



Transport Safety Action Plan

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1. Introduction

1.1. Purpose of this Action Plan

This Transport Safety Action Plan is one of seven action plans that coordinate and prioritise the various activities developed to implement the Access Hamilton Strategy.

The purpose of this action plan is to guide the delivery of transport safety in Hamilton from now until it is reviewed in three years time. This document is based on a 30 year vision, with general plans for a 10 year implementation programme and detailed activities for the next three years.

This plan:

- Outlines Hamilton City Council's (HCC) goals for road safety
- Summarises road safety issues in Hamilton
- Identifies safety targets
- Identifies actions for implementation.

Implementation of this action plan will be through:

- HCC's Safety Management System – engineering actions and processes that apply to HCC's transportation and development control activities.
- Annual Road Safety Action Plan – targets and actions with performance measures, prepared and delivered in conjunction with HCC's road safety partners.

1.2. Action Plan Structure

This action plan is set out as follows:

- Vision and objectives
- Strategic context – national, regional, local
- Background – general description of current transport safety situation and trends
- Desired outcomes and actions for implementation for Hamilton's areas of concern.
- Coordination of this plan with other Access action plans, road safety partners and stakeholders.



2. Vision

2.1. Access Hamilton

The overall vision for Access Hamilton is that “Hamilton has an affordable, integrated, **safe**, responsive and sustainable transport system”.

HCC’s aspiration is for no-one to be killed or seriously injured on Hamilton’s transport network.

This is consistent with the government’s goal of ‘a safe transport system that is increasingly free of transport-related deaths and serious injuries’.

This transport safety action plan applies to all roads within Hamilton, both local and state highways.

2.2. Objectives and Targets

Transport crashes are caused by one or more of: driver error, environmental factors (safety of the road) and vehicle error (mechanical problems). In order to work towards the vision, HCC will address the crash causes by:

- Reducing driver error by educating people and enforcing laws
- Making our roads as safe as possible to reduce environmental factors
- Supporting national legislation regarding vehicle safety requirements

HCC will work towards achieving a transport network free of road deaths and serious injuries by:

- Reversing the trend of increasing numbers of injury crashes
- Reducing the number of crashes where alcohol is a factor
- Achieving an intersection crash rate that is the same as or is lower than similar cities.
- Reducing the level of rear-end crashes.
- Reducing the representation of young drivers (<25 years old) in Hamilton’s crash casualties
- Improving safety for vulnerable road users.
- Reverseingthe trend of increasing motorcyclist casualties

The Road Safety Action Plan includes targets reviewed each year that reflect Hamilton’s current transport issues.

The safe systems approach and objectives are in line with national and regional road safety goals, including the Government Policy Statement on Land Transport Funding (GPS) desired impact of a ‘reductions in deaths and serious injuries as a result of road crashes’.

Safety strategies rely on the three E’s to improve road safety: education, enforcement and engineering. This plan will approach transport safety looking at the transport system as a whole – a ‘safe systems approach’.



A safe system approach recognises that despite our best efforts, road crashes will still occur. The aim for a safety system is to combine safer use, safer vehicles, safer speeds and safer roads and roadsides to reduce the incidence and consequences of crashes.

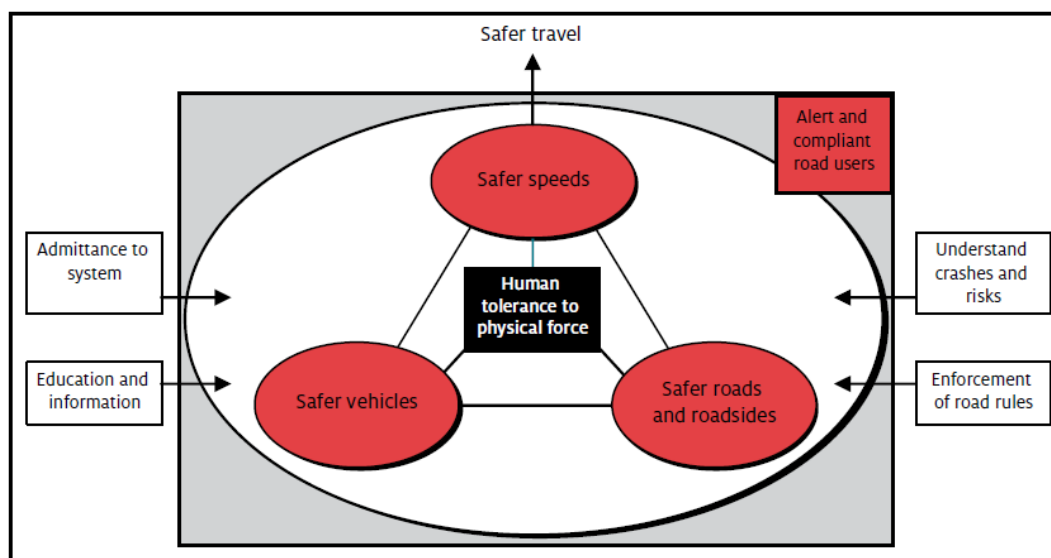


Figure 1: A Safe Systes Approach (Regional Road Safety Strategy 2009 - 2012)



3. Context

3.1. Overview

The following diagram shows relevant safety strategies and plans. They are described in more detail below.

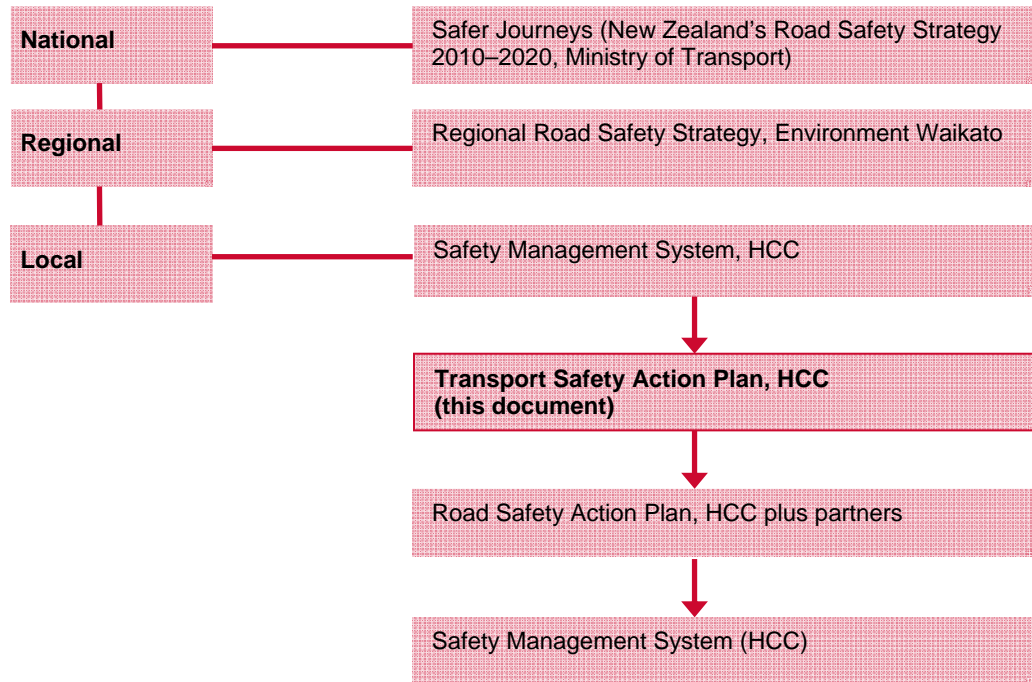


Figure 2: Relevant Safety Strategies and Plans

3.2. National

The National Road Safety Strategy, Safer Journeys 2010-2020 (RSS 2020) is New Zealand's Road Safety Strategy for 2010 to 2020. The strategy looks at the transport system as a whole, and identifies actions to address road safety issues. It includes safer roads, drivers and vehicles, and legislation / policy changes required to meet targets.

A safe system approach recognises that despite our best efforts, road crashes will still occur. The aim for a safety system is about safer use, safer vehicles, safer speeds and safer roads and roadsides. Education, enforcement and engineering will be used to implement the strategy.

The New Zealand Transport Strategy (NZTS) sets out the government's vision for transport in 2040, which is that: 'People and freight in New Zealand have Access to an affordable, integrated, safe, responsive and sustainable transport system.'

That vision is supported by five transport objectives:

- ensuring environmental sustainability
- assisting economic development
- assisting safety and personal security



- improving access and mobility
- protecting and promoting public health

The NZTS is supported by the desired impacts of the GPS. These impacts are described in this action plan under 'Objectives and Targets'.

3.3. Regional

The regional road safety strategy for the Waikato region also follows a safe systems approach, and sets out Vision and outcomes, policies and actions for road safety from 2009 to 2012, for:

- Safer speeds
- Safer roads and roadsides
- Safer road use
- Safer vehicles
- Improved organisation and coordination

3.4. Local

Access Hamilton

This Transport Safety Action Plan is one of seven Action Plans that coordinate and prioritise the various activities developed to implement the Access Hamilton Strategy. The diagram below shows the context and content of Access Hamilton.

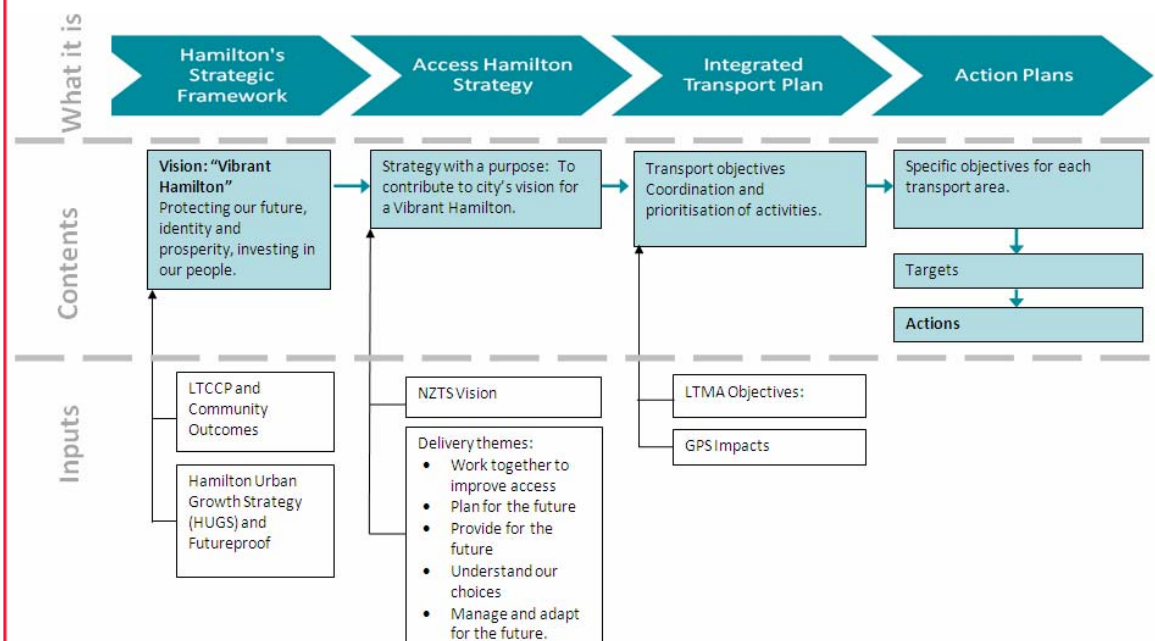


Figure 3: Access Hamilton Context

This document is one of the seven action plans. The other six are:

