## New Zealand Government

## briefing notes - road safety issues

NZ TRANSPORT AGENCY

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## Tauranga City

New Zealand Transport Agency has prepared this eleventh road safety issues report. It is based on reported crash data and trends for the 2005-2009 period. The intent of the report is to highlight the key road safety issues and be a resource to identify possible ways to reduce the number of road deaths and injuries in Tauranga City.

All the material unless otherwise stated in this report applies to both local roads and state highways. Local roads are all non state highway roads in Tauranga City.

In March the Government released Safer Journeys the road safety strategy for the next ten years. The two following pages contain a brief introduction to the strategy and a link to find more information.

The issues chosen for this report are drawn from either the most common crash types, those that appear overrepresented when Tauranga City is compared to similar local bodies or those with high social cost (high numbers of fatal and serious crashes mainly).

We have included a brief overview of crashes in Tauranga City and we encourage safety engaged staff at Tauranga City Council to use their free access to the Ministry of Transport's Crash Analysis System (CAS) to delve deeper into the highlighted issues. All data and maps in this note are from CAS.

Major road safety issues	2009 road trauma	
Tauranga City	Casualties	Tauranga City
Pedestrians	Deaths	1
Cyclists	Serious casualties	36
Motorcyclists	Minor casualties	182

National priorities from Road Safety 2020— Safer Journeys	Crashes	Tauranga City
Speed	Fatal crashes	1
Alcohol / drugs	Serious injury crashes	36
Young drivers	Minor injury crashes	147
Roads and roadsides	Non-injury crashes	628
Motorcyclists		

## Safer Journeys

For the past decade road safety in New Zealand has been directed by the Road Safety 2010 strategy.

This strategy was introduced in 2003 and aimed to reduce deaths and casualties from road crashes.

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

Under the new strategy, road safety will be looked at from a system wide approach rather than focusing so strongly on the road user.

The emphasis will be on improving all the parts of the road transport system that impact on safety; the road, the vehicle, travel speeds and the road user.

Under the 2020 strategy a number of priority areas have been chosen as the areas of focus.

These areas were assigned a priority, based on research that shows five major areas of concern, six areas of lesser concern, and two areas where continued focus is needed, or concern is emerging.

These divisions are shown in "Table 3" opposite. This table is a direct extract from page 12 of the Safer Journeys document which can be found at: http://www.transport.govt.nz/saferjourneys/ Documents/SaferJourneyStrategy.pdf

To reflect the new strategy, changes to the wording and the way data is presented in these briefing notes to reflect and emphasise the connections to the new strategy. In particular, we have included more tables showing age distribution as problems with the safety of young drivers as a particular focus of Safer Journeys.

However, as these reports are based on crash data, particularly fatal and serious crashes, the actual "issues" identified by our analysis remain as before, fact based. It would be irresponsible of us to ignore an area of high social cost in a particular local body or region just because it wasn't a national priority.

We have prepared a table on the following page which shows the areas of "high concern" under Safer Journeys 2020 strategy.

This table allows some relative comparison of Safer Journeys priorities across the local bodies in the area covered by the Hamilton NZTA Office.

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

AREAS OF CONCERN WE WILL ADDRESS	and the second se	VE WILL TA	KE ACTION	l.
	SAFE ROADS AND ROAD- SIDES	SAFE SPEEDS	SAFE	SAFE ROAD USE
Areas of high concern				
Reducing alcohol/drug impaired driving			1	1
Increasing the safety of young drivers	1	1	1	1
Safe roads and roadsides	1			
Safe speeds	1	1	1	
Increasing the safety of motorcycling	1	1	1	1
Areas of medium conce	ern			
Improving the safety of the light vehicle fleet			1	1
Safe walking and cycling	1	1	1	1
Improving the safety of heavy vehicles	1	1	1	1
Reducing the impact of fatigue	1	1	1	1
Addressing distraction	1		1	1
Reducing the impact of high risk drivers		1	1	1
Areas of continued and	emergin	g focus		
Increasing the level of restraint use			1	1
Increasing the safety of older New Zealanders	1	1	1	1

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

Table source: Ministry of Transport 2020 Safer Journeys

## Status of the areas of "high concern" from Safer Journeys 2020 for the Bay of Plenty Region 2005-2009

(table below refers only to fatal and serious crashes on both local roads and state highways for the years 2005—2009 except for the "intersection" columns which also include minor crashes for reasons of sample size)

