
ROAD SAFETY OUTCOMES

Supplement to the NZ Transport Agency's
Quarterly results and insights

1 October to 31 December 2018

Q2 2018/19



Cover picture: **Safe Speed.** Speed cameras that calculate a motorist's average speed, such as these units in the United Kingdom, have successfully reduced the number of fatal crashes overseas. Two hazardous stretches of Auckland motorway, the Waterview Tunnel and southern motorway, will host point-to-point speed cameras in a 2019 trial. The camera system determines the average speed a car is travelling along a stretch of road by snapping the registration at two separate points, then calculating the average speed using the time it took to cover the distance between them. Tickets are only issued to drivers if their average speed, over the entire distance between the two cameras, exceeds the legal limit. The new cameras, with extra warning signs, give people an incentive to slow down on high-risk roads.

This quarterly summary of road safety outcomes shows:

- an overall picture of fatal and serious casualties in road crashes over the past five years
- a set of intermediate outcome measures for each of the *Safer Journeys* areas of concern, **by calendar year**
- the trend in a representative headline measure over the past five years for each of the *Safer Journeys* areas of concern
- trends in eight of the *Safer Journeys* areas of concern over the past five years in each NZ Transport Agency Relationship Zone
- Local Government Region and Police District comparisons against a representative headline outcome measure for each of the *Safer Journeys* areas of concern.

Outcome measures are provided for the most recently available quarter, to December 2018 in some cases but usually to September 2018. Injury data from the Crash Analysis System and from hospital discharge data are incomplete for the most recent quarter and should be treated as provisional.

Some measures are only available on an annual basis. National outcome measures are not always available at Regional or Police District level, so alternative headline measures are presented in the relevant charts. In the Regional and Police District charts, some measures are shown on an averaged three-yearly basis where the numbers are too small to give meaningful single year comparisons.

Key results for the quarter

- 102 people were killed in road crashes in the quarter, resulting in a total of 379 killed in the last 12 months, back to the highest 12 month total since 2010
- hospitalisations and ACC claim numbers have also continued to increase, particularly among **pedestrians and cyclists** and **older road users**
- several casualty indicators from reported crashes have decreased for 3 quarters in succession, including those for overall DSIs, alcohol, speed, young drivers and high risk drivers
- casualties in crashes involving driver **fatigue or distraction** occur at higher rates than the rest of the country in Waikato, Nelson-Tasman-Marlborough, and Southland.

More information ...

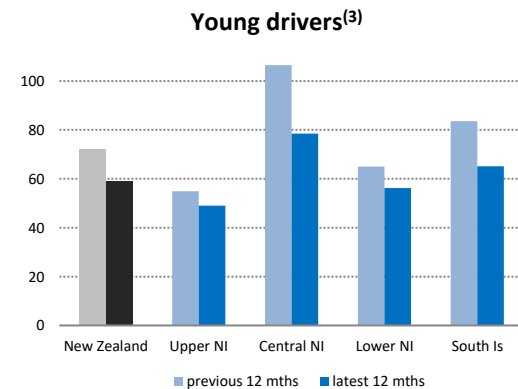
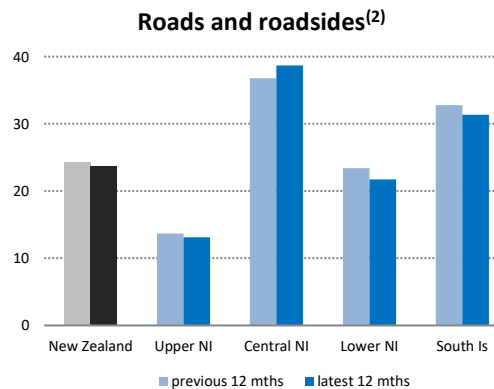
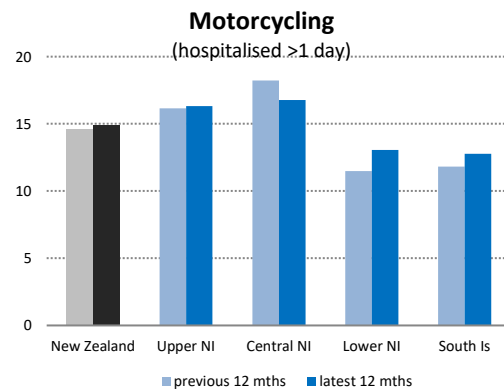
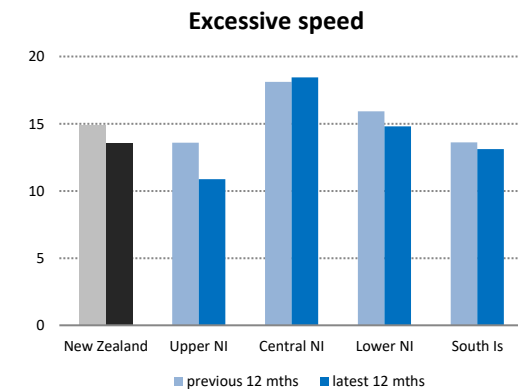
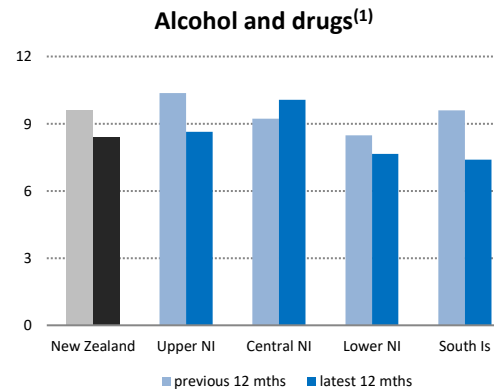
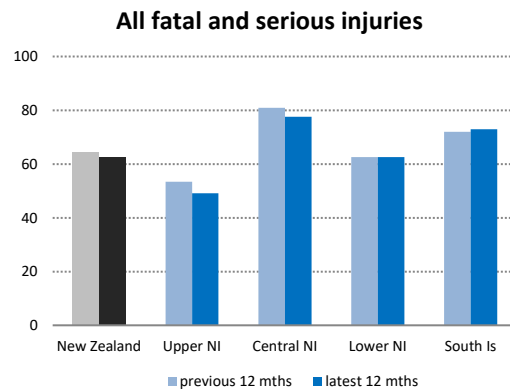
Published 31 January 2019
NZ Transport Agency, Private Bag 6995, Wellington 6141

This document and its time series data are available on the NZ Transport Agency's website at <http://www.nzta.govt.nz/resources/road-safety-outcomes/>.

HIGH PRIORITIES: NZTA RELATIONSHIP ZONES, 2017/18 and 2018/19

The following charts compare per capita casualty rates for the *Safer Journeys* high priority road safety concerns in the four NZ Transport Agency Relationship Zones*, which apply from February 2017. The rates for the latest (to Sep. 2018) and the preceding 12 months, allow comparisons across years, zones and priority concerns.

Fatal and serious injuries in crashes, per 100,000 population



The North Island relationship zones comprise Upper NI (Northland and Auckland), Central NI (Waikato, Bay of Plenty and Taranaki) and Lower NI.

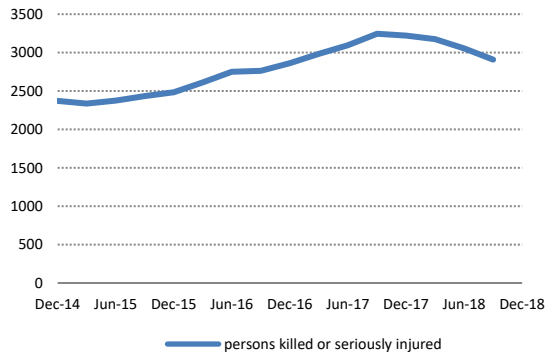
(1) alcohol only, if confirmed by breath/blood test; (2) casualties result from open road head-on and run off road crashes (80-100 km/h); (3) young driver rates are per 100,000 15-24 year olds.

ROAD SAFETY OUTCOME TRENDS 2014-2018 (12 month rolling figures)

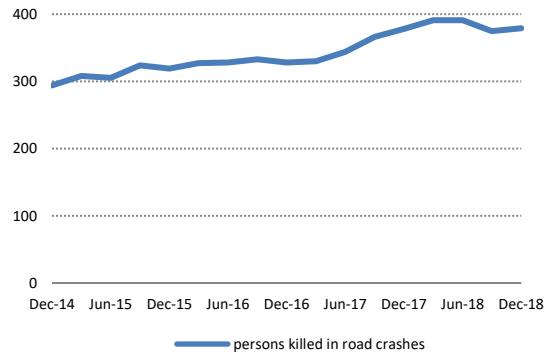
Road safety outcome measures in the following charts and tables are provided for the last five years, up to the most recently available quarter. The measures are obtained from the Transport Agency's Crash Analysis System*, ACC entitlement claims, Ministry of Health hospital discharge data*, Ministry of Transport speed, restraint and public attitude surveys, Statistics NZ population data, and new vehicle registration figures.

(* Injury data from the Crash Analysis System and from hospital discharge data are incomplete for the most recent quarter and should be treated as provisional.)