- Parking management
- Travel demand management
- Active travel

- Activity management
- Passenger transport
- Network

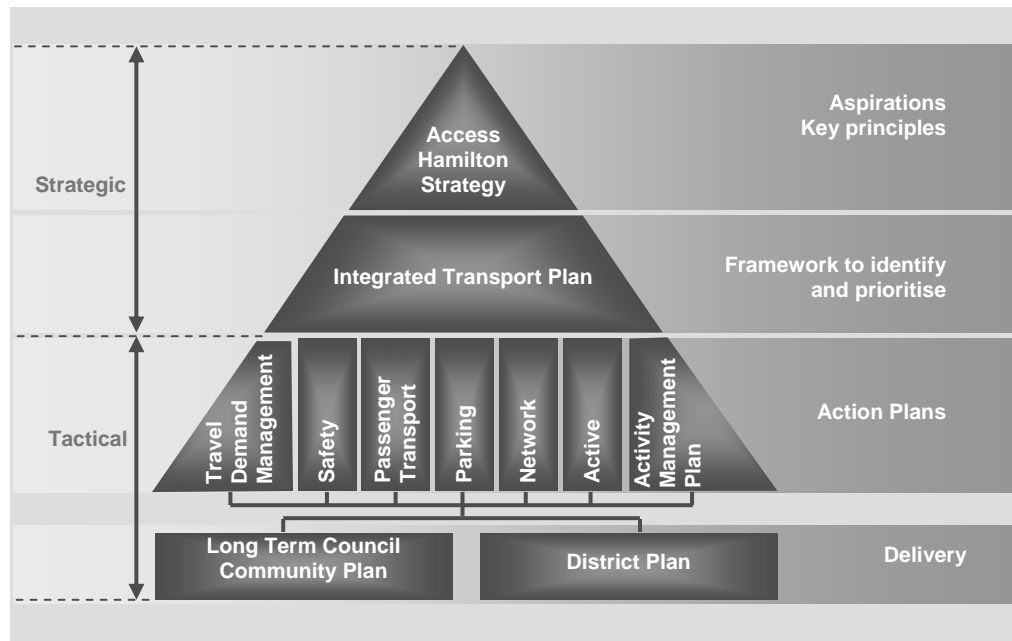


Figure 4: Access Hamilton Document structure

Safety Management System

HCC's Safety Management System that provides a comprehensive set of procedures to implement the Hamilton City Transport Safety Strategy in a systematic way. NZTA have a Safety Management System that focuses on the highway network, however this plan also includes the state highways within the Hamilton boundary. The draft SMS is included in Appendix 5.

Road Safety Action Plan

HCC's Road Safety Action Plan sets out specific actions to deliver the strategy. It is reviewed and updated annually, with input from all of Hamilton's road safety partners. The current RSAP is included in Appendix 4.

4. Background

NZTA's briefing notes on Hamilton City's road safety issues (2009 version) are in Appendix 3. The notes contain detailed crash information based on crash statistics from 2004 to 2008 inclusive. This section provides a summary of the briefing notes.

Nationally, the number of deaths each year on New Zealand's roads has been decreasing since 1996; however the number of injury crashes in Hamilton has been rising over the last five years.

In 2008, there was one death, 58 serious casualties and 407 minor casualties on Hamilton's roads. There were 882 reported non-injury crashes, and the total social cost of crashes in 2008 was \$84M.

Although Hamilton's severity rate of crashes is decreasing, the urban crash rate and rate of casualties is higher than New Zealand's as a whole. Hamilton's current areas of concern for transport safety are shown below. Note that:

- Bold type indicates the areas of concern that are described in more detail and addressed in this action plan.
- Letters in brackets indicate where the area of concern is recognised as a national issue, and how it is prioritised (H = High, M = Medium, L = Low)

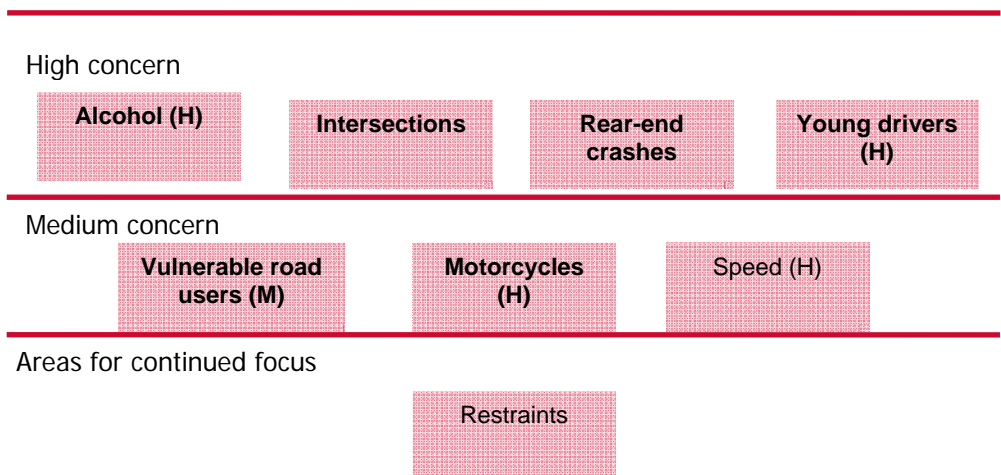


Figure 5: Hamilton's Areas of Concern

This shows that priority areas nationally are key local areas of concern.

Hamilton's main areas of concern are described in the table on the following page. A crash detail report for each of the areas of concern is included in Appendix 1.

Area of Concern	Comments
Alcohol	<p>The number of alcohol-related injury crashes, both urban and rural, has been rising.</p> <p>Hamilton has significantly more alcohol-related crashes on open roads (speed limit greater than 80 km/h) than both its peer group and New Zealand as a whole.</p> <p>About half of the alcohol-related crashes occurred at intersections, and speed was factor in almost 40% of crashes.</p>
Intersections	<p>The five worst urban intersections in Hamilton have crash rates up to three times what would be expected for typical similar sites.</p> <p>The two most common driver / vehicle factors were failure to give way / stop and poor observation.</p> <p>The proportion of open road crashes that occurred at intersections on rural roads is significantly higher than for New Zealand or Hamilton's peer group.</p>
Rear-end crashes	<p>24% of all injury crashes between 2004 and 2008 involved rear end collisions. The number has increased every year since 2004.</p> <p>About 60% of rear-end crashes occurred at mid-block locations.</p> <p>The three most common driver / vehicle factors were speed, incorrect lane / position and poor observation.</p>
Young drivers	<p>The number of injury crashes involving young drivers has increased almost every year since 2004.</p> <p>Most of these crashes were by male drivers, and most were due to poor observation resulting in failure to give way / stop.</p>
Vulnerable road users	<p>In Hamilton, pedestrians and cyclists do not feature highly in the overall number of crashes; however, they make up a significant proportion of fatalities.</p> <p>Most pedestrian crashes occurred at mid-block locations (not intersections).</p> <p>Most cyclist crashes occurred at intersections.</p>
Motorcyclists	<p>An increase in motorcycle registrations has resulted in an increase in motorcycle crashes.</p> <p>The most common type of motorcycle crash in Hamilton is when a vehicle fails to give way. This is most often due to poor observation.</p>

Table 1 Areas of Concern

Hamilton's Road Safety Group have initiatives in place to address crashes caused by excessive speed, as this is an area of national importance.



5. Alternatives and Evaluation

5.1. Actions and Implementation

The table on the following page outlines objectives, actions and performance measurement for transport safety in general and for each of Hamilton's areas of concern. All of the actions are on-going.

The processes through which transport safety is delivered by HCC are described after the table of actions.

We identified transport safety projects for each sector of Hamilton, based on where there is currently an obvious crash problem. Sector maps showing areas of safety concern in Hamilton are included in Appendix 2. Appendix 2 also includes a table listing projects identified. Some of these projects will be delivered through other action plans.

Funding provision has been made for a specialised study and subsequent capital projects. This project is in addition to existing cycleway programmes contained in Council's 2009-19 LTCCP and will include assessment of innovative solutions (such as signalling various roundabouts) in the City where there are ongoing issues.

Actions and projects identified as part of this action plan can be funded through allocations in the 2009-19 LTCCP, through the projects mentioned above or through the funding allocated to implementing the Access Hamilton Strategy.

The actions in the following table contribute to national objectives and targets set out in Safer Journeys 2020, including increase the safety of motorcycling and achieve safer walking and cycling.

Activities will be carried out and / or funded as part of Access Hamilton projects S01 to S06 (refer to Integrated Transport Plan and Sector Maps).



Area of Concern	Objective	Outcome (by 2019)	Output	Success measurement	Evaluation
General	Ensure safety is integrated into HCC transportation processes and procedures	Updated Safety Management System		Up to date, auditing, continuous improvement	HH_
	To educate people about the risks associated with transport etc.	Reverse the trend of increasing injury crash numbers, aiming for a level at or below 340 injury crashes per year.	Education campaigns about Hamilton's areas of concern.	Crash numbers recorded in CAS.	HML
	Improve the rate of correct child restraint wearing.	Correct child (< age 5 years) restraint wearing rate greater 80%.	Checkpoint surveys recording child restraint use.	Restraint wearing rate as measured by check-point surveys.	HML
	Address areas of the transport network where there are currently safety issues.	Reduction in crashes occurring at the identified locations.	Ensure RSAP crash reduction studies include: SH3 Raynes Road SH3 Dixon Road Hood Street Cobham Drive/Grantham Street Lake Road/Queens Ave	Crash numbers recorded in CAS.	HML
Planning (AM05, AM08)	Consider transport safety in land use decisions.	Land use decisions are made that best provide a safe travel environment for Hamilton residents, for example, the location of schools in relation to busy arterial roads , severance of communities by travel corridors etc.	Review of development manual and district plan to consider this action plan.	Development manual and district plan to include transport safety as a factor in land-use decision-making.	HML
Alcohol	To reduce the number of drink driving offences and alcohol related crashes in Hamilton. To reduce the proportion of alcohol-related crashes on open roads to equal to or better than Hamilton's peer groups.	5% reduction in positive alcohol tests. 20% reduction in alcohol-related crashes on roads with a speed limit of 80 km/h or greater.	Police breath-testing checkpoints.	Crash numbers recorded in CAS. Police Data – breath screening tests.	HML

Area of Concern	Objective	Outcome (by 2019)	Output	Success measurement	Evaluation
Intersections	To reduce the number of crashes at intersections in Hamilton city to better than or equal to the intersection crash rate of Hamilton's peer group.	5% reduction in urban intersection crashes. 50% reduction in open road intersection crashes.	Safety review of Hamilton's worst five intersections (see road safety briefing notes for details). Crash reduction study identifying and prioritising worst intersections, and addressing safety issues.	Crash numbers recorded in CAS. Crash reduction studies carried out. Road safety audits carried out.	HML
Rear-end crashes	Reduce the level of rear-end crashes in Hamilton.	5% reduction in rear-end crashes.	Road safety audits for intersection improvement projects to ensure changes have considered existing issues and are to safe standards.		HML
Young drivers	To reduce the representation of young drivers (<25 years old) in Hamilton's crash casualties to equal to or better than its peer group.	20% reduction in casualties of drivers under 25 years old.	Education, enforcement.	Casualty numbers recorded in CAS.	HML
Vulnerable road users	To reduce crashes involving pedestrians and cyclists in Hamilton.	5% reduction in pedestrian crashes. 5% reduction in cyclist crashes.	Safety review of Hamilton's worst sites for pedestrian crashes (see road safety briefing notes for details). Safety review of Hamilton's worst sites for cyclist injuries (see road safety briefing notes for details). Pedestrian and cyclist crash reduction studies identifying and prioritising worst sites, and addressing safety issues.	Crash numbers recorded in CAS.	HML
Motorcyclists	Reverse the trend of increasing motorcyclist casualties	Number of motorcyclist casualties at or below 40 per year.	Safety review of worst intersections for motorcyclist crashes (see road safety briefing notes for details).	Casualty numbers recorded in CAS.	HML

Table 2 Objectives, Targets and Actions for Areas of Concern

5.2. Delivery Method

HCC have a number of plans and processes that deliver transport safety. These are illustrated in the diagram below.