Safer Journeys area of concern	Reducing alcohol and drug impaired driving	Increase the safety of young drivers	Safer roads and roadsides			Safe speeds	Increasing the safety of motorcycling
Measure	Percentage of fatal and serious crashes with this factor	Percentage of fatal and serious crashes with at fault drivers aged 24 years or less	Percentage of fatal and serious crashes with an object struck	Number of urban intersections with three or more injury crashes in the last five years	Number of rural intersections with three or more injury crashes in the last five years	Percentage of fatal and serious crashes where speed was a factor	Percentage of fatal and serious crashes involving a motorcyclist
Western BOP District	32	31	48	1*	9	25	15*
Tauranga City	25	28	29	36	1*	20	26
Rotorua District	27	31	42	24	4	33	14
Whakatane District	32	36	49	2	3	32	17*
Opotiki District	37*	37*	68	0**	0***	41*	19**
Kawerau District	56***	56***	89***	0***	0****	33***	22***
BOP Region	29	32	43	63	16	28	18
New Zealand	23	34	45	1938	320	23	18

#### Note:

\* Sample size of 30 crashes or less

\*\* Sample size of 20 crashes or less

\*\*\* Sample size of 10 crashes or less

\*\*\*\* No crashes in sample

## Tauranga City overview

In 2009 on local roads in Tauranga City there were 134 injury crashes and 446 non-injury crashes. In addition on state highways in Tauranga City there were 50 injury crashes and 182 non-injury crashes. The tables below show the number of injuries resulting from the 184 injury crashes by rural or urban areas for local roads and state highways (rural is defined as an area with a speed limit of 80km/h or more).

### Casualties by urban / rural 2009

	Fatalities	Serious injuries	Minor injuries	Total
Rural	0	6	35	41
Urban	1	30	147	178
Total	1	36	182	219

### Casualties by State Highway / local road 2009

	Fatalities	Serious injuries	Minor injuries	Total
Local road	0	23	132	155
State Highway	1	13	50	64
Total	1	36	182	219

### Crash trends in Tauranga City

Fatal crashes	Serious crashes	Minor crashes	Total crashes
7	30	88	125
5	24	93	122
2	46	160	208
9	30	124	163
7	36	105	148
4	37	131	172
3	45	121	169
4	42	131	177
3	36	130	169
1	36	147	184
	crashes   7   5   2   9   7   4   3   4   3	crashes   crashes     7   30     5   24     2   46     9   30     7   36     4   37     3   45     4   42     3   36	crashes   crashes     7   30   88     5   24   93     2   46   160     9   30   124     7   36   105     4   37   131     3   45   121     4   42   131     3   36   130

Crash characteristics (all roads)					
Crash type or contributory cause 2005 to 2009	Percentage <b>fatal</b> and serious crashes of this type or contributory cause	Percentage <b>all</b> <b>injury</b> crashes of this type or contributory cause			
Pedestrians	16	11			
Cyclists	18	15			
Motorcyclists	26	16			
Alcohol	25	18			
Speed	20	15			

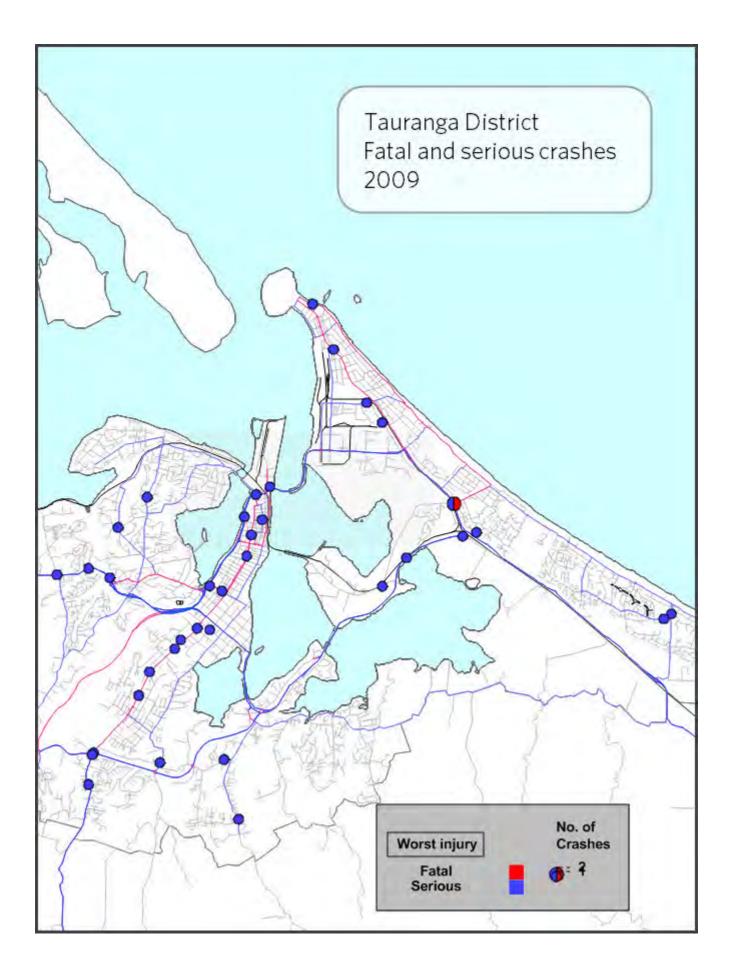
Further information about the 645 injury and 2500 non-injury crashes on **local roads** in Tauranga City 2005 to 2009:

