

Road safety strategy 2016-25

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Prepared by:

Cardinia Shire Council Infrastructure Services Unit in association with CTD Consultants

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Executive Summary

Cardinia Shire Council is committed to providing an environment for residents and visitors that promotes health, safety and wellbeing. Council, along with the Victorian and Australian Government, community groups, businesses and all community members, have a role in encouraging road safety. We can all contribute to reducing the significant emotional, social, environmental and financial burden that follows road crashes.

This Road Safety Strategy 2016 (RSS) has been developed to guide Council in implementing activities that aim to reduce the level and severity of road trauma within the municipality over the coming 10 years.

This strategy complements the regional and state road safety direction by following the 'Safe System'. It has considered the social and demographic issues within Cardinia Shire and acknowledges the geographic and infrastructure challenges in the municipality.

The Action Plan within this strategy outlines prioritised activities that have been recommended after considering:

- relevant research and the local, state, national and international policy context
- road crash statistics within Cardinia Shire
- the views of the community and professional stakeholders
- the outcomes of reviewing Council's previous Road Safety Strategy.

The priorities for Council are to focus on:

- 1. safety for young families, including children aged 0-12 years of age and their parents/ carers
- 2. youth road safety issues
- 3. road users aged over 50 years
- 4. vulnerable road users, including pedestrians, cyclists and motorcyclists
- 5. safe roads, roadsides, paths and vehicles
- 6. risky behaviour, e.g. speed, drink and drug driving, fatigue, distractions
- 7. advocating to the Victorian and Australian Governments for safer transport infrastructure and services
- 8. governance and communications.

Council will seek to reduce the number of people affected by road trauma over the coming 10 years by implementing a range of activities that focus on:

- Infrastructure and maintenance programs
- Delivering and supporting behavioural and education programs
- Advocating to external organisations
- Communication

Cardinia Shire Council is grateful for the funding from the Transport Accident Commission (TAC), through its Community Road Safety Grants program. This funding has enabled the development of this strategy.

Cardinia Shire

Cardinia Shire is located on the south east fringe of metropolitan Melbourne. The Shire covers an area of 1,280 square kilometres and has a population of approximately 87,000 residents.

Figure 1. Location of Cardinia Shire



The 2011 Census conducted by the Australian Bureau of Statistics found the following information about the people who live in Cardinia Shire¹:

- Cardinia Shire has a higher proportion of young residents aged up to 18 years and a lower number of residents aged over 50 years compared to Greater Melbourne.
- 16.5 per cent of Cardinia Shire residents were born in another country, with nearly half of these people coming from countries where English is not their first language. These levels are lower than the metropolitan Melbourne average.
- 3.8 per cent of residents reported that they needed assistance with day to day activities due to a
 disability. This level is slightly lower than the Greater Melbourne rate of 4.5 per cent.
- 65 per cent of households have access to two or more cars. This is much higher than the Greater Melbourne rate of 51 per cent. 3.2 per cent of Cardinia Shire households do not have access to a car.
- Cardinia Shire scored 1,024.3 on the SEIFA Index of Disadvantage. The SEIFA score refers to the level of social disadvantage based on a number of statistics that relate to areas such as employment status, salary and education level. Cardinia Shire is ranked in the top 25 per cent of Victorian local government areas, meaning that it has a lower level of disadvantage than the remaining 75 per cent of councils. There are however areas within Cardinia Shire where the SEIFA score indicates much more disadvantage than other areas of the municipality, i.e. Lang Lang, Koo Wee Rup and portions of Pakenham.

It is expected that Cardinia Shire will be home to 174,993 by 2036, around double the current population². This will have a major impact on the level of infrastructure and services that Council needs to provide to its community.

¹ Profile.id, Cardinia Shire Community Profile, retrieved 22 November 2015, http://profile.id.com.au/cardinia

² Forecast.id, Cardinia Shire Population Forecasts, retrieved 22 November 2015, http://forecast.id.com.au/cardinia

Strategic context

Cardinia Shire Council

Cardinia Shire's community is growing and Council has a strong commitment to protect and enhance the natural and built environment, advocating for improved services, and to promote an exciting future where residents and visitors are safe and healthy. Council Plan 2015 sets the strategic directions for Council over the coming four years. All Council decisions, including strategies and policies, stem from the Council Plan.

The vision of Cardinia Shire Council, as outlined in the Council Plan 2015:

"Cardinia Shire will be developed in a planned manner to enable present and future generations to live and work in our Shire, enjoying its diverse and distinctive characteristics."

Figure 2. Relationship between Council Plan and Road safety strategy



The Council Plan identifies some major challenges to address over the coming years (listed below); many of them will have an impact on road safety:

- managing population growth
- managing the natural and built environment, including climate change
- developing a prosperous local economy and creating employment
- long-term financial sustainability
- supporting and increasing agricultural productivity
- timely delivery of infrastructure, transport options and services
- encouraging residents to improve their health and wellbeing
- encouraging community engagement in Council's decision making.

A number of other municipal strategies are relevant and have been considered during the preparation of this strategy. These include, but are not limited to:

- Municipal Public Health and Wellbeing Plan
- Access and Inclusion Policy and Action Plan
- Age Friendly Strategy and Action Plan
- Road Management Plan
- Youth Strategy
- Asset Management Strategy
- Special Charge Scheme Policy
- Community Engagement Plan
- Equestrian Strategy.

Additional strategic documents are currently being developed that consider road safety, including:

- The Cardinia Pedestrian Bicycle Strategy (PBS)
- The Pakenham East Precinct Structure Plan
- Review of the Beaconsfield Precinct Structure Plan.

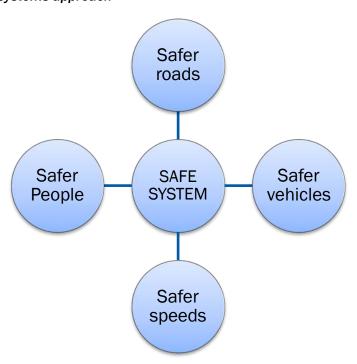
Victoria

Vision Zero 2016-2020 Road Safety Strategy sets the strategic direction of the Victorian Government. It sets the goal of reducing road deaths by 20% and serious injuries by 15% in the next five years.