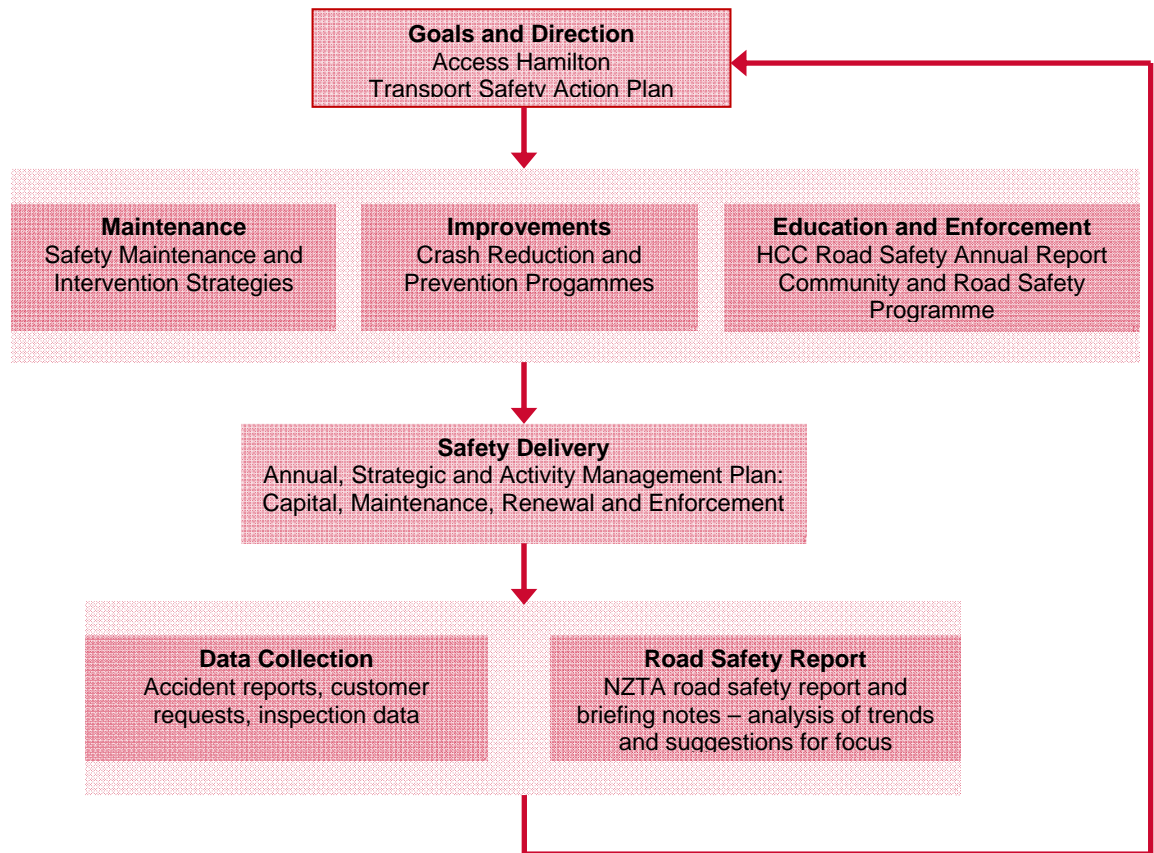


Figure 6: Delivery Method

HCC implements transport safety actions through a safety management system and a road safety action plan. These are described below.

5.3. Safety Management System (SMS)

This Transport Safety Action Plan forms part of HCC's Safety Management System (SMS). The SMS provides procedures to implement the Hamilton City Transport Safety Strategy in a systematic way. The SMS includes engineering standards, and guidelines for crash reduction and prevention programmes, maintenance and intervention strategies and road safety reports.

5.4. Road Safety Action Plan (RSAP)

HCC's Road Safety Action plan is attached in Appendix 4 (current as at June 2009). The plan outlines engineering measures and education / enforcement actions for a number of target areas that relate to Hamilton's areas of concern.

It is reviewed by the road safety group quarterly and updated by HCC annually, to ensure targets are appropriate and to review progress.



6. Coordination

6.1. With Road Safety Partners and Stakeholders

The Road Safety group meet every four months to discuss road safety issues in relation to the road safety action plan. HCC's road safety partners are:

- ACC
- Police
- NZTA Highways / Funding
- EW
- Waikato DHB

The Road Safety Action Plan is then updated to ensure that issues identified in this action plan and any new issues are addressed.

6.2. With other Action Plans

The following table outlines how this Transport Safety Action Plan relates to the other six action plans that form part of Access Hamilton.

Action Plan	Coordination with Transport Safety Action Plan
Travel Demand Management (TDM)	TDM measures will be prioritised considering transport safety, existing and potential crash problems. Travel plans will promote awareness of transport safety issues and educate people about safe travel habits.
Active Modes	Pedestrians and cyclists are vulnerable road users, an area of concern for Hamilton. Walking and cycling facilities that are upgraded and built will address any existing safety concerns, will meet safe engineering standards and will consider safety and personal security.
Passenger Transport	Passenger transport connections and infrastructure will be made safe through meeting engineering standards, adequate lighting and recognising that for some of their journey, passenger transport users are pedestrians and therefore vulnerable road users.
Network Management	As Hamilton's transport network is upgraded, crash problems will be identified and addressed, and the upgraded network will be built to safe engineering standards.
Activity Management	The activity management plan will include the road safety strategy and targets in performance measurements and reporting.
Parking Management	Parking areas will meeting engineering standards for safety, be adequately lit where appropriate and will provide adequate connections to active mode facilities (pedestrian routes etc).

Table 3 Coordination with other Access Action Plans



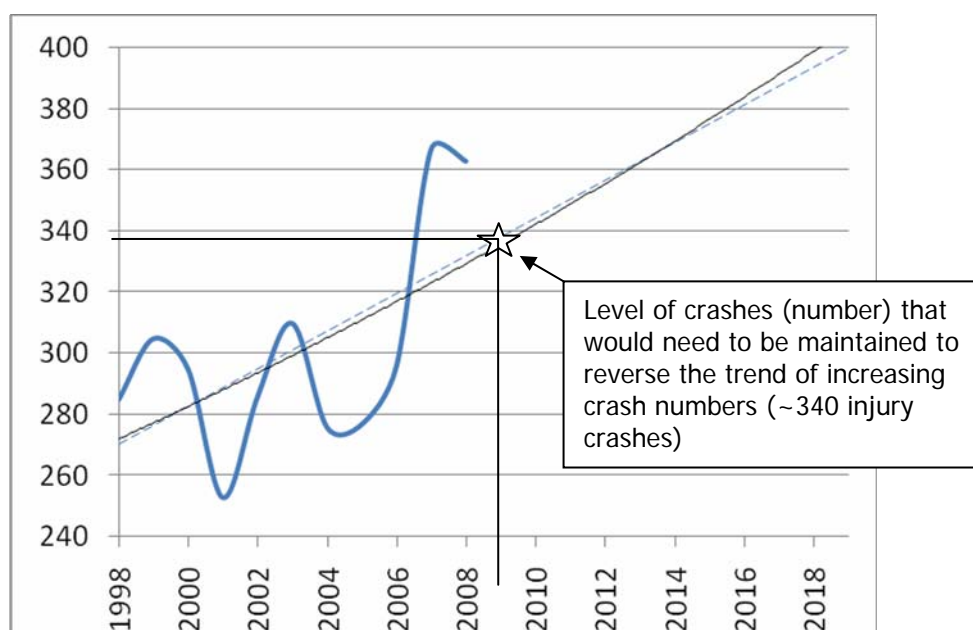
Appendices



Appendix 1: Crash Data and Evaluation

Number of Injury Crashes in Hamilton

Year	Urban	Rural	Total
1998	258	27	285
1999	273	32	305
2000	259	36	295
2001	226	27	253
2002	250	36	286
2003	276	34	310
2004	245	31	276
2005	253	24	277
2006	266	30	296
2007	323	44	367
2008	328	35	363



Adding a trend line to the graph and projecting the total number of injury crashes to 2019 (timeframe for this action plan) shows that the number of crashes is likely to increase to around 400.

In order to reverse the trend of increasing crashes, the number of crashes would need to stay at or below about 340 injury crashes per year.

Appendix 2: Safety Issues Sector Maps

Project / Area	Network	TDM	Active Modes	Passenger Transport	Parking	Safety	Delivered through which action plan
SH3 Raynes Road						S	Safety
SH3 Dixon Road						S	Safety
Hood Street						S	Safety
Cobham Drive/Grantham Street						S	Safety
Lake Road/Queens Ave						S	Safety
Deys Park/Fairfield Bridge	N		A	PT		S	Network
Peachgrove Road/Ruakura Road intersection	N			PT		S	Network
Whitiora Bridge, Boundary Road	N		A	PT		S	Package - Network
Bridge Street/Grey Street/Clyde Street/Hamilton East area	N	TDM	A	PT	P	S	Package - Network
5 Cross Roads	N					S	Network
Lyndon Court/Chartwell/Hukanui Road/Comries Road		T	A	PT	P	S	Package Passenger Transport
Bridge Street	N			PT		S	Network
Ohaupo Road/Lorne Street/Hospital Triangle	N	T	A	PT	P	S	Package - TDM
The Base & SH1 Te Rapa		T		PT		S	Package - TDM
City Centre Area	N	T	A	PT	P	S	Package – TDM
Anglesea Street			A	PT		S	Active modes
Whitiora Bridge/Victoria Street	N		A	PT		S	Active modes
Intersections	N		A	PT		S	Active modes







CENTRAL - SAFETY



M.036



EAST - SAFETY



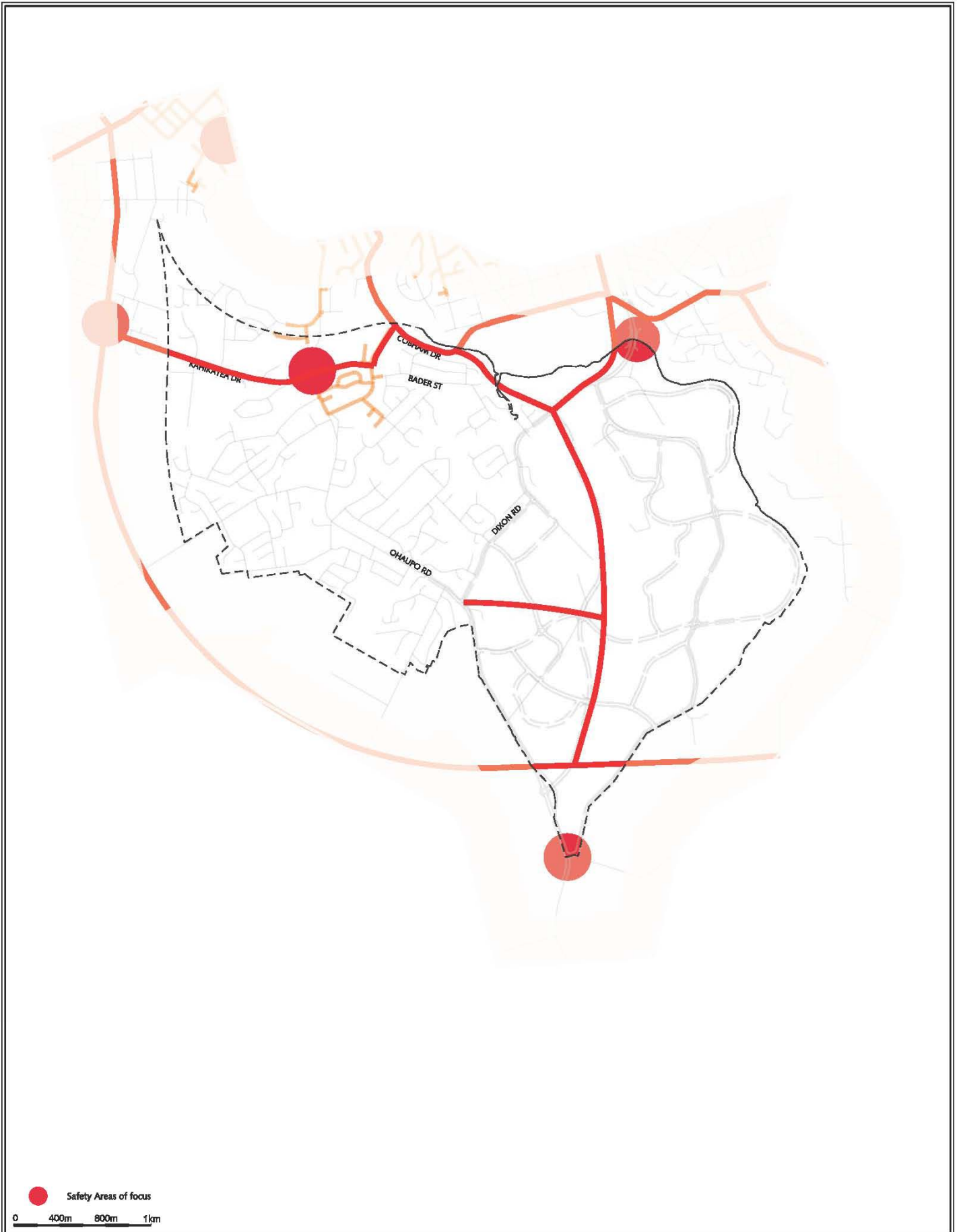
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WEST - SAFETY





SOUTH - SAFETY



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Appendix 3: Briefing Notes – Road Safety Issues

(Hamilton City, published 2009, crash information from 2004 to 2008)





briefing notes - road safety issues

Hamilton City

New Zealand Transport Agency has prepared this road safety issues report. It is based on reported crash data and trends for the 2004–2008 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 Hamilton City.

