITANGI WHARF OWENGA ROAD lost control turning right, VAN1 went Over Bank, Fence on right hand bend	VAN1 lost control when turning, suddenly swerved to avoid animal	Dry	Dark	Fine	Unknown	Nil	0	0	0
WAITANGI WHARF OWENGA ROAD	600 E		TE AWINANGA RIV BR	2874289	13/12/2008	Sat	830	SUV1 WBD on WAITANGI WHARF OWENGA ROAD lost control turning right, SUV1 hit Cliff Bank on right hand bend	SUV1 lost control when turning, driver over-reacted, mixed treads/space saver tyre	Dry	Bright Sun	Fine	Unknown	N/A	0	0	0
WAITANGI WHARF OWENGA ROAD	50 W		TE AWINANGA RIV BR	2870314	19/01/2008	Sat	630	SUV1 EBD on WAITANGI WHARF OWENGA ROAD lost control turning left	SUV1 too fast entering corner, lost control due to vehicle fault, service brake failed	Dry	Bright Sun	Fine	Unknown	N/A	0	0	0
WAITANGI WHARF OWENGA ROAD	4800 E		TE MATARAE ROAD	2451626	7/04/2004	Wed	418	VAN1 EBD on WAITANGI WHARF OWENGA ROAD hit obstruction, VAN1 hit Stray Animal	VAN1 did not see or look for other party until too late ENV: farm animal straying	Dry	Dark	Fine	Unknown	Nil	0	0	0

CRASH ROAD	CRASH DIST	CRASH DIRN	SIDE ROAD	CRASH ID	DATE	Day of Week	TIME	Description of Event	CAUSES	ROAD WET	LIGHT	WTHRa	JUNC TYPE	TRAF CTRL	Fatalities	Serious Injury	Minor Injury
WAITANGI WHARF OWENGA ROAD	5100 E		TE MATARAE ROAD	2511087	23/01/2005	Sun	1800	VAN1 SBD on WAITANGI WHARF OWENGA ROAD lost control turning right, VAN1 hit Cliff Bank on right hand bend	VAN1 too far left/right, lost control on unsealed road	Dry	Twilight	Fine	Unknown	Nil	0	0	1
WAITANGI WHARF OWENGA ROAD	10900 E		TE MATARAE ROAD	2411107	15/01/2004	Thu	1400	TRUCK1 SBD on WAITANGI WHARF OWENGA ROAD lost control turning left, TRUCK1 hit Ditch	TRUCK1 swung wide on bend, lost control while returning to seal from unsealed shoulder, driving unfamiliar vehicle	Dry	Bright Sun	Fine	Unknown	Nil	0	1	0
WAITANGI WHARF OWENGA ROAD	3500 W		TE MATARAE ROAD	2451690	21/04/2004	Wed	2130	VAN1 EBD on WAITANGI WHARF OWENGA ROAD hit obstruction, VAN1 hit Stray Animal	ENV: farm animal straying	Dry	Dark	Fine	Unknown	Nil	0	0	0
WAITANGI WHARF OWENGA ROAD	3300 N		TE ONE CRK BR	2723810	14/12/2007	Fri	1930	VAN1 WBD on WAITANGI WHARF OWENGA ROAD lost control turning right, VAN1 hit Cliff Bank on right hand bend	VAN1 too fast entering corner, lost control on unsealed road ENV: visibility limited by crest or dip, signs / signals ineffective or inadequate	Dry	Overcast	Fine	Unknown	N/A	0	0	1
WAITANGI WHARF OWENGA ROAD	350 N		TIKITIKI HILL ROAD	2713413	5/09/2007	Wed	1010	SUV1 NBD on WAITANGI WHARF OWENGA ROAD lost control turning left, SUV1 hit Water/River	SUV1 lost control due to road conditions, incorrect tyre type ENV: road slippery (mud)	Wet	Overcast	Light Rain	Unknown	Nil	0	0	1
WAITANGI WHARF OWENGA ROAD	550 E		WAITANGI TUKU ROAD	2412765	11/09/2004	Sat	2000	VAN1 NBD on WAITANGI WHARF OWENGA ROAD lost control turning left, VAN1 hit Water/River	VAN1 lost control due to road conditions ENV: road slippery (mud), road obstructed (slip or subsidence)	Dry	Dark	Unknown	Unknown	Nil	0	0	1