The strategy is based on the 'safe system' that sees collaboration between policy makers and road users to achieve road safety benefits. The key principles of the safe system are:

- we all make mistakes, but no-one should die because of them
- people are vulnerable, our bodies can only withstand so much crash force before being seriously injured or killed
- we all need to share responsibility and make every part of our road system safer.

Figure 3. Safe systems approach



Victoria's Road Safety Strategy and its accompanying Action Plan identify education, enforcement and engineering actions within the following priority areas:

- drink driving
- drug driving
- speeding
- distractions
- pedestrians
- cyclists
- country road users
- roads and speed limits
- young drivers

At the time of writing this strategy, the Victorian Government commenced updating its Road safety strategy.

The Victorian Government has also commenced updating Victoria's Cycling strategy. The themes discussed during the community engagement phase of updating the Cycling strategy are:

- · improving cyclist safety
- encouraging cycling participation
- promoting the health benefits of cycling
- highlighting the environmental benefits of cycling
- growing the cycling economy, particularly cycle tourism and regional development
- strategically planning networks and prioritising investment

Australia

The Australian Road Safety Strategy 2011-20, also based on 'safe system' principles, has the vision that no person should be killed or seriously injured on Australia's roads. The strategy outlines broad directions for the future of Australian road safety, set out in four key areas - safe roads, safe speeds, safe vehicles and safe people.

International

The United Nations has proclaimed 2011–20 the 'Decade of action for road safety' to address the problem of deaths and serious injuries on the world's roads. Australia is one of 100 counties to cosponsor this initiative. The goal of the decade of action is to stabilise and then reduce global road traffic fatalities by 2020.

Victoria has one of the lowest rates of road trauma in Australia however is well behind other countries such as the UK, Sweden, Switzerland, Denmark and the Netherlands. Victorian and Australian road safety authorities are closely investigating what we can learn from these countries³.

³ Victorian Government, Towards Zero Community Consultation Discussion Paper, retrieved 13 March 2016, https://www.towardszero.vic.gov.au/ data/assets/pdf file/0004/179680/Towards-Zero-Community-Consultation-from-roadsafety-website.pdf

Road Safety in Cardinia Shire

Transport options in Cardinia Shire

Council manages 632 kilometres of sealed local roads, 865 kilometres of unsealed roads, and 570 kilometres of footpaths. This road infrastructure is complemented by large open spaces and reserves that cater for off-road walking and cycling. Arterial roads and freeways, managed by VicRoads, make the Melbourne central business district (CBD) and surrounding precincts accessible by car. The local and arterial road infrastructure within the municipality allows commuters using private vehicles to access the retail, medical, business, industrial, recreation and educational resources.

Public transport options are not as accessible in Cardinia Shire as in municipalities closer to the CBD. This leads to high levels of car dependency that has safety, environmental, access, health, and financial impacts on the community. The low level of non–car based transport options causes sectors of the community, particularly young and elderly people, to have limited access to services and facilities to meet their daily needs. While public transport options within Beaconsfield, Officer and Pakenham are improving, there are still significant deficiencies in the remainder of the municipality.

The following public transport services are available in Cardinia Shire:

- four metropolitan train stations on the Pakenham line
- twelve metropolitan bus routes
- fourteen regional bus and rail services.

PΤ Shire of Cardinia Ner Ner Goor Cranbourne

Figure 4. Public transport routes in Cardinia Shire (Public Transport Victoria Dec 2015)

A number of short term and longer term proposals to improve bus services have been developed by Council in association with Public Transport Victoria and bus operators. Advocacy is ongoing to ensure Cardinia Shire has appropriate levels of public transport.

2011 Census data shows that driving a car is the main method residents in Cardinia Shire choose to travel to work. These rates in Cardinia Shire (69.9%) are higher than that for Greater Melbourne (60.6%) and can be attributed to the lack of public transport coverage in the area. The rates of using active transport modes (walking 1.7% and cycling 0.2%) in Cardinia Shire are much lower than Greater Melbourne (walking 2.9% and cycling 1.3%).

Figure 5. Comparison of mode used to travel to work between Greater Melbourne area and Cardinia Shire in 2011

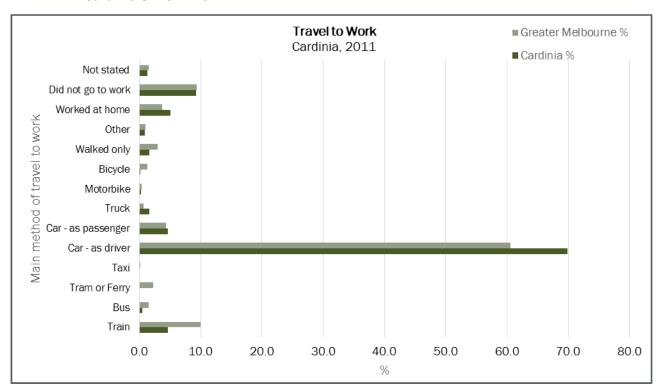


Figure 5 and 6 shows that the use of public transport by residents to travel to work increased noticeably since the 2006 Census as did the use of cars. Cycling to work however has decreased since 2006.

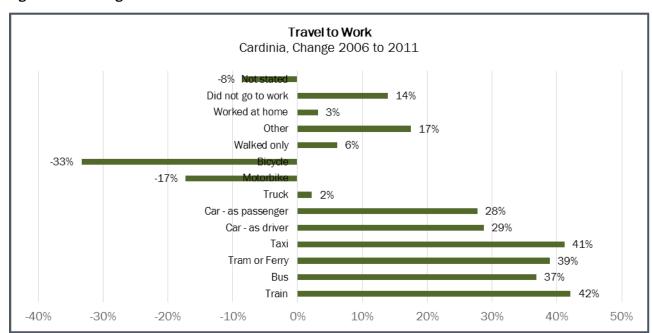


Figure 6. Change in mode used to travel to work in Cardinia Shire between 2006 and 2011

Source: Australian Bureau of Statistics, Census of Population and Housing, 2011 (Enumerated data). Compiled and presented in profile.id

Review of Cardinia Road Safety Strategy 2011 - 14

Council adopted the Road Safety Strategy 2011 -14 with the focus on addressing:

- leadership and governance
- safe road users
- safe roads and paths
- safe vehicles and transport services.