This report is the tenth road safety report for Hamilton City. All the material unless otherwise stated in this report applies to both local roads and state highways.

In each new report one year's data is added to a five year block and the oldest dropped so it is unlikely that the core issues would change radically from report to report.

The issues chosen for this report are drawn from either the most common crash types, those that appear over-represented when Hamilton 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 the city.

We encourage Hamilton City Council to use its free access to the Ministry of Transport's Crash Analysis System (CAS) to delve deeper into the highlighted issues. All data in this report is from CAS.

Major road safety issues *

Hamilton City

Alcohol

Intersections

Young Drivers

Rear End Crashes

Nationally

Speed

Alcohol

Failure to give way

Restraints

2008 road trauma

Casualties

Hamilton City

Deaths

1

Serious casualties

58

Minor casualties

407

Crashes

Hamilton City

Fatal crashes

1

Serious injury crashes

55

Minor injury crashes

309

Non-injury crashes

882

* Issues are not in any specific order of importance

Overview

In 2008 on local roads in Hamilton City there were 289 injury crashes and 692 non-injury crashes. In addition there were 76 injury crashes and 190 non-injury crashes on state highways both as reported by the New Zealand Police.

The table below shows the number of injuries resulting from the 365 injury crashes on local roads and state highways

Casualties by local roads / state highways 2008				
	Fatalities	Serious injuries	Minor injuries	Total
Local Roads	1	48	318	367
State Highways	-	10	89	99
Total	1	58	407	466

Crash trends in Hamilton City				
Year	Fatal Crashes	Serious Crashes	Minor Crashes	Total Injury Crashes
1999	7	39	258	304
2000	4	44	247	295
2001	-	34	218	252
2002	3	41	242	286
2003	8	45	257	310
2004	3	33	237	273
2005	10	36	231	277
2006	6	35	255	296
2007	6	44	317	367
2008	1	55	309	365

Local road crashes

Crash type or contributory cause 2004 to 2008	Percentage fatal and serious crashes of this type or contributory cause	Percentage all injury crashes of this type or contributory cause
Alcohol	22	14
Too fast	18	14
At bends	19	14
At intersections	51	53
Pedestrians	22	14
Cyclists	14	11
Motorcyclists	17	11
Road factors	6	8
Night time	38	33

Further information about 2004 to 2008 injury and non-injury crashes on **local roads** in Hamilton City

- Worst month May, best January
- Worst day Friday, best Sunday
- 26 percent on wet roads
- 34 percent at night
- 56 percent at intersections
- 2038 roadside objects struck
- Social cost of crashes in 2008 \$68m

Further information about 2004 to 2008 injury and non-injury crashes on **state highways** in Hamilton City:

- Worst month June, best September
- Worst day Tuesday, best Sunday
- 25 percent on wet roads
- 29 percent at night
- 63 percent at intersections
- 359 roadside objects struck
- Social cost of crashes in 2008 \$16m

Intersections

During the five year period 2004 to 2008 within Hamilton City there was a total of 3968 crashes at intersections, 848 of these were injury crashes and 3120 non-injury.

In these crashes 10 people were killed, 116 received serious injuries and 953 received minor injuries.

Crashes at Intersections					
	2004	2005	2006	2007	2008
Injury crash	161	151	147	198	191
Non-injury crash	563	738	682	632	505
Total	724	889	829	830	696

Locations with the most injury crashes 2004 to 2008		
Intersection name (Within a radius of 50m)	Injury crashes 2004 - 2008	total Injury crashes 2008
Mill Street / Victoria Street	17	3
Kahikatea Drive / Greenwood Street	13	2
Peachgrove Road / Te Aroha Street	12	3
Normandy Avenue / Bader Street	11	0
Bridge Street / Victoria Street	11	6

Junction control Injury and non-injury crashes				
Junction control	Traffic signals	Nil	Give Way	Stop
Number of crashes	952	646	2011	343

The most common crash type at intersections is when a driver turns right and is hit by a vehicle approaching from the right.

The main causes contributing to crashes described in Police reports were:

- Failure to stop and give way
- Not checking properly
- General errors of judgement

Junction type Injury and Non-injury crashes		
Junction Type	Open	Urban
Roundabout	90	655
Tee	138	1622
Cross (X)	14	1266
Y	3	29
Other (includes driveways)	8	143

Further information about the 663 injury crashes at intersections on **local roads** in Hamilton City 2004 to 2008:

- 8 deaths, 91 serious injuries and 735 minor injuries
- 27 percent wet roads
- 34 percent night time
- Worst month May, best October
- Worst day of week Thursday, best Sunday
- Worst three hour time period 3pm to 6pm

Further information about the 185 injury crashes at intersections on **state highways** in Hamilton City 2004 to 2008:

- 2 deaths, 25 serious injuries and 218 minor injuries
- 21 percent wet roads
- 37 percent night time
- Worst month May, best October
- Worst day of week Friday, best Sunday
- Worst three hour time period 3pm to 6pm

Alcohol

Alcohol affects the way people drive. Studies show that the risk of being involved in a crash increases rapidly as a driver's blood alcohol level rises.

A driver over the legal limit (80mg of alcohol per 100ml of blood) is three times more likely to be involved in a crash than a sober driver.

Contrary to popular opinion, people with high blood alcohol levels are more likely to be injured or killed in a crash than a sober driver in the same crash, and if injured, they are also more likely to encounter complications in their recovery.

In New Zealand for the 12 months to December 2008, alcohol-affected drivers contributed to 34 percent of all fatal crashes (the same as 2007) and 15 percent of all injury crashes (the same as 2007).

In Hamilton City alcohol was a factor in 13 percent of injury crashes in 2008.

Number of alcohol related injury crashes

Crash year	Open road	Urban road	Total
2004	4	26	30
2005	4	32	36
2006	4	38	42
2007	8	43	51
2008	7	42	49
Total	27	181	208

(Open road is classified as any area with a speed limit of 80km/hr or more)

From the beginning of 2007 New Zealand Transport Agency (formally Land Transport NZ) has been adding driver factor codes to all non-injury crashes for Hamilton City.

This will allow the Police and other agencies to target alcohol related crashes more quickly and with even more geographic accuracy than ever before.

In 2008 there were 100 non-injury alcohol related crashes reported by the Police in Hamilton City.

Alcohol related crashes by location

Road (road lengths may differ)	Crash social costs 2004-2008
Bridge St / Victoria St intersection	\$856,264
Victoria St / Marlborough Place intersection	\$4,148,732
Tristram St / Pembroke St intersection	\$675,095
Te Rapa Rd / Sunshine Ave intersection	\$254,164
Victoria St / Collingwood St intersection	\$179,464

Further information about the 172 alcohol related injury crashes in Hamilton City on **local roads** 2004 to 2008:

- 10 deaths, 42 serious injuries and 198 minor injuries
- 76 percent of at fault drivers were male
- Most common crash type 'Lost control turning right'
- 40 percent at intersections
- 94 percent urban
- 26 percent wet road
- 86 percent night time
- Worst three hour time period midnight to 3am
- Worst months June & September (equal) best March
- Worst day of week Sunday, best Monday

Further information about the 36 alcohol related injury crashes in Hamilton City on **state highways** 2004 to 2008:

- 6 deaths, 11 serious injuries and 34 minor injuries
- 71 percent of at fault drivers were male
- Most common crash type 'Lost control on left hand bend'
- 36 percent at intersections
- 56 percent urban
- 31 percent wet road
- 83 percent night time
- Worst three hour time period 3am to 6am
- Worst month April, best January & July (equal)
- Worst day of week Thursday, best Monday & Tuesday (equal)

Rear End Crashes

Between 2004 and 2008, 24 percent of all injury crashes in Hamilton City involved rear end collisions. These crashes resulted in 3 fatalities, 31 serious injuries and 448 minor injuries.

There were also 2169 non-injury rear end crashes which have fluctuated over the last 5 years.

Rear End collisions 2004 to 2008				
Crash year	Fatal crashes	Serious crashes	Minor crashes	Total
2003	-	3	51	54
2004	1	6	67	74
2005	1	5	66	72
2006	1	7	72	80
2007	-	8	95	103
Total	3	29	351	383

Most rear end crashes involve a driver failing to see a car slowing with 20 percent of all injury rear end crashes including this factor. 12 percent involve a driver following to closely.

Locations with the most injury rear end crashes 2004 to 2008	
Location name (Within a radius of 100m)	Total Injury crashes
Victoria St / Ward St intersection	6
Victoria St / Bridge St intersection	6
SH1 (Lorne St) / Normandy Ave intersection	6
SH1 / The Base Parade intersection	6
Grey St—30m north of Cook St	5

Age and gender of at fault drivers (note—age ranges are not equal)

Ages of drivers at fault in injury crashes (2004 to 2008)	Male	Female	Total
15- 19	49	36	85
20 - 24	43	35	78
25 - 29	23	20	43
30 - 39	29	28	57
40 - 49	31	15	46
50 - 59	14	8	22
60 - 69	13	3	16
70+	8	9	17
Total	210	154	364

Further information about rear end injury crashes on **local roads** and **state highways** in Hamilton City 2004 to 2008:

- 2 deaths, 25 serious injuries and 351 minor injuries on **local roads**
- 1 death, 6 serious injuries and 97 minor injuries on **state highways**
- 7 percent involved alcohol
- 10 percent involved 'too fast for the conditions'
- 21 percent at night
- 21 percent in the wet
- 52 percent of drivers with a 'full' licence
- 58 percent of at fault drivers were male
- Most common cause of crashes, 'failed to see vehicle slowing'
- Worst month May, best January
- Worst day of week Thursday, best Sunday & Monday
- Worst three hour time period 3pm to 6pm

Young drivers

Young drivers are those aged less than 25 years.

This analysis is based on injury crashes only as driver age is not recorded in non-injury crashes.

In Hamilton City between 2004 and 2008 44 percent of injury crashes involved young drivers. These crashes resulted in 21 fatalities, 99 serious injuries and 899 minor injuries. Three of the eight fatalities were from a single fatal crash in 2005.

The total number of injury crashes involving young drivers reduced in 2008 from the high of 207 in 2007. There is no obvious trend in the annual number of crashes involving young drivers, however numbers have increased each year between 2004 and 2007.