appendix



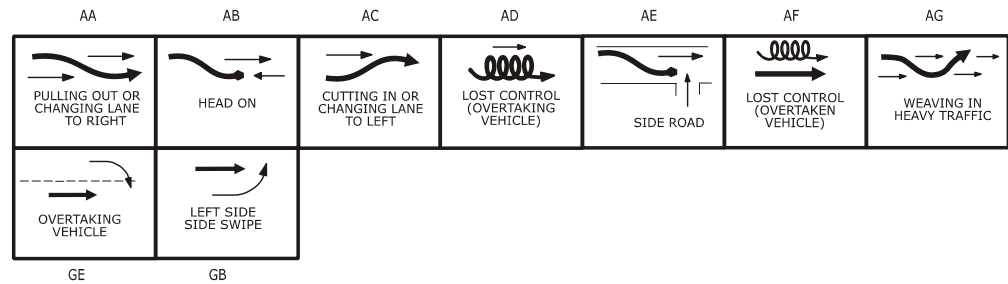
- Groupings of crash types
- Grouping of contributing factors

Explanatory notes for the appendix

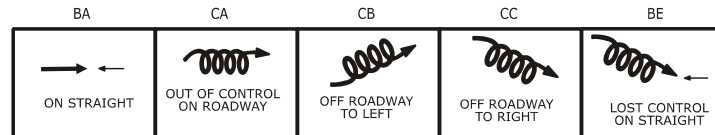
1. Each traffic crash report has a diagram and a description of what happened. These are used to classify the movements the vehicles were making when they crashed eg 'collided with parked vehicle', or 'lost control while overtaking'. In this report, crash types are grouped into seven categories. The following page shows the types of crashes which are included in each group.
2. Traffic crash reports also include information on why the crash occurred, or on factors contributing to the crash. In this report the hundreds of contributing factor codes used by New Zealand Transport Agency have been condensed into 16 groups for practical reasons. Lists of the factor groups used in this report, and of all the contributing factors used by New Zealand Transport Agency, are shown on the following pages.
3. Note that in the year 2000 there were some minor changes to the contributing factor groups. The most significant change was that 'inattention' was grouped with 'inadequate check' to form 'poor observation'. This allowed a more accurate assessment of 'fatigue' as a contributing factor, as it now has its own grouping.
4. The factor group 'poor handling' includes factor codes that were only introduced in 1998. This could explain why there may have been a sudden change at this time.
5. The coding of the factors contributing to a crash is subjective. Therefore analysis using contributing factor groups needs to be interpreted with caution. Also, to effectively target safety or enforcement campaigns more analysis of the specific contributing factors involved may be needed.
6. It should be noted that a traffic crash generally has more than one contributing factor. Therefore, adding the number of crashes on graphs showing the number of crashes with a given factor or factor group will be greater than the total number of crashes in the city or district.