This strategy has been reviewed to enable Council to learn from the successes and opportunities for improvements. This has been done by:

- researching changes in road safety issues in Cardinia Shire
- reviewing internal and external initiatives conducted during the time of the strategy.

The outcomes of the analysis have guided the direction of the new Road safety strategy.

A listing of the status of all actions in the RSS 2011–14 has been reviewed and a summary of the key activities and programs conducted are:

- Streets Ahead
- 'Stop and Drop' zones around schools
- Bike education
- advocacy for installation of bike and scooter racks in new and existing facilities to encourage safe and active travel
- L2P learner driver mentor program
- speed trailer regularly placed at locations identified with speeding concerns
- collaborative work with Victoria Police to identify and address locations where high vehicle speeds are detected
- review of speed zones in accordance with Victorian speed zoning guidelines
- review of the current public transport services and advocacy to the Victorian Government for short and long term improvements.

The activities have been conducted in association with stakeholders, such as RoadSafe South East, Victoria Police, SES, VicRoads, community groups, residents, and neighbouring municipalities.

There were some actions within the RSS 2011-14 that were not completed which could be attributed to the ongoing pressures that local governments face with regards to staff and financial resources. The current environment of rate capping will place ongoing challenges and it is therefore recommended that the new RSS is particularly mindful of this to ensure it is deliverable.

The key recommendations coming out of the review of the RSS 2011 -14 include:

- 1. Continue to give emphasis to linking road safety messages to activities already being conducted by other agencies and Council departments. This will increase the community's exposure to road safety messages and avoid duplication. This approach also recognises the limited Council human resources and funding available to implement road safety activities.
- 2. Given the demographics of residents, continue to prioritise the road safety needs of young families and youth.
- 3. Ensure road safety is prioritised when designing new developments so that paths and roads are safe, integrated and accessible for all road users.
- 4. Encourage active forms of transport such as walking and cycling and support this encouragement with safe pedestrian and cycling infrastructure.
- 5. Continue to strongly advocate for improved public transport services and infrastructure so that safe, efficient and accessible alternatives to car based travel are available.

Statistics

Statistics help to gauge the level of road safety within a municipality. By analysing statistics trends relating to road users and locations assist to focus the road safety priorities for Cardinia Shire.

Unless otherwise stated, the statistics below have been sourced from the VicRoads online statistics site 'Road Crash Information System'.

There were 1,063 crashes in Cardinia Shire between 2011 and 2015 that involved at least one fatality or injury. In these 1,063 crashes, 34 people were killed, 431 people sustained serious injuries, and 919 people suffered minor injuries. Figure 8 shows how these crashes compare with the crashes between the previous five-year period of 2006 and 2010.

Figure 7 shows that since 2006, fatalities have ranged from one to nine each year and serious injuries range between 76 and 164 per year. The highest number of minor injuries over the past ten years was 198 in 2014, and the lowest was 129 in 2009.

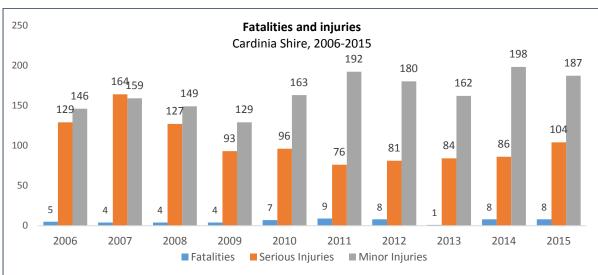
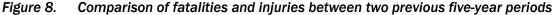


Figure 7. Yearly fatalities and injuries between 2006 and 2015



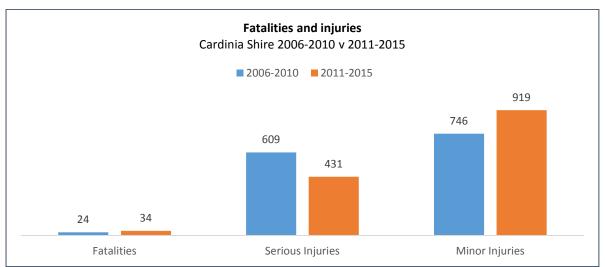


Table 1 shows there has been a 29 per cent increase in the number of road fatalities in Cardinia when comparing the five year period 2006-10 to the following 5 year period 2011-15. Serious injuries decreased by 39 per cent during this timeframe and there was a 20 per cent increase in minor injuries. Overall there were a 2 per cent increase in crashes in Cardinia. The changes across other local government areas within the region are shown below.

Table 1. Change in number of fatalities and injuries over the two previous five-year periods in Cardinia and neighbouring municipalities

Local Government Area	Fatalities	Serious injuries	Minor injuries	Total
Bass Coast	+8%	-19%	+7%	-2%
Baw Baw	-82%	-8%	+15%	+6%
Cardinia	+29%	-39%	+20%	+2%
Casey	-142%	-67%	+18%	-4%
Dandenong	-38%	-19%	+13%	+2%
South Gippsland	+22%	-34%	-6%	-14%
Yarra Ranges	-40%	-30%	+2%	-9%
Total	-35%	-35%	+12%	-2%

Figure 9. Comparison of road users suffering fatalities and injuries between two previous fiveyear periods

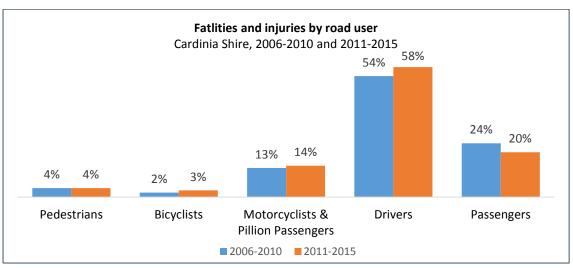


Figure 9 shows nearly 80 per cent of fatalities and injuries within Cardinia Shire between 2011 and 2015 were suffered by vehicle drivers and passengers. The remaining fatalities and injuries were sustained by pedestrians, cyclists, motorcyclists and pillion passengers. Driver injuries and fatalities increased by 4% since 2006-2010 while passenger injuries and fatalities decreased by 4 per cent. There has been little change in the percentage split between other road users when comparing the 2006-10 period to 2011-15.

