Bayside City Council
Road Safety Strategy 2014 – 2019

Safer Local Journeys
& User Friendly Streets

March 2014

Foreword From The Mayor

Our community value the unique character of our municipality, including the foreshore, our beaches, parks and open spaces, the leafy streetscapes, the vibrant shopping strips and our heritage buildings. Our community wants the municipality to be safe, inclusive and environmentally sustainable.

The Road Safety Strategy is part of Council's commitment to supporting and enabling the achievement of these community aspirations. The Strategy is about people, traffic and reducing road trauma. However, it is also about encouraging people to be out and about, walking or cycling, moving freely around the municipality and participating actively in our community.

The Road Safety Strategy is being led by Council, but calls for action and collaboration from key stakeholders and the community. As road users, whether this be a pedestrian, cyclist or driver of a motorised vehicle we are each responsible for maintaining safe conditions through our own actions. By tackling the challenges of safer travel within Bayside on a wide front, with many players working towards the same goal, we are more likely to reduce road trauma within the municipality.

As individuals, family members, and businesses and organisations that serve our community, collectively we can improve road safety to facilitate safer local journeys in user friendly streets.

Join us on our sustainable journey and make Bayside an easier and safer place to get around for all of us.

Cr Laurence Evans
Mayor

Contents

1   A Road Safety Strategy for Bayside

1.1   Vision and objectives for safer travel within Bayside

The Bayside Road Safety Strategy (the Strategy) provides a policy framework and specific actions aimed at achieving a vision of:

> *Reducing the number of fatalities and injuries on our road and path network so that people of all ages and abilities can travel safely, easily and confidently within Bayside.*

Council is committed to improving the safety of all users of the transport system within Bayside and is well placed to assist in reducing road trauma given its strong community links. Council has led the development of the Strategy as part of its civic leadership role, and will also lead its implementation. Council will coordinate its efforts internally across Council departments, and externally with both local and state-wide stakeholders who can play a role in road safety.

The main objectives of the Strategy are to:

- Reduce the number of people killed or injured in road crashes within Bayside;

- Enhance safety and accessibility for pedestrians, cyclists and public transport users, as they are the most vulnerable users of our transport system; and

- Focus on the safety needs of school children, young drivers and older members of the Bayside community.

The vision and objectives will be addressed by:

- Providing road safety education programs that encourage road users to make safe transport decisions;

- Providing social marketing and behaviour change activities to encourage the community and visitors to adopt safe travel behaviour through their own actions;

- Advocating with State and Federal Government to bring about policy, legislative and infrastructure improvements for road safety; and

- Establishing and fostering strong relationships with stakeholders who can assist Council in delivering road safety programs.

The Strategy is supported by a series of actions involving a partnered approach to achieve multi-faceted, multi-agency initiatives at the local community level, blending the '3 "E's" of Road Safety'; engineering, education and enforcement. This approach is consistent with the Victorian Government's Road Safety Strategy and the *Safe System* approach adopted by VicRoads.

1.2   Why have a Road Safety Strategy?

The need to improve road safety and reduce road accidents and casualties are issues which form a fundamental part of the Bayside Integrated Transport Strategy. The Integrated Transport Strategy has established a new approach to transport planning in Bayside and identified that a new Road Safety Strategy should be developed for Bayside to ensure the safety of street users within the municipality.

The purpose of a Road Safety Strategy is to provide a solidly researched basis to inform the direction of actions that will have the greatest impact on reducing the number and severity of road crashes within a community.

This Strategy links directly to the Integrated Transport Strategy and will guide the implementation of road safety activities within Bayside over the lifespan of the Strategy with a view to further improving safety for all road users within Bayside.

1.3   The role of Bayside City Council in road safety

As individuals, we must all take responsibility for improving safety on our roads, whether we are drivers, cyclists, passengers or pedestrians. Local governments are well placed to be able to advocate and educate their communities in an attempt to reduce the number and severity of road crashes. Previously, the approach taken by local government in trying to reduce road crashes has focused predominantly on the implementation of traffic engineering measures. Whilst traffic engineering still has an important role to play in improving road safety, it is recognised that a complimentary program of education and social marketing activities is also required to address the behaviour of road users.

Bayside City Council recognises the need to provide a safe, well connected, accessible and convenient transport system that positively contributes to a strong economy, the health and wellbeing of the community and a low carbon future within Bayside and is committed to undertaking activities that encourage safe travel behaviour.

This Strategy will be a tool for sharing knowledge with the wider community and encouraging the development of a culture of responsibility and shared beliefs, resulting in the creation of safer roads and safer road user behaviour.

1.4   Bayside community profile

The City of Bayside is a leafy, predominantly residential municipality, located in Melbourne's middle southern suburbs. One of Bayside's key defining features is the stunning foreshore, which covers approximately 24% of Bayside's publicly accessible open space. Bayside is also characterised by beautiful parks and open spaces, vibrant retail centres and is considered one of Melbourne's most attractive municipalities. The official 2012 population of the City of Bayside was 96,824 persons. Bayside's population is forecast to increase to 105,393 persons by 2026, an increase of 9,292 persons from 2011 (City of Bayside Population Forecast 2012). This represents a total increase in population of 9.7% over that period.

The largest age groups (using 10 year cohorts) are the 40-49 year olds and the 50-59 year olds. The average (median) age of Bayside residents in 2011 was 42 years compared to the Melbourne median of 36 years. Over the past decade Bayside has had a growing population of elderly residents aged 85 years and over (a 38% increase from 2001 to 2011). Since 2006 there has also been an increase in the proportion of Bayside persons living in group accommodation such as residential aged care or hospitals.

With the ageing of the baby boomer generation, it is anticipated that the proportion of persons aged 60 years and over in Bayside will increase from 24% in 2011, to 26% in 2021 and then to 28% in the year 2031. The proportion of Bayside persons with a disability is also expected to increase with ageing and many residents may find it increasingly challenging to get around on foot in future years. Consideration of how transport and street environments are designed and maintained to meet these needs is important. Simple measures to reduce the existence of current physical barriers to provide access and the safe movement of these users will also benefit the wider Bayside community.

Compared to most other local government areas in Victoria, and to metropolitan Melbourne, Bayside is amongst the least disadvantaged 10% of all local government areas in Victoria. Despite this, Bayside does have scattered pockets of neighbourhoods experiencing substantial disadvantage, which are masked by the affluence across the municipality. Almost all of these more disadvantaged neighbourhoods in Bayside are public housing estates where almost all residents are receiving a pension or benefit as their income source, predominantly the Disability Pension and Age Pension.

1.5   Challenges for the future

Bayside, like all of Melbourne, is facing a future of change and our transport system must be flexible and resilient enough to adapt. Some of the main challenges relate to the growth in use of some traffic corridors, such as Beach Road, Bay Road, Bluff Road and Nepean Highway.

Nepean Highway forms part of Bayside's eastern boundary and carries a large amount of through traffic heading towards Melbourne CBD from the south eastern suburbs. Beach Road also carries a substantial amount of commuter and commercial traffic, competing with its role as a scenic route, with a high proportion of pedestrian and cycle movements around the foreshore.

Future projections suggest an additional 7,881 peak hour car trips each day across the entire 355 kilometres of local road network (excluding arterial network) in Bayside by 2026 (based on projected population growth and current travel patterns remaining the same).

Whilst these challenges are addressed more comprehensively in the Bayside Integrated Transport Strategy, it is likely that there will be increasing competition for safe road access between motorised vehicles and unprotected road users, such as pedestrians, cyclists and motorised mobility scooters. The Bayside Road Safety Strategy 2013 – 2018 seeks to re-orient road management priorities to enable greater sharing between users of streets and

public spaces, allowing people to safely walk and cycle with confidence to common local destinations.

1.6   Opportunities for the future

Local councils in Victoria and the communities they represent have access to a range of programs and resources developed by various agencies including VicRoads, the Transport Accident Commission and Community Road Safety groups across Victoria. These resources support actions within local road safety strategies, and specifically target a wide range of people at risk on the road and path network. A list of some of the local road safety programs operating across Victoria is provided below:

Looking After Our Mates

'Looking after our Mates' is an alcohol education information session that aims to reduce the incidence and severity of crashes involving alcohol affected drivers, riders and pedestrians. The program is delivered to senior secondary school students and carries an effective message about responsible drinking, driving and 'looking after our mates' who have been drinking.

Wiser Driver

The 'Wiser Driver' program is designed to encourage older aged persons to become safer and wiser drivers. Attendees have an opportunity to improve their knowledge in relation to road safety and to discuss any related issues with their peers. It provides older drivers with advice about the effects of various types of impairments on driving ability, such as the effects of medication, fatigue, alcohol and poor eyesight.