Groupings of crash types

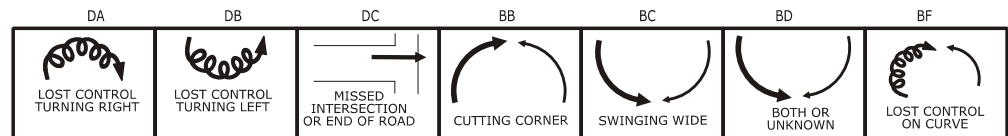
Overtaking



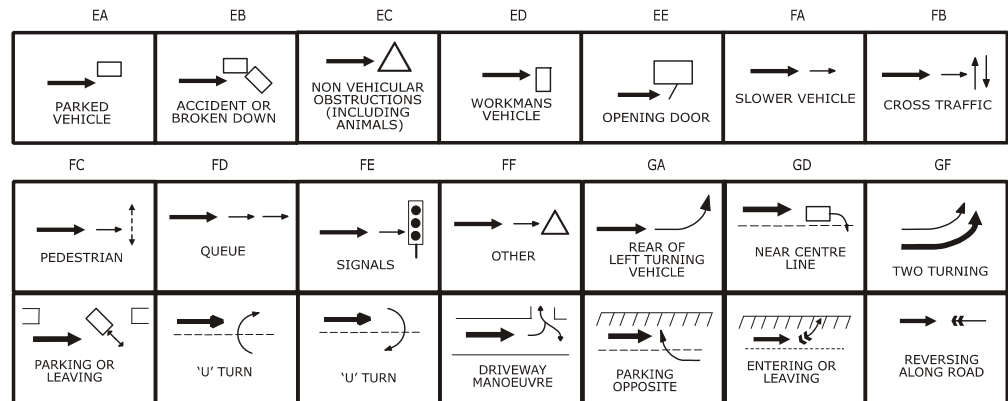
Straight - Lost control / Head on



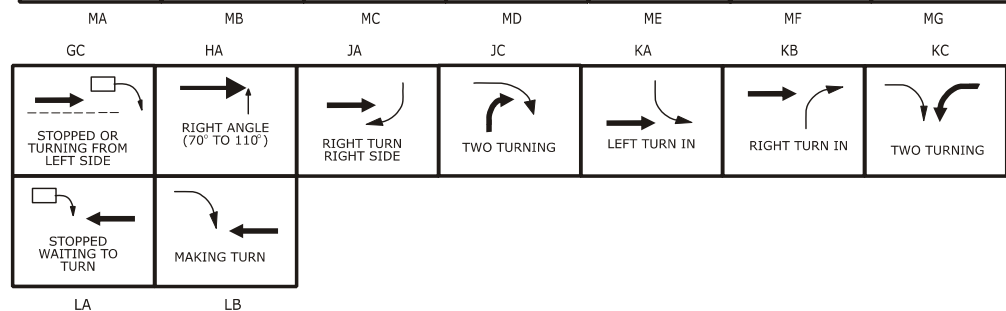
Bend - Lost control / Head on



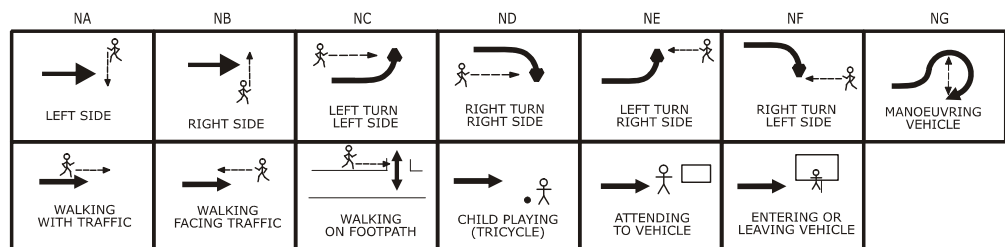
Rear end / Obstruction



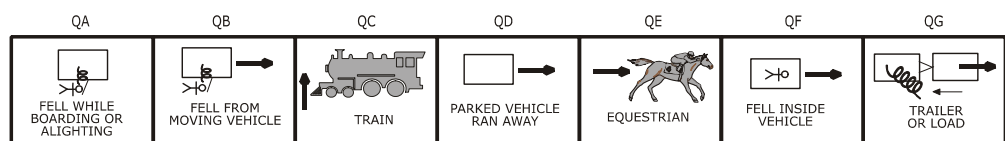
Crossing / Turning



Pedestrian vs Vehicle



Miscellaneous



Groupings of contributing factors

Factor group	Factor codes included
Alcohol involved	100 – 101 103 – 109
Too fast	110 – 119 430 – 432
Failed to give way or stop	300 – 314 320 – 328
Failed to keep left	120 – 128 205
Overtaking	150 – 161
Incorrect lanes or position	129 170 – 183 200 – 204 206 – 209 440 – 448
Poor handling	130 – 134 137 – 149 420 – 429
Poor observation	330 – 360 370 – 379
Poor judgement	380 – 387 400 – 407
Fatigue	410 – 415
Disabled, old age or illness	500 – 507
Pedestrian factors	700 – 731
Cyclist factors	Any factor coded against a cyclist
Vehicle factors	136, 600 – 699
Road factors	135, 800 – 899
Weather	900 – 909

Note:

The following factor codes are not included as they do not fit adequately into any of the above groupings: 102, 106, 190–198, 433, 434, 510–534 and 910–999.

FACTORS PROBABLY CONTRIBUTING TO CRASHES

DRIVER CONTROL

- 100 **Alcohol or drugs**
 - 101 Alcohol suspected
 - 102 Alcohol test below limit
 - 103 Alcohol test above limit or test refused
 - 104 Alcohol test result unknown
 - 105 Visibly intoxicated non-driver (pedestrian / cyclist / passenger)
 - 106 Dead driver not suspected, tested negative (MOT only)
 - 107
 - 108 Drugs suspected
 - 109 Drugs proven
- 110 **Too fast for conditions**
 - 111 Cornering
 - 112 On straight
 - 113 To give way at intersection
 - 114 Approaching railway crossing
 - 115 When passing stationary school bus
 - 116 At temporary speed limit
 - 117 At crash or emergency
- 120 **Failed to keep left**