Figure 10. Comparison of age of road users involved in fatalities and injuries between two previous five-year periods

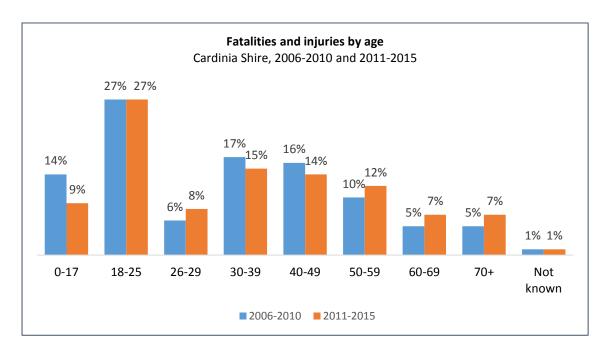
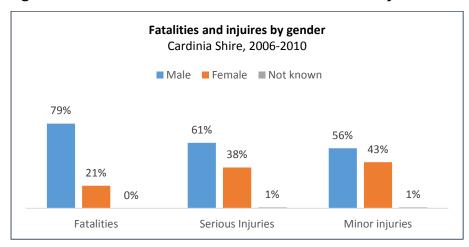


Figure 10 shows road users aged 18-25 years are over represented in road fatalities and injuries. Injury and fatality rates for people over 50 years of age have increased since 2006-2010.

Figure 11. Gender of road users involved in fatalities and injuries between 2006 and 2010



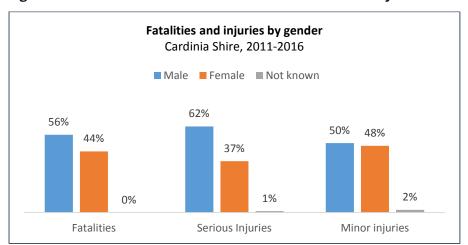


Figure 12. Gender of road users involved in fatalities and injuries between 2011 and 2015

Figures 11 and 12 show that there has been very little change in injuries by gender over the two 5-year periods of 2006-2010 and 2011-2015. There was however a major change in fatalities with the split in genders being more balanced in 2011-2015 compared with 2006-2010.

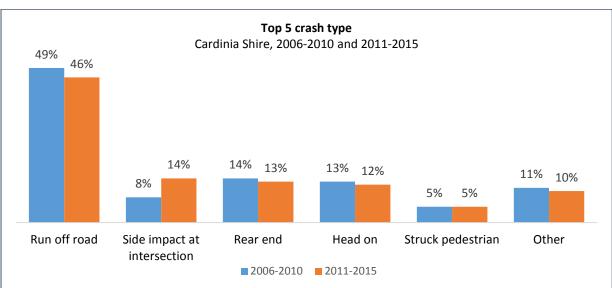


Figure 13. Comparison of top five fatality and injury crash types between two previous five-year periods

Figure 13 shows the main type of crashes that occur in Cardinia Shire are run off roads, followed by side impacts and rear ends.

Figure 14. Comparison of fatalities and injuries occurring on local and arterial roads over the two previous five-year periods

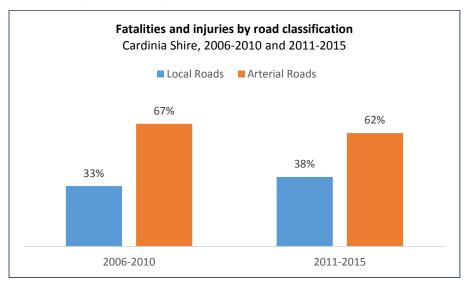


Figure 14 shows that approximately two thirds of fatalities and injuries in Cardinia Shire occurred on arterial roads that are the responsibility of the Victorian Government. The remaining third occurred on local roads that are under Council's jurisdiction.

Figure 15. Comparison of fatalities and injuries occurring in urban and rural areas over the two previous five-year periods

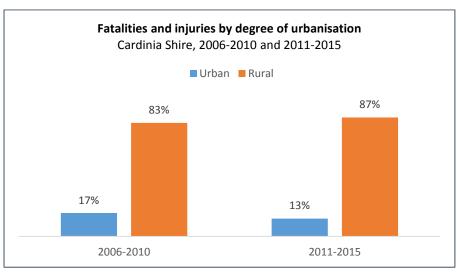


Figure 15 shows that the vast majority of fatalities and injuries occurred in parts of the municipality considered as rural as opposed to urban locations.

Table 2 shows the locations within Cardinia Shire where the highest number of people were killed or injured during 2011 to 2015.

Table 2. Top crash locations within Cardinia Shire, 2011 to 2015

Location	Fatalities	Serious injuries	Minor injuries	Total
Intersection of Princes Hwy and McGregor Rd		5	11	16
Intersection of South Gippsland Hwy and Sybella Ave		4	6	10
Intersection of Dalmore Rd and Manks Rd (Blackspot improvements at this site due for completion in 2016)		7	2	9
Intersection of South Gippsland Hwy and Rossiter Rd (Roundabout constructed at this site in 2015)	1	2	3	6
Intersection of Princes Hwy and Cardinia Rd		3	3	6
Intersection of Princes Fwy and Hope St		2	4	6
Intersection of Princes Hwy and Lakeside Bvd (Signal phasing improvements undertaken in 2014)		2	4	6
Intersection of Koo Wee Rup Rd and Manks Rd (Roundabout constructed at this site in 2015)		2	4	6
Intersection of Old Princes Hwy and Beaconsfield-Emerald Rd		2	4	6
Intersection of Princes Fwy and Abeckett Rd		2	4	6

Victoria Police statistics show that 478 vehicles were impounded during 2006-15 within Cardinia Shire⁴. This figure represents 1.3 per cent of all impoundments during this time period within Victoria. The municipalities with the highest rate of impoundments within the Southern Metro region were Greater Dandenong (4.2% of Victoria) and Frankston (3.6% of Victoria). The second lowest rate in the Southern Metro region was Cardinia Shire (1.3% of Victoria) with Glen Eira having the lowest rate (0.9% of Victoria).