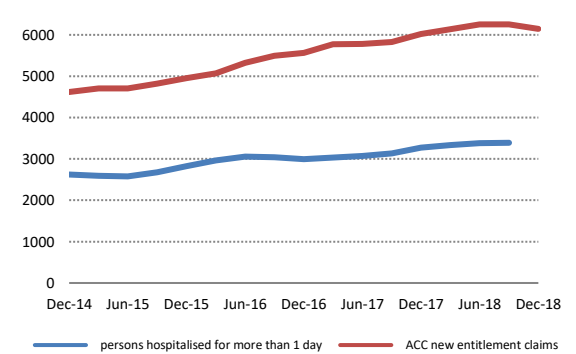
Overall outcomes: DSIs



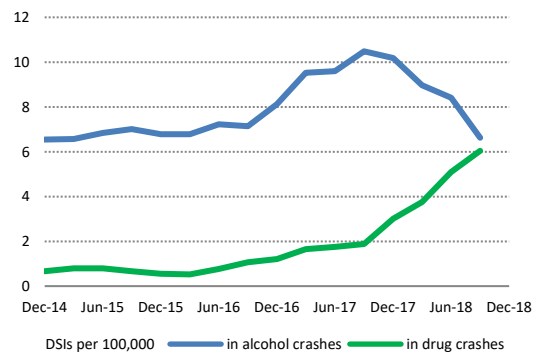
Overall outcomes: fatalities



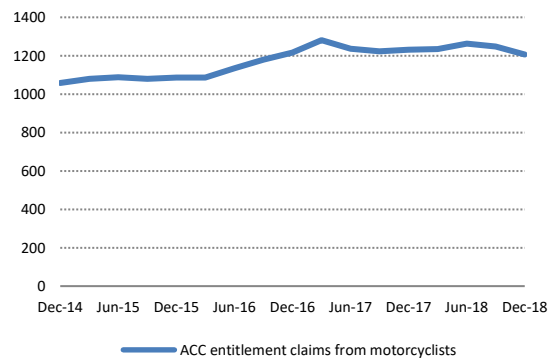
Overall outcomes: injuries



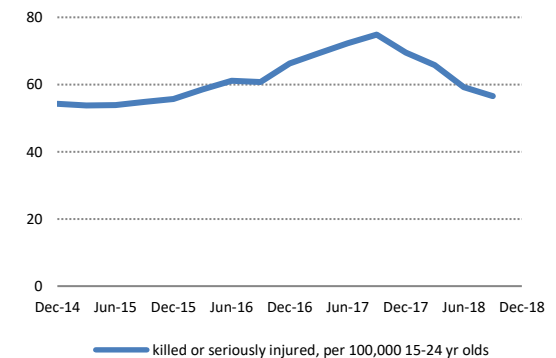
Alcohol and drugs

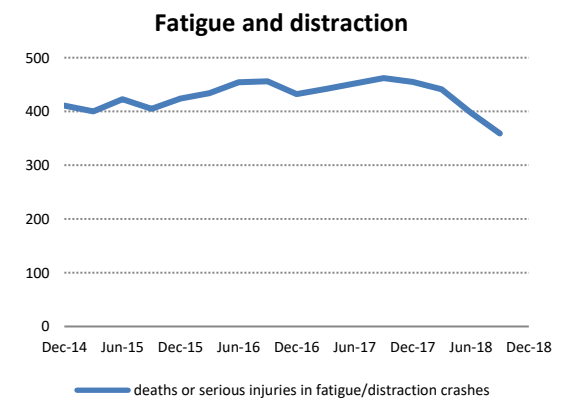
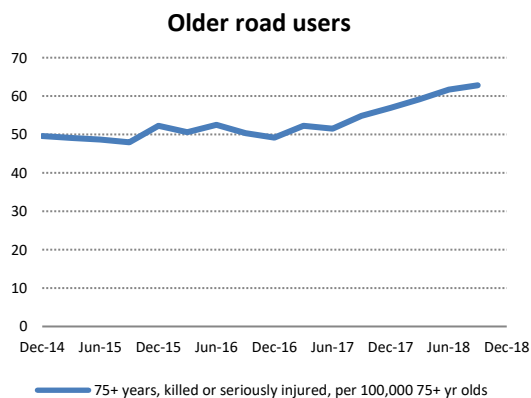
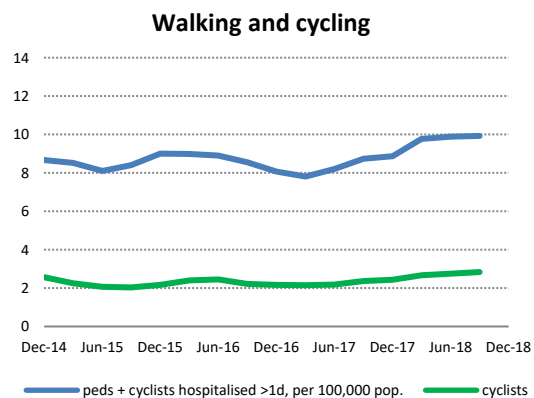
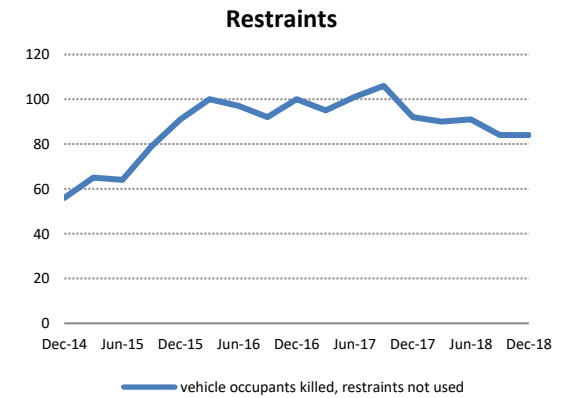
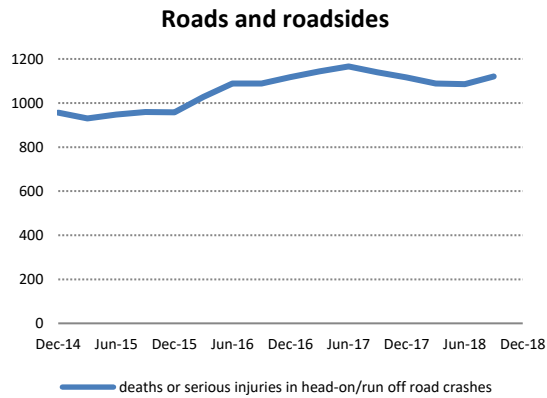
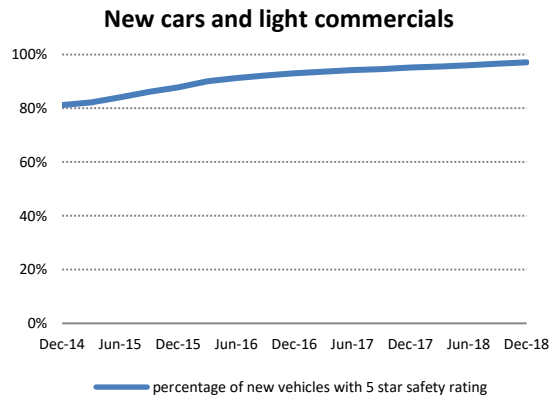
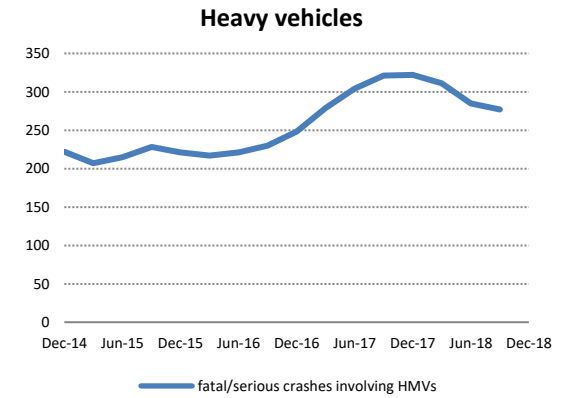
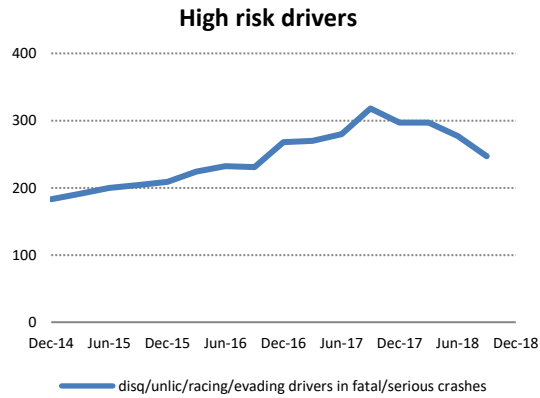
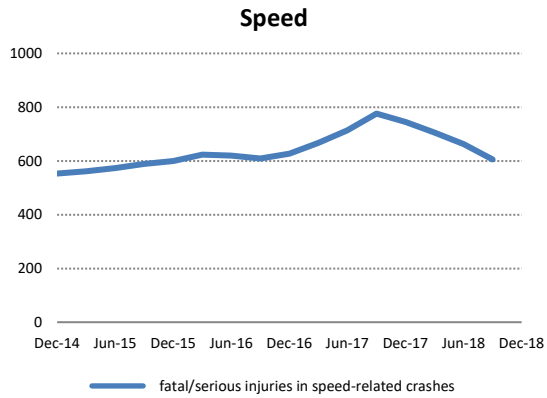