Fit to Drive

'Fit to Drive' workshops are delivered in schools to Year 11 students. The program has a focus on personal safety, responsibility and strategies to make them safer drivers and passengers. Fit to Drive encourages young people's ownership of the issue – exercising choices, responsibility and accountability. The program also assists the development of problem solving and decision making skills and incorporates the notion that young people have the capacity to change attitudes in relation to risky driving and supports them to take ownership and responsibility for their own and their peers' safety.

Keeping Safe and Mobile

'Keeping Safe and Mobile' provides information and resources to assist older drivers to understand the mental and physical changes that take place as we age and the need to plan for our future mobility needs. The program provides an opportunity for the participants to reflect on their own driving ability, providing the tools for older drivers to accurately self-assess their current driving skills and plan for their future driving needs.

Bike Ed Instructor Training - Teachers

Completion of the 'Bike Ed' Instructor Course results in a cycling instructor certification enabling teachers to conduct on-road cycling programs such as 'Bike Ed'. 'Bike Ed' is a school safe cycling resource produced by Vic Roads that aims to improve student riding skills and road safety awareness whilst promoting bicycle riding as a healthy transport alternative. 'Bike Ed' is recommended for use with students in Years 4 to 6 and 7 to 12.

RoadSafe South East financially supports training for schools. Teachers from schools in the RoadSafe South East region, which includes Bayside, are encouraged to apply for funding to undertake the Bike Ed Instructor Course.

Further details of these and other road safety programs operating across Victoria are provided in Appendix A.

1.7 The role of RoadSafe South East

RoadSafe South East is a community road safety group funded by VicRoads through the Victorian Community Road Safety Partnership Program and is committed to reducing road trauma in the municipalities of Bayside, Cardinia, Casey, Frankston, Greater Dandenong, Kingston and Mornington Peninsula. RoadSafe South East will be an important partner to Council in delivering selected actions within the Strategy, ensuring that the Bayside community receives information, motivation and the resources to play its part in improving safer local travel.

1.8 Vulnerable Road User Committee – Southern Metro Region Division

The Victoria Police Southern Metro Region covers the municipalities of Bayside, Glen Eira and Kingston. Within the Southern Metro Region approximately half of all road trauma is represented by vulnerable road user groups which include motorcycle riders, cyclists, pedestrians and the elderly.

In May 2013 Victoria Police established the Vulnerable Road User Committee to achieve a greater relationship with all road safety stakeholders that will deliver the highest level of visible intelligence led road policing enforcement including the implementation of strategies within local municipalities aimed at significantly reducing road trauma. The Vulnerable Road User Committee will be an important group in working towards achieving a reduction in the number of fatalities and casualties within Bayside.

2   Planning and policy context

The Road Safety Strategy is informed by existing plans and strategies at both the State and local level as outlined within this section.

2.1   State Government Context

Victorian Road Safety Strategy

The Strategy is aligned with Victoria's Road Safety Strategy, which sets out state-wide priorities and defines the roles of the key agencies involved at state-wide level; VicRoads, the Transport Accident Commission and Victoria Police. Victoria's Road Safety Strategy was updated in 2013 and formally incorporates the "Safe System" approach to road safety.

The Safe System Approach

In 2004 VicRoads adopted the *Safe System* approach in the delivery of its road safety programs. The *Safe System* is derived from the Swedish model '*Vision Zero*' which is based on the following principles:

- Road users are likely to make mistakes (even with a focus on education/prevention);
- System designers and vehicle manufacturers are responsible for building in safety so that when crashes occur, the road design, vehicle and speed limit ensure that crashes are survivable; and,
- Road users are responsible for obeying the road rules.

The Strategy incorporates the key elements of the *Safe System* approach, including the following three main aspects:

Aspect	Government and community actions
Safer Road Environments	Improvements to the safety of the roads and roadsides including clear zones, intersection improvements and lower speed limits.
Safer Vehicles	Achieved at statewide and national level through a market driven and regulatory approach, with government and manufacturers working together, and at local level through fleet safety policies and programs.
Safer Road Users	Road users have an obligation to follow the road rules to ensure their own safety and the safety of other road users. At local level, this involves raising awareness of the risks people face and the steps they can take to reduce the risks, supported by enforcement. These messages are conveyed through local media and community networks, to bring the key principles closer to home and generate a greater sense of community ownership of road safety improvement.

2.2   Local Context

Bayside 2020 Community Plan – Our City, Our Future

Bayside 2020 sets the long term vision and goals for the community. The central vision for Bayside in the long term is:

> *In 2020 Bayside will be a truly interconnected community with support for people of all ages and stages of their life.*

While Bayside 2020 emphasises social interconnection, physical access and mobility are important enablers of a cohesive community. Perceived danger, such as roads that are too difficult to cross safely, can deter both younger and older people from participating fully in the life of the community.

Bayside Council Plan 2013 – 2017

The Council Plan 2013 – 2017 commits to the following objectives and strategies under the goal of 'A Liveable City':

Goal 3 – A liveable city	
Strategic Objectives	**Strategies**
3.2 Providing infrastructure and transport options that meet current and expected needs of the Bayside community	3.2.1 Ensuring community assets and infrastructure meet current and expected needs
	3.2.2 Planning, advocating, implementing and promoting integrated transport options in Bayside

Bayside Integrated Transport Strategy 2013 - 2023

The Bayside Integrated Transport Strategy sets Council's direction for transport planning for the next 10 years and beyond. The Integrated Transport Strategy recognises that the streets within Bayside provide access for a range of users, including pedestrians, cyclists, public transport and private vehicles, and need to be managed to provide the safest and most efficient transport system possible. Ensuring the safety of street users is considered to be the most important aspect of any user friendly street. The following guiding principles form the focus of the Integrated Transport Strategy:

1	Improved local accessibility
2	Better public transport connections
3	User friendly streets
4	Integrated transport and land use
5	Improve perceptions and enable choice

User friendly streets are those which incorporate measures such as reduced vehicle speeds and volumes, enable greater sharing between users of streets and public spaces and provide various transport modes and users with a balanced and appropriate level of priority. However, ensuring the safety of street users through the reduction of traffic conflicts and crashes is considered to be the most important aspect of any user friendly street.

Bayside Wellbeing for All Ages and Abilities Strategy 2013 - 2017

The Wellbeing for All Ages and Abilities Strategy meets the requirements of the Public Health and Wellbeing Act 2008 whilst streamlining Bayside's community services planning for health and wellbeing from early childhood, through to youth, adult lives and older years. The following goals are the focus of the Wellbeing for All Ages and Abilities Strategy 2013 – 2017:

> 1   An engaged and supported community;
>
> 2   A healthy and active community;
>
> 3   Safe and sustainable environments.

The Strategy will complement the Council's *Wellbeing for All Ages and Abilities Strategy* by addressing trauma on the road and path network, and will assist in achieving safer environments for people of all ages and abilities within Bayside.

Beach Road Corridor Strategy 2011

The Beach Road Corridor Strategy 2011 identifies and prioritises a range of actions that will improve the overall safety and amenity for all users of Beach Road with a particular emphasis on pedestrians, cyclists and motorists. The key objectives of the Strategy are based on the Municipal Strategic Statement contained within the Bayside Planning Scheme some of which include:

> 1   Facilitate the safe movement of vehicles, pedestrians and cyclists;
>
> 2   Identify actions required to improve safety and access across Beach Road;
>
> 3   Divert freight / heavy traffic from Beach Road to the Nepean Highway.

2.3   Road safety stakeholders

The roles of the main partners in road safety in Bayside are set out in Table 1.1.

Table 1.1   Roles of the main partners in road safety in Bayside

Agency		Main roles in road safety improvement
Bayside City Council	**Civic Leadership**	• Setting directions, considering safety in all decision making. • Undertaking advocacy for road safety. • Strategic planning, land use planning, social planning.
	Practical Support	• To coordinate, drive, administer and monitor implementation of the Road Safety Strategy. • Communication and promotion.
	Integration	• Integration of road safety into Council's policies, plans and general programs to provide a 'whole-of-Council' approach. • Fleet vehicle safety program.
	Infrastructure	• Developing and maintaining a safe local municipal road and path network.
	Partnerships	• Helping to establish and maintain partnerships with, and between, agencies to support road safety initiatives.
VicRoads South Eastern Metropolitan Region	**Infrastructure**	• Construction and maintenance of highways and declared arterial roads. • Provision of funding for engineering improvements on declared arterial and local municipal roads.
	Support for Local Government	• Information, advice and guidance material on a range of road safety issues. • Internet CrashStats, and other information relating to crashes occurring within the municipality.
Victoria Police	**Enforcement**	• Moorabbin Highway Patrol
	Encouragement	• Community policing through Moorabbin Proactive Unit
	Education	• Public education, media promotion, advocacy, advice, training.
RoadSafe South East	**Support for Local Government Road Safety Programs**	• Develop and implement community programs that will target the behavior and attitudes of road user groups, vehicles or road environment.