The most common offences for vehicle impoundments within Cardinia Shire include5:

- excessive speed (more than 45 km/h over the speed limit);
- improper use of a motor vehicle; and
- driving whilst disqualified/ suspended.

⁴ Victoria Police, Vehicle Impoundment Annual Statistics 2006-2015,

http://www.police.vic.gov.au/content.asp?a=internetBridgingPage&Media_ID=93995, retrieved on 7/8/16 Victoria Police, Vehicle Impoundment PSA Statistics 2006-2015,

http://www.police.vic.gov.au/content.asp?a=internetBridgingPage&Media_ID=93998, retrieved on 7/8/16

Factors that influence road safety in Cardinia Shire

A number of challenges face Council in an attempt to have an impact on the behaviour of road users. Many of the factors that influence travel behaviours are similar to those faced when developing the previous Road safety strategy. Some of these issues include:

- Cardinia Shire has a high dependence on car-based travel, which can be attributed to the lack of public transport and other convenient forms of transport.
- The reliance on car-based travel results in environmental impacts along with health conditions that result from sedentary lifestyles.
- The vast size of the municipality means that walking and cycling is not a realistic alternative for many journeys.
- Older roads designed to previous standards that were not designed to meet the Safe system approach
- Nearly 30 per cent of all road fatalities and injuries in the municipality involve at least one
 person who is aged 18-25 years. Inexperience, peer pressure and over confidence therefore
 need to continue to be addressed.
- Financial pressures on residents may result in drivers purchasing vehicles that do not have the
 optimal level of safety features. Rising fuel and maintenance costs also place financial pressures
 on vehicle owners. The cost of public transport and car parking also affect the travel decisions
 made by residents.
- Victorian Government policy designates Cardinia Shire as a growth area, attracting increasing number of residents, business and services. It is anticipated that the population within the municipality will double by 2036. This will impact on the level of road infrastructure needed to cater for their needs.
- While predominantly home to a young population, there is also a significant population in Cardinia Shire aged over 60 years. Safe and accessible transport options for older residents in our community are required to allow them to participate in community, social, employment, and family activities, leading to a higher quality of life.
- The municipality is a mix of rural and urban environments resulting in road safety issues differing throughout the municipality.
- There are 865 kilometres of unsealed roads within Cardinia Shire. Unsealed roads and shoulders
 can increase the severity of injuries when involved in a crash as it is harder to control the vehicle
 on these surfaces.
- There are 455 kilometres of pathways of which approximately 25 kilometres are shared with cyclists within Cardinia Shire. Pathways remove the need for pedestrians and cyclists to use the road network, however ongoing promotion is required to encourage pedestrians and cyclists to respectfully share the pathways.
- The 'Creating an Accessible Future Access and Inclusion Action Plan, 2014–17' estimates that 16.6 per cent of Cardinia Shire's residents have one or more specified limitations, restrictions or impairment that impact on daily living activities. Advocacy for transport options that are accessible and integrated is therefore warranted.

- All local governments within Victoria are facing the financial pressures that come with rate
 capping. This is placing significant pressure on Councils to decide how funding is allocated to its
 services. Transport and road safety continue to be important issues within the community, along
 with so many other worthwhile services.
- Horse riding is popular within Cardinia Shire. Generally, horse riding is encouraged along off-road trails, however if riding on road there are specific road rules that need to be adhered to. Riding on high and medium volume roads is discouraged. Horse riders and other road and path users need to be aware of each other and respectfully share the space.

The 'Cardinia Wellbeing Report', conducted by Community Indicators Victoria, provides a snapshot of community trends and issues within Cardinia Shire. Two sections of the report are relevant to road safety, these are:

- Perceptions of safety this was measured in the 2011 VicHealth Indicators Survey. Respondents were asked to rate how safe they felt when walking alone in their local area during the day and at night. The results show that 97.5 per cent of respondents in Cardinia Shire felt safe or very safe walking alone in their local area during the day. This is comparable to the Victorian State average of 97 per cent. When walking alone at night 71.7 per cent of respondents in Cardinia Shire felt safe or very safe, slightly higher than the Victorian State average of 70.3 per cent.
- Transport limitations this was also measured in the 2011 VicHealth Indicators Survey.
 Respondents were asked if their day-to-day travel had been limited or restricted in the previous 12 months. 26.3 per cent of respondents from Cardinia Shire had experienced transport limitations in the previous year, higher than the Victorian State average of 23.7 per cent.

Community engagement

While developing this strategy, significant effort was placed on understanding the views of residents, visitors, employees and people who work within the road safety profession. The main questions we asked were:

- which road safety issues should be prioritised by Cardinia Shire?
- do you have any ideas for addressing these priorities?
- what are the strategic directions of internal and external organisations that impact on road safety?

A wide variety of community engagement activities were conducted to collect this information, including:

- online and hard copy surveys
- inviting written comments
- posting information on Council's website and social media
- printing information in local print media
- meeting with numerous Council departments and external road safety professionals.

The feedback received through these engagement processes is summarised below and has directly influenced this Strategy through the prioritisation of resources, programs and projects.

The key outcomes of the engagement activities include:

- Road and path design and maintenance are the key road safety concern for respondents, particularly the condition of unsealed roads.
- The road safety issues/groups of road users that received the highest level of support for Council to address are:
 - safer roads, roadsides and paths
 - youth road safety issues
 - vulnerable road users (pedestrians, cyclists and motorcyclists).
- Participants in the engagement activities were asked if they support Council implementing a range of roads safety programs and activities. The highest level of support was for the following:
 - Improve roads and footpaths to help pedestrians, particularly the elderly and people with limited mobility, to cross the roads safely;
 - increase connectivity and provide additional footpaths for pedestrians
 - review road maintenance regimes and undertake regular safety inspections to improve road safety in accordance with current best practice
 - advocate to the Victorian and Australian Governments for road safety improvements to services, infrastructure, enforcement and road laws within their jurisdiction.
- There is support to maintain the current successful programs and introduce other programs that are relevant and achievable within Cardinia Shire.
- Professional stakeholders value partnerships and networks that are cross functional and include internal and external stakeholders.