Motorcycling



Young drivers





NATIONAL ROAD SAFETY OUTCOMES IN DETAIL	LATEST FIGURES			LAST FIVE CALENDAR YEARS				
	latest quarter	latest 12 months	as at	2014	2015	2016	2017	2018
Overall outcomes								
persons killed or seriously injured in road crashes	606	2907	Sep 2018	2369	2483	2864	3219	
fatal or serious injury crashes	516	2414	Sep 2018	2003	2124	2401	2733	
persons killed in road crashes	102	379	Dec 2018	294	319	328	378	379
persons killed in road crashes, per 100,000 population, per year	6.4	7.7	Dec 2018	6.5	6.9	6.9	7.8	7.7
persons killed in road crashes, per billion vehicle km travelled	6.5	7.8	Dec 2018	6.9	7.5	7.4	8.2	7.8
persons killed or seriously injured, per 100,000 population, per year	49	5.9	Sep 2018	52	53	60	66	
persons hospitalised for more than 1 day (>1d), non-fatal	729	3390	Sep 2018	2626	2822	2996	3269	
ACC new entitlement claims	1464	6145	Dec 2018	4618	4953	5567	6024	6145
Alcohol and drugs								
fatal or serious injuries in alcohol (+ve test), per 100,000 population, per year	3.4	6.6	Sep 2018	6.5	6.8	8.1	10.2	
drivers killed with excess alcohol, per 100,000 population	1.0	1.0	Jun 2018	0.7	1.1	1.1	1.0	
fatal or serious injuries in drug-related crashes (suspected/confirmed), per 100,000	5.6	5.4	Sep 2018	0.5	1.2	3.0	6.0	
% think high probability being stopped at CBT checkpoint	-	50%	2016	50%	49%	50%	-	
% admit driven while affected by prescription or other drugs	-	9%	2016	10%	8%	9%	-	
Young drivers								
young drivers killed or seriously injured, per 100,000 15-24 year olds, per year	54	57	Sep 2018	54	56	66	70	
young drivers (15-24 years) hospitalised >1d, per 100,000 15-24 year olds, per year	45	50	Sep 2018	46	45	45	53	
young drivers (15-24 years) killed, per 100,000 15-24 year olds, per year	6.5	8.2	Dec 2018	4.6	8.1	6.7	6.8	8.2
young drivers (15-24 years) killed with excess alcohol, per 100,000 15-24 yr olds, per year	1.8	2.1	Jun 2018	2.0	2.9	3.3	2.5	
% youth believe will be stopped for non-alcohol/speed traffic offences	-	39%	2016	49%	45%	39%	-	
drivers on GDL primary contributor in fatal/serious crashes	65	289	Sep 2018	245	289	308	371	
fatal and serious crashes involving 15-19 year old drivers	65	297	Sep 2018	233	278	341	328	
Speed								
deaths or serious injuries in speed-related crashes	122	606	Sep 2018	553	599	627	745	
% vehicles exceeding 100 km/h limits	-	23%	2015	22%	23%			
deaths or serious injuries in open road (80-100km/h) crashes	306	1604	Sep 2018	1331	1336	1599	1715	
fatal/serious speed-related crashes	102	472	Sep 2018	447	502	492	598	
% disagree probability being detected speeding is small	-	55%	2016	57%	57%	55%	-	
mean rural speed (km/h)	-	95.7	2015	95.3	95.7			
mean urban speed (km/h)	-	50.4	2015	51.1	50.4			
Motorcycling								
ACC entitlement claims from motorcyclists	279	1207	Dec 2018	1058	1087	1217	1232	1207
motorcycle and moped riders killed, per 100,000 population, per year	1.3	1.1	Dec 2018	0.9	1.1	1.1	0.9	1.1
% of motorcycles in crashes with non-current WoFs	16%	16%	Sep 2018	25%	25%	20%	16%	
motorcyclists hospitalised >1d, per 100,000 population, per year ⁽¹⁾	10.9	14.9	Sep 2018	12.4	13.2	13.9	15.0	
Roads and roadsides								
fatal or serious injuries in head-on* and run off road crashes, 80-100 km/h roads	207	1120	Sep 2018	956	957	1118	1116	
fatal or serious injuries in head-on (* not overtaking) crashes, 80-100 km/h roads	70	420	Sep 2018	322	323	316	339	
fatal or serious injuries in run off road crashes, 80-100 km/h roads	137	700	Sep 2018	634	634	802	777	
fatal or serious injuries in intersection crashes	174	803	Sep 2018	712	718	819	919	
fatal or serious injuries in pedestrian/cyclist crashes	124	494	Sep 2018	434	449	470	542	
fatal or serious injuries in all crashes on SH network	211	1123	Sep 2018	937	931	1057	1194	

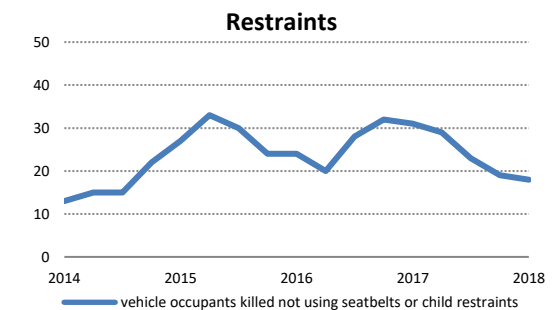
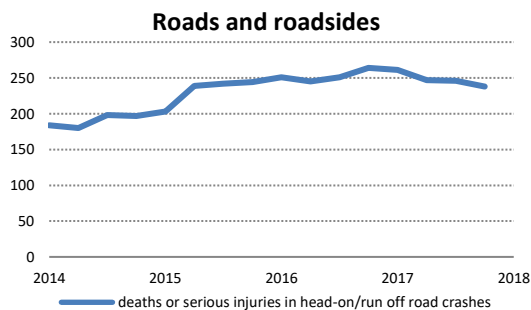
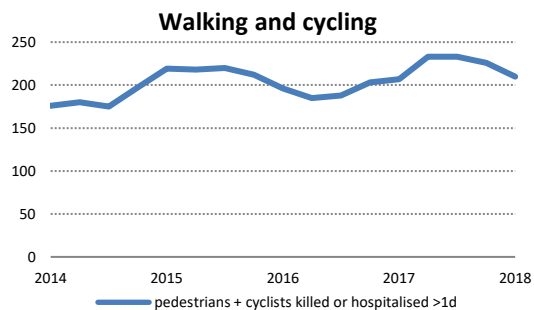
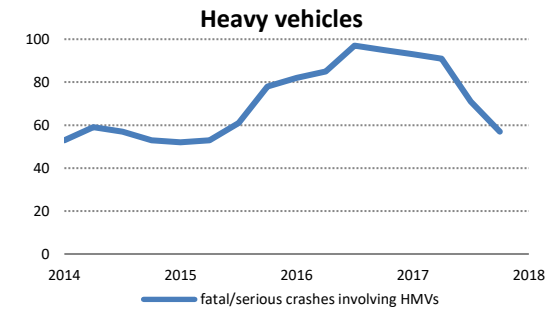
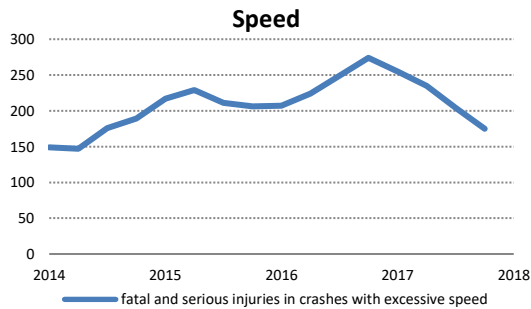
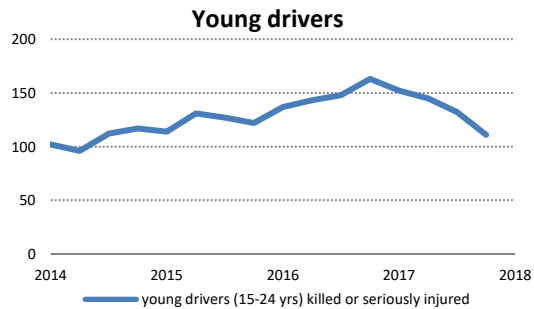
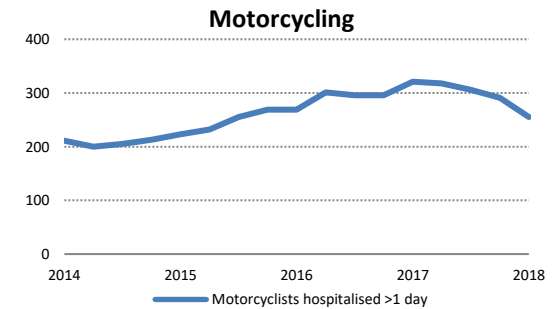
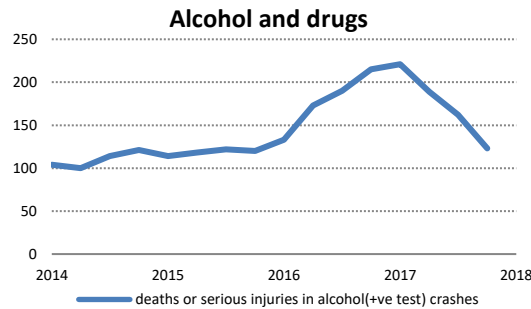
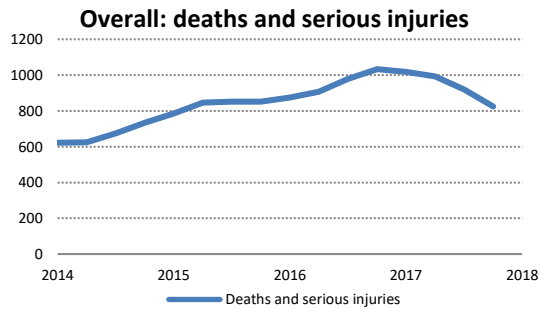
NATIONAL ROAD SAFETY OUTCOMES IN DETAIL	LATEST FIGURES			LAST FIVE CALENDAR YEARS				
	latest quarter	latest 12 months	as at	2014	2015	2016	2017	2018
High risk drivers								
high risk drivers⁽²⁾ in fatal or serious injury crashes	57	247	Sep 2018	183	209	268	296	
disqualified drivers detected driving	1942	7685	Sep 2018	7860	7368	7938	7877	
notices issued for 3 rd or subsequent drunk/drugged driving offences	1066	4404	Sep 2018	4974	4281	4242	4353	
disqualified or unlicensed drivers involved in fatal/serious crash	53	214	Sep 2018	167	185	241	244	
Light vehicles								
% of new vehicles with 5-star safety rating	98%	97%	Dec 2018	81%	88%	93%	95%	97%
% of vehicles in fatal/serious crashes with non-current WOFs ⁽¹⁾	19%	16%	Sep 2018	9%	11%	15%	18%	
% of fatal/serious injuries in crashes with contributing vehicle faults	4.1%	4.1%	Sep 2018	3.2%	2.9%	5.0%	4.6%	
average (median) age of light vehicle fleet (years)	-	14.2	Dec 2017	14.0	14.0	14.1	14.1	
Fatigue and distraction								
fatal or serious injuries in fatigue/distraction crashes	68	359	Sep 2018	411	424	432	455	
fatal/serious injuries in crashes with contributing driver fatigue	30	165	Sep 2018	196	214	206	178	
fatal/serious injuries in crashes with contributing driver distraction	39	196	Sep 2018	225	220	245	281	
Heavy vehicles								
fatal/serious crashes involving HMVs	73	277	Sep 2018	222	221	248	322	
fatal/serious injuries in HMV crashes	84	345	Sep 2018	277	259	321	403	
% of fatal/serious HMV crashes where HMV was primary contributor	56%	51%	Sep 2018	47%	53%	44%	47%	
% of HMV drivers exceeding 90 km/h speed limit	-	31%	2015	31%	31%	-	-	
Walking and cycling								
pedestrians and cyclists hospitalised >1d, per 100,000 population, per year	7.2	9.9	Sep 2018	8.7	9.0	8.1	8.9	
pedestrians hospitalised >1 day, per 100,000 population, per year	4.3	7.1	Sep 2018	6.1	6.8	5.9	6.4	
pedestrians and cyclists killed, per 100,000 population, per year	0.6	0.9	Dec 2018	1.2	0.7	0.7	1.2	0.9
fatal or serious injuries to school age (5-17) cyclists and pedestrians	17	74	Sep 2018	78	67	65	73	
cyclists killed or hospitalised >1 day	36	147	Sep 2018	127	107	108	136	
% cyclists wearing helmets	-	94%	2015	-	94%	-	-	
Older road users								
persons 75+ yrs killed or seriously injured in crashes, per 100,000 75+ yr olds, per year	61	63	Sep 2018	50	52	49	57	
persons 75+ years killed in road crashes	11	43	Dec 2018	36	30	27	37	43
persons 75+ years hospitalised >1d	93	401	Sep 2018	317	335	377	382	
persons 75+ years, ACC claims, per 100,000 75+ year olds, per year	81	82	Sep 2018	75	80	80	80	82
Restraints								
vehicle occupant deaths where restraints not worn	20	84	Dec 2018	56	91	100	92	84
% of children (5-9 years) in booster seats or child restraints	-	26%	2015	-	26%	-	-	
% front seat adult vehicle occupants restrained	-	97%	2016	97%	-	97%	-	
% child (0-4 years) vehicle occupants restrained	-	93%	2016	93%	-	93%	-	
% drivers think highly likely to be stopped for non-compliance	-	40%	2016	43%	41%	40%	-	
Overseas-licensed drivers involved in fatal/serious crash	14	125	Sep 2018	126	127	142	151	