2.3   Development of the Road Safety Strategy

The Road Safety Strategy 2013 - 2018 has been developed through the following stages:

Review of relevant State Government and Council strategies and policies

A number of key State Government and Council strategies and plans have been reviewed in the previous section of this report.

The previous Bayside City Council Road Safety Strategic Plan (2002) provided a framework on which this Strategy is based. However, the crash analysis data that was considered in developing the previous strategy was for the five year period between 1996 and 2000. Since then, many changes have taken place at State and local level affecting road safety, including measures such as the introduction of the 50 km/hr urban speed limit and the 40 km/hr speed limits near schools. For these reasons, it is difficult to reliably evaluate the contribution of individual actions in that plan to improving road safety in Bayside. Nor was it feasible, over that period of time, to track the extent to which actions in the plan were implemented.

Analysis of road crash data using the CrashStats database

The crash data that has been analysed to inform the development of the Strategy was obtained from CrashStats, a VicRoads' data base which is publicly available on the internet. At the time of analysis, data was available up to the end of 2011. It includes all crashes involving at least one motor vehicle on roads in Bayside, in which at least one person was injured. The data is derived from police reports.

The data base was interrogated using ready-made queries (generated by CrashStats), with the results analysed. A crash analysis summary is contained in Section 3 of the Strategy.

One-on-one consultation with key internal Council staff

Consultations were held with the following Council staff, selected from departments of council whose work relates to safe travel on roads within Bayside:

- Family Services Planning and Development Officer;
- Metro Access Officer;
- Health Planner;
- Community Care Coordinator;
- Community Engagement Coordinator;
- Senior Strategic Planner;
- Community Development Officer;
- Youth Services Coordinator;
- Transport Planner; and
- Traffic Management Coordinator.

Road Safety Stakeholder Forum

A Road Safety Stakeholder Forum was held at Council's Corporate Centre, Sandringham, in March 2013. The aim of the forum was to seek input from stakeholders on those measures that can be used to improve road safety and how people can be encouraged to use our roads more safely.

The forum was well attended with representatives from Victoria Police, Moorabbin Highway Patrol, VicRoads, Metro Trains, Grenda Moorabbin Transport, St Leonards College, Sandringham Primary School, Melbourne Montessori School, neighbouring municipalities and a number of Bayside City Council officers taking part.

The forum heard presentations from Council, Victoria Police, VicRoads and the results of the CrashStats analysis were shared with the forum. The forum also shared ideas and discussed possible actions that may potentially improve road safety within the municipality.

Development of action plans

Based on consultation with key stakeholders and the CrashStats analysis, eight key response areas with associated action plans have been developed to address the main road safety challenges and opportunities facing Bayside and its key partners in road safety – Victoria Police, VicRoads and RoadSafe South East. The key response areas and associated action plans are contained within Section 4 of the Strategy.

3.   Crash analysis – main findings

Road Crash Statistics for Bayside

Using data obtained from VicRoads through their CrashStats database, a detailed crash analysis has been undertaken of those crashes in Bayside in which at least one person was injured or killed. Those crashes resulting only in vehicle and/or property damage and those where the police did not attend have not been included. At the time of the analysis data was available up to the end of 2011 (except for crash data for fatal crashes which was available up to the end of 2012).

Fatal crashes

During the five year period from January 2008 to December 2012 inclusive, there have been 11 fatal crashes in Bayside. This compares to the previous total of 7 fatal crashes during the five year period between January 2003 and December 2007. This represents a 57% increase in fatal crashes between the two periods. However, as the numbers are small, it is considered that much of the increase may be due to random effects. In most years there are approximately two fatal crashes (plus or minus one).
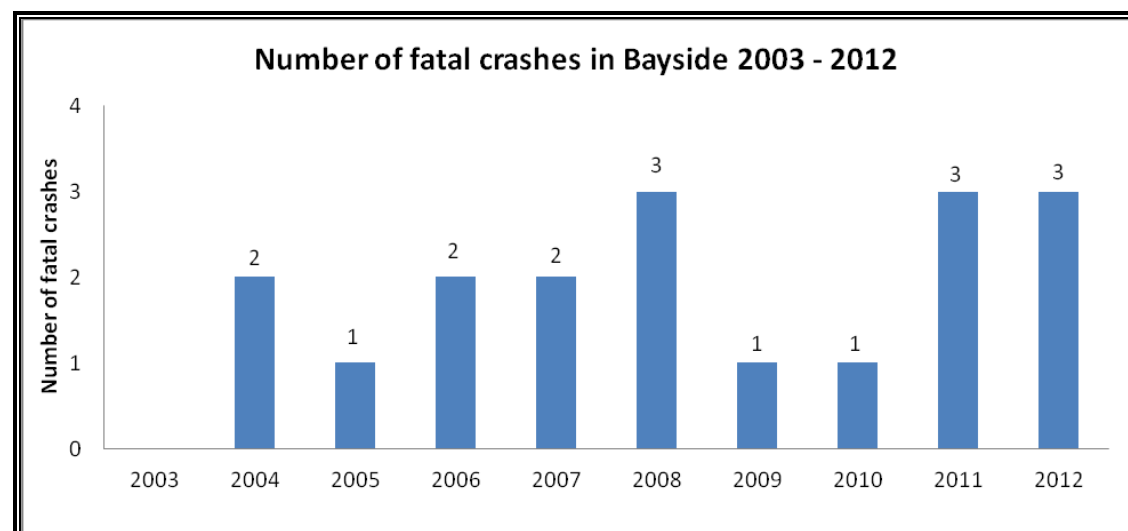
Figure 3.1   Fatal crashes averaged about two per year, apart from 2003 when no fatal crashes occurred in Bayside.

Road user category of fatalities

Of the 11 fatalities that were recorded in Bayside during the five year period from January 2008 to December 2012 inclusive, the majority of these comprised either motorcyclists (3 persons) or pedestrians (3 persons).
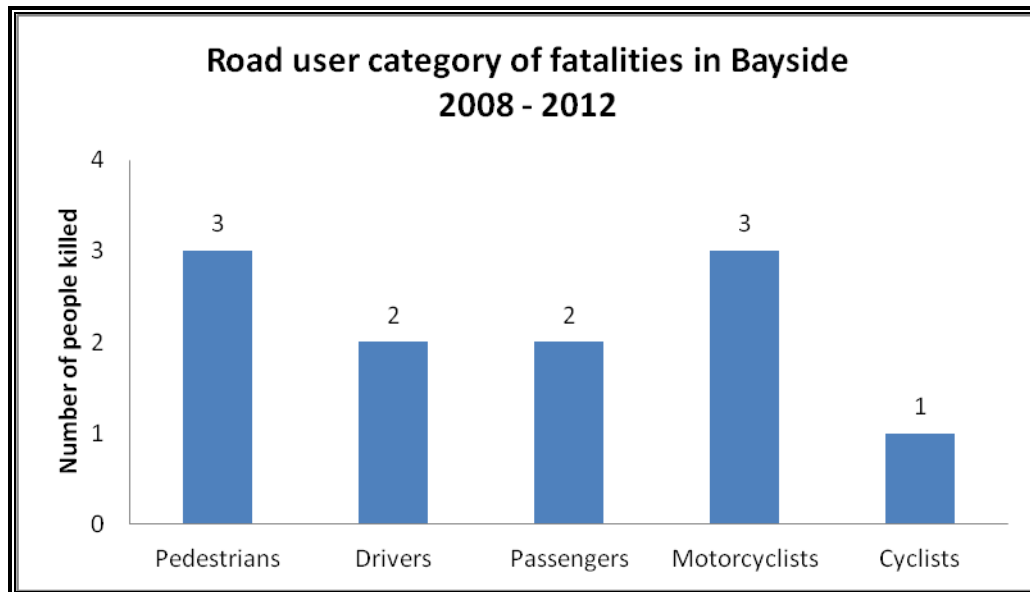
Figure 3.2   Road user categories of fatalities in Bayside