Council recently conducted a significant amount of community engagement as part of the 'Cardinia: An International Safe Community' program. The Cardinia: An International Safe Community, Community Consultation Report – Road Safety' (ISC-Road Safety Report) was produced by Council in 2015 and brings together the results of the community engagement activities with other relevant research. The report shows that road safety issues are consistently rated amongst the highest safety concerns for community members.

64.57 per cent of respondents identified road traffic incidents as being a main safety and injury concern in the Shire. This was the third highest response behind crime (68%) and family violence (65.14%).

Of the road safety issues identified by participants, there is most concern about:

- hoon driving
- dangerous driving
- drink/drug driving
- pedestrian incidents

When breaking down the safety priorities by age groups and comparing them to other safety issues such as crime, family violence, drug/ alcohol issues and mental health issues; road safety was in the top 3 issues for all age groups.

Table 3. Top three safety priorities within Cardinia Shire

Priority	Under 17	17-24	25-44	45-64	65-84
1	Falls	Crime including cyber-crime	Crime	Family violence	Drug and alcohol related issues
2	Road traffic incidents	Dangerous driving	Road traffic incidents	Road traffic incidents	Crime
3	Natural hazards	Drug and alcohol related issues	Family violence	Crime	Road traffic incidents and dangerous driving

Source: Cardinia: An International Safe Community, Community Consultation Report – Road Safety. 2015

The ISC-Road Safety Report refers to other relevant research that also highlights the level of concern in the community about road safety issues. The '2014 Social Health telephone survey' found that

- traffic/speeding and antisocial behaviour/hoons were listed in the top three things that residents would like to see less of in their estates (11.9% and 8.1% respectively)
- hoons contributed to 6.3 per cent of respondents experiencing sleepless nights
- 8.1 per cent of respondents reported that they would like to see less antisocial behaviour/hoons within their estate which was the third highest response.

Participants were invited to provide comments, and a large number of comments related to road safety issues. Some of the comments are listed below:

'Dangerous driving is what I come across every day. Lack of respect for rules and courtesy. People think because Cardinia is open and 'country' that they don't need to follow speed limits and rules' – Male Cardinia Shire resident aged 25 – 44

'Our children can't ride bikes etc. without the fear that these hoons won't lose control or have us walk through a shopping centre car park without them driving erratically' – Female Pakenham resident aged 25 – 44

'Hoon driving – well it was brought up last night at the township committee, particularly at weekends were being invaded by young people and their hooning around the place any given time... You can see where the hoon drivers have been...but that's not been ongoing on for a long time in my opinion, hoon driving, it's been recent. It's escalated recently' – Koo Wee Rup open consultation

'Biggest safety concern I would say, road safety. I think injuries that occur unexpectedly; locally that's probably the highest...the conditions of the roads but also the speed limits, awareness of speed limits. A lot of it comes down to education about driving locally' – Emerald open consultation

'More parking spaces at school and pedestrian signs in front of schools, it's very busy and dangerous outside of schools and lots of children are running around' – Living Learning Pakenham

Participants were asked how safety could be improved within Cardinia Shire. Road safety themes were common, some of these comments included:

'More police presence on our roads in local streets not just major highways also more use of mobile cameras in residential areas and again not just high volume highways' – Male officer employee/volunteer aged 45 – 64

'Police could be more visible around the community and out on the roads' – Female Beaconsfield resident aged 25 – 44

'Good footpaths that go somewhere' - Female Pakenham resident aged 45 - 64

Road safety priorities for Council

After considering the research and community views, the priorities for Council to focus on over the coming 10 years include:

1. Safety for young families, including children aged 0-12 years of age and their parents/ carers According to the 2011 Census data, 19 per cent of Cardinia Shire's population are aged under 12 years (higher than the Melbourne average of 15%). Young children need assistance from adults to learn how to be safe around traffic. Their peripheral vision is still developing and their height makes it hard for them to see other road users and difficult to be seen by others. Programs and services that support schools, preschools and parents to teach road safety skills are therefore worthwhile. Comments received during the community engagement phase indicate that there is support (64%) for Council to address road safety issues involving young children and their families. Many comments from respondents focussed on providing a safe environment around schools.

2. Youth road safety issues

Nearly 30 per cent of all road fatalities and injuries within Cardinia Shire during 2011-2015 involved at least one person who is aged 18-25 years. The major contributing factors associated with youth crashes include inexperience, peer pressure and over confidence. 81% of the community engagement survey respondents agree or strongly agree that Council should be involved in delivering programs that address youth road safety issues. Many comments were received from community members regarding youth hoon behaviour.

3. Road users aged over 50 years

While predominantly home to a young population, there is also a significant population in the Shire aged over 50 years (27%). Safe and accessible transport options for older residents in our community are required to allow them to participate in community, social, employment, and family activities, leading to a higher quality of life. Road safety programs provide access to information for older road users on ways to safely remain active and mobile within the community. 62% of community engagement survey respondents strongly agreed or agreed that Council should be involved in delivering programs and activities that improve the safety of senior road users. There is particular support (88%) for Council to improve footpaths and roads to assist elderly people and people with disabilities to cross roads safely.

4. Vulnerable road users, including pedestrians, cyclists and motorcyclists

Pedestrians, cyclists and motorcyclists do not have the protection that a car offers drivers and passengers. They are therefore more likely to sustain injuries or die if involved in a crash. 21 per cent of injuries and fatalities within Cardinia Shire during 2010-14 involved vulnerable road users.

5. Risky behaviour – for example: speed, drink and drug driving, fatigue, distractions
Speed, drink and drug driving, fatigue and distraction are amongst the leading causes of crashes within Victoria. 25% of all drivers and motorcyclists killed in Victoria in 2012 had a Blood Alcohol Content (BAC) greater than 0.05g/100m and it is estimated that 20% of fatalities involve driver fatigue. It is therefore a priority for Council to address these issues through education and infrastructure actions, such as the installation of traffic calming measures to reduce speeds in local streets. Speeding, hoon behaviour and disregard for the Road Rules are a concern for many of the community engagement survey respondents.