(1) The national headline measure is not available at regional/district level; this measure is used instead for local government region and police district charts

(2) High risk driver = disqualified, unlicensed, illegal street racing, evading enforcement

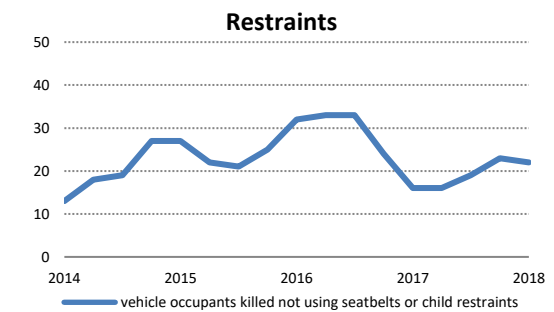
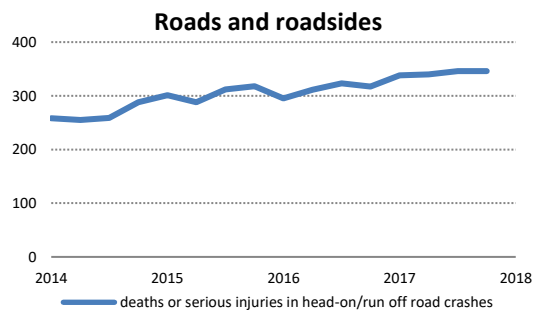
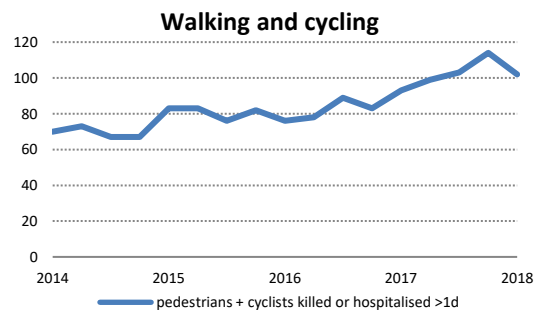
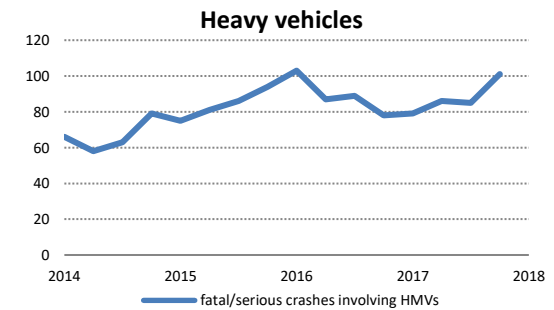
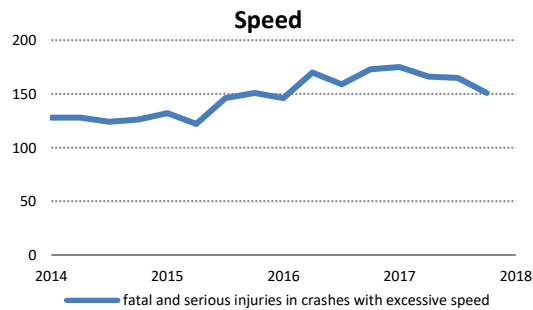
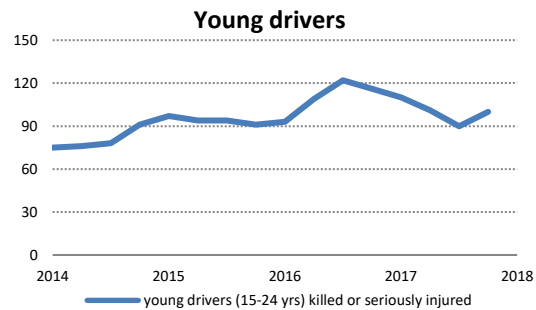
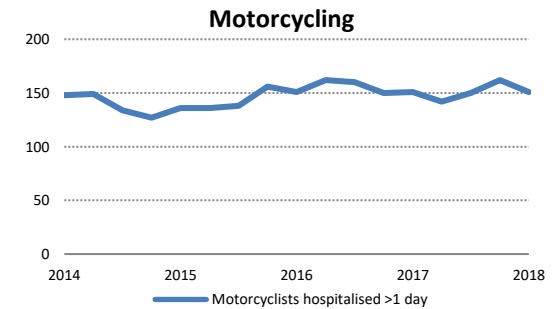
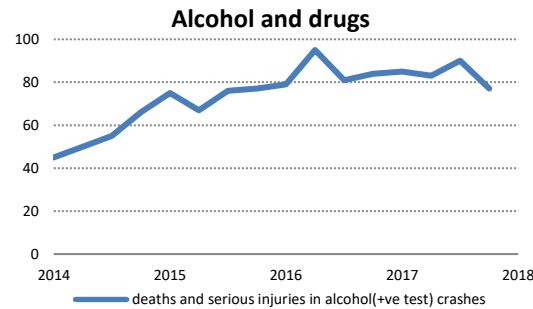
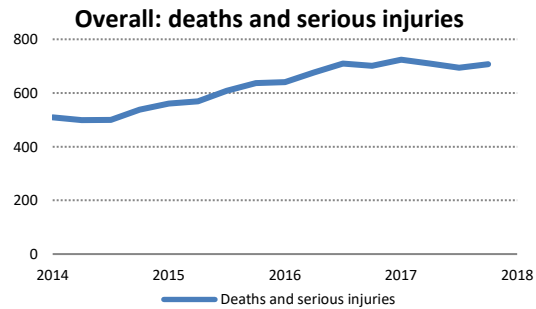
REGIONAL OUTCOME TRENDS, UPPER NORTH ISLAND (12 month rolling figures)

Road safety outcome measures for the four Transport Agency regional groupings are provided for the last five years in the following charts, up to the most recently available quarter, for eight of the *Safer Journeys* high and medium areas of concern. The measures are a subset of the national outcome measures presented earlier in this report (pages 4 - 7). Data for the other areas of concern are available in the [regional time series spreadsheet](#) accompanying this report.