Injury crashes involving young drivers

	Fatal	Serious	Minor	Total
2004	2	9	108	119
2005	6	12	118	136
2006	6	17	119	142
2007	3	24	180	207
2008	1	18	147	166
Total	18	80	672	770

Just under half of the young drivers in these crashes had a learner or restricted licence. Nearly two thirds of them were males and 47 percent of young drivers involved in crashes were 15-19 year olds.

Over 80 percent of all the young drivers involved in crashes in Hamilton City were local residents.

Young drivers in injury crashes

Licence type	Female	Male	Total
Full	102	197	299
Learner	43	79	122
Restricted	113	126	239
Overseas	10	14	24
Never licensed	7	16	23
Disqualified	2	10	12
Other (unknown, wrong class)	20	33	53
Total	297	475	772

Injury crashes involving young drivers

Crash type or contributory cause	Urban roads % of injury crashes
Alcohol	15
Speed	18
Failed to stop/Give way	39
Poor handling	10
Poor observation	52
Lost control - straight	9
Lost control - bend	16
Rear end / obstruction	25
Crossing / turning	6

Further information about the 626 injury crashes involving young drivers on **local roads** in Hamilton City 2004 to 2008:

- 22 percent were single vehicle crashes
- 53 percent at intersections
- 39 percent at night
- 27 percent in the wet
- Worst month May, best January
- Worst day of week Friday, best Tuesday

Further information about the 144 injury crashes involving young drivers on **state highways** in Hamilton City 2004 to 2008:

- 16 percent were single vehicle crashes
- 66 percent at intersections
- 39 percent at night
- 26 percent in the wet
- Worst month July, best January
- Worst day of week Wednesday, best Monday

Motorcyclists

Nationally motorcycling fatalities dropped from 20 percent of all fatalities in 1988, to just six percent in 2003. Since then there has been an increase in motorcycle registrations and this has reversed the downward trend. In 2008 motorcyclists accounted for 14 percent of road fatalities in New Zealand. In early 2009 this had risen to over 20 percent.

Motorcyclist injuries feature relatively high in the overall crash statistics in Hamilton City. While representing only 10 percent of all injuries they however make up 15 percent of fatal and serious injuries. Between 2004 and 2008 injuries as a result of motorcycle crashes have more than doubled.

Motorcyclist injuries					
	2004	2005	2006	2007	2008
Fatal	1	-	1	1	-
Serious	4	8	5	7	13
Minor	19	23	29	39	44
Total	24	31	35	47	57

The most common type of motorcycle crash is when a vehicle fails to give way and the motorcyclist hits the vehicle.

Locations with most cyclist crashes	
Location	Number of motorcycle crashes
Normandy Ave / Bader St intersection	3
Anglesea St / London St intersection	3
SH 1 north / Church Rd intersection	3
Killarney Rd / Queens Ave intersection	2

Ages of motorcycle casualties

Ages	Male	Female	Total
5 to 9	-	-	-
10 to 14	-	-	-
15 to 19	47	8	55
20 to 24	25	7	32
25 to 29	17	3	20
30 to 34	16	4	20
35 to 39	12	4	16
40 to 44	10	4	14
45 to 49	8	2	10
50 to 54	6	3	9
55 to 59	5	2	7
60 to 64	2	-	2
65 to 69	2	-	2
70 to 74	2	-	2
75 and over	-	-	-
Unknown	3	2	5

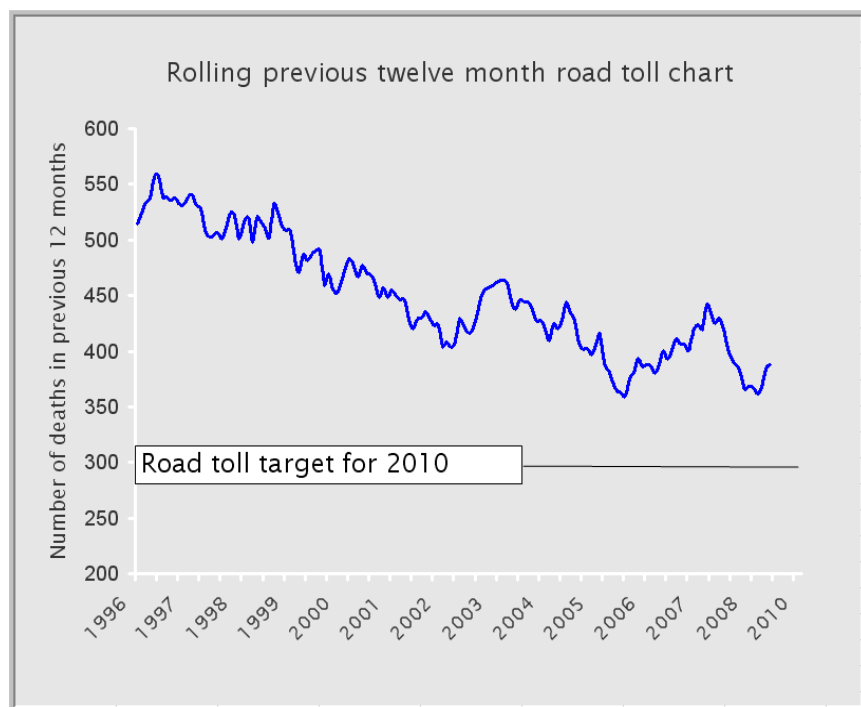
Further information about the 137 injury motorcyclist crashes on **local roads** in Hamilton City 2004 to 2008:

- 31 motorcyclists received serious injuries and 115 minor injuries
- 18 percent were in the wet
- 26 percent at night
- Worst month May, best June
- Worst day of week Friday, best Wednesday

Further information about the 45 injury motorcyclist crashes on **state highways** in Hamilton City 2004 to 2008:

- 3 motorcyclists died, 6 received serious injuries and 39 minor injuries
- 16 percent were in the wet
- 33 percent at night
- Worst month December, best October & November (equal)
- Worst day of the week Wednesday, best Saturday

The next ten years—moving beyond Road Safety 2010



In August this year the Ministry of Transport will embark on a nationwide road safety consultation programme as it moves to formulate priorities for the next ten years.

Information will be published on their web site and we would encourage any person or group with an interest in road safety to watch the site carefully for developments. Follow this link :

<http://www.transport.govt.nz/ourwork/Land/landsafety/SaferJourneys-RoadSafetyStrategyto2020/>

The chart on the left illustrates the progress made during the life of the Road Safety 2010 strategy and although progress has been made it would seem highly unlikely that the target of 300 or fewer fatalities will be met.

Restraints

The Ministry of Transport (MoT) conducts surveys of restraint use. Results are available for front, rear and child restraints although not all at a local authority level.

See the MoT website : <http://www.transport.govt.nz/research/safetybeltstatistics/>

Contacts

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TBA

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New Zealand Police

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Road Policing Manager
New Zealand Police
Waikato
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Hamilton

Phone 07 858 6200
www.police.govt.nz

Appendix 4: Road Safety Action Plan

(Current as at March 2010)



Road Safety Action Plan for



Period: 1st July 2010 to 30th June 2011
Date: 31 March 2010

Contact: Kerryn Merriman
Ph: 07 958 5976

Road Safety Objectives

State what the partners want to achieve, including targets, and how effectiveness will be measured:

1. Reduction in the number and severity of crashes.
2. Creation of a culture of safety on Hamilton roads, with well trained and well educated road users who are aware of risks and mitigate them.
3. Achievement of transport safety targets that place Hamilton equal to or better than councils in Peer Group A.

Explain how the partners will monitor progress:

1. Report back,
2. Maintained reduction in accident figures,
3. Respond to identified issue areas.

Identify the links between the targets identified in this RSAP and the objectives set out in strategic documents:

1. HCC Safety Management System, Access Hamilton strategy and Transport Safety Action Plan
2. Regional Road Safety Strategy
3. National Road Safety Strategy 2020
4. Police, NZTA, ACC and WDHB strategic documents.

Date of next meeting:

31 March, 2010
Hamilton City Council Building, Garden Place

Record of actions

[illegible]

Target Area: Alcohol

Area/location specific issues	Strategic linkages
Alcohol. Focus on City centre and high speed urban zones	HCC, ACC, Police, Kirikiriroa Maori Wardens, EW.
Objectives	Success Indicators
To reduce the number of drink and drug-driving offences and alcohol related crashes in Hamilton.	Police Data – numbers breath screened.

Targets
<p>5% reduction in positive breath alcohol tests.</p> <p>20% reduction in alcohol-related crashes on high speed urban zones.</p>

Actions		Target outcome	Organisations And persons responsible	Date to be completed by	Monitoring and evaluation
Education	1. ACC will keep us informed on campaigns that the Liquor Licensing Group will be involved in.	Form steering group that involves the District and City Councils, along with the W.D.H.B.	ACC	Ongoing project.	
	2. Develop campaign – how much is too much?	Educate patrons attending bars/clubs in city centre about # drinks and alternative transport options.	HCC	Xmas new year & O'week	
	3. Ready Response.	Targeting alcohol use in Hamilton City.	Kirikiriroa Maori Wardens in association with Police.		

Enforcement	1. Continue to support Booze Bus operations.	Reduce alcohol related crashes.	Police.	ongoing	Dedicated Booze Bus in Hamilton every weekend
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Comments	Analyse and report enforcement and crash figures to each RSAP meeting
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Target Area: Intersections

Area issues	Strategic linkages
Intersections. Failure to Give Way. Poor Observation. Running red lights. New give way rule.	HCC, NZTA, Police
Objectives	Success Indicators
To reduce intersection related crashes in the City. To reduce 'failure to give way' crashes to a level equal or better than that of our peer group average.	Reduce crashes (CAS Data).

Targets
50% reduction in high speed urban intersection crashes 5% reduction in urban intersection crashes

Actions	Target outcome	Organisations and persons responsible	Date to be completed by	Monitoring and evaluation
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Engineering	Review crash data for indications of black spots for top 40 intersections in Hamilton.	Identify black spots and programme and remedial works required.	HCC, Police & NZTA.	Annually	Top 40 now assessed annually. Intersections that have been treated are monitored for 5 years. Reassess annually.
	Undertake Crash Reduction Study identifying and prioritising worst intersections, and addressing safety issues	Crash reduction studies completed	HCC, NZTA, Police	Annually	
	Consider new technology such as Red Light Cameras. – install dummy cameras until NZTA approved? – identify key sites	Investigate Red Light Cameras	HCC./NZTA		
	Assess all possible locations to ensure full compliance with traffic regs	Traffic signals compliant with regs and red light cameras installed	HCC		
	Consider changing phasing – reduce orange phase, remove all red phase	Reduced red light running & crashes	HCC		
Education	Undertake annual 'Give a Damn' Intersection project. Promotion of poor observation, change in give way rule,	Target driver and road user behaviour with direct campaigning combined with Police enforcement and HCC/NZTA engineering.	HCC, NZTA, Police,	Annual programme with different phases focussing on key areas.	CAS Data. Police enforcement statistics.

Enforcement	Undertake annual 'Give a Damn' Intersection project. Serious & ongoing attention from police to change long term behaviour	Target driver and road user behaviour with direct campaigning combined with Police enforcement and HCC/NZTA engineering.	HCC, NZTA, Police,	Annual programme with different phases focussing on key areas.	CAS Data. Police enforcement statistics.
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Comments	HCC expectation to take an active role in promoting and enforcing rule change and assess engineering requirements.
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Target Area: Rear End Crashes

Area/location specific issues	Strategic linkages
Poor observation	HCC
Objectives	Success Indicators
Reduce the number of rear end crashes in Hamilton	Reduction in CAS statistics. Reduction in injuries.