6. Safe roads, roadsides, paths and vehicles

Cardinia Shire is a mix of rural and urban environments with a large proportion of roads unsealed (865 kilometres). Unsealed roads and shoulders can increase the severity of injuries when involved in a crash as it is harder to control the vehicle on these surfaces. There are 455 kilometres of pathways of which approximately 25 kilometres are shared with cyclists within the Shire. The design, construction and maintenance of these roads and paths are crucial in reducing the number and severity of road crashes. Addressing road and path infrastructure was one of the leading issues identified during the community engagement activities for Council to focus on. 88% of respondents strongly agree or agree that Council should be involved in addressing infrastructure safety. There is particular concern for the safety of people travelling along unsealed roads.

7. Advocating to the Victorian and Australian Governments for safer transport infrastructure and services

Council plays an advocacy role for the improvements of infrastructure and services that are the responsibility of other authorities, such as VicRoads. A cooperative approach between local and Victorian governments and other stakeholders will see greater road safety benefits than working in isolation. There is overwhelming support (87%) from respondents of the community engagement survey for Council to continue advocating to other levels of government for improved road safety.

8. Governance and communications

Cardinia Shire is committed to providing an environment for residents and visitors that promotes health, safety and wellbeing. Council's governance and communication activities therefore consider social, demographic, land use and economic issues to ensure decisions are tailored to suit the needs of the community. There is strong commitment from officers across Council departments to share data and work collaboratively on programs and activities that can improve the safety and wellbeing of residents and visitors to Cardinia Shire.

Goals

Council will seek to reduce the number of people affected by road trauma over the coming 10 years by implementing a range of activities that focus on:

- Infrastructure and maintenance programs
- Delivering and supporting behavioural and education programs
- Advocating to external organisations
- Communication

Action plan

The priorities and goals listed above enable the development of a tailored list of activities to address the road safety issues. The Action Plan lists behavioural and infrastructure programs, projects and activities that aim to reduce the number and severity of road crashes within the municipality.

Each action is allocated a timeline for their implementation:

- short 1 to 3 years
- medium 4 to 7 years
- long 8 to 10 years
- ongoing to be completed throughout the life of the Strategy

Actions are also allocated a Council department to take the lead in its implementation. Primary supporting departments and external organisations have been listed next to each action. Other departments and external organisations, not listed, will also be required to assist with actions as required.

Actions that are also contained in other Council strategies are also noted where appropriate. These actions will be assessed as part of their original Strategy.

Given the life of the Strategy is 10 years, a review is recommended after 5 years to enable the action plan to be refined, if required, to reflect the road safety and Council priorities at that time.

Table 4. Safety for young families, including children aged 0-12 years of age and their parents/ carers

Action		Priority	Responsibility	Support	Link to Council Plan
1.1	Provide information to parents and carers regarding road safety including child restraints and fitting stations, during visits to Council's Maternal and Child Health nurses.	Ongoing	Community and Family Services	Department of Education and Early Childhood Development	1.4.4
1.2	Assist in promotion and arrangement of child restraint fitting sessions that enable residents to gain information about safe installation and use of child restraints.	Ongoing	Community and Family Services	RoadSafe South East Infrastructure Services Communications	1.4.4
1.3	Deliver and support road safety education programs within primary schools.	Ongoing	Community and Family Services	RoadSafe South East	1.4.4
1.4	Implement school crossing supervision services to eligible schools throughout the municipality.	Ongoing	Development and Compliance Services	VicRoads Infrastructure Services School crossings Victoria	1.4.4

 Table 5.
 Youth road safety issues

Action		Priority	Responsibility	Support	Link to Council Plan
2.1	Support the delivery youth road safety programs within non-school environments such as youth centres and sporting clubs.	Ongoing	Active Communities	RoadSafe South East VicRoads Infrastructure Victoria	1.3.3 2.4.1 2.4.2
2.2	Support the L2P learner driver mentor program	Short	Community and Family Services	VicRoads Koo Wee Rup Regional Health Service	1.2.1 2.3.2
2.3	Liaise with Victoria Police regarding road safety issues involving youth.	Ongoing	Infrastructure Services	Victoria Police	1.6.1

Table 6. Road users aged over 50 years

Action		Priority	Responsibility	Support	Link to Council Plan
3.1	Advocate for road safety education programs that provide information about the issues that face senior road users. (Action within Age Friendly Strategy, 2015–19).	Short	Community Strengthening	RoadSafe South East	1.1.3
3.2	Implement an asset-based community development project on transport solutions for older adults (action within Age Friendly Strategy, 2015–19).	Short	Community Strengthening	Infrastructure Services	1.1.3
3.3	Host education programs regarding the safe purchase and use of mobility scooters.	Long	Community Strengthening	RoadSafe South East	1.1.3
3.4	Provide up to date information kits containing information and checklists regarding safe use of mobility scooters.	Long	Community Strengthening	Cardinia-Casey Community Health Service Koo Wee Rup Regional Health Centre	1.1.3

Table 7. Vulnerable road users, including pedestrians, cyclists and motorcyclists

Action		Priority	Responsibility	Support	Link to Council Plan
4.1	Periodically review parking conditions around schools	Ongoing	Infrastructure Services	Schools Development and Compliance Services	1.6.1 3.2.1 3.4.1
4.2	Enforce parking restrictions around schools	Ongoing	Development and Compliance Services	Schools Infrastructure Services	1.6.1 3.2.1 3.4.1
4.3	Improve pedestrian linkages including the installation of street lighting at identified locations	Ongoing	Infrastructure Services	Active Communities	3.2.1 3.2.4
4.4	Assist RoadSafe South East to deliver community events within the South East region that provide road safety education and information to motorcycle riders, their families and members of the community.	Medium	Infrastructure Services	RoadSafe South East	2.1.1 2.4.1
4.5	Improve the safety of on-road and roadside horse riding trails through appropriate signage, barriers and other measures (action within the Cardinia Equestrian Strategy).	Medium	Active Communities	VicRoads Infrastructure Services Operations	1.5.1 1.6.1 3.1.1 3.1.4 3.4.1

Table 8. Risky behaviour – speed, drink and drug driving, fatigue and distractions