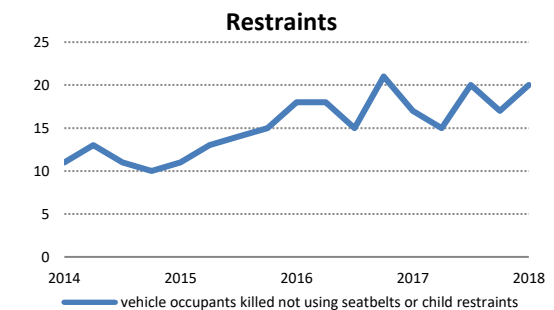
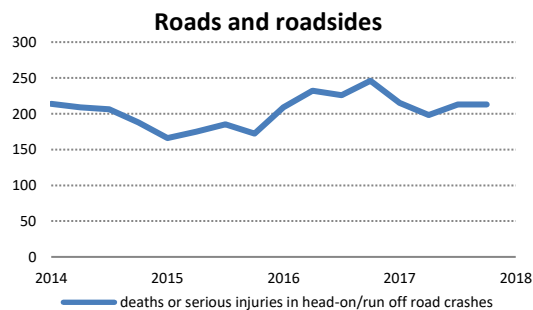
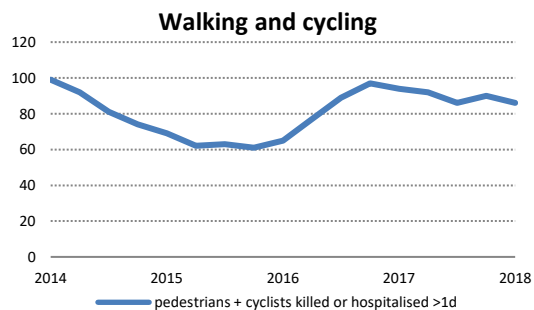
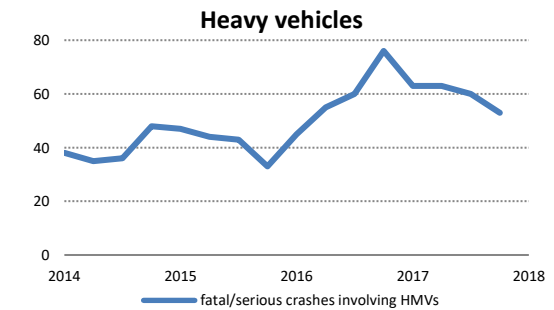
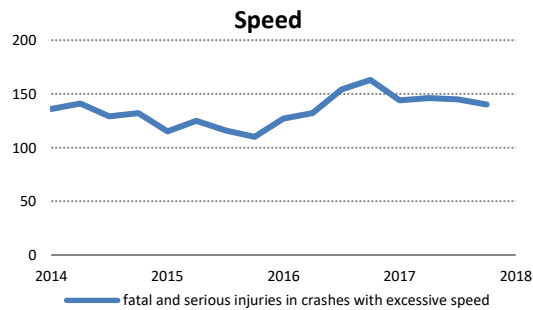
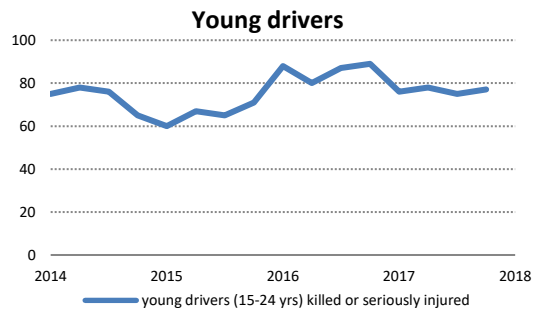
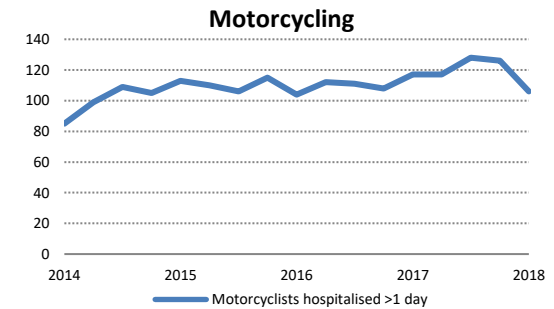
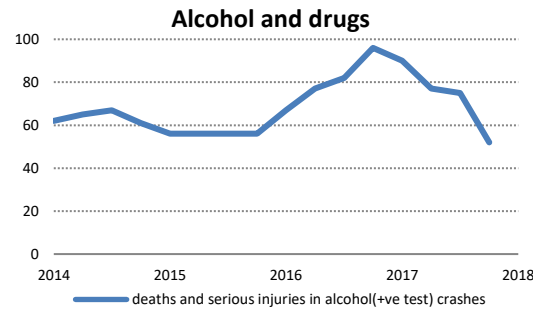
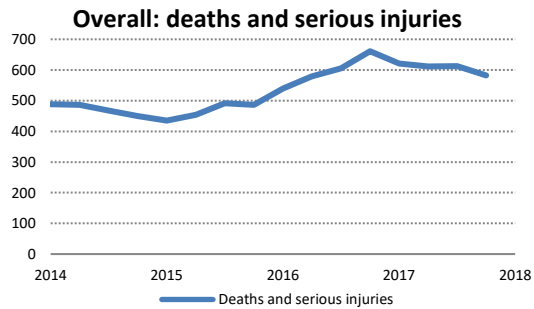
REGIONAL OUTCOME TRENDS, CENTRAL NORTH ISLAND (12 month rolling figures)

Road safety outcome measures for the four Transport Agency regions are provided for the last five years in the following charts, up to the most recently available quarter, for eight of the *Safer Journeys* high and medium areas of concern. The measures are a subset of the national outcome measures presented earlier in this report (pages 4 – 7). Data for the other areas of concern are available in the [regional time series spreadsheet](#) accompanying this report.



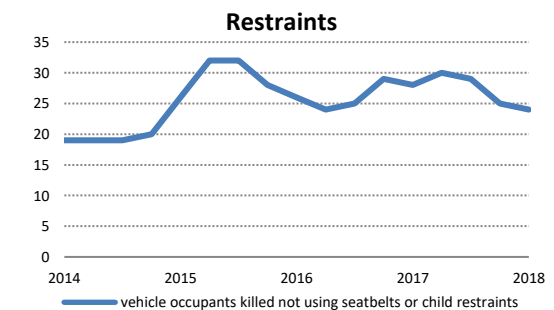
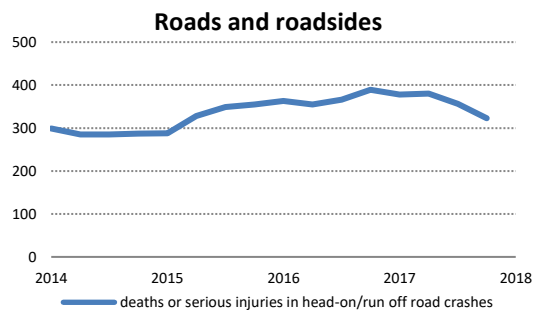
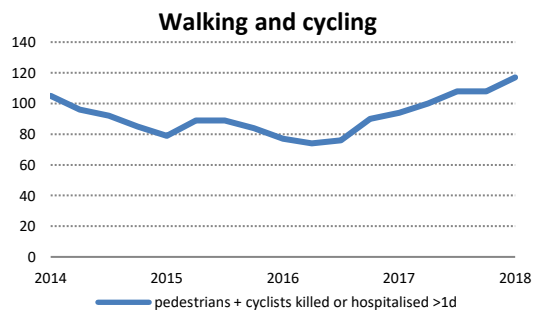
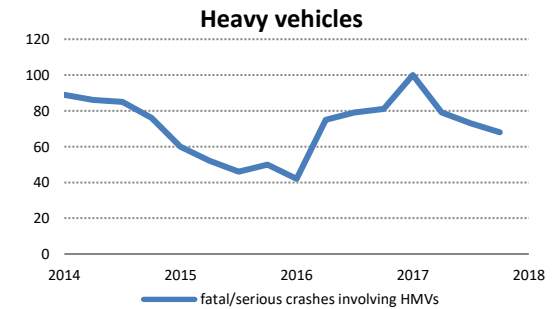
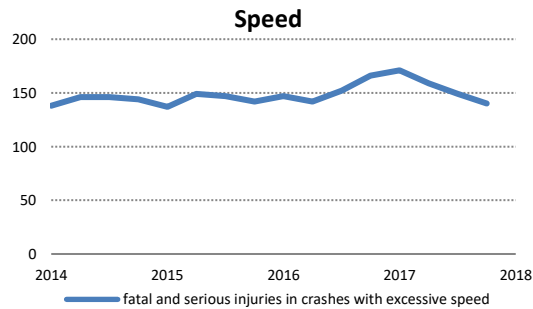
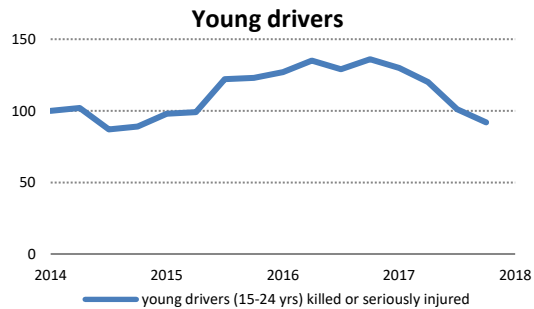
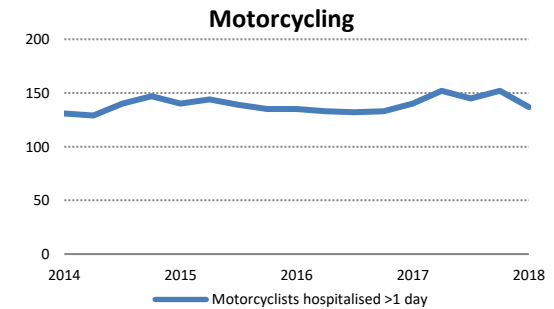
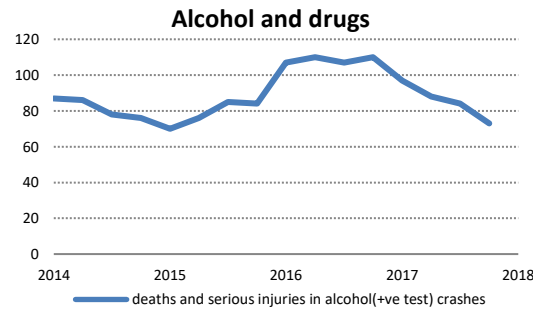
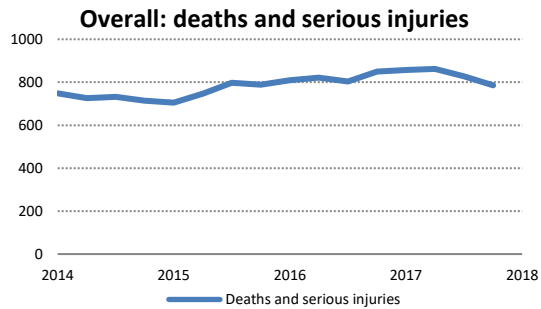
REGIONAL OUTCOME TRENDS, LOWER NORTH ISLAND (12 month rolling figures)