Targets
5% reduction in rear end crashes

Actions	Target outcome	Organisations And persons responsible	Date to be completed by	Monitoring and evaluation
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Engineering	Review crash data for indications of black spots for top 40 intersections in Hamilton.	Identify black spots and programme and remedial works required.	HCC, Police & NZTA.	Annually	Top 40 now assessed annually. Intersections that have been treated are monitored for 5 years.
	Undertake Crash Reduction Study identifying and prioritising worst intersections, and addressing safety issues	Crash reduction studies completed	HCC, NZTA, Police	Annually	Reassess annually.
	Engineer road network to reduce the risk of rear-end crashes	Road Safety Audits for intersection improvement projects are completed to ensure changes have considered existing issues and have implement changes to resolve them.	HCC		Less intersection crashes.
Education	Undertake campaign to raise awareness of the dangers of poor observation.	More understanding of the dangers of give way rules	HCC		Less rear end crashes
	Undertake campaign to raise awareness of change in give way rule.	Ensure public are aware of changes to rule	HCC, NZTA		Less rear end and intersection crashes
Enforcement	Enforce give way rules, stop lines and poor observation offences		Police		

Comments	HCC expectation to take an active role in promoting and enforcing rule change and assess engineering requirements.
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Target Area: Young Drivers

Area/location specific issues	Strategic linkages
Drivers under the age of 25	HCC, NZTA, EW, Police
Objectives	Success Indicators
Reduction in the representation of young drivers in Hamilton crash casualties to equal to or better than Peer Group.	

Targets
20% reduction in casualties of drivers under 25 years old.

Actions		Target outcome	Organisations And persons responsible	Date to be completed by	Monitoring and evaluation
Education	Undertake awareness raising exercises at schools, UoW, & WINTEC.	Raise understanding of skills needed to drive safely	HCC, Schools, UoW, WINTEC	Annually	
	Provide additional training for young drivers	Work with outside vendors to provide training to young drivers	HCC	Annually	
	Promote changes in BAC levels Promote alternative modes	Increased use of Night Rider	HCC, EW	ongoing	

Enforcement	Young drivers – speed	Enforce speeding offences to raise awareness of speed limits	Police	Ongoing	What are the issues? Speed? Care? Training?
	Young drivers - alcohol	Regularly test young drivers for breath alcohol levels. Lower BAC levels apply. Regular use of BOOZE bus	Police	ongoing	

Comments	
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Target Area: Vulnerable Road Users.

Area/location specific issues	Strategic linkages
Vulnerable Road Users.	HCC
Objectives	Success Indicators
To reduce Vulnerable Road User crashes in Hamilton City.	ACC, CAS

Targets
<p>5% reduction in cycle crashes.</p> <p>5% reduction in pedestrian crashes.</p>

Actions		Target outcome	Organisations And persons responsible	Date to be completed by	Monitoring and evaluation
Engineering	1. Development of city cycle network.	Safe cycle routes	HCC / NZTA	10-year programme, due for completion in 2016	Annual cycle cordon count undertaken. Assessment of cycle crashes.
	2. Development of 40km/h school speed zones	Reduce speeds and severity of crashes/injuries around schools.	HCC	Annual programme due for completion by 2015	Speeds and volumes of traffic monitored before and after.

Education	1. Support Bike Wise week.	Increase cycle usage.	HCC	Annual	Higher awareness of bikewise, higher participation in cycle use Target set to complete 39 plans by 2012. More coordinated involvement of parking enforcement officers
	2. Lights on Bike campaign.	Highlighting the dangers of not been seen at night, and increasing the number cyclists using both front and back lights.	HCC, Police and cycle firms within the city.	Annual in June/July.	
	3. Develop School Travel Plans. Coordinate work with EW, police in schools	Awareness of the impact of school travel and promotion of alternatives to driving.	HCC		
	4. Cycle skills training	Improved safe cycling behaviour from students	HCC, sport Waikato, police, NZTA		
	5. Back to school campaigns	Increase awareness & compliance of speed and parking	HCC		
	6. Parking education of parents re: safety	Reduced occurrence of illegal parking at school gates	HCC, parking,		
Enforcement	1. Targeting people without helmet, which would encompass a \$55 fine.	Increase numbers wearing helmets.	Police Education Officer.		Infringements issues and Police data collected.
	2. Targeting people with no front light, taillight or reflector, which would encompass a \$55 fine.	Increase numbers having and using cycle lights.			

Comments	Coordinated approach with all partners to ensure successful behaviour change
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Target Area: Motorcycles

Area/location specific issues	Strategic linkages
citywide	HCC, Police, ACC
Objectives	Success Indicators
Reverse the trend of increasing motorcyclist casualties	

Targets
Number of motorcyclist casualties at or below 40 per year.

Actions		Target outcome	Organisations And persons responsible	Date to be completed by	Monitoring and evaluation
Education	Undertake awareness raising exercises	Raise understanding of skills needed to drive safely	HCC	Annually	
	Provide additional training	Work with outside vendors to provide training	HCC	annually	
Enforcement	Speed	Enforce speeding offences to raise awareness of speed limits	Police	Ongoing	

Comments

Appendix 5: Safety Management System (Currently draft)





Safety Management System

Draft

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1. Introduction

1.1. Purpose, Use and Ownership of the SMS

This document describes HCC's safety management system (SMS) for transportation.

The aim of the SMS is to provide a guideline for HCC staff members to ensure that transportation activities are carried out safely and in a way that contributes to HCC's safety objectives and strategy. It targets a 'safe systems approach' as illustrated in the diagram below:

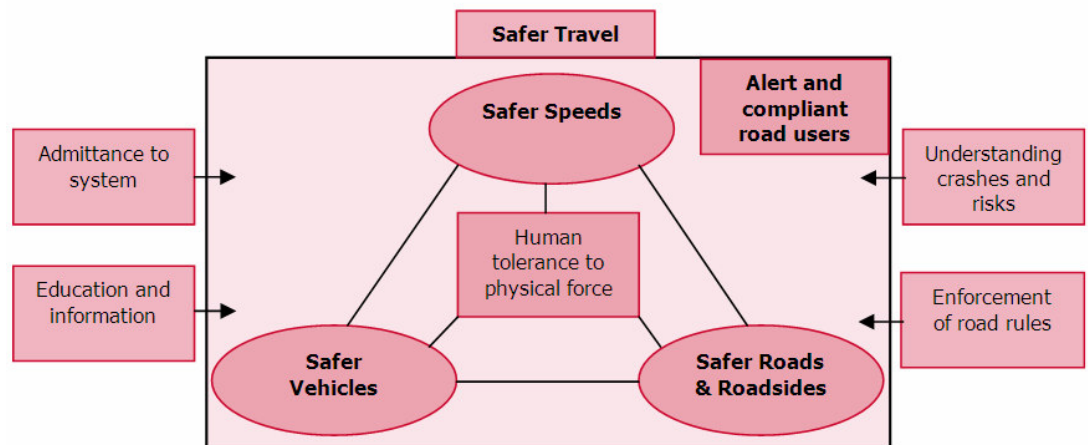


Figure 1 Safe Systems Approach

The document will direct staff to relevant documents, policies and procedures that will be followed to ensure safety. The previous SMS collated and summarised standards and guidelines.

The SMS is owned by the Works and Services Transportation team. Its implementation is the responsibility of the City Transportation Manager.

1.2. Structure

The SMS is set out in accordance with NZTA Guidelines for Safety Management Systems, in the following sections:

- Safety strategy – outlines HCC’s strategy for safety and how it will be implemented.
- Standards and guidelines – provides direction on their application.
- Expertise – outlines how the SMS requires HCC transportation staff to be competent in terms of carrying out their responsibilities safely.
- Management – sets out the management system for the SMS
- Auditing – sets out audit requirements, including timing and frequency and requirements for auditors

The HCC Transport safety strategy is set out in the HCC Transportation Safety Action Plan, included in Access Hamilton, HCC’s strategy for integrated transport for the City. The diagram below shows the structure of Access Hamilton and where transport safety fits (**bold outline**):

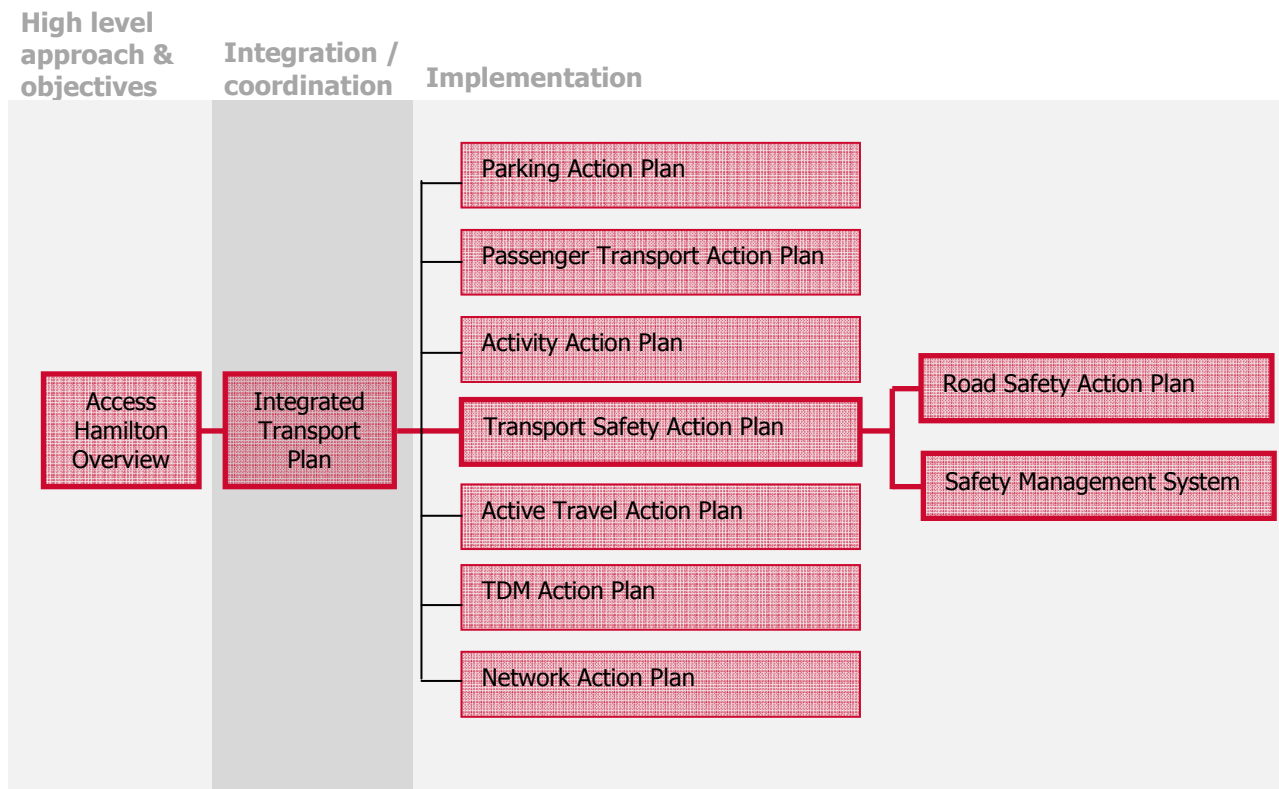


Figure 2 Transport Safety in Access Hamilton Structure

2. Transport Safety Strategy

2.1. Outline of Strategy

HCC's transport safety strategy was developed and is being implemented as part of Access Hamilton.

The transport safety strategy is called the 'Transport Safety Action Plan'. It includes objectives and targets, along with an action and implementation plan and measuring and monitoring guidelines.

The overall vision for Access Hamilton is that "Hamilton has an affordable, integrated, safe, responsive and sustainable transport system".

HCC's aspiration is for no-one to be killed or seriously injured on Hamilton's transport network. This is consistent with the government's goal of 'a safe transport system that is increasingly free of transport-related deaths and serious injuries'.