- 7 deaths, 155 serious and 627 minor injuries
- Worst month May, best February
- Worst day Friday, best Sunday
- 19 percent on wet roads
- 29 percent at night
- 48 percent at intersections
- 1457 roadside objects struck \*
- Most represented five year age group in 'at fault' drivers in injury crashes: 15 to 19 years (19 percent of at fault drivers)
- Social cost of crashes in 2009 \$41m

Further information about the 226 injury and 980 non-injury crashes on **state highways** in Tauranga District 2005 to 2009:

- 10 deaths, 63 serious and 247 minor injuries
- Worst month August, best September
- Worst day Friday, best Sunday
- 17 percent on wet roads
- 28 percent at night
- 52 percent at intersections
- 337 roadside objects struck \*
- Most represented five year age group in 'at fault' drivers in injury crashes: 15 to 19 years (19 percent of at fault drivers)
- Social cost of crashes in 2009 \$25m

\* It needs to be noted that if a vehicle hits the same type of object more than once it is only counted in CAS once.



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## Pedestrians

In the last five years in Tauranga City, 16 percent of fatal and serious crashes and 11 percent of all injury crashes involved a pedestrian.

Pedestrian injuries 2005 to 2009					
Pedestrian injuries	2005	2006	2007	2008	2009
Fatal	1	0	1	1	0
Serious	9	6	7	6	2
Minor	16	12	13	13	12
Total	26	18	21	20	14

The most common type of pedestrian crash is when a pedestrian is crossing the road and is hit by a vehicle approaching from their right. (36 crashes)

There are three locations in the city with three or more pedestrian injury crashes in the last five years. Sites with three or more injury crashes in the last five years and at least one in 2009 are in the table below.

Locations with three or more injury pedestrian crashes in the last five years - including at least one crash in 2009

Location	Number of crashes 2005 to 2009	2009
Elizabeth St/ Devonport Road	4	1
Twenty third Avenue/ Cameron Road	3	1
Fraser St, 30m South of Surrey Grove	3	1

It is interesting to note in the following table how the age distribution of pedestrian crashes has changed in the city over time.

Between 1980 and 1984, 51 percent of crashes involved pedestrians aged 19 or less, in the last five years 54 percent of injured pedestrians are in this age range.

Conversely the 50+ age group now accounts for 23 percent of injured pedestrians, this was 33 percent 25 years ago.

A compounding factor here can be the national drop in the number of young people walking to school. The Ministry of Transports Household Travel survey shows that just 20years ago 42 percent of children walked to school , three years ago this had dropped to 25 percent.

# Age group of pedestrian casualties 2005 to 2009 and 25 years ago—as a percentage of the total pedestrians injured

Age group	2005 to 2009	1980 to 1984
0 to 4	5	7
5 to 9	11	18
10 to 14	23	13
15 to 19	15	13
20 to 24	7	5
25 to 29	3	7
30 to 34	1	1
35 to 39	3	3
40 to 44	3	1
45 to 49	6	0
50 to 54	1	1
55 to 59	2	3
60 to 64	2	5
65 to 69	6	4
70 to 74	5	8
75 and over	7	12

Further information about the 87 injury pedestrian crashes on **local roads** in Tauranga City 2005 to 2009:

- 24 percent at intersections
- 24 percent at night
- Worst month June, best January and July (equal)
- Worst day of week Friday, best Sunday
- 7 of the pedestrians were intoxicated
- Pedestrians themselves contributed wholly (or in part) to 71 percent of the crashes
- In addition there were 7 crashes on state highways involving 7 pedestrians

## Cyclists

Cyclists feature strongly in the overall crash numbers in Tauranga City, representing 15 percent of all injuries and 18 percent of fatal and serious injuries in the last five years.