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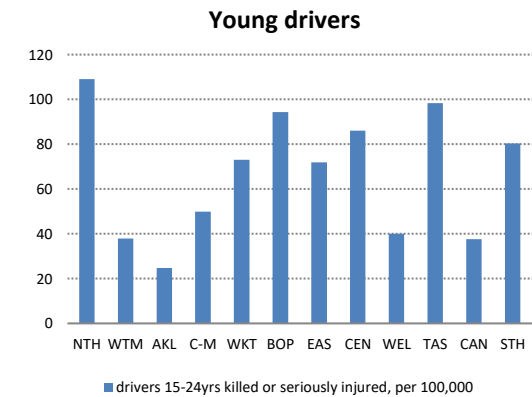
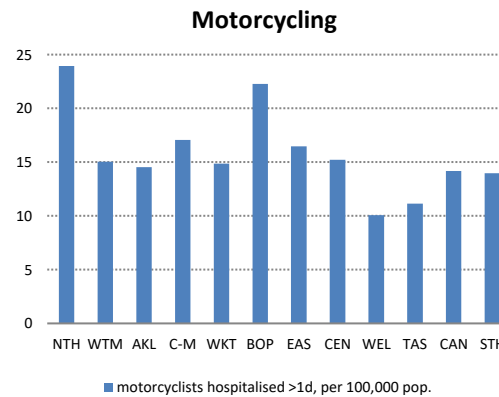
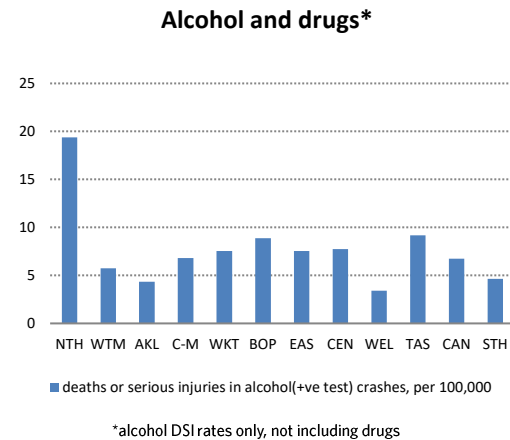
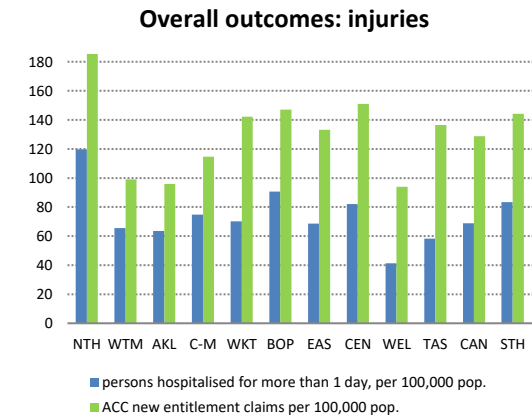
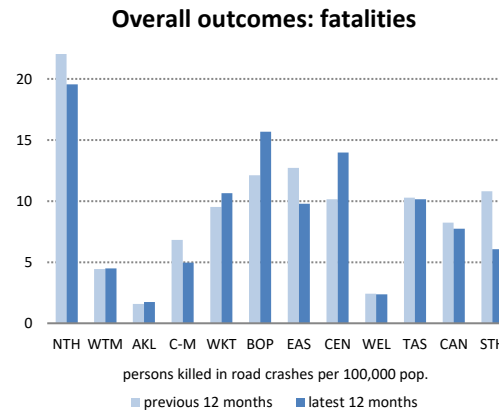
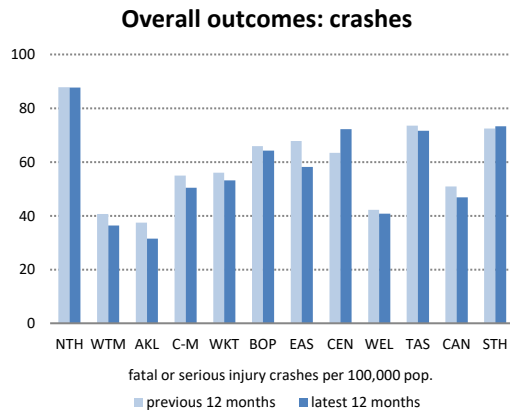
REGIONAL OUTCOME TRENDS, SOUTH ISLAND (12 month rolling figures)

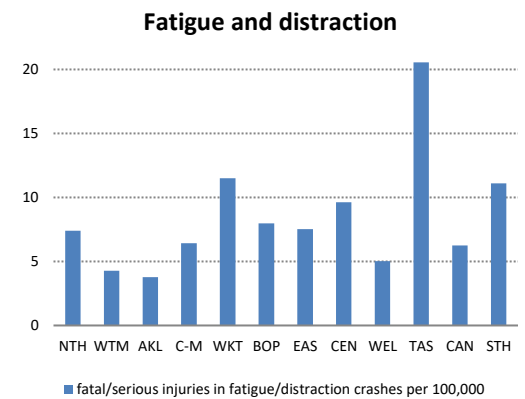
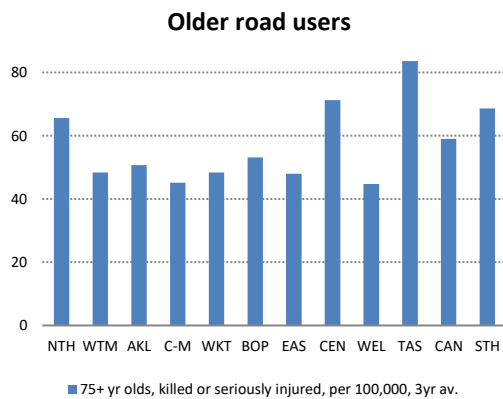
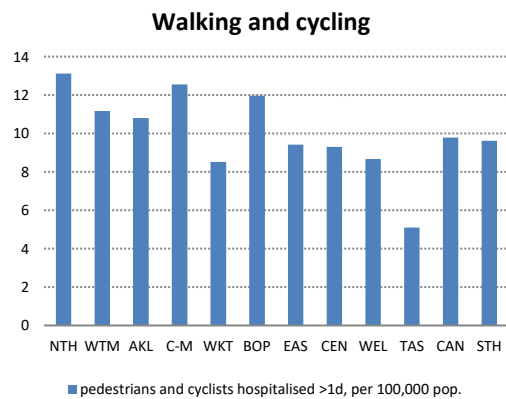
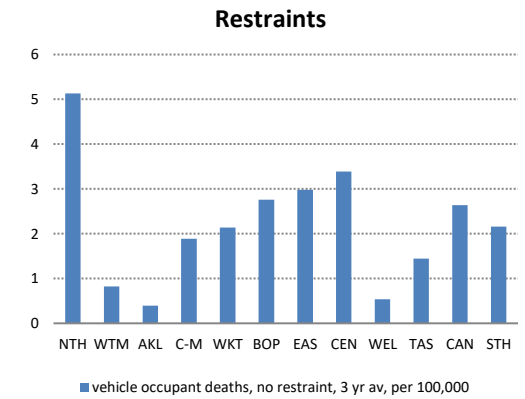
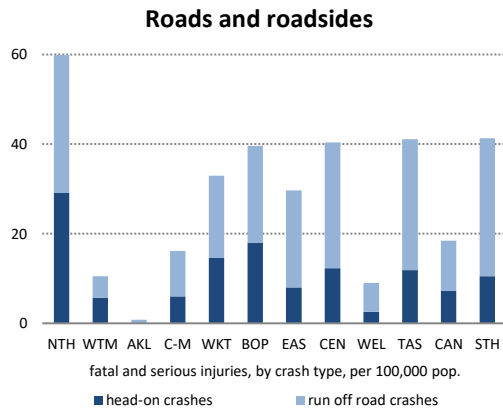
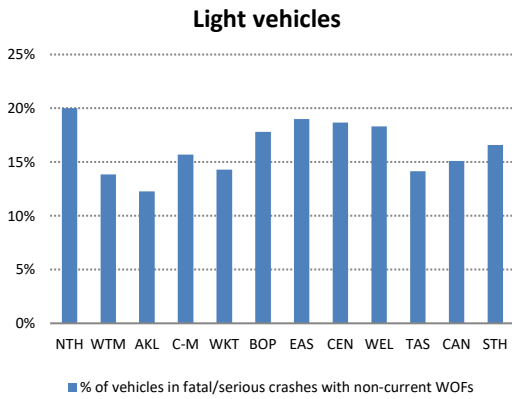
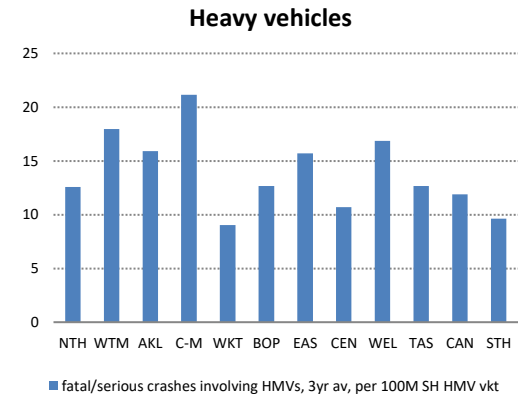
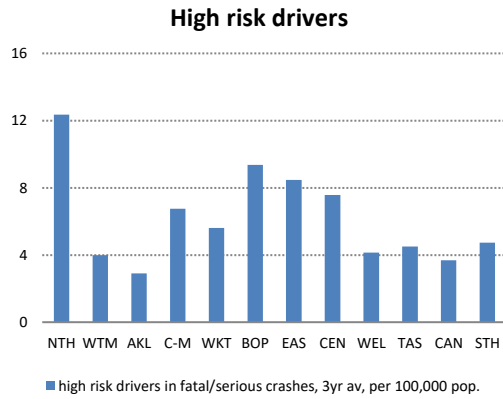
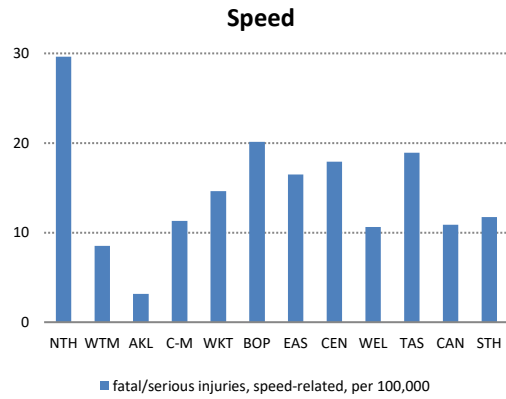
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COMPARISON OF ROAD SAFETY OUTCOMES BY POLICE DISTRICT