The objectives for transport safety for Access Hamilton to achieve by 2040 include:

- Reverse the increasing trend in the number of injury crashes
- Reduce the number of crashes where alcohol is a factor
- Achieve an intersection crash rate that is the same as or is lower than similar cities.
- Reduce the level of rear-end crashes.
- Reduce the representation of young drivers (<25 years old) in Hamilton's crash casualties
- Improve safety for vulnerable road users.
- Reverse the trend of increasing motorcyclist casualties

2.2. Implementation

The transport safety strategy is delivered through:

- This Safety Management System (SMS) which in turn relies upon the HCC LTCCP Asset Management Plan, District Plan, Bylaws and Policies.
- The annual Road Safety Action Plan (RSAP), which is reviewed and updated by the road safety group (HCC, NZTA, ACC, Police). The RSAP includes actions that relate to Hamilton's specific safety issues. This SMS is a guide that will help HCC transportation staff members operate in a way that supports Hamilton's road safety aspiration.

3. Policies, Procedures, Standards and Guidelines

HCC's standards and guidelines relating to transportation can be found in the Development Manual.

Processes and procedures are included in the District Plan, Development Manual and Activity Management Plan.

HCC processes, such as emergency management and customer request notifications, are included in the Activity Management Manual (AMP).

HCC have various policies available to staff via the intranet. The following policies relate to safety in the transportation unit. The words 'Health and Safety' will be replaced with 'Safety and Well-being'.

- Health and Safety Policy
- Code of Practice for Health and Safety
- Contractors Health and Safety Manual
- Safety and Well-being Charter

4. Expertise

4.1. Overview

The structure of Works and Services is available on Velocity, HCC's intranet system, and shows reporting lines and responsibilities. A copy of the structure of the transportation unit as at 1 March 2010 is attached overleaf.

Appropriate levels of expertise are required for City Transportation to safely deliver its services. There are four levels of competence, described below:

Competence Level		Description of Expected Abilities
A	Appreciation	Recognises the purpose of the activity or infrastructure element. Knows who can help and what the likely processes are in responding to requests and notifications. Can assess the need for urgency.
U	Understanding	Understands the processes and decisions involved. Appreciates the impact of options available and can identify the appropriate response within readily available guidelines.
C	Competence	Develops appropriate solutions without supervision, drawing on previous experience and training. Can identify when expert or specialist assistance is necessary.
E	Expertise	Provides specialist advice, training and supervision in the relevant field. Can develop guidelines for others to determine actions, assess the implications of trends and offer options for solution.

4.2. Requirements for expertise / competency requirements

It is the responsibility of the transportation unit manager to ensure that the group as a whole meets requirements for expertise and competency in relation to safety.

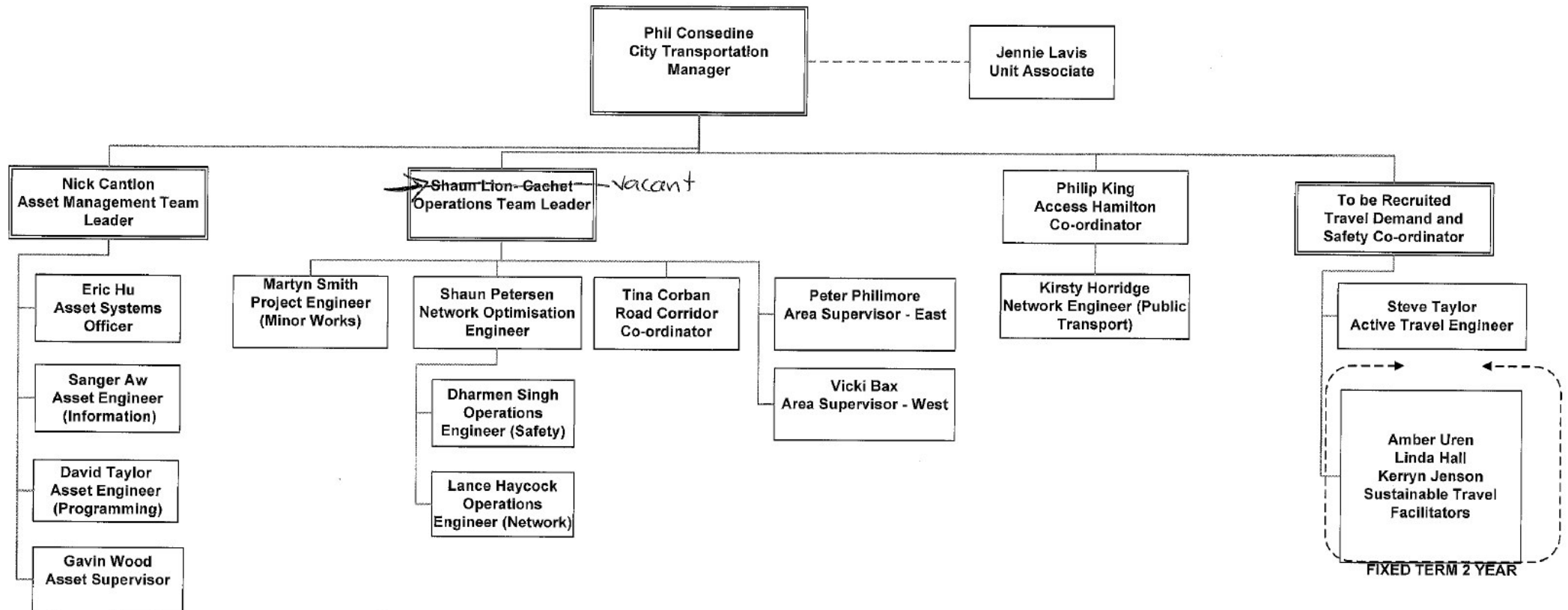
All HCC Works and Services staff must have a level of competence of at least 'Understanding' level for assets or processes for which they are responsible, with regard to safety aspects. This will ensure that staff can recognise the safety impacts of options and when a higher level of knowledge is required.

Within the Transportation group, staff as a whole must have expertise or access to expertise for all aspects of safety.

Unit managers fill out a Team Development questionnaire to identify what is currently going on and changes that are expected in the future. One of the questions triggers identification of any critical skill gaps within the unit, and prompts managers to consider how they can be filled.

This is an ideal opportunity to review the competency and expertise requirements and amend development and training plans to ensure that within the unit, safety expertise requirements are met.

WORKS & SERVICES CITY TRANSPORTATION UNIT



5. Management

5.1. Overview

The diagram below illustrates the structure and the implementation of the SMS:



Figure 3 SMS Structure

5.2. Responsibilities

The SMS is owned by the transportation unit. The Operations Engineer (safety) is responsible for:

- Day to day delivery of the SMS
- Audit of the SMS

The transportation unit manager is responsible for ensuring that the system is implemented.

All transportation unit staff are responsible for applying relevant procedures and processes to their activities

5.3. Opportunities for Improvement

To continually improve the SMS, opportunities for improvement should be identified and implemented. The process for continuous improvements is outlined in the diagram below and is the responsibility of the Operations Engineer (Safety).

Contribute to other processes

Activity Management Plan
Development Manual
District Plan
Other strategies and standards

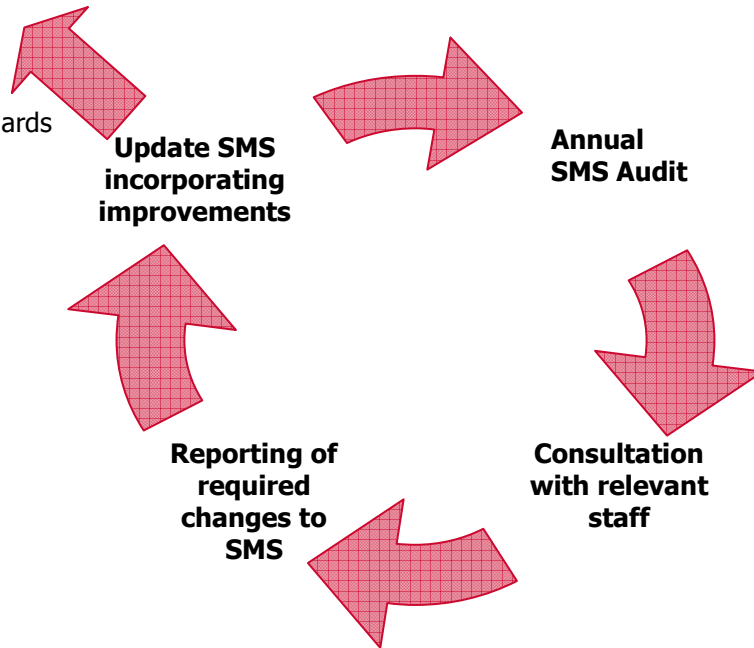


Figure 4 System for continuous improvement

A 'continuous improvements' form is included in Appendix A, and should be reviewed every 6 months for progress and outstanding actions.

5.4. Audits

The SMS will be reviewed annually for consistency and effectiveness. The identified opportunities for improvement will be reviewed to ensure that worthwhile opportunities have been incorporated into the SMS.

5.5. Staff Competence

Management of staff competence is the responsibility of the transportation unit manager. Following each role change, structure change or training programme, the manager must ensure that competency and expertise requirements as set out in Section 3 are met. If there are any gaps, the manager should address these through staff responsibility allocations, training and development programmes or procurement of external specialists.

6. Audit Requirements

6.1. Purpose of Audits

The purpose of auditing the SMS is to assess the systems:

- Effectiveness, in terms of progress to targets and safety trends.
- Compliance – adherence to procedures and guidelines, and currency of components.

6.2. Auditor Requirements

The auditor may be internal or externally appointed. The auditor must have suitable experience in:

- Road safety engineering, or
- Auditing of compliance with safety / quality management systems.

The auditor may be the owner of, or may be appointed by the owner of the SMS and must report audit results, outcome and further actions to the transportation unit manager.

6.3. Timing and Frequency

Audit reports should be completed annually, with selected audits of activities occurring throughout the year.

6.4. Audit Requirements for SMS Sections

Audit requirements are outlined in the table below:

SMS Section		Audit considerations
1	Transport Strategy	Identify if there have been any changes to the Access Hamilton Transport Strategy, and if this will result in any changes to the SMS.
2	Policies, Standards and Guidelines	Ensure there is a correct list of policies, standards and guidelines that includes for safety. Ensure all are correctly referenced in relevant documents, and are consistent with Access Hamilton.
3	Expertise	Ensure all required competency and expertise needs are met within the group.
4	Management	Check for consistency with transportation unit structure, systems, operations, delegations and responsibilities. Adequacy Identify opportunities for improvement.