There were 131 injury crashes involving cyclists between 2005 and 2009.

Cyclist injuries					
Cyclist injuries	2005	2006	2007	2008	2009
Fatal	0	0	0	0	1
Serious	6	9	9	4	9
Minor	13	24	22	15	20
Total	19	33	31	19	30

The two most common types of crashes for cyclists in Tauranga City are:

- At a cross junction, when a cyclist is hit while going straight ahead by a vehicle also going straight ahead, both cyclist and vehicle will be heading at right angles to each other.
- When a cyclist is hit by a vehicle turning right out of a side road or driveway.

Cycling crashes are largely spread over the district but seventeen locations stand out with 2 or more injury crashes over the last five years. The one location with three crashes is :

• Intersection of, Waihi Road and Cambridge Road (3 crashes)

In the last 20 years there has been a significant shift in the age distribution of cyclists being injured in Tauranga City as illustrated in the following table.

There is now a much broader spread of ages but with far fewer in the lower age brackets.

This would suggest that fewer of today's children are learning to ride bicycles, in turn, over time, it may make it harder to attract new adult participants to this form of transport.

It will also impact on those learning to drive not bringing an adequate understanding of the needs of two wheeled road uses.

and 2009 and 25 years ago in Tauranga City (by age group)			
Age group	2005 to 2009	1980 to 1984	
0 to 4	1	1	
5 to 9	4	11	
10 to 14	21	35	
15 to 19	11	38	
20 to 24	6	3	
25 to 29	5	2	
30 to 34	7	2	
35 to 39	6	1	
40 to 44	11	3	
45 to 49	10	0	
50 to 54	5	1	
55 to 59	7	1	
60 to 64	2	0	
65 to 69	2	1	
70 to 74	2	0	
75 and over	2	0	

Further information about the 106 injury cyclist crashes on **local roads** in Tauranga City 2005 to 2009:

- 53 percent at intersections
- 12 percent at night
- Worst month January, best November
- Worst day Thursday, best Sunday
- Worst three hour time period, 3pm to 6pm

Further information about the 25 injury cyclist crashes on **state highway** roads in Tauranga City 2005 to 2009:

- 72 percent at intersections
- 12 percent at night
- Worst month August and September (equal), best July
- Worst day Thursday, best Tuesday, Friday and Saturday (equal)
- Worst three hour time period, 9am to 12 noon

## Motorcyclists

In Tauranga City, 26 percent of all fatal and serious crashes involve a motorcyclist or moped.

Motorcyclist and moped injuries					
	2005	2006	2007	2008	2009
Fatal	0	0	0	0	0
Serious	9	10	15	9	12
Minor	25	18	19	22	17
Total	34	28	34	31	29

In the last 20 years there has been a significant shift in the number of crashes and age distribution of motorcyclists being injured in Tauranga City as illustrated in the table opposite.

The table below shows a <u>national</u> analysis of the age of at fault riders in crashes cross referenced with distance ridden data from the Ministry of Transport's household travel survey.

It shows that young riders are highly over-represent. The under 24 age group rides 7.8 percent of the kilometres but represents 34 percent of at fault riders. This reinforces the "young driver" thrust in Safer Journeys . Unfortunately the "distance driven" sample at a local body level is too small to make this

All NZ Data Motorcycle riders			
Age group	Percentage of total distance driven	Percentage of at fault riders in injury crashes	
10-14	0.2	1.8	
15-19	2.5	18.5	
20-24	5.1	14.1	
25-29	12.4	8.9	
30-34	4.2	9.5	
35-39	30.1	9.6	
40-44	10.0	10.2	
45-49	17.8	10.0	
50-54	3.6	7.7	
55-59	3.4	4.8	
60-64	7.8	2.5	
65-69	2.7	1.4	
70-74	0.0	0.5	
75+	0.3	0.6	