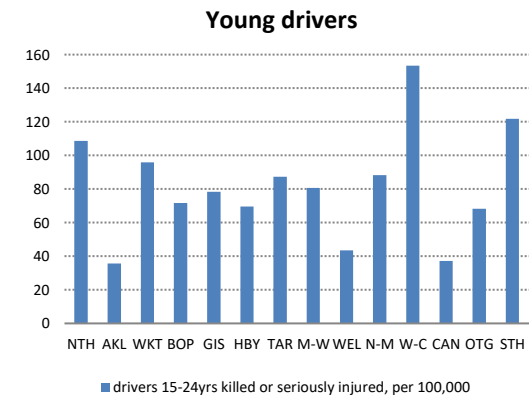
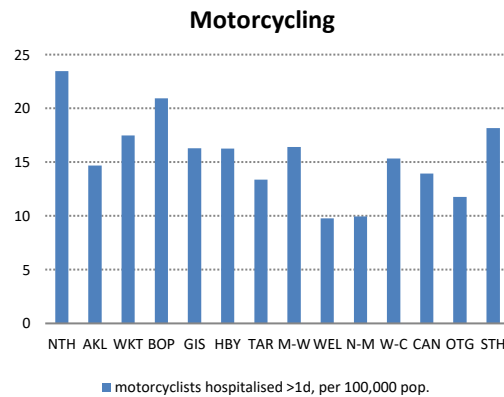
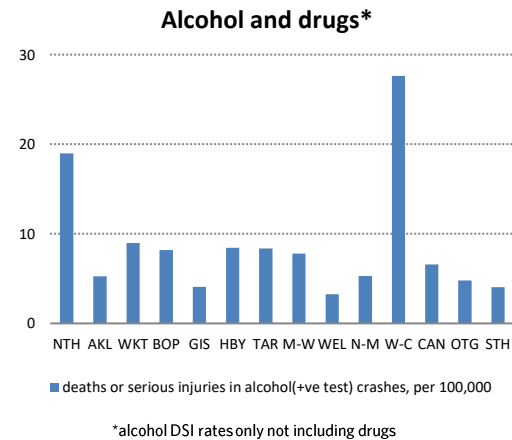
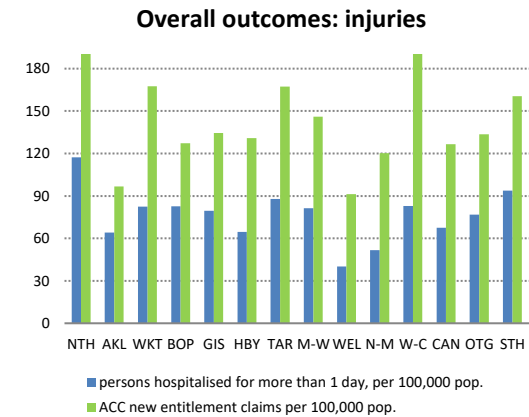
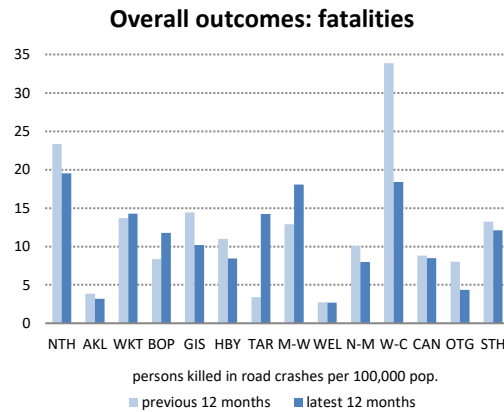
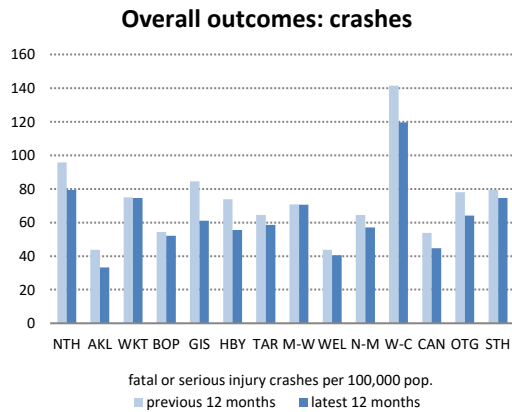
The following charts and tables show headline outcome measures for the 12 months to the end of the latest available quarter. Alternative measures are shown if the national measure is not available at a regional or Police district level. In cases where the numbers involved are too small to give meaningful single year comparisons, some measures are shown on an averaged three-yearly basis.

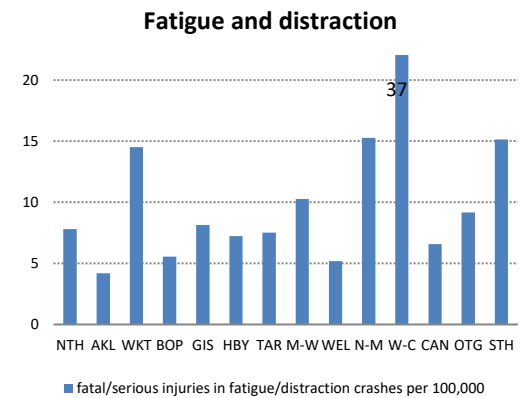
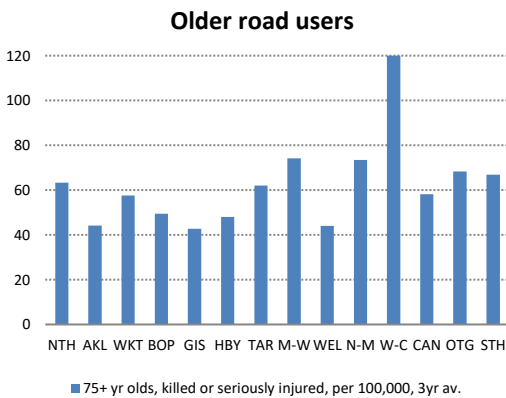
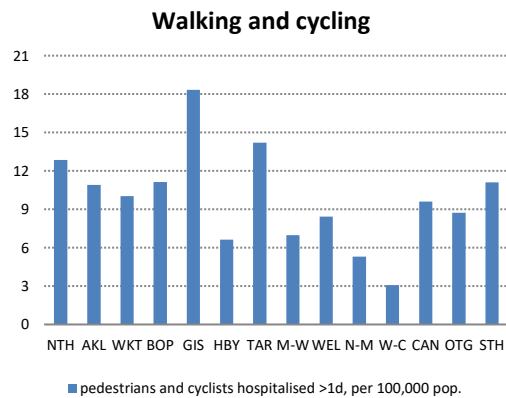
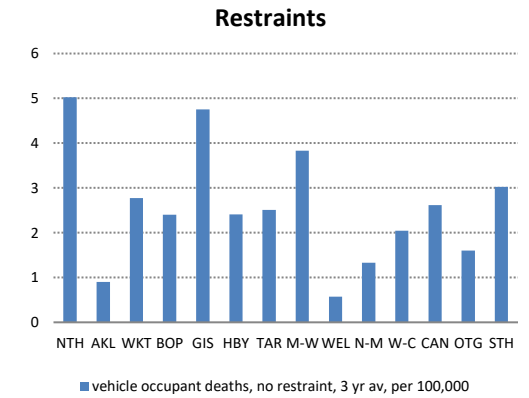
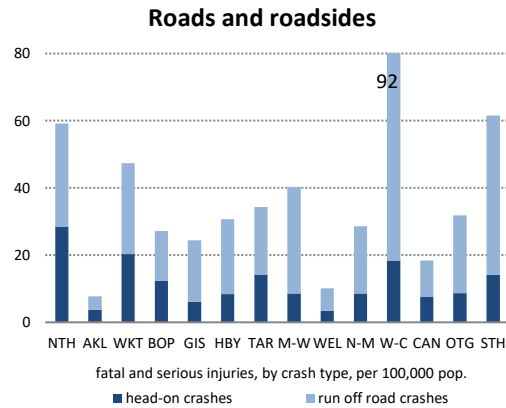
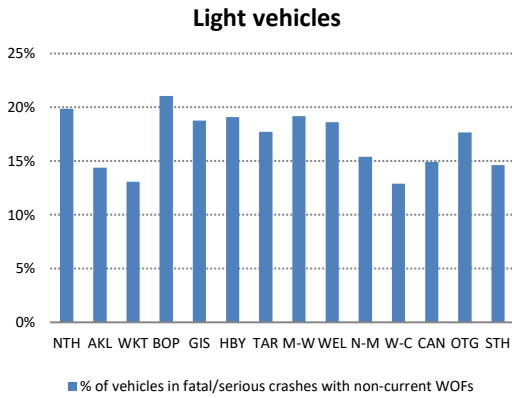
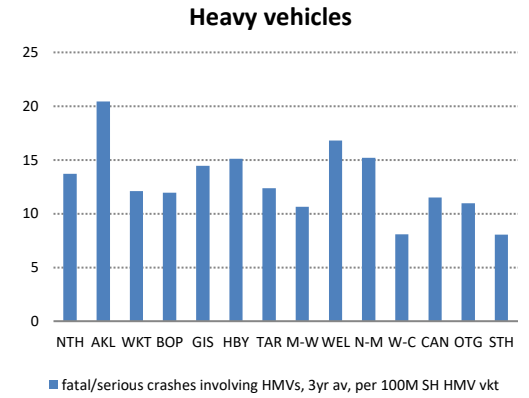
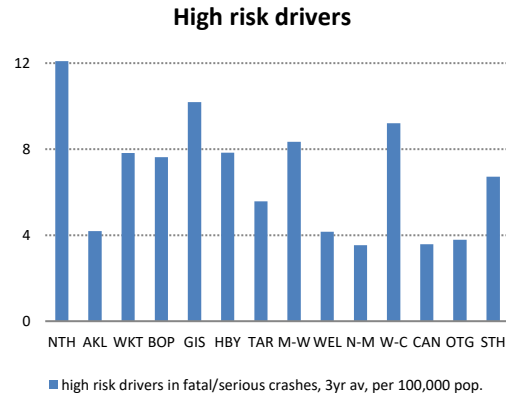
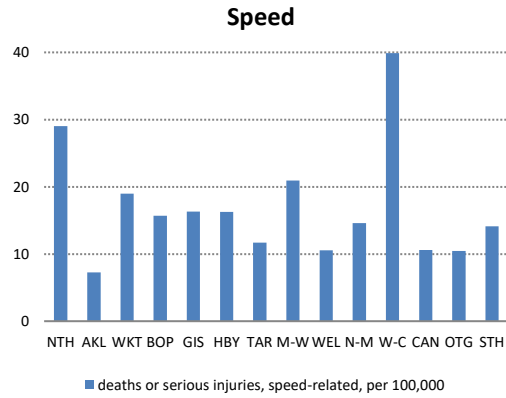