7. Appendices

Appendix 1: Continuous Improvement

Section	Process to identify opportunities	Resulting Actions (examples in italics)	Person Responsible	Completion Date
Strategy	Ensure planned reviews and monitoring of strategy have been carried out.	<i>Check progress against targets</i>	Access Hamilton Coordinator	
Policies, standards and guidelines	Consultation with HCC staff to identify issues with policies, standards and guidelines.	<i>Review particular standards with respect to safety Update relevant documents to ensure latest standards, procedures etc</i>	Staff as outlined in the Transportation Unit's 'Who Does What' guide, see following page.	
Procedures	Consultation with HCC staff to identify issues	<i>Amend procedures where required</i>	Transportation Asset Manager	
Expertise	Consultation with HCC staff to identify possible gaps	<i>Update of job descriptions Incorporate findings into training development programmes</i>	Transportation Unit Manager	
Management	Check outstanding actions from audits and this table	<i>Complete actions</i>	Operations Engineer (safety)	
Audit	Check if audit outcomes are being incorporated into SMS	<i>Amend process of incorporating improvements</i>	Operations Engineer (safety)	

Transportation Unit 'Who Does What'

Asset	Staff	Extn	Number	Email
Asset Manager	Nick Cantlon	6598	021 223 4611	nick.cantlon@hcc.govt.nz
Bridges	Nick Cantlon	6598	021 223 4611	nick.cantlon@hcc.govt.nz
Bus Shelters	Kirsty Horridge	6861	021 229 8286	kirsty.horridge@hcc.govt.nz
Catch Pits (fixing)	Gavin Wood	6780	021 904 247	gavin.wood@hcc.govt.nz
Catch Pit Cleaning (East side)	Vicki Bax	6779	021 809952	vicki.bax@hcc.govt.nz
Catch Pit Cleaning (west side)	Peter Phillimore	6870	021 937 820	peter.phillimore@hcc.govt.nz
Cobble Stones	Gavin Wood	6780	021 904 247	gavin.wood@hcc.govt.nz
Crossings / Driveways	Building Unit			
Cycling Issues	Steve Taylor	6949	021 240 9782	steve.taylor@hcc.govt.nz
Events	Tina Corban		021 937 854	tina.corban@hcc.govt.nz
Flooding (East Side)	Vicki Bax	6779	021 809952	vicki.bax@hcc.govt.nz
Flooding (West Side)	Peter Phillimore	6870	021 937 820	peter.phillimore@hcc.govt.nz
Footpaths	Gavin Wood	6780	021 904 247	gavin.wood@hcc.govt.nz
Kerb and Channel	Gavin Wood	6780	021 904 247	gavin.wood@hcc.govt.nz
Litter (East Side)	Vicki Bax	6779	021 809952	vicki.bax@hcc.govt.nz
Litter (West Side)	Peter Phillimore	6870	021 937 820	peter.phillimore@hcc.govt.nz
Neighbours consent for planning - building in front yard	Phil Consedine	6904		phil.consedine@hcc.govt.nz
Over hanging vegetation	Bylaws			
Parking (on my street)	Lance Haycock	5868	021 849 967	lance.haycock@hcc.govt.nz
Parking (over my driveway)	Lance Haycock	5868	021 849 967	lance.haycock@hcc.govt.nz
Potholes	Gavin Wood	6780	021 904 247	gavin.wood@hcc.govt.nz
RAMM Information	David Taylor	5995	021 224 2894	david.taylor@hcc.govt.nz
RAMM Information	Sanger Aw	6580		sanger.aw@hcc.govt.nz
Road Marking (East side)	Vicki Bax	6779	021 809952	vicki.bax@hcc.govt.nz
Road Marking (West side)	Peter Phillimore	6870	021 937 820	peter.phillimore@hcc.govt.nz
Road Opening corridor	Tina Corban		021 937 854	tina.corban@hcc.govt.nz
Road Sealing (1st Point)	Nick Cantlon	6598	021 223 4611	nick.cantlon@hcc.govt.nz
Road Sealing (2nd Point)	Paul Prouse (Duke Street)	6775	021 416 503	paul.prouse@hcc.govt.nz

Asset	Staff	Extn	Number	Email
Safety (Roading)	Dharmendra Singh	6500	021 792 375	dharmendra.singh@hcc.govt.nz
Signs (East Side)	Vicki Bax	6779	021 809952	vicki.bax@hcc.govt.nz
Signs (West Side)	Peter Phillimore	6870	021 937 820	gavin.wood@hcc.govt.nz
Street Furniture (East Side)	Vicki Bax	6779	021 809952	vicki.bax@hcc.govt.nz
Street Furniture (West Side)	Peter Phillimore	6870	021 937 820	peter.phillimore@hcc.govt.nz
Street Lights	David Taylor	5995	021 224 2894	david.taylor@hcc.govt.nz
TMP's - Traffic management plans	Tina Corban		021 937 854	tina.corban@hcc.govt.nz
Traffic Signals	Shaun Peterson	6638	021 356 393	shaun.peterson@hcc.govt.nz
Trees (street only)	Pip Watson	9005		
Unit Manager	Phil Consedine	6904		phil.consedine@hcc.govt.nz
V8's	Peter Phillimore	6870	021 937 820	peter.phillimore@hcc.govt.nz
Walking School Bus	Steve Taylor	6949	021 240 9782	steve.taylor@hcc.govt.nz
Walkway Litter (East Side)	Vicki Bax	6779	021 809952	vicki.bax@hcc.govt.nz
Walkway Litter (West Side)	Peter Phillimore	6870	021 937 820	peter.phillimore@hcc.govt.nz
Weeds	Paul Prouse (Duke Street)	6775	021 416 503	paul.prouse@hcc.govt.nz

Appendix 6: Proposed Safety Activities



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Appendix 7: Summary Brochure



Areas for Action

Coordination with other Action Plans		Parking	Safety	TDM	Active Travel	Activity	Passenger Transport	Network	Cost	Funding*
Possible packages are identified in the Integrated Transport Plan. Projects are those identified in the LTCCP or RLTP, whether funded or not.										
Possible Packages										
SH3 Raynes Road										U
SH3 Dixon Road										U
Hood Street										U
Cobham Drive/Grantham Street										U
Lake Road/Queens Ave										U
Key Projects										
S01	Annual Accident Investigation Study 2009-2012								\$223K	NF
S02	Safety Improvements								\$6.3M	LF
S03	Safety Management System Update 2009-2012								\$200K	NF
S04	School speed zones (signage and education)								\$991K	LF
S05	SH1 Safety Improvements (Hamilton North SH1)								\$3.6M	NF
S06	SH1 Safety Improvements (Hamilton Urban)								\$360K	NF
S07	E1 –Peachgrove East St, Te Aroha – Peachgrove intersections									LF
S08	Traffic Calming									LF
S09	Comries Road traffic calming									U

* LF = funded in LTCCP, LU = unfunded in LTCCP, U = not funded, NF= NLTP funded

Contact

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Visit Council Offices, Garden Place, Hamilton, New Zealand
Phone 07 838 6699
Fax 07 838 6599
Email info@hcc.govt.nz

Access Hamilton will be delivered by Hamilton City Council working closely with Hamilton’s neighbouring Council’s and Transport Safety Partners.

Status: Draft Issue 4



Transport Safety Action Plan Summary

Access Hamilton is one of Hamilton’s eight key strategies that assist the City Council to achieve its strategic objectives and guide the city’s development and transport infrastructure planning over the next thirty years. It is a high-level integrated transport strategy that identifies the strategic transport aspirations of the city to deliver Council’s objectives, and contributes to national goals and regional priorities.

Access Hamilton will meet the changing travel demands of the city by providing an affordable, safe, responsive and sustainable transport system.

The Access Hamilton strategy focuses on Hamilton’s transport partners working together to improve access and considers transport in five ways:

- Working together to improve access
- Planning for the future
- Understanding our choices
- Managing and adapting for the future
- Providing for the future

Access Hamilton Strategy	
Integrated Transport Plan	Parking Management Action Plan
	Transport Safety Action Plan
	Travel Demand Management
	Active Travel Action Plan
	Activity Management Action Plan
	Passenger Transport Action Plan
	Network Action Plan

This Action Plan

The Transport Safety Action Plan sets out how HCC will work with its transport safety partners to achieve its safety vision:

‘a safe transport system that is ‘increasingly free of transport-related deaths and serious injuries’

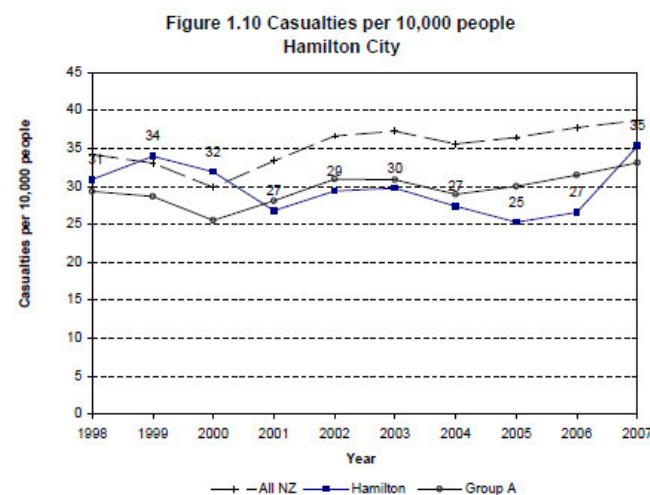
The planned actions cover the following areas of activity and concern:

- General
- Planning
- Alcohol
- Intersections
- Rear-end crashes
- Young drivers
- Vulnerable road users
- Motorcyclists



Issues

- Hamilton is over-represented in its number of crashes at rural intersections, and crashes involving alcohol, young drivers and rear-end collisions
- The number of serious injury crashes is rising
- The social cost of crashes on Hamilton's urban roads is approximately \$70million/year
- Pedestrians and cyclists make up a significant proportion of fatalities
- An increase in motorcycle registrations has resulted in an increase in motorcycle crashes.



Objectives

- Reverse the increasing trend in the number of injury crashes
- Reduce the number of crashes where alcohol is a factor
- Achieve an intersection crash rate that is the same as or is lower than similar cities
- Reduce the number of rear-end crashes
- Reduce the representation of young drivers (less than 25 years old) in Hamilton's crash casualties
- Improve safety for vulnerable road users
- Reverse the trend of increasing motorcyclist casualties.



Approach

HCC's approach is to work with transport safety partners in the delivery of programmes combining educating people, enforcing the law and making roads safer.

The actions (outputs) below will be implemented through HCC's Safety Management System (SMS) and the Road Safety Action Plan (RSAP) in consultation with the Road Safety Activity Group, representing NZTA, Environment Waikato, and ACC.

Area	Objective	Outcome (by 2019)	Output	Success measurement
General	To educate people about the risks associated with transport etc. Improve the rate of correct child restraint wearing.	Reverse the trend of increasing injury crash numbers, aiming for a level at or below 340 injury crashes per year. Correct child (under 5 years) restraint wearing rate greater 80%.	Education campaigns about Hamilton's areas of concern. Checkpoint surveys recording child restraint use.	Crash numbers recorded in CAS Restraint wearing rate as measured by check-point surveys.
Planning	Consider transport safety in land use decisions.	Land use decisions are made that best provide a safe travel environment for Hamilton residents, for example, the location of schools in relation to busy arterial roads , severance of communities by travel corridors etc.	Review of development manual and district plan to consider this action plan.	Development Manual and District Plan to include transport safety as a factor in land use decision-making.
Alcohol	To reduce the number of drink driving offences and alcohol related crashes in Hamilton. To reduce the proportion of alcohol-related crashes on rural roads to equal to or better than Hamilton's peer groups.	5% reduction in positive alcohol tests. 20% reduction in alcohol-related crashes on rural roads.	Police breath-testing checkpoints.	Crash numbers recorded in CAS. Police Data – breath screening tests.
Intersections	To reduce the number of crashes at intersections in Hamilton city to better than or equal to the intersection crash rate of Hamilton's peer group.	50% reduction in rural intersection crashes. 5% reduction in urban intersection crashes.	Safety review of Hamilton's worst five intersections (see road safety briefing notes for details). Crash reduction study identifying and prioritising worst intersections, and addressing safety issues.	Crash numbers recorded in CAS. Crash reduction studies carried out. Road safety audits carried out.
Rear-end crashes	Reduce the level of rear-end crashes in Hamilton.	5% reduction in rear-end crashes.	Road safety audits for intersection improvement projects to ensure changes have considered existing issues and are to safe standards.	
Young drivers	To reduce the representation of young drivers (less than 25 years old) in Hamilton's crash casualties to equal to or better than its peer group.	20% reduction in casualties of drivers under 25 years old.	Education, enforcement.	Casualty numbers recorded in CAS.
Vulnerable road users	To reduce crashes involving pedestrians and cyclists in Hamilton.	5% reduction in pedestrian crashes. 5% reduction in cyclist crashes.	Safety review of Hamilton's worst sites for pedestrian crashes (see road safety briefing notes for details). Safety review of Hamilton's worst sites for cyclist injuries (see road safety briefing notes for details). Pedestrian and cyclist crash reduction studies identifying and prioritising worst sites, and addressing safety issues.	Crash numbers recorded in CAS.
Motorcyclists	Reverse the trend of increasing motorcyclist casualties	Number of motorcyclist casualties at or below 40 per year.	Safety review of worst intersections for motorcyclist crashes (see road safety briefing notes for details).	Casualty numbers recorded in CAS.

CAS = NZTA Crash Analysis System