 - 121 Swung wide on bend
 - 122 Swung wide at intersection
 - 123 Cutting corner on bend
 - 124 Cutting corner at intersection
 - 125 On straight section
 - 126 Vehicle crossed raised median
 - 127 Driving or riding abreast (cyclists more than 2 abreast)
 - 128 Wandering or wobbling
 - 129 Too far left / right
- 130 **Lost control**
 - 131 When turning
 - 132 Under heavy braking
 - 133 Under heavy acceleration
 - 134 While returning to seal from unsealed shoulder
 - 135 Due to road conditions (requires road series code)
 - 136 Due to vehicle fault (requires vehicle series code)
 - 137 Avoiding another vehicle, pedestrian, party or obstacle on roadway
 - 138 On unsealed road
 - 139 End of seal
- 140 **Failed to signal in time**
 - 141 When moving to left, pulling over to left
 - 142 When turning left
 - 143 When pulling out or moving to the right
 - 144 When turning right
 - 145 Incorrect Signal
- 150 **Overtaking**
 - 151 Overtaking line of traffic or queue
 - 152 Deliberately in the face of oncoming traffic
 - 153 Failed to notice oncoming traffic
 - 154 Misjudged speed or distance of oncoming traffic
 - 155 At no passing line
 - 156 With insufficient visibility
 - 157 At an intersection without due care
 - 158 On left without due care
 - 159 Cut in after overtaking
 - 160 Vehicle signalling right turn
 - 161 Without care at a pedestrian crossing
- 170 **Wrong lane or turned from wrong position**
 - 171 Turned right from incorrect lane
 - 172 Turned left from incorrect lane
 - 173 Travelled straight ahead from turning lane or flush median
 - 174 Turned right from left side of road
 - 175 Turned left from near centre line
 - 176 Turned into incorrect lane
 - 177 Weaving or cut in on multi-lane roads
 - 178 Moved left to avoid slow vehicle

- 180 **In line of traffic**
 - 181 Following too closely
 - 182 Travelling unreasonably slowly
 - 183 Motorist crowded cyclist