Age of fatalities and road user category

Of the 10 fatal crashes that occurred within Bayside in the five years between January 2007 and December 2011, the three motorcyclist fatalities were aged between 26 and 39 and two of the pedestrian fatalities were aged over 75 years old.
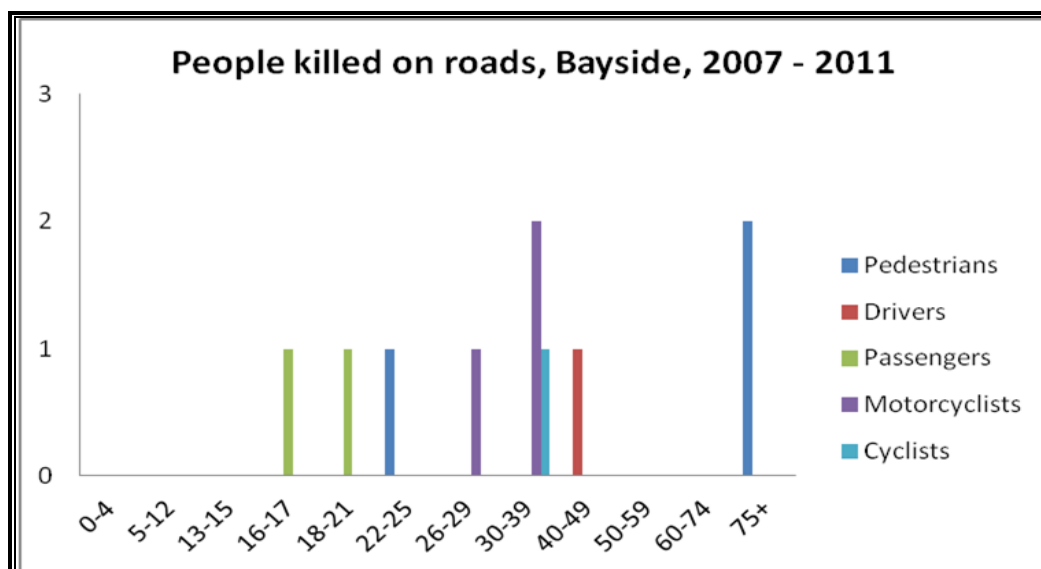
Figure 3.3   Age of fatalities and road user categories

Casualty Crashes

During the five year period from January 2007 to December 2011 inclusive (the most recent for which casualty data is available), there have been 966 casualty crashes in Bayside. This compares to the previous total of 1125 casualty crashes during the five year period between January 2002 and December 2006. This represents a 14% reduction in casualty crashes between the two periods. It is considered that a reduction in casualty crashes from 2001 is attributable to the introduction of a 50km/h default speed limit for roads in built up areas. Similarly, the introduction 40km/h school zones which were introduced in 2003 will have also contributed to a reduction in casualty crashes.
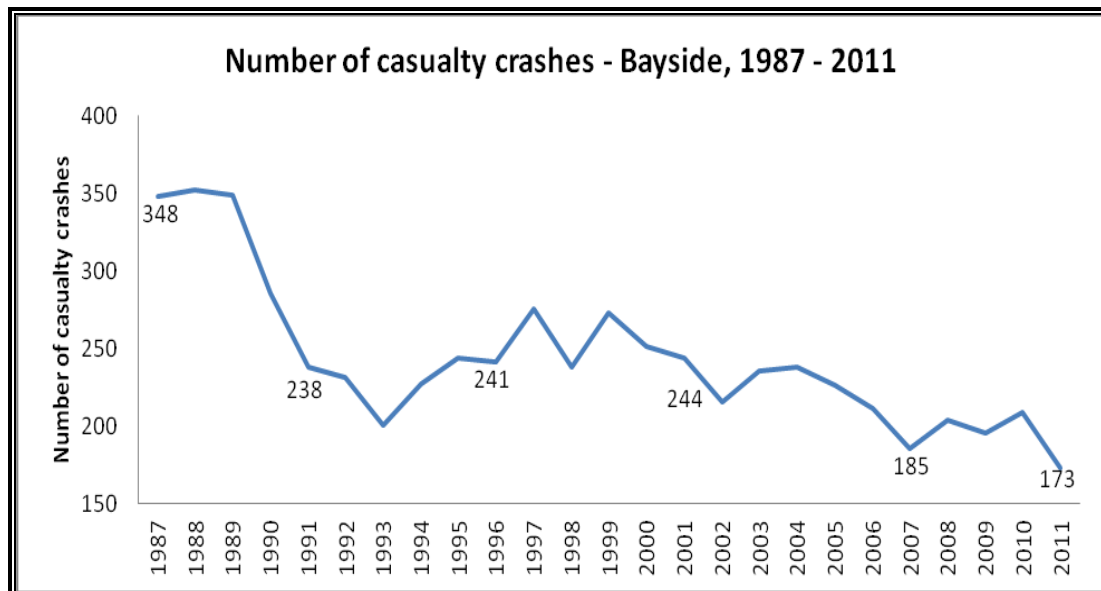
Figure 3.4   The number of casualty crashes per year decreased by 14% in 2007 – 2011 compared to the period 2002 – 2006.

Road user categories of people injured

The pattern of injuries to road users is quite different to that of fatal crashes, with drivers and cyclists suffering many more injuries compared to other road users.
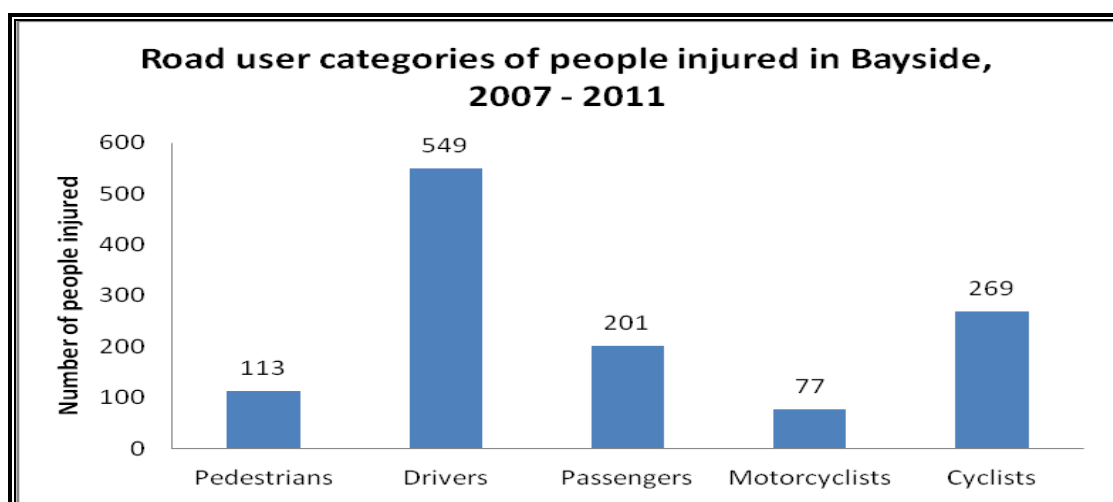
Figure 3.5   Road user categories of people injured on roads in Bayside in 2007 – 2011.

Pedestrian Injury Analysis by Age

Older males and female pedestrians (aged 50 years and older) experienced injuries during the five year period between January 2007 and December 2011 inclusive. Young males aged 13 – 15 years also suffered a relatively high number of injuries.

Figure 3.6   Age and gender of pedestrians injured on roads in Bayside in 2007 – 2011.

Further analysis of those crashes involving pedestrians revealed the following:

- 58% of pedestrian crashes occurred on roads managed by VicRoads, with 42% occurring on Council managed roads;
- Of those pedestrian crashes occurring on roads managed by VicRoads roads 15% occurred on Nepean Highway, 13% on Bluff Road and 12% on Beach Road;
- On the Council managed road network 44% of all pedestrian crashes occurred at intersections with 56% occurring at midblock locations; and
- There were two locations on the Council managed road network where two or more pedestrian crashes occurred:

  - Asling Street /Martin Street (3 crashes)
  - Charman Road near Blagdon Street (2 crashes)