Action		Priority	Responsibility	Support	Link to Council Plan
5.1	Support external stakeholders to deliver and implement programs that address identified behavioural issues within the community	Ongoing	Community Strengthening	RoadSafe South East Victoria Police VicRoads Schools Clubs	1.4.4 2.2.2 2.3.2 2.4.1
5.2	Liaise with Victoria Police regarding enforcement needs.	Ongoing	Infrastructure Services	Victoria Police	1.6.1
5.3	Implement the Speed Advisory Trailer program in local streets throughout the municipality.	Ongoing	Infrastructure Services	Operations	1.6.1 1.6.2

 Table 9.
 Safe roads, roadsides, paths and vehicles

Action		Priority	Responsibility	Support	Link to Council Plan
6.1	Maintain all Council roads and supporting infrastructure in accordance with the Road Management Act 2004 and Council's Road Management Plan (action within Council Plan 2015). Focus on the safety of unsealed roads.	Ongoing	Operations	Infrastructure Services	3.1.1 3.1.4 3.5.3
6.2	Upgrade Council roads to improve safety while considering the traffic demand of the community (action within the Council Plan 2015).	Ongoing	Infrastructure Services	Operations	3.2.1 3.1.4
6.3	Develop transport networks that incorporate public transport services (action within the Council Plan 2015).	Short	Infrastructure Services	Development and Compliance Services	3.2.3
6.4	Prioritise multi-use pathways, where practicable, to create networks that connect destinations (action within the Council Plan 2015).	Ongoing	Active Communities	VicRoads Active Transport Victoria Infrastructure Services	3.1.2 3.2.4 3.4.1

Action		Priority	Responsibility	Support	Link to Council Plan
6.5	Identify missing links in the existing on and off road cycling network and consider funding to provide their construction.	Long	Infrastructure Services	Active Communities Operations	3.1.2 3.2.4 3.4.1
6.6	Install and upgrade street lighting at targeted locations throughout the shire to address identified road safety issues.	Ongoing	Infrastructure Service	Operations	3.1.1 3.4.1
6.7	Ensure the design of new estates promote road safety and sustainable transport modes.	Ongoing	Infrastructure Services	Community Strengthening Development and Compliance Services	3.4.1 3 .5.2
6.8	Ensure land developers deliver safe, connected and accessible roads and paths as per structure plan requirements.	Ongoing	Infrastructure Services	Strategic Planning	3.4.1 3.5.2 3.5.3
6.9	Respond efficiently to weather and other incidents that impact on the safe use of roads and paths in accordance with the Road Management Plan (action within the Road Management Plan)	Ongoing	Operation	Risk, Emergency and Community Safety Communications Customer Service	1.7.2
6.10	Maintain vegetation to improve sight distances and pedestrian safety.	Ongoing	Operation	Infrastructure Services	3.1.2 3.4.1
6.11	Implement procedures to identify and review roadside plantings to ensure new plantings do not cause road safety problems.	short	Operations	Infrastructure Services	3.1.2 3.4.1
6.12	Advocate Victorian and Australian Government agencies to fund and deliver road safety infrastructure improvements.	Ongoing	Infrastructure Services		3.2.1 5.4.1
6.13	Apply for funding opportunities to deliver infrastructure improvement projects that address safety related problems.	Ongoing	Infrastructure Services		3.2.1 5.4.1
6.14	Establish a program and advocate for funding to deliver traffic calming devices in identified residential areas.	Ongoing	Infrastructure Services		3.2.1

Action		Priority	Responsibility	Support	Link to Council Plan
6.15	Implement procurement procedures in the fleet selection process to ensure Council fleet vehicles have appropriate safety features – aiming for 5 star safety ratings	Short	Operations		5.3.3
6.16	Promote the importance of community members selecting safe new and used vehicles	Ongoing	Community Strengthening	RoadSafe South East Infrastructure Services Communications	1.1.3 1.6.1 2.4.1 2.4.2
6.17	Work with government and community groups to promote heavy vehicle safety within the Cardinia community.	Long	Infrastructure Services	Gippsland Safe Freight Network RoadSafe South East VicRoads Victoria Police	1.6. 3.2.1
6.18	Advocate for funding for targeted road improvement works on heavy vehicle routes.	Long	Infrastructure Services	Gippsland Safe Freight Network RoadSafe South East Operations VicRoads Victoria Police	1.6.1 3.2.1

Table 10. Advocating to the Victorian and Australian Governments for safer transport infrastructure and services

Action		Priority	Responsibility	Support	Link to Council Plan
7.1	Advocate for and facilitate improved public transport options and major arterial roads to help link employment, educational, recreational and retail activities between the Shire's rural and growth areas (action within Council Plan 2015).	Ongoing	Infrastructure Services	Community Strengthening Development and Compliance Services	3.2.5
7.2	Advocate on behalf of the community to ensure it receives a fair share of funding and support from the Australian and Victorian governments for infrastructure, facilities and services (action within Council Plan 2015).	Ongoing	Infrastructure Services	Development and Compliance Services	5.4.1
7.3	Advocate for improvements to the funding and implementation of the school crossing supervision program.	Short	Development and Compliance Services	Infrastructure Services	5.4.1
7.4	Advocate on behalf of the community for road safety improvements, including guidelines, standards and legislation.	Ongoing	Infrastructure Services		5.4.1

Table 11. Governance and Communications

Action		Priority	Responsibility	Support	Link to Council Plan
8.1	Strengthen relationships with internal and external stakeholders to improve road safety within the community.	Ongoing	Infrastructure Services	All internal departments RoadSafe South East Victoria Police VicRoads Neighbouring municipalities Schools Community groups Businesses Township Committees SES	1.6.1 1.6.2
8.2	Promote road safety in regular community publications	Ongoing	Communications	Communications Infrastructure Services	2.2.2 2.3.2
8.3	Establish an internal road safety review committee to monitor the progress of implementing the Road Safety Strategy and set regular meetings.	Short	Infrastructure Services	Relevant internal departments	2.1.1
8.4	Review this Strategy regularly, particularly at the half way point (after 5 years), to identify if the priorities need to be refined.	Medium	Infrastructure Services	All internal departments All external stakeholders	2.1.1

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