- 190 **Sudden action**
 - 191 Braked
 - 192 Turned left
 - 193 Turned right
 - 194 Swerved to avoid pedestrian
 - 195 Swerved to avoid animal
 - 196 Swerved to avoid crash or broken down vehicle
 - 197 Swerved to avoid vehicle
 - 198 Swerved to avoid object or for unknown reason
- 200 **Forbidden movements**
 - 201 Wrong way in one way street, motorway or roundabout
 - 202 When turning or U turning contrary to a sign
 - 203 Contrary to "in" or "out" only driveway sign
 - 204 Driving or riding on footpath
 - 205 On incorrect side of island or median
 - 206 Contrary to "no entry" sign
 - 207 In Car Park
 - 208 Motor vehicle in cycle lane
 - 209 Bus / Transit lane

VEHICLE CONFLICTS

- 300 **Failed to give way**
 - 301 At Stop sign
 - 302 At Give Way sign
 - 303 When turning to non-turning traffic
 - 304 When deemed turning by markings, not geometry
 - 305 When turning left, to opposing right turning traffic
 - 306 To pedestrian on a crossing
 - 307 When turning at signals to pedestrians
 - 308 When entering roadway from driveway
 - 309 To traffic approaching or crossing from the right
 - 310 Failed to give way at one lane bridge / road
 - 311 Failed to give way to pedestrian on footpath or verge
 - 312 Entering roadway not from driveway or intersection
 - 313 To emergency vehicle
 - 314 Driver waved through
- 320 **Did not stop**
 - 321 At stop sign
 - 322 At steady red light
 - 323 At steady red arrow
 - 324 At steady amber light
 - 325 At steady amber arrow
 - 326 At flashing red lights (Rail Xing, Fire Stn etc)
 - 327 For police or flag-person
 - 328 For school patrol / kea crossing
- 330 **Inattentive: failed to notice**
 - 331 Car slowing, stopping or stopped in front
 - 332 Bend in road
 - 333 Indication of vehicle in front
 - 334 Traffic lights
 - 335 Intersection or its Stop / Give Way control
 - 336 Other regulatory sign / markings
 - 337 Warning sign
 - 338 Direction, information signs / markings
 - 339 Road-works signs
 - 340 Lane use arrows / markings?
 - 341 Obstructions on Roadway
- 350 **Attention diverted by:**
 - 351 Passengers
 - 352 Scenery or persons outside vehicle
 - 353 Other traffic
 - 354 Animal or insect in vehicle
 - 355 Trying to find intersection, house number, destination
 - 356 Advertising or signs
 - 357 Emotionally upset
 - 358 Cigarette, radio, glove box etc, obj under drivers feet/pedals etc
 - 359 Cell phone / navigation device or any communications device
 - 360 Driver dazzled

- 370 **Did not see or look for another party until too late**
 - 371 Behind when reversing / manoeuvring
 - 372 Behind when changing lanes position or direction (includes U-turns)
 - 373 Behind when pulling out from parked position
 - 374 Behind when opening door or leaving vehicle
 - 375 When required to give way to traffic from another direction
 - 376 When required to give way to pedestrians.
 - 377 When visibility obstructed by other vehicles
 - 378 When visibility limited by roadside features
 - 379 When first in queue on receiving green light
- 380 **Misjudged speed, distance, size or position of:**
 - 381 Other vehicle coming from behind or alongside
 - 382 Other vehicle coming from another direction with right of way
 - 383 Pedestrian movement or intention
 - 384 Towed vehicle, or while towing a vehicle
 - 385 Size or position of fixed object or obstacle
 - 386 Of own vehicle
 - 387 Misjudged intentions of another party