Cyclist Injury Analysis by Age

Male cyclists aged 30 to 59 years experienced a high number of injuries in crashes with motor vehicles during the five year period between January 2007 and December 2011. Figure 3.6 does not include injuries to cyclists not involving a motor vehicle (e.g. fell off bike). The number of secondary school aged males is substantial, given the small age categories (13 – 15 = 3 years, 16 – 17 = 2 years, compared to 10 year categories for over 30 year olds).
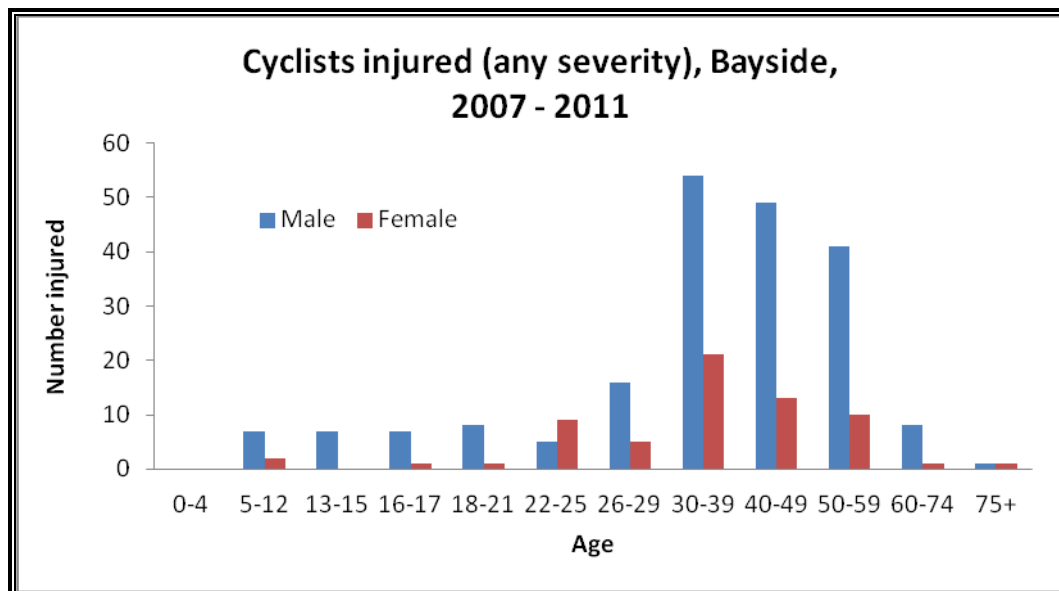
Figure 3.7   Age and gender of cyclists injured on roads in Bayside in 2007 – 2011.

Further analysis of those crashes involving cyclists revealed the following:

- 75% of crashes occurred on roads managed by VicRoads, with 25% occurring on Council managed roads;
- 55% of the crashes occurring on roads managed by VicRoads occurred on Beach Road;
- On the Council managed road network 69% of all cyclist crashes occurred at intersections with 31% occurring at midblock locations;
- Those intersections on the Council managed road network where cyclists crashes are most prevalent included the roundabouts at the following locations:

  - St Kilda Street / Bent Street (3 crashes)
  - Bent Street / Murphy Street (2 crashes)
  - Cochrane Street / Martin Street (2 crashes)
  - Durrant Street / Male Street (2 crashes)
  - Dendy Street / Roslyn Street (2 crashes)

Driver Injury Analysis By Age

During the five year period between January 2007 and December 2011 female drivers outnumbered male drivers injured in all age categories above 22 years, but younger drivers (under 30) are at relatively higher risk of injury compared to older drivers.
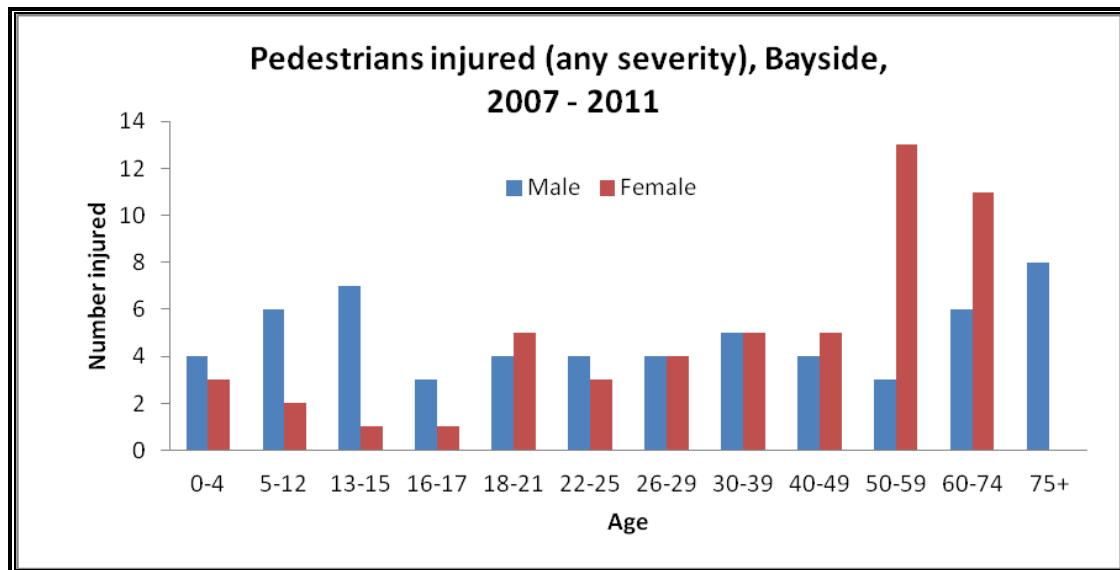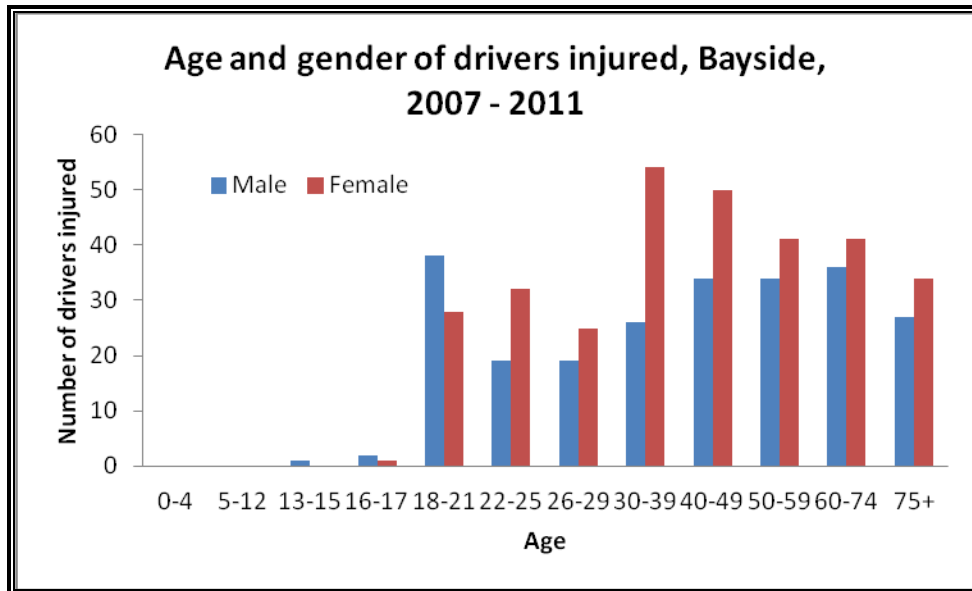
Figure 3.8   Age and gender of drivers injured on roads in Bayside in 2007 – 2011.

Further analysis of those crashes involving drivers revealed the following:

- 71% of crashes in which at least one driver suffered injury, occurred on roads managed by VicRoads, with 29% occurring on Council managed roads;
- 25% of crashes occurring on roads managed by VicRoads State in which a driver was injured occurred on Nepean Highway, followed by Beach Road (17%) and Bluff Road (13%);
- Two thirds (67%) of crashes on Council managed roads in which a driver was injured occurred at intersections, and one third at mid-block; and
- Those intersections on the Council managed road network where a driver was injured in a crash were most prevalent at the following locations:

    - Nepean Highway / Bay Street (5 crashes)
    - Roslyn Street / Were Street (5 crashes)
    - Carpenter Street / New Street (3 crashes)
    - Martin Street / New Street (3 crashes)
    - Cheltenham Road / Reserve Road (3 crashes)

Gender of people killed

Males were involved in 90% of road fatalities within Bayside during the five year period between January 2007 and December 2011.
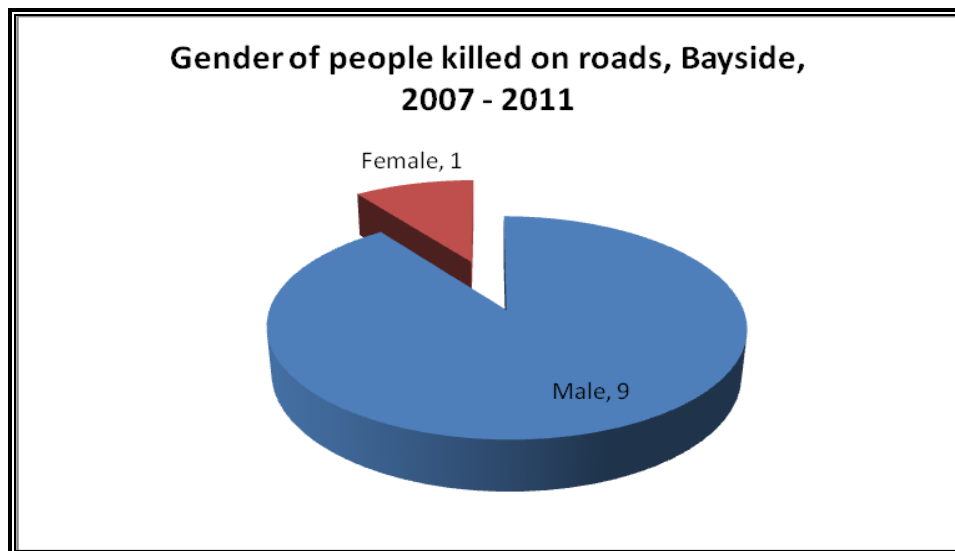
Figure 3.9   More males were killed on roads compared to females.