COMPARISON OF ROAD SAFETY OUTCOMES BY LOCAL GOVERNMENT REGION

The following charts and tables show headline outcome measures for the 12 months to the end of the latest available quarter. Some alternative measures are shown if the national measure is not available at a regional or police district level. In cases where the numbers involved are too small to give meaningful single year comparisons, some measures are shown on an averaged three-yearly basis.





POLICE DISTRICT ROAD SAFETY OUTCOMES		NTH	WTM	AKL	C-M	Total Auck	WKT	BOP	EAS	CEN	WEL	TAS	CAN	STH	NZ
Overall	fatal or serious injury crashes per 100,000 popn.	78	31	32	40	34	68	60	57	69	39	68	45	67	52
	persons killed in road crashes, per 100,000 popn.	20	5	1	4	3	11	15	9	17	3	10	9	7	7.9
	persons hospitalised more than 1 day (>1d) , per 100000 popn.	120	66	63	75	68	70	91	69	82	41	58	69	83	71
	ACC new entitlement claims, per 100000 popn.	208	99	96	115	103	142	147	133	151	94	137	129	144	128
Alcohol*	deaths or serious injuries in alcohol(+ve test) crashes, per 100,000	19	6	4	7	6	8	9	8	8	3	9	7	5	7
Youth	young driver fatal/serious injuries, per 100,000 15-24 year olds	109	38	25	50	37	73	94	72	86	40	98	38	80	57
Speed	deaths + serious injuries in speed related crashes, per 100,000 popn.	30	9	3	11	8	15	20	16	18	11	19	11	12	13
High risk	high risk drivers in fatal/serious crash, 3-year average per 100,000 popn.	12	4	3	7	5	6	9	8	8	4	5	4	5	6
Roads and roadsides	deaths + serious injuries in head-on crashes, per 100,000 popn.	29	6	0	6	4	15	18	8	12	3	12	7	10	9
	deaths + serious injuries, run off road crashes, per 100,000 popn.	31	5	1	10	5	18	22	22	28	6	29	11	31	15
	deaths + serious injuries, intersection crashes, per 100,000 popn.	10	10	12	18	13	21	15	14	20	12	14	25	25	17
	deaths + serious injuries in ped/cyclist crashes, per 100,000 popn.	10	7	12	10	10	10	9	10	8	13	15	9	14	10
Motorcycles	motorcyclists hospitalised >1d, per 100,000 popn.	24	15	15	17	16	15	22	16	15	10	11	14	14	15
Light vehicles	% of vehicles in fatal/serious crashes without current WoFs	20%	14%	12%	16%	14%	14%	18%	19%	19%	18%	14%	15%	17%	16%
Fatigue	fatal/serious injuries in fatigue/distraction crashes, per 100,000 popn.	7	4	4	6	5	12	8	8	10	5	21	6	11	7
Heavy vehicles	fatal/serious crashes involving HMTVs, 3yr avg, per 100m SH HMTV vkt	13	18	16	21	19	9	13	16	11	17	13	12	10	13
Walk/cycle	pedestrians and cyclists hospitalised >1d, per 100,000 popn.	13	11	11	13	11	9	12	9	9	9	5	10	10	10
Older users	persons 75+ years killed or seriously injured, per 100,000, 3yr avg.	66	48	51	45	48	48	53	48	71	45	84	59	69	56
Restraints	occupant deaths, restraints not worn, last 3 yrs, per 100,000 popn.	5.1	0.8	0.4	1.9	1.0	2.1	2.8	3.0	3.4	0.5	1.4	2.6	2.2	1.9

REGIONAL ROAD SAFETY OUTCOMES		NTH	AKL	WKT	BOP	GIS	HBV	TAR	M-W	WEL	N-M	W-C	CAN	OTG	STH
Overall	fatal or serious injury crashes per 100,000 popn.	79	33	75	52	61	55	59	71	40	57	120	45	64	75
	persons killed in road crashes, per 100,000 popn.	20	3	14	12	10	8	14	18	3	8	18	8	4	12
	persons hospitalised more than 1 day (>1d) , per 100,000 popn.	117	64	83	83	79	64	88	81	40	52	83	68	77	94
	ACC new entitlement claims, per 100,000 popn.	203	97	167	127	134	131	167	146	91	120	202	127	134	160
Alcohol*	deaths or serious injuries in alcohol(+ve test) crashes, per 100,000	19	5	9	8	4	8	8	8	3	5	28	7	5	4
Youth	young driver fatal/serious injuries, per 100,000 15-24 year olds	109	36	96	72	78	70	87	81	44	88	153	37	68	122
Speed	deaths + serious injuries in speed related crashes, per 100,000 popn.	29	7	19	16	16	16	12	21	11	15	40	11	10	14
High risk	high risk drivers in fatal/serious crash, 3yr avg, per 100,000 popn.	12	4	8	8	10	8	6	8	4	4	9	4	4	7
Roads and roadsides	deaths + serious injuries in head-on crashes, per 100,000 popn.	28	4	20	12	6	8	14	9	3	9	18	8	9	14
	deaths + serious injuries, run off road crashes, per 100,000 popn.	31	4	27	15	18	22	20	32	7	20	74	11	23	47
	deaths + serious injuries, intersection crashes, per 100,000 popn.	9	12	26	11	16	13	18	20	13	15	12	24	24	26
	deaths + serious injuries in ped/cyclist crashes, per 100,000 popn.	9	9	11	8	18	8	10	7	13	16	9	9	15	10
Motorcycles	motorcyclists hospitalised >1d, per 100,000 popn.	23	15	17	21	16	16	13	16	10	10	15	14	12	18
Light vehicles	% of vehicles in fatal/serious crashes without current WoFs	20%	14%	13%	21%	19%	19%	18%	19%	19%	15%	13%	15%	18%	15%
Fatigue	fatal/serious injuries in fatigue/distraction crashes, per 100,000 popn.	8	4	15	6	8	7	8	10	5	15	37	7	9	15
Heavy vehicles	fatal/serious crashes involving HMTVs, 3yr avg, per 100m SH HMTV vkt	14	20	12	12	14	15	12	11	17	15	8	12	11	8
Walk/cycle	pedestrians and cyclists hospitalised >1d, per 100,000 popn.	13	11	10	11	18	7	14	7	8	5	3	10	9	11
Older users	persons 75+ years killed or seriously injured, per 100,000, 3yr avg.	63	44	58	49	43	48	62	74	44	74	120	58	68	67
Restraints	occupant deaths, restraints not worn, last 3 yrs, per 100,000 popn.	5.0	0.9	2.8	2.4	4.8	2.4	2.5	3.8	0.6	1.3	2.0	2.6	1.6	3.0

*alcohol DSI rates only, not including drug