GENERAL DRIVER

- 400 **Inexperience**
 - 401 In driving in fast, complex or heavy traffic
 - 402 New driver showed inexperience
 - 403 Driving strange vehicle
 - 404 Overseas driver fails to adjust to local conditions
 - 405 Driver under instruction
 - 406 At towing trailer / other vehicle
 - 407 Driver over-reacted
 - 408 Unsupervised cyclist
- 410 **Fatigue (drowsy, tired, fell asleep)**
 - 411 Long trip
 - 412 Lack of sleep
 - 413 Exhaust fumes
 - 414 Worked long hours before driving
 - 415 Exceeded driving hours
- 420 **Incorrect use of vehicle controls**
 - 421 Started in gear
 - 422 Stalled engine
 - 423 Wrong pedal
 - 424 Footrest, stand
 - 425 Ignition turned off (steering locked)
 - 426 Lights not switched on
 - 427 Foot slipped
 - 428 Parking brake not fully applied
 - 429 Trailer coupling or safety chain not secured
- 430 **Showing off**
 - 431 Racing
 - 432 Playing chicken
 - 433 Wheel spins / wheelies / doughnuts etc
 - 434 Intimidating driving
- 440 **Parked or stopped**
 - 441 Inadequately lit at night: (not lit by street lights or park lights off)
 - 442 At point of limited visibility
 - 443 Not as close as practicable to side of road
 - 444 On incorrect side of road
 - 445 Double parked
 - 446 In 'No Stopping' area
 - 447 Not clear of rail crossing
 - 448 In cycle or Transit lane

GENERAL PERSON

- 500 **Illness and disability**
501 Illness with no warning e.g. heart attack, unexpected epilepsy)
502 Physically disabled
503 Defective vision
504 Medical illness (not sudden) flu, diabetes
505 Mental illness (depression, psychosis)
506 Suicidal (but not successful)
507 Impaired ability due to old age

- 510 **Intentional or criminal**
511 Deliberate homicide (only if succeeded)
512 Intentional collision
513 Committed suicide (only if succeeded)
514 Evading enforcement
515 Object deliberately thrown at or dropped on vehicle / shot at
516 Object thrown from vehicle
517 Stolen vehicle

- 520 **Driver or passenger, boarding, leaving , in vehicle**
521 Boarding moving vehicle
522 Intentionally leaving moving vehicle
523 Riding in insecure position
524 Interfered with driver
525 Opened door inadvertently
526 Overloaded vehicle (with passengers)
527 Child playing in parked vehicle

- 530 **Miscellaneous person**
531 Casualty drowned
532 Casualty thrown from vehicle
533 Equestrian not keeping to verge
534 Cyclist or M/cyclist wearing dark clothing

VEHICLES

- 600 **Lights and reflectors at fault or dirty**
601 Dazzling headlights
602 Headlights inadequate or no headlights
603 Headlights failed suddenly
604 Brake-lights or indicators faulty or not fitted
605 Tail-lights inadequate or no tail-lights
606 Reflectors inadequate or no reflectors
607 Lights or reflectors obscured

- 610 **Brakes**
611 Parking brake failed
612 Parking brake defective
613 Service brake failed
614 Service brake defective
615 Jack-knifed

- 620 **Steering**
621 Defective
622 Failed suddenly

- 630 **Tyres**
631 Puncture or blowout
632 Worn tread on tyre
633 Incorrect tyre type
634 Mixed treads / space savers

- 640 **Windscreen or mirror**
641 Shattered windscreen
642 Windscreen or rear window dirty
643 Rear vision mirror not adjusted correctly
644 No rear vision mirror
645 Windscreen or rear window misted/frosted
646 Inadequate or no sun-visors
647 Inadequate or no windscreen wipers
648 Cycle / Motorcycle visor, glasses, goggles or screen

- 650 **Mechanical**
651 Engine failure
652 Transmission failure (including chains and gears)
653 Accelerator or throttle jammed

- 660 **Body or chassis**
661 Body, chassis or frame (cycle, m/c) failure
662 Suspension failure
663 Failure of door catch or door not shut
664 Inadequate mudguards
665 Inadequate tow coupling
666 Inadequate or no safety chain
667 Bonnet catch failed
668 Wheel off
669 Broken axle
670 Inconspicuous colour
671 Blind spot
672 Seat belt / restraint failed
673 Air-bag failed to inflate (fully)