Gender of people injured

During the five year period between January 2007 and December 2011 more males were injured in Bayside than females (Figure 3.10). The difference between the genders was much less than it was for fatalities.
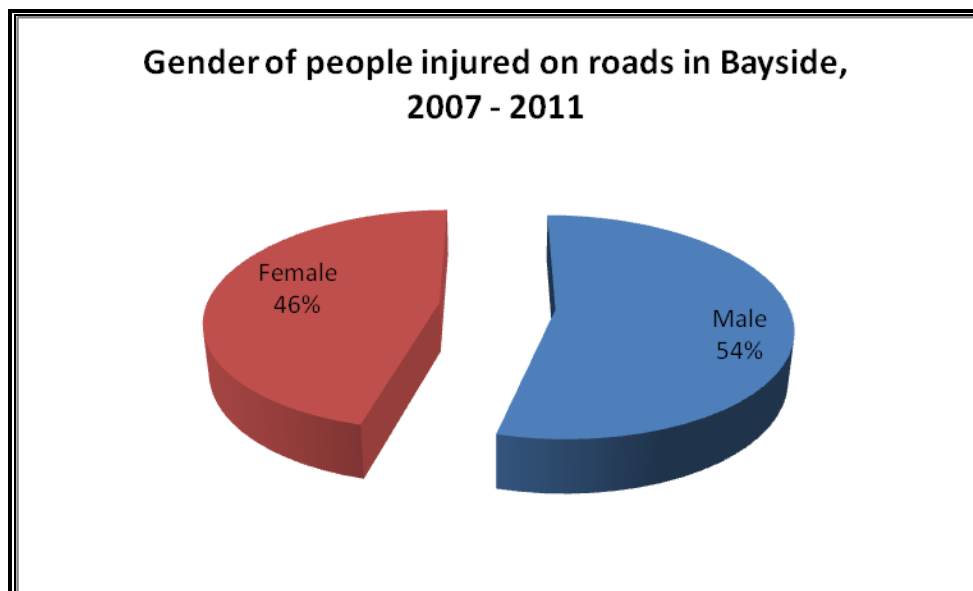
Figure 3.10   Slightly more males were injured on roads compared to females.

Location of crashes (State Government Roads / Council Managed Roads)

There were a number of crash locations within Bayside during the five year period between January 2007 and December 2011 with the vast majority occurring on arterial roads under the management of VicRoads .
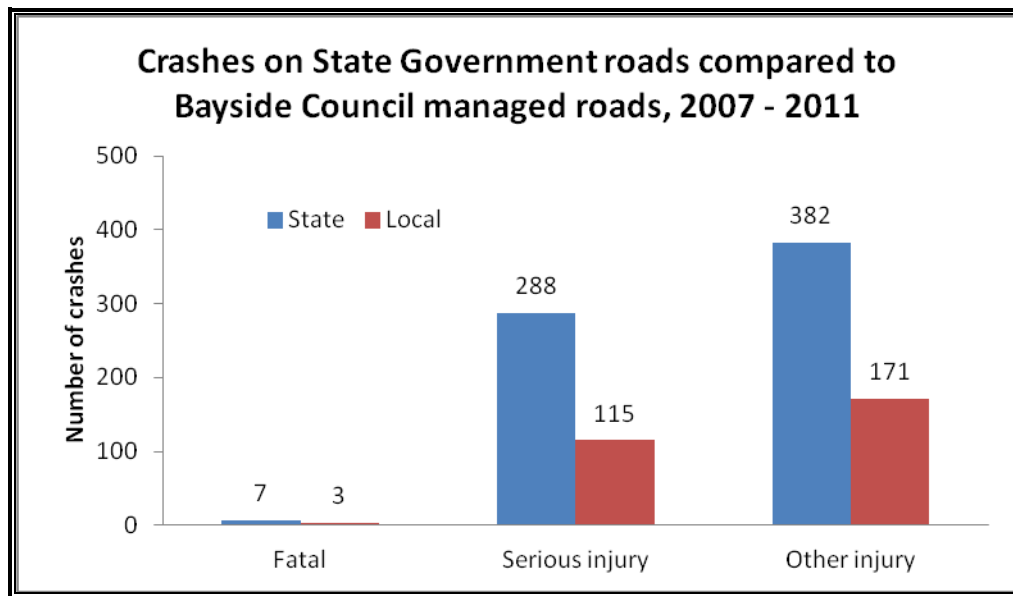
Figure 3.11   There majority of crashes occurred on VicRoads managed roads

Location of arterial road crashes

The following arterial road locations recorded seven or more casualty crashes during the period 2007 – 2011.

Ranking	Number of crashes	First road	Second road
1	13	Nepean Highway	South Road
2	10	North Road	Hawthorn Road
3	9	Nepean Highway inbound Cwy	Hampton Street
4	8	Bluff Road	South Road
5	8	Nepean Highway	Gardenvale Road
5	8	North Road	Nepean Highway
5	8	Beach Road	South Road
5	8	Bluff Road	Highett Road
9	7	Beach Road	Bay Street
9	7	Nepean Highway inbound Cwy	North Road
9	7	Nepean Highway inbound Cwy	Cummins Road
9	7	Beach Road	btw Sylvia Cres and Balcombe Road
9	7	Balcombe Road	Beach Road

Location of local road crashes

The following local road locations recorded three or more casualty crashes in the period 2007 – 2011.

Ranking	Number of crashes	First road	Second road
I	6	Nepean Highway	Bay Street
2	5	Roslyn Street	Were Street
2	5	Reserve Road	Tulip Street
4	4	Reserve Road	Weatherall Road
5	3	Durrant Street	Male Street
5	3	Dendy Street	Roslyn Street

Identified trends and people at risk

- On average, one person was killed every six months on roads in Bayside. This is low relative to other middle-urban municipalities;

- Every four days on average, one person was seriously injured, requiring hospital attendance. This is more typical of similar municipalities, indicating that Bayside has a high number of people seriously injured, but they tend to survive serious crashes. This may be attributable to two main factors: the absence of high speed roads, and the proximity of trauma centres;

- Every three days two people suffered injuries serious enough to require medical treatment;

- Young people aged 16 to 25 are at high risk of non-fatal injury in multiple modes of travel; and

- Most casualty crashes happened during normal business and commuting hours.

Within the road safety field "risk of injury" is calculated as the number injuries in each age group divided by the number of years that make up that age group. This exercise has been undertaken to determine those age groups of people at the greatest risk of non-fatal injury amongst the various road users within Bayside. The result of this analysis has determined that the following groups are at most risk:

- Cyclists: Young males aged and 13 – 17 and males aged 30 to 59
- Pedestrians: Young males aged 13 – 15, males aged 60 – 75+ and females aged 50 - 74
- Passengers: 16 – 25 year old males and females
- Drivers: 18 – 21 year old males and females
- Motorcyclists: 18 – 49 year old males

4.   Key response areas, goals and actions

The key response areas below, and the set of eight action plans that follow, have been developed to address the main road safety challenges and opportunities facing Bayside City Council and its key partners in road safety – Victoria Police, VicRoads and community road safety groups. The actions are directed at various aspects of the issues, and take account of the needs of all sections of the community from newborn infants to older people and people with disabilities. As far as possible, multi-faceted and multi-agency actions are proposed as these have been proven to generally be more effective than one-off or single-action approaches.

	Key response areas	Goals
1	**Coordination and leadership of road safety planning and action**	In partnership with key agencies, provide strong direction, leadership, coordination and service in road safety, for the benefit of all residents and visitors to Bayside.
2	**Road safety promotion at schools and safe school travel**	Help students travel to and from school safely. Encourage schools to provide well-targeted and proven traffic safety education programs that address the variety of risks young people face on the road network at different stages of their lives.
3	**Young children and their families**	Encourage parents and carers to protect young children when they are passengers in vehicles, or within the street environment.
4	**Developing and maintaining a safe road and path network**	Ensure that the current and future road and path network across the Bayside is as safe as possible for all users.
5	**Older road users and road users with limited mobility**	Reduce the incidence of road trauma in older road users and road users with limited mobility.
6	**Safety for pedestrians including mobility scooter users**	Improve pedestrian and motorised scooter safety and accessibility, and encourage walking and public transport alternatives to car travel for short trips in Bayside.
7	**Safer cycling**	Improve bicycle safety and accessibility and encourage cycling as a safe and viable alternative to car travel
8	**Safer driving, safer vehicles**	Promote safer driving and motorcycling, and safe operation of vehicle fleets.