### Percentage of motorcycle and moped casualties between 2005 and 2009 and 25 years ago (by age group)

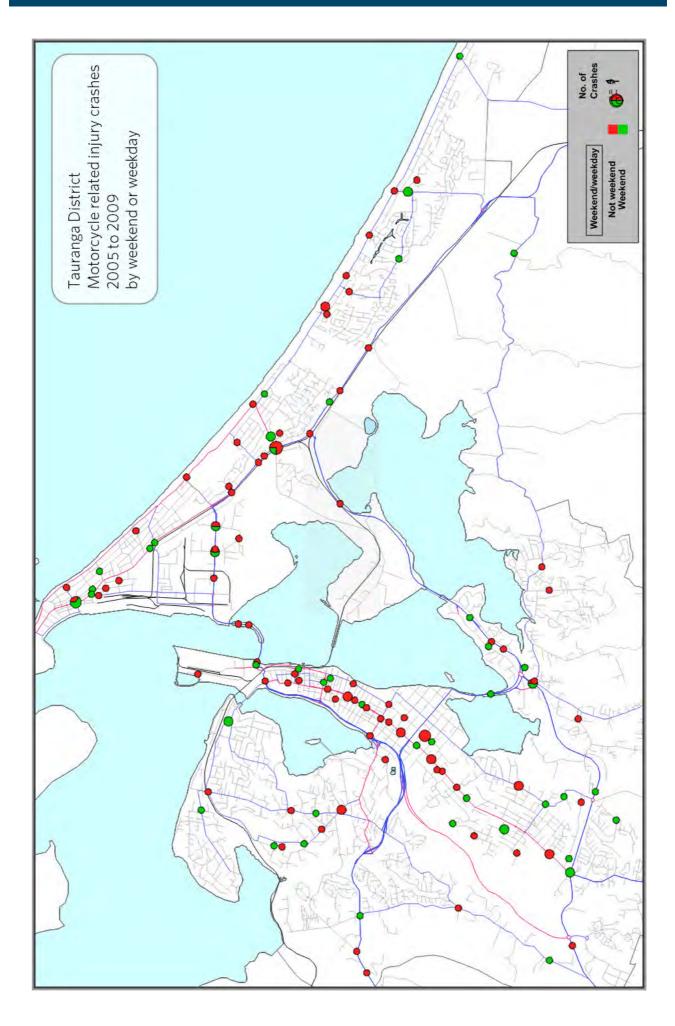
Age group	2005 to 2009	1980 to 1984
5 to 9	1	0
10 to 14	1	0
15 to 19	22	63
20 to 24	13	21
25 to 29	10	6
30 to 34	9	1
35 to 39	15	3
40 to 44	6	2
45 to 49	8	1
50 to 54	6	1
55 to 59	3	0
60 to 64	1	0
65 to 69	1	0
70 to 74	1	0
75 and over	1	0

Further information about the 109 injury motorcyclist and moped crashes on **local roads** in Tauranga City 2005 to 2009:

- No motorcyclists died, 38 received serious and 81 minor injuries
- 13 percent involved speed too fast for the conditions
- From a total of 115 at fault (or part fault) drivers, 69 of these were motorcyclists
- 17 percent at night
- Worst month December, best May and November (equal)
- Worst day Saturday, best Monday and Sunday (equal)

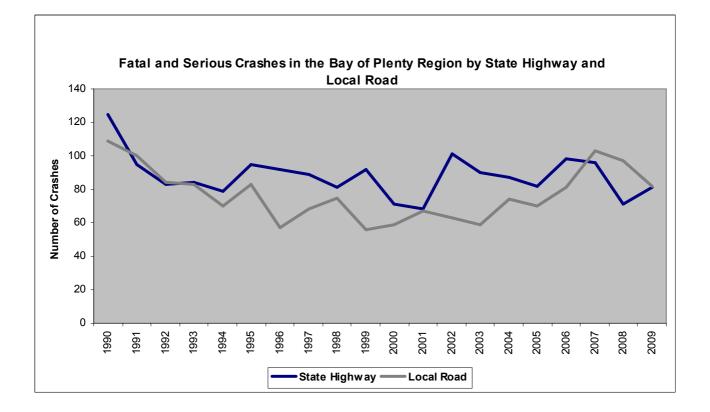
Further information about the 32 injury motorcyclist and moped crashes on **state highways** in Tauranga City 2005 to 2009:

- No motorcyclist died, 17 received serious and 20 minor injuries
- 16 percent involved speed too fast for the conditions
- 25 percent at night
- Worst month March, best April
- Worst day Thursday, best Sunday



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## Looking back—the last two decades ...



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