- 680 **Load**
681 Load interferes with driver
682 Not well secured or load moved
683 Over-hanging
684 Load obscured vision
685 Excess dimensions not adequately indicated
686 Over dimension vehicle or load
687 Load too heavy
688 Towed vehicle or trailer too heavy or incompatible

- 690 **Miscellaneous vehicle**
691 Emergency Vehicle attending emergency
692 Vehicle caught fire
693 Being towed
694 Air-bag contributed to crash or injury
695 Seatbelt / restraint absent or unusable
696 Dangerous goods

PEDESTRIANS

- 700 **Walking along road**
701 Not keeping to footpath
702 Not keeping to side of road
703 Not facing oncoming traffic
704 Not on outside of blind curve
705 Wheeled ped inconsiderate or dangerous on footpath

- 710 **Crossing road**
711 Walking heedless of traffic
712 Stepping out from behind vehicles
713 Running heedless of traffic
714 Failed to use pedestrian crossing when one within 20 metres
715 Waiting on roadway for moving traffic
716 Confused by traffic or stepped back
717 Suddenly stepped onto pedestrian crossing
718 Not complying with traffic signals or school patrols
719 Misjudged speed and / or distance of vehicle

- 720 **Miscellaneous**
721 Pushing, working on or unloading vehicle
722 Playing on road or unnecessarily on road
723 Working on road
724 Wearing dark clothing
725 Vision obscured by umbrella or clothing
726 Child escaped from supervision
727 Unsupervised child
728 Sitting / lying on road
729 Pedestrian from school bus
730 Pedestrian behind reversing / manoeuvring vehicle
731 Overseas pedestrian

ROAD

- 800 **Slippery**
801 Rain
802 Frost or ice
803 Snow or hail
804 Loose material on seal
805 Mud
806 Oil / Diesel / Fuel
807 Painted markings
808 Recently graded
809 Surface bleeding / defective

- 810 **Surface**
811 Potholed
812 Uneven
813 Deep loose metal
814 High crown
815 Curve not well banked
816 Edge badly defined or gave way
817 Under construction or maintenance
818 Unusually narrow
819 Broken glass

- 820 **Obstructed**
821 Fallen tree or branch
822 Slip or subsidence
823 Flood waters, large puddles, ford
824 Road works not adequately lighted
825 Road works not adequately signposted
826 Roadside object fell on vehicle
827 Object flicked up by vehicle

- 830 **Visibility limited**
831 Curve
832 Crest
833 Building
834 Trees
835 Hedge or fence
836 Scrub or long grass
837 Bank
838 Temporary obstruction, dust or smoke
839 Parked vehicle

- 840 **Signs and signals**
841 Damaged, removed or malfunction
842 Badly located
843 Ineffective or inadequate
844 Necessary
845 Signals turned off

- 850 **Markings**
851 Faded
852 Difficult to see under weather conditions
853 Markings necessary
854 Not visible due to geometry or vehicles
855 Old markings not adequately removed

- 860 **Street lighting**
861 Failed
862 Inadequate
863 Glare on wet road
864 Pedestrian crossing not adequately lighted

- 870 **Raised islands and roundabouts**
871 Traffic island(s) difficult to see
872 Traffic island(s) Ineffective, badly located or designed
873 Cyclist squeeze point

MISCELLANEOUS

- 900 **Weather**
901 Heavy rain
902 Dazzling sun
903 Strong wind
904 Fog or mist
905 Snow, sleet or hail

- 910 **Animals**
911 Household pet rushed out or playing
912 Farm animal straying
913 Farm animal attended, but inadequate warning or unexpected
914 Farm animal attended, but out of control
915 Wild animal

- 920 **Entering or leaving land use**
921 Roadside stall
922 Service station
923 Specialised liquor outlet
924 Take away foods
925 Shopping complex
926 Car parking building / area
927 Other commercial
928 Industrial site
929 Private house / farm
930 Other non-commercial
931 Mobile shop or vendor

- 999 **Unknown**