The action plans are set out on the following pages.

1.   Coordination and leadership of road safety planning and action

Goal: In partnership with key agencies, provide strong direction, leadership, coordination and service in road safety, for the benefit of all residents of and visitors to Bayside

	Actions	Lead Council Department	Partners	Timeline	Measure
1.1	Bayside City Council to take a proactive lead role in implementing the Road Safety Strategy in collaboration with stakeholders, the community and other council officers.	Infrastructure Assets	All road safety stakeholders	Strategy adopted by March 2014

Actions to be implemented over the lifespan of the Strategy | Adoption of Road Safety Strategy (RSS) by Council

Annual evaluation of RSS to assess implementation of actions |
1.2	Establish a Road Safety Working Group as the ongoing and cross-council reference group for implementing the Road Safety Strategy.	Infrastructure Assets	Across council departments	April 2014	Establishment of Group with a quarterly frequency of meetings
1.3	Coordinate and implement community road safety programs and planning in conjunction with RoadSafe South East, Victoria Police and other road safety partnerships.	Infrastructure Assets	All road safety stakeholders	Immediate and ongoing	Attend regular meetings with key stakeholders
1.4	Continue to provide representation at the Victoria Police Vulnerable Road User Committee (Southern Metro Region)	Infrastructure Assets	VP	Immediate and ongoing	Attendance at meetings
1.5	Seek opportunities within the various strategic planning cycles to ensure that road safety is appropriately incorporated into all relevant strategies and plans including, but not limited to, the Council Plan, Municipal Strategic Statement and the Bayside Wellbeing for All Ages and Abilities Strategy.	Infrastructure Assets	Across council departments	In accordance with council planning cycles	Ensure road safety is addressed in all relevant strategies, plans and policies
1.6	Identify and address any new issues relating to road safety and the City of Bayside.	Infrastructure Assets	VP, VR	Annually from July/August 2014	Undertake an annual review of crashes in Bayside using 'Crash Stats' to identify any new issues

Key to abbreviations: VR = VicRoads   VP = Victoria Police   DEECD = Department of Education and Early Childhood Development   ELAA = Early Learning Association Australia

	Actions	Lead Council Department	Partners	Timeline	Measure
1.7	Develop and implement a complementary annual communication plan to support the Road Safety Strategy and to promote road safety messages and education within the municipality.	Infrastructure Assets	Communications / Family Services / Aged & Disability Services	April 2014	Number of media releases issued Number of articles in 'Let's Talk Bayside'
1.8	Advocate to State and Federal government for improved infrastructure, services and funding that will improve road safety for residents of and visitors to Bayside. In particular, Council will advocate for the following: • State Government funding to implement the short term recommendations from the Beach Road Corridor Strategy; and • State Government funding for blackspot projects from the Blackspot Program (as and when required).	Infrastructure Assets	VR, VP	Immediate and ongoing	Ongoing advocacy to the appropriate level of government
1.9	Develop a road safety component on Council's website which contains key road safety messages and other relevant information.	Infrastructure Assets	Communications	April 2014	Road safety component of website is developed and updated annually

Key to abbreviations: VR = VicRoads   VP = Victoria Police   DEECD = Department of Education and Early Childhood Development   ELAA = Early Learning Association Australia   26

2. Safe school travel

Goal: Help students travel to and from school safely; and support schools to provide well targeted and proven traffic safety education programs that address the variety of risks young people face on the road network at different stages of their lives

	Actions	Lead Council Department	Partners	Timelines	Measure
2.1	In partnership with the Department of Education and Early Childhood Development (DEECD) Traffic Safety Education Senior Program Officers, help raise schools' awareness of available programs, resources, funding opportunities and contact/access points for support. • At primary school level focus on programs such as *Kids on the Move and BikeEd; and* • At secondary school level focus on programs such as *Looking After Our Mates and Fit to Drive*.	Infrastructure Assets / Youth Services	DEECD, VR, VP, Schools	May 2014 and ongoing	Promotion of available programs and resources to schools
2.2	Promote safe walking and cycling to schools through active travel events such as Walk to School Month (every November) and Ride2School Day (every March).	Infrastructure Assets / Youth Services	Schools, Bicycle Network Victoria	January and September throughout the lifespan of the Strategy	Promotion of events to schools Number of schools participating in events
2.3	Utilise VicRoads road safety messages to educate parents about safely 'dropping off and picking up' children, for distribution to parents via all schools in Bayside.	Infrastructure Assets / Youth Services	VP, Schools	Annually from July 2014	Promotion of road safety messages and resources to schools

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3. Young children and their families

Goal: Encourage parents and carers to protect young children when they are passengers in vehicles, or within the street environment

	Actions	Lead Council Department	Partners	Timeline	Measure
3.1	Promote to parents/guardians regular child restraint checks by a qualified restraint fitter. Promote road safety education and child restraint resources through Council run parent education programs and early years services.	Family Services / Infrastructure Assets	Restraint fitters, ELAA, VR, Kids Safe, DEECD	Annually	No. of 'hits' on the Road Safety section of Council's website. No. of Council run parent education programs, events and early years services distributing child restraint resources
3.2	In partnership with Early Learning Association Australia (ELAA) provide a training and resource sharing session to early years care, education and health services via Council run network meetings.	Family Services	Infrastructure Services, ELAA, external early years care, education and health services, DEECD	Annually	Training and resource sharing session delivered
3.3	In partnership with ELAA support the implementation of VicRoads *'Starting out Safely'* program via Bayside Maternal and Child Health Service, Kindergartens and Education and Care Services	Family Services	VR, ELAA, DEECD	Annually	No. of services delivering *'Starting out Safely'* program

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4.	**Developing and maintaining a safe road network**

Goal: Ensure that the current and future road and path network across the municipality is as safe as possible for all users

	Actions	Lead Council Department	Partners	Timeline	Measure
4.1	Advocate to VicRoads for the lowering of speed limits to 40km/h on the following streets: • Bay Street, Brighton between Cochrane Street and Nepean Highway; • Church Street, Brighton between St Andrews Street and Male Street; • Martin Street, Brighton between Nepean Highway and Hamilton Street; • Hampton Street, between Crisp Street and Ratho Avenue; • Station Street, Bay Road and Abbott Street, Sandringham; and • Bluff and Balcombe Roads, Black Rock	Infrastructure Assets	VR, VP	At least one street per year from 2013/14 throughout the lifespan of the Strategy	Number of streets with a reduced speed limit of 40km/h
4.2	Identify and rank high risk crash locations within the municipality by conducting an annual review of available crash data and traffic speed and volume data for Bayside, supplemented by inspections, local knowledge and community input.	Infrastructure Assets	VR, VP	Annually from July 2014	An annual crash analysis will be undertaken to identify any new issues Inspection of relevant sites (as and when required)
4.3	For those high risk crash locations on Council managed roads, investigate and implement measures to improve safety for all road users.	Infrastructure Assets	VR, VP	Throughout the lifespan of the Strategy	Number of Local Area Traffic Management measures implemented
4.4	For those high risk crash locations on the arterial road network, advocate to State Government for actions that will improve safety for all road users.	Infrastructure Assets	VR, VP	Throughout the lifespan of the Strategy	Advocacy to State Government Number of measures implemented by State Government
4.5	Ensure road safety issues for all users are addressed in the design, implementation and promotion of all transport infrastructure upgrades and street works, with particular attention provided to the needs of vulnerable road users such as pedestrians and cyclists.	Infrastructure Assets	Infrastructure Assets / City Works	Throughout the lifespan of the Strategy	Road safety issues considered and, where required, addressed within projects

5.   Older road users and road users with limited mobility

Goal: Reduce the incidence of road trauma in older road users and road users with limited mobility

	Actions	Lead Council Department	Partners	Timeline	Measure
5.1	Provide and promote relevant information to encourage older aged persons to become safer drivers. Programs that will be delivered in Bayside include '*Wiser Driver'* and '*Keeping Safe and Mobile'.*	Aged & Disability Services / Infrastructure Assets	VR, VP	May 2014 and continuing	Number of programs delivered within Bayside Road Safety component of website to contain information relating to older road users
5.2	Provide information to older people about the range of transport options and support services available for them to remain confident, safe and mobile and to assist in remaining connected to their community. Programs that will be delivered in Bayside include '*Wiser Walker, Wiser Traveller'.*	Aged & Disability Services / Infrastructure Assets	VR, VicHealth	June 2014 and ongoing	Number of programs delivered within Bayside Road Safety component of website to contain information relating to older road users
5.3	Provide support to community groups to deliver programs aimed at reducing the incidence of road trauma for older road users and road users with limited mobility.	Aged & Disability Services / Infrastructure Assets	VR, VP	Throughout the lifespan of the Strategy	Number of programs delivered within Bayside Road Safety component of website to contain information relating to older road users
5.4	Provide travel and road safety information for seniors in Bayside.	Aged & Disability Services / Infrastructure Assets	VR, VP	May 2014 and ongoing	Information included within Bayside Seniors Newsletter

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6.   Safety for pedestrians, including motorised scooter users

Goal: Improve pedestrian and motorised scooter safety and accessibility

	Actions	Lead Council Department	Partners	Timeline	Measure
6.1	Provide and promote relevant information to educate pedestrians in relation to road safety and the safe use of the road network. This may include information on safe places for pedestrians to cross the road, the dangers associated with walking and the use of mobile phones.	Infrastructure Assets / Aged & Disability Services / Family Services	VR, VP	April 2014 and ongoing	Road Safety component of website to contain information One article per year to be included within 'Let's Talk Bayside'
6.2	Seek to deliver the '*Safer Scooter* and *Wiser Wheelchair'* education program to wheelchair users and motorised scooter users. This program covers issues such as road rules and legal requirements, choosing the right mobility scooter and developing safe travel routes.	Aged & Disability Services / Infrastructure Assets	RoadSafe South East	August 2014 and ongoing	Number of programs delivered
6.3	Ensure that the needs of motorised scooter users are considered in streetscape design and reinforce to the community that motorised scooter users are classified as pedestrians under road rules.	Infrastructure Assets / City Works	VR	Throughout the lifespan of the Strategy	Needs of motorised scooter considered and, where required, addressed within projects Road Safety component of website to contain information relating to motorised scooters
6.4	Review pedestrian waiting times at controlled signals in key locations to ensure suitable waiting and crossing times, especially for older people and adults with young children.	Infrastructure Assets	VR	September 2014 and ongoing	Number of sites assessed and result of assessment

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7.	Safer cycling

Goal: Improve bicycle safety and accessibility

	Actions	Lead Council Department	Partners	Timeline	Measure
7.1	Provide and promote relevant information to educate cyclists in relation to road safety and the safe use of the road network.	Infrastructure Assets	VR, VP	April 2014 and ongoing	Road Safety component of website to contain information One article per year to be included within 'Let's Talk Bayside'
7.2	Work in partnership with Victoria Police, VicRoads, Cycling Victoria and other relevant stakeholders to improve conditions for cyclists along Beach Road	Infrastructure Assets	VR, VP, CV	Immediate and ongoing	Number of coordinated activities delivered
7.3	Annually promote the *Bike Ed* program to all schools within Bayside	Infrastructure Assets	RoadSafe South East	May 2014. Repeated annually	Distribution of information and uptake by schools
7.4	Promote bicycle safety leading up to summer and at the end of daylight savings, aimed at increasing visibility, helmet wearing and responsible behaviour on the shared path network.	Infrastructure Assets	VR, VP	April / October 2014. Repeated annually	Road Safety component of website to contain information Include an article within 'Let's Talk Bayside'
7.5	Promote skill and knowledge development amongst people taking up riding, including the establishment of a *Cycle with Confidence* program for Bayside residents.	Infrastructure Assets	Bicycle Network Victoria and Amy Gillett Foundation	November 2014. Repeated annually	Cycling component of website to contain information Establishment and delivery of a *Cycle with Confidence* program
7.6	Through the Bayside Bicycle Strategy, improve safety for cyclists at those locations on the Metropolitan Bicycle Network where cyclist crashes / relevant safety issues have been identified.	Infrastructure Assets		Coordinated through the implementation of the Bayside Bicycle Strategy	Number of sites treated

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8.   Safer driving and safer vehicles

Goal: Promote safer driving and motorcycling, and safe operation of vehicle fleets

	Actions	Lead Council Department	Partners	Timeline	Measure
8.1	Provide and promote information to young drivers about the responsibilities of safe driving, including but not limited to mobile phone use when driving and vehicle confiscation legislation, through schools, sporting clubs and young people's venues and networks.	Youth Services / Infrastructure Assets	VR, VP	July 2014, then ongoing	Distribution of information to relevant young people's venues and networks Road Safety component of website to contain information
8.2	Assist learner drivers to gain supervised experience safely through programs and resources such as *L2P, Fit to Drive* and *Keys Please*. Distribute resources via youth services, secondary schools, libraries, and other outlets.	Youth Services / Infrastructure Assets	VR, RoadSafe South East	Immediate and ongoing	Number of learner drivers assisted in L2P program Number of programs delivered
8.3	Encourage the rollout of the *Fit to Drive* and *Looking After Our Mates* programs to secondary schools within Bayside.	Infrastructure Assets	RoadSafe South East	August 2014, then ongoing	Number of schools receiving information regarding the programs
8.4	Promote safe alcohol and anti-drug driving messages.	Infrastructure Services / Communications	VP	July 2014	Road Safety component of website to contain information. To be updated annually if necessary
8.5	Provide information to the Bayside community in relation to the safe selection of vehicles with increased active and passive safety technologies.	Infrastructure Assets / Communications	Transport Accident Commission, RACV, ANCAP	July 2014	Road Safety component of website to contain information. To be updated annually if necessary
8.6	Ensure that all new fleet vehicles comply with a minimum four star Australian New Car Assessment Program (ANCAP) safety rating.	Commercial Services	N/A	Immediate and ongoing	Number of new fleet vehicles complying with ANCAP four star safety rating

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	Actions	Lead Council Department	Partners	Timeline	Measure
8.7	Provide and promote relevant information to educate staff, local businesses and the community in relation to selecting safer vehicles.	Infrastructure Assets / Communications	N/A	July 2014	Road Safety component of website to contain information. To be updated annually if necessary
8.8	Promote the use of the VicRoads '*Road Mode*' app for Android mobile devices and advocate to State Government for a similar app to be developed for Apple mobile devices.	Infrastructure Assets / Communications	VR	March 2014	Road Safety component of website to contain information Include an article within 'Lets Talk Bayside'
8.9	Advocate to State Government for a review of the Road Safety (Vehicles) Regulations 2009 to restrict the level of window tinting in the front side of vehicle windows with a view to increasing the minimum level of visible light transmission from the existing 35% requirement to 70%.	Infrastructure Assets	VP	Immediate	Changes to the Road Safety (Vehicles) Regulations 2009
8.10	Promote the use of VicRoads car door sticker packs to remind drivers and passengers to look out for bike riders before getting in and out of vehicles.	Infrastructure Assets / Commercial Services	VR	March 2014	Number of sticker packs distributed All council fleet vehicles to display stickers

Appendix A

Selected local community based road safety programs in Victoria

This appendix contains a selection of programs currently or recently operating at local level in Victoria. Not all school curriculum programs are included. Infrastructure safety funding programs are not included.

New programs are often being developed, and may replace existing programs. Further information about programs may be obtained from the following websites:

http://www.vicroads.vic.gov.au

http://www.police.vic.gov.au

http://www.tac.vic.gov.au

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Target Area	Programs	Source
Safe Vehicle Speed	*Not So Fast* *Speed Solutions*	Vicroads
Risk Management	*Is Your Council at Risk?*	Vicroads
Fleet/Workplace Safety	*Driving Workplace Safety Kit*	Vicroads
Land Use Planning	*Safer Urban Environments*	Vicroads
Older Drivers	*Keeping Older Drivers Safe and Mobile*	Vicroads
	Wiser Driver	Hawthorn CC
	Years Ahead	RACV
	Safe Drive Medical	VicRoads
Young drivers Secondary school students Sporting clubs	*Enhancing the Safety of Young Drivers*	Vicroads
	Keys Please	VicRoads
	Fit to Drive	RoadSafe
	Good Sports	Australian Drug Foundation
Drink Driving	*Looking After Our Mates*	Vicroads
	Party Safe Register	Local police
Motorcycle Safety	*Make Motorcycling Safer*	Vicroads
Pre-school Age Children	*Starting Out Safely*	Early Learning Australia
	Multi-lingual Guide to Child Restraints	VicRoads
Primary School Children	*Kids on the Move*	VicRoads
	Bike Ed	VicRoads
Cyclists	*Safe Cycle Month*	Police
	Bike Ed / Cycle On	VicRoads
Pedestrian Safety	*Looking out for Pedestrians*	VicRoads
	Wiser Walking	VicRoads
Whole of Community	*Community Safety Month*	Police / Victorian Safe Communities

